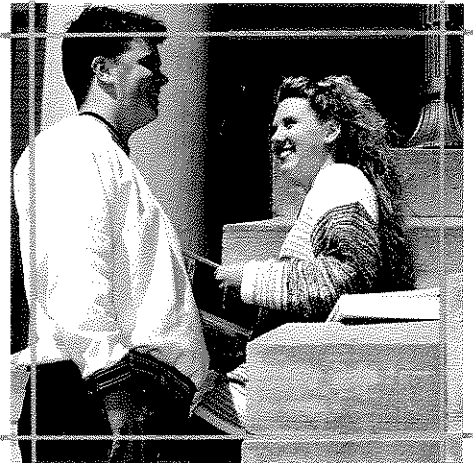
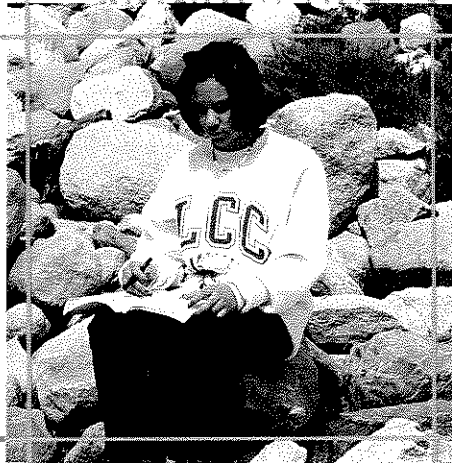


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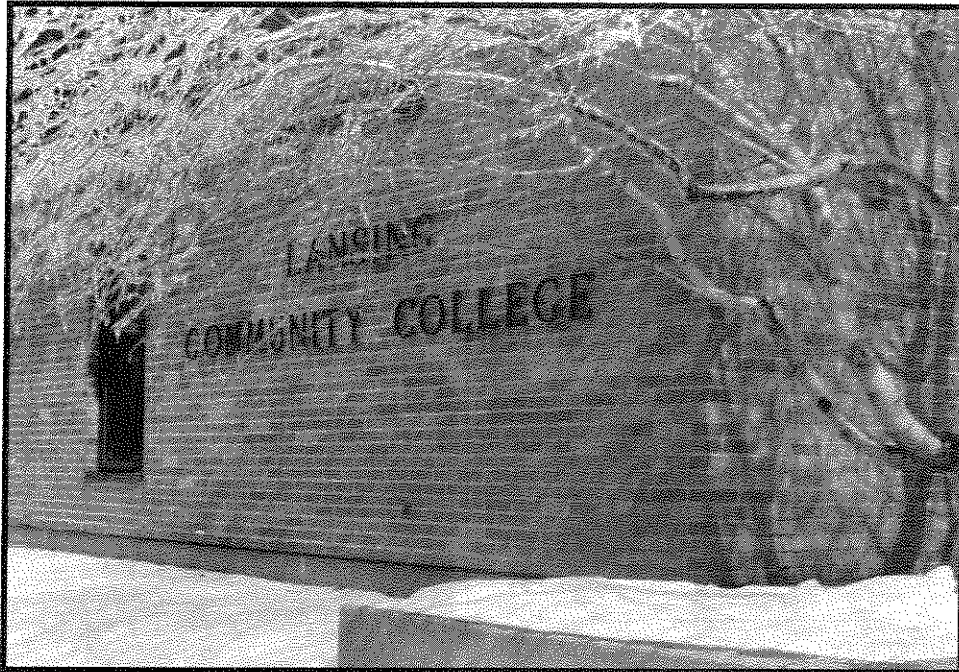
C A T A L O G



L A N S I N G C O M M U N I T Y C O L L E G E

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C A T A L O G



400-600 North Washington Square, P.O. Box 40010, Lansing, Michigan 48901-7210, Telephone: (517) 483-9850
Handicapper Student Services Telephone Device for the Deaf, TDD (517) 483-1218
Accredited by North Central Association of Colleges and Schools

WELCOME TO LCC

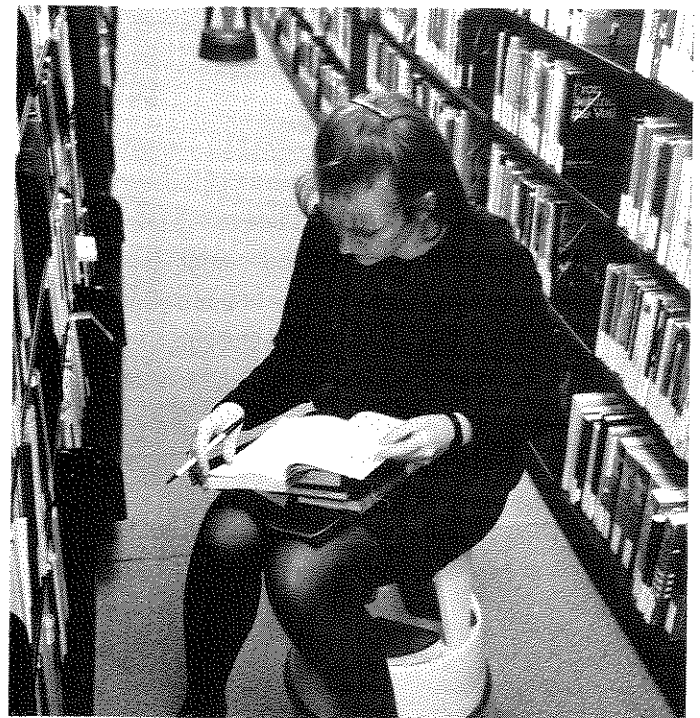
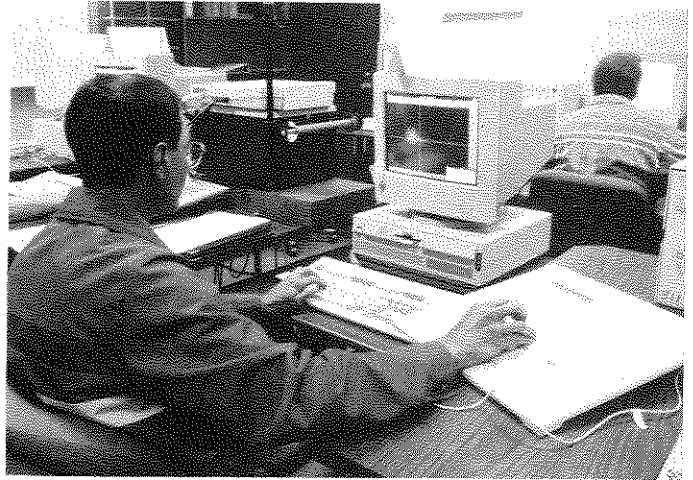
Lansing Community College is committed to excellence in education. Since its beginning in 1957, the College has grown from a small technical college to one of the largest, most comprehensive community colleges in the nation. Classes are offered year-round on the 28-acre campus in the heart of Michigan's capital. Students can choose from over 150 degree and certificate programs and nearly 2,500 course offerings or complete the first two years of a liberal arts education. In addition to the programs offered on the main campus, the College operates the Aviation Center at Capital City Airport in Lansing and the Truck Driver Training Center near Battle Creek. To make classes more accessible, a number of Learning Centers are located in communities within the College's 30-mile service area. LCC is accredited by the North Central Association of Colleges and Schools and serves more than 40,000 persons annually. The College recently held its 37th commencement, evidence of LCC's success in providing education as a lifelong process for all.

TABLE OF CONTENTS

Mission	1
Strategic Goals	1
Board of Trustees	2
President's Letter	3
General Information	4
Directory of Departments	6
Academic Calendar	7
Policies, Procedures, and Regulations	8
Special Programs and Services	29
Degree and Certificate Programs	30
Course Descriptions	36
How to Read Course Descriptions	38
Course Code Abbreviations	38
Descriptions	40
Special Courses	162
Descriptions	164
Faculty and Staff Directory	170
Index and Maps	180
Index	182
College Maps	186

Please keep this catalog for future reference to the lifelong learning opportunities that are available at Lansing Community College. Education is a lifelong process, and LCC continues to be a resource for its students through the nation and the world. Futures begin at LCC, and they can be enriched—over and over again, for a lifetime.

This catalog was produced by the Marketing and Communications, Publications and Advertising Office, Lansing Community College.





MISSION STATEMENT

The mission of Lansing Community College is to provide lifelong education based on traditional and contemporary values, and to create a dynamic educational environment that enables individuals to enrich their personal, professional and occupational lives.

Lansing Community College will continue to develop partnerships with the community that foster support and understanding for mutually beneficial endeavors. The College recognizes the diverse community it serves, and believes in nurturing and promoting a climate that supports and respects the value of this diversity.

Lansing Community College is committed to standards of excellence in the programs that it offers through general education, career training and transfer programs, basic skills education, and supportive services to the students, community, business and industry at the local, national and international levels.

STRATEGIC GOALS

1. Maintain and develop the highest standards of academic and curricular and co-curricular excellence in order to promote recruitment, retention and student success in a diverse society.
2. In recognition and awareness of the value of the College's human resources, continue to provide professional development activities as a commitment to faculty, staff, students, and community.
3. Recruit faculty, staff and students to promote academic excellence while continuing to emphasize diversity, affirmative action and equal opportunity in staffing and student body.
4. Emphasize critical/analytical thinking skills across the College's curricula.
5. Emphasize writing, reading, speaking, and listening skills across the College's curricula.
6. Develop sufficient technology skills in students, faculty and staff to enable them to function in a modern technological environment.
7. Continue to be sensitive to the issues of statewide governance, coordination and planning.
8. Continue to strengthen the College's international and external communications.
9. Enhance the College's resource base in order to maintain the quality of its education, training, support services, and activities.
10. Develop and enhance partnerships with business, industry, government, labor, public agencies, health service organizations, K-12 school districts, colleges, and universities.
11. Increase the internationalization of the College's curricula and services in recognition of the competitive international marketplace, world interdependence and a pluralistic society.
12. Provide continuous development, review and evaluation of the College's total learning environment.
13. Increase educational opportunities through the use of learning/extension centers and state-of-the-art telecommunication systems.

Lansing
Community
College

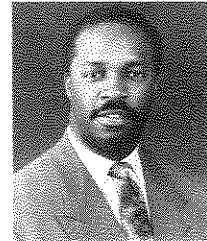
BOARD OF TRUSTEES



James E. Byrum
Chair



Melvin M. Villarreal, Ph.D.
Vice Chair



Ronald A. Nichols, M.D.
Secretary



M. Kate Murphy, Ph.D.
Treasurer



Olga A. Holden, Ph.D.
Trustee



Dorothy D. Jones
Trustee



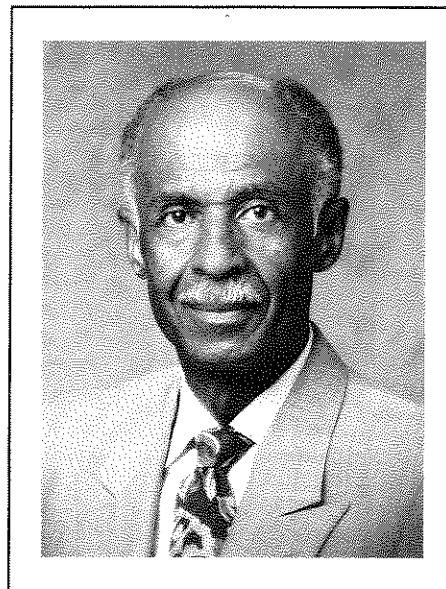
Sharon A. Reid
Trustee



MESSAGE FROM THE PRESIDENT

Dear Students,

On behalf of the Board of Trustees, faculty, and staff, welcome to Lansing Community College. We're glad you're here.



Our philosophy is that students come first: you are the lifeblood of our institution; you are the reason we are all here. Please know that everything about Lansing Community College—instruction, libraries, computer labs, cafeterias, student services of all kinds as well as the physical facilities—is all designed with you and your learning needs as our highest priority.

We hope that you take full advantage of all that we have to offer you here, because we feel that together we can build a new and better future for you, your co-workers, your family and the greater Lansing community.

Please let us know what we can do to help you reach your goals. If there is anything I can do personally to improve your learning experience, please contact the Executive Office at 517/483-1851.

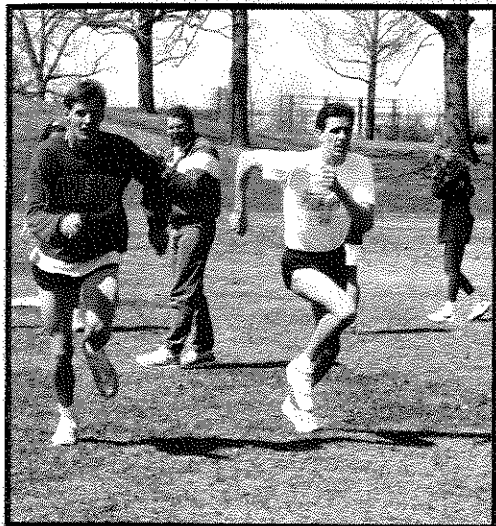
Cordially,

Abel B. Sykes, Jr.
President
Lansing Community College



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C A T A L O G



GENERAL
INFORMATION

DIRECTORY OF DEPARTMENTS

(Area Code 517)

Careers Division

Career Services (GVT 211) 483-1172
 Career and Employment
 Development Services 483-1172

Business Careers (OC 210) 483-1522
 Accounting 483-1599
 Computer Information
 Systems 483-1546
 Hospitality and Tourism 483-1542
 Hotel-Motel-Foods
 Management 483-1542
 Travel and Tourism 483-1542
 Legal Assistant 483-1503
 Management and Marketing 483-1532
 Labor Relations 483-1532
 Management 483-1532
 Marketing 483-1532
 Real Estate 483-1532
 Office Careers 483-1587
 Secretarial 483-1587
 Word Processing 483-1587

Human, Health, and Public Service

Careers (GVT 175) 483-1410
 Allied Health 483-1410
 Community Health
 Services 483-1410
 Massage Therapy 483-1410
 Medical Assistant 483-1410
 Surgical Technology 483-1410
 Criminal Justice and Law (OC 224) 483-1570
 Corrections 483-1570
 Court and Conference
 Reporting 483-1616
 Law Enforcement 483-1570
 Security 483-1570
 Dental 483-1457
 Emergency Medical Services 483-1448
 Fire Science 483-1346
 Human Services 483-1141
 Child Development 483-1141
 Gerontology/Aging 483-1141
 Social Work 483-1141
 Substance Abuse 483-1141
 Imaging Technology 483-1410
 Nursing 483-1413
 Respiratory Therapy 483-1410
 Sign Language 483-1410

Technology Careers (GVT 220) 483-1336
 Architecture and Land
 Planning 483-1336
 Architecture Technology 483-1356
 Geographic Resource and
 Environmental Technology 483-9675
 Interior Architectural
 Design 483-9679
 Landscape Architecture
 Design (Horticulture, Floriculture) .. 483-9675
 Construction Technology 483-1339
 Apprentice Programs 483-1337
 Building Maintenance 483-1396
 Civil Technology 483-1383
 Heating, Air Conditioning,
 and Refrigeration 483-1396
 Residential Builder 483-1361
 Industrial Drafting 483-1339

Industrial Technology 483-1364
 Computerized Numerical Control .. 483-1364
 Electrical Technology 483-1360
 Electronics Technology 483-1364
 Industrial Automation 483-1318
 Machine Trades/Maintenance 483-1364
 Quality Control 483-1318
 Welding Technology 483-1364
 Media 483-1476
 Art (AOF 309) 483-1476
 TDD 483-1477
 Media Technology
 (TV and Audio) (AOF 108) 483-1670
 Photo Imaging
 Technology (PC 117) 483-1673
 Transportation 483-1336
 Automotive Technology 483-1336
 Aviation Technology (AIRPORT) .. 483-1406
 Truck Driver Training
 (Fort Custer, Battle Creek) .. (616) 731-4125
 483-1336

Community Services and Continuing Education Division

Community Education and Services (OC 207) 483-1179
Continuing Professional Education (CSCE 109) 483-1414
Contracted Training Services (CSCE 206) 483-1965
Instructional Services (CSCE 210) 483-1280
Physical Fitness and Wellness (GVT 354) 483-1227
 TDD 483-9610
 Rentals (CSCE 110) 483-1881

Extension and Community Education (Learning Centers)..... 483-1860

International Programs 483-1006
Japan Adventure/ Japan Horizon (OUF 228) 483-1006

Liberal Studies Division

Military Science/ROTC (A&S 110) 483-1101/1112
Communication (A&S 211) 483-1040
 Foreign Language 483-1040
 Speech 483-1040
 Writing 483-1040
Humanities and Performing Arts (A&S 255) 483-1018
 English/Literature 483-1018
 Humanities 483-1018
 History 483-1018
 Philosophy 483-1018
 Religion 483-1018
 Performing Arts 483-1018
Math and Computer Science (A&S 408) 483-1087
 Applied Math 483-1087

Computer Science 483-1087
 Statistics 483-1087
 Transfer Math 483-1087

Science (A&S 408) 483-1092
 Biology/Molecular Biology 483-1092
 Chemistry 483-1092
 Geological Science 483-1092
 Integrated Science 483-1092
 Physics 483-1092

Social Sciences (A&S 353) 483-1126
 Economics 483-1126
 Geography 483-1126
 Political Science 483-1126
 Psychology/Education 483-1126
 Sociology/Anthropology 483-1126

Public Safety

(GVT 250) 483-1800
 TDD 483-9916

Student and Academic Support Division

Athletics (TH 103) 483-1624

Enrollment Services

Counseling
 (A&S 103/SPS 208) 483-1191/1184
 Advising Center (A&S 103) 483-1904
 Disability Support Services
 (SPS 208) 483-1207
 TDD 483-1218/1207
 Native American
 Leadership Courses (SPS 122) 483-9803
 Student Development
 Courses (SPS 208) 483-1184
 Women's Resource Center
 (SPS 208) 483-1199
 Entry Services (SPS 104) 483-1266
 Admissions (GVT 232) 483-1200
 Limited English Proficiency
 (SPS 104A) 483-1207
 Minority Outreach
 and Recruitment (SPS 103) 483-9755
 Native American Leadership
 Program (SPS 122) 483-9803
 Office of the Registrar (SPS 104) 483-1266
 Financial Aid (SPS 112) 483-1296
 Veteran's Services (SPS 114) 483-1300

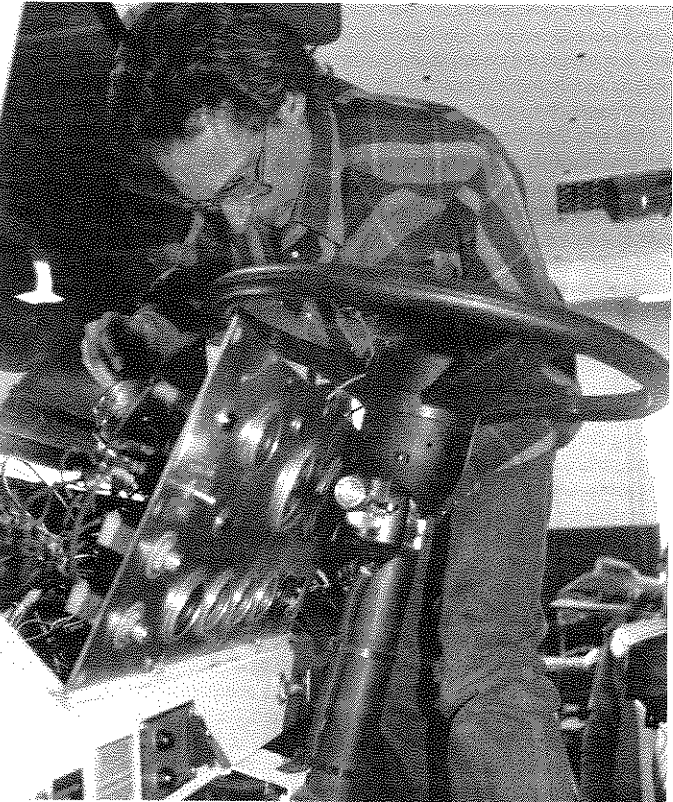
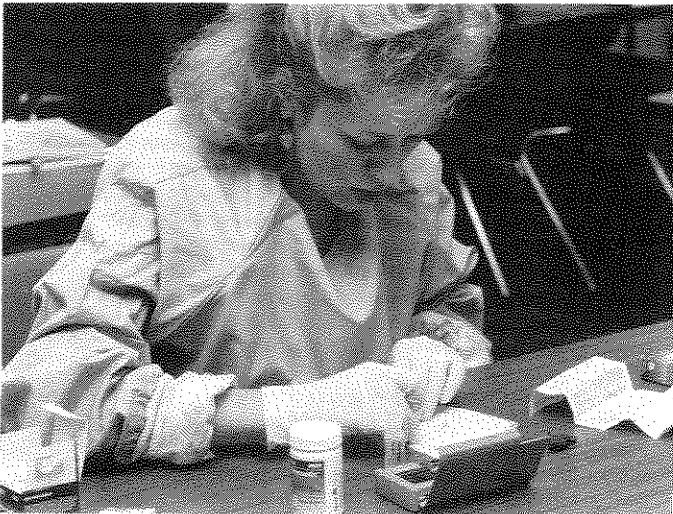
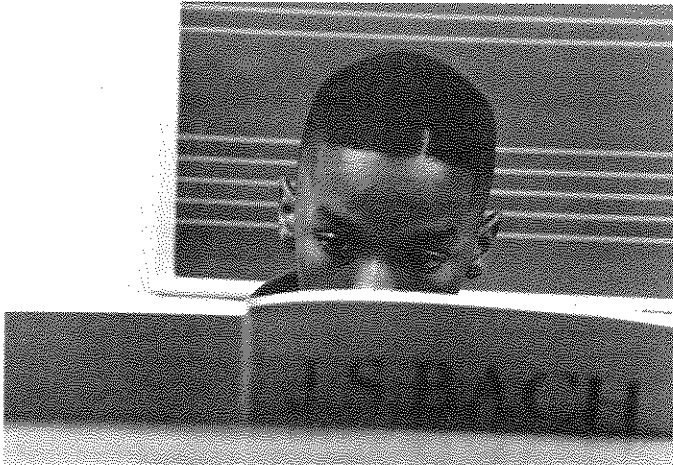
Honors (SPS 215) 483-1162

Instructional and Student Support

Library Information Services
 (OC 231) 483-1657
 Tutorial Services (SPS 208) 483-1207
 Media Services (AOF 108) 483-1672
 Interactive Learning
 Center (OC 200) 483-1566
 Telecourse Hotline (AOF 108) 483-1695
 Telelearning (AOF 108) 483-1672
 Student Life (SPS 201) 483-1285

Language Skills (A&S 309E) 483-1061
 Learning Center 483-1060
 Limited English
 Proficiency Courses (SPS 104A) 483-1061

Math/Science (A&S 309JJ) 483-1073
 Math Lab (A&S 309) 483-1073



ACADEMIC CALENDAR

Fall Semester 1995

Classes Begin	August 24
Labor Day	September 4
Thanksgiving	November 23–26
Last Day of Classes	December 17

Spring Semester 1996

Classes Begin	January 13
Martin Luther King, Jr. Day	January 15
Spring Break	March 4–10
Last Day of Classes	May 10
Graduation Day	May 12

Summer Session 1996

Classes Begin	June 6
Independence Day	July 4
Last Day of Classes	August 1

Registration information and dates are published in the *Class Schedule* for each semester, or students may call the Office of the Registrar.

POLICIES, PROCEDURES, AND REGULATIONS

ADMISSIONS INFORMATION

GENERAL ADMISSION CRITERIA

Lansing Community College is an open-door community college designed to extend service to applicants possessing appropriate preparation to benefit from programs and courses offered at the College. Determination and judgment of an individual's preparation and readiness to benefit from a course or program at Lansing Community College is the responsibility of the College's professional personnel.

Persons who are 18 years of age or older or who have graduated from high school are eligible to attend Lansing Community College. Persons who are under 18 years of age, enrolled in high school, and working to fulfill high school graduation requirements, may be admitted to LCC under the Dual Enrollment or Special Admission Programs explained later in this section. Admission to the College does not guarantee admission to a particular program.

GENERAL ADMISSION PROCEDURES

Procedures for Completing the Admissions Application

1. Complete all items requested on the application for admission.
2. Attach the non-refundable \$10 application fee (check or money order made payable to Lansing Community College) to the application.
3. International applicants must follow the procedures outlined under "International Applicants."
4. Applicants in high school must follow the procedures outlined under "Dual Enrollment Program" or "Special Admission Program."
5. Guest students must follow the procedures outlined under "Guest and International Guest Applicants."

APPLICANTS MAY MAIL OR BRING APPLICATIONS TO THE ADMISSIONS OFFICE LOCATED IN THE GANNON VOCATIONAL-TECHNICAL CENTER IN ROOM 232. ITEMS SHOULD BE MAILED TO: 1111-ADMISSIONS OFFICE, LANSING COMMUNITY COLLEGE, P.O. BOX 40010, LANSING, MI 48901-7210. FOR ADDITIONAL INFORMATION CALL (517) 483-1200.

Applicants who are admitted to LCC will receive notification and information regarding registration procedures. Applicants denied admission will receive a letter stating the reason for denial and explaining the appeal process (see Appeal Process for Denial of Admission).

Basic Skills Assessment and Advising

Some courses require particular basic skills proficiency levels prior to enrollment. These basic skills levels are identified in the *Class Schedule* booklet, which is published prior to each semester. Students are strongly encouraged to arrange for testing and follow-up advising prior to registration to avoid delays. Assessment information may be obtained by contacting:

Reading and Writing—Language Skills Learning Center located in Room 309 (third floor) of the Arts & Sciences Building, phone: (517) 483-1060.

Math—Mathematics Learning Center located in Room 309 (third floor) of the Arts & Sciences Building, phone: (517) 483-1900.

Science—Science Department located in Room 408 (fourth floor) of the Arts & Sciences Building, phone: (517) 483-1092.

Assessment tests are also given in English as a Second Language, vocabulary, and spelling for designated students.

Phase I of the S.T.A.R.T. (Student Testing, Advising, Registration Times) Program requires that students take appropriate assessment tests prior to attending Phase II (advising and registration) of the program.

SPECIAL PROGRAM/SPECIAL CIRCUMSTANCE ADMISSION

Selective Admission Programs

The programs listed in this section are selective admission programs. Admission to selective admission programs is on a competitive basis, and these programs have program admission requirements beyond those required for admission to the College. Admission to Lansing Community College does not guarantee admission to a selective admission program. Students wishing to apply for admission to a selective admission program should contact the Admissions Office for further information by calling (517) 483-1254 or writing

1111-ADMISSIONS OFFICE, LANSING COMMUNITY COLLEGE, P.O. BOX 40010, LANSING, MI 48901-7210.

- Aviation Flight Technology, Associate in Applied Science
- Aviation Maintenance Technology, Associate in Applied Science
- Avionics, Associate in Applied Science
- Basic Emergency Medical Services, Certificate of Achievement
- Career Ladder Nursing-First Year, Certificate of Achievement
- Career Ladder Nursing-Second Year, Associate in Applied Science
- Court and Conference Reporting, Associate in Business
- Criminal Justice, Law Enforcement, Associate in Business
- Dental Assistant, Certificate of Achievement
- Dental Business Assistant, Certificate of Completion
- Dental Hygienist Program, Associate in Applied Science
- Diagnostic Medical Sonography, Certificate of Achievement
- Emergency Medical Services, Associate in Applied Science
- Fire Academy, Certificate of Completion
- Fire Science Technology, Associate in Applied Science
- Medical Assistant, Certificate of Achievement
- Mid-Michigan Police Academy, Certificate of Completion
- Music Commercial Performance, Associate in Applied Arts
- Music Transfer, Associate in Applied Arts
- Paramedic, Certificate of Achievement
- Radiation Therapy, Associate in Applied Science
- Radiologic Technology Program, Associate in Applied Science
- Respiratory Therapist, Associate in Applied Science
- Surgical Technology, Certificate of Achievement
- Truck Driver Training, Certificate of Completion

International Applicants

International student admission procedures have been developed to create a positive experience for the international student, the service community, and the College community.

Admissions requirements for international students are affected by U.S. Immigration and Naturalization Service (USINS) regulations. In accordance with USINS regulations, any individual who is not a United States citizen and who has been admitted to the United States in a temporary, non-resident status will be classified as an international student at Lansing Community College. Individuals who have refugee, immigrant, or resident alien status are not international students.

The visa classification of each international applicant determines the admission requirements and the attendance regulations applied to the applicant. For details on the requirements for each visa type, the applicant should refer to the International Student Admissions Application Packet. To request the Application Packet, contact 1111-ADMISSIONS OFFICE, LANSING COMMUNITY COLLEGE, P.O. BOX 40010, LANSING, MI 48901-7210.

General admission to the College for all types of visas requires applicants to: (1) be at least 18 years old, (2) prove successful completion of studies equivalent to U.S. high (secondary) school, (3) provide proof of competency in the English language, and (4) provide additional documents as required by the applicant's USINS visa classification.

International students who would like copies of documents submitted to Lansing Community College for admission purposes must request these copies no later than one year after the last semester of attendance in international student status with the College. Lansing Community College does not keep such documents beyond legally required time limits.

Admission to LCC as an international student will be considered after receipt of the application, \$10 application fee, and *all* required documents. **All admission material must be received by the College no later than eight weeks prior to the first day of walk-in registration for the semester of attendance.** Applicants outside the United States are advised to apply as early as possible to allow for mail delays, to obtain visas and exit permits, and to make travel arrangements.

The Admissions Office will provide to admitted applicants information regarding USINS regulations, academic advising, and College policies governing international students. Prior to registering for classes, international students will be asked to take tests administered to the general College population. If evaluation of these tests indicates a need for improvement of English language skills, the student will be required to enroll in appropriate language courses.

Admission procedures are established and reviewed by the International Student Services Committee. Any changes in the procedures will be brought to the attention of the Dean of Student and Academic Support, students, applicants, LCC staff, and the service community.

The International Student Services Committee has been established in the Division of Student and Academic Support with the following membership:

1. Director or Assistant Director of Entry Services (Chairperson)
2. Director of International Programs
3. Bilingual Coordinator
4. International Student Counselor
5. A member of the teaching faculty
6. International Admissions Specialist

Dual Enrollment Program

This program is designed to provide an opportunity for qualified high school juniors and seniors to earn college credit. High school credit may or may not be granted according to the discretion of the participating high school. Dual enrollment affords students educational enrichment in specific areas where unusual ability and interest are displayed, especially in courses and academic areas not available in the students' high school.

Qualifications for the Dual Enrollment Program

Applicants must:

1. Be working toward high school graduation requirements;
2. Have attained **junior or senior high school standing** prior to applying for the program.

Application Procedures for the Dual Enrollment Program

Applicants must:

1. Complete a College application;
2. Submit written approval from their authorized high school official each semester of attendance;
3. Submit an official high school transcript once each academic year;
4. Mail or bring the application, the non-refundable \$10 application fee, letter of authorization, and transcript to the LCC Admissions Office prior to enrolling in classes.

Special Admission Program

Qualifications for the Special Admission Program

Applicants must:

1. Be working toward high school graduation requirements;
2. Have attained freshman or sophomore high school standing prior to applying for the program.

Application Procedures for the Special Admission Program

Applicants must:

1. Complete a Special Admission Supplemental Application for each class in which the student intends to enroll;
2. Submit an official high school transcript each semester of attendance;
3. Mail or bring the Special Admission Supplemental Application(s), the non-refundable \$10 application fee, and transcript to the LCC Admissions Office prior to enrolling in classes.

Guest and International Guest Applicants

Guest and international guest applicants must:

1. Obtain a guest application from the Registrar's Office of the student's primary college;
2. Submit a completed guest application form to LCC each semester they wish to continue in the guest admission category (international guest students seeking regular student admission at LCC must contact the Admissions Office at least eight weeks prior to walk-in registration);
3. Mail or bring the guest application and the non-refundable \$10 application fee to the Admissions Office prior to enrolling in classes.

APPEAL PROCESS FOR DENIAL OF COLLEGE ADMISSION

Applicants denied admission to the College may appeal the denial. The decision to admit or uphold denial of admission will be based upon the individual

merits of the appeal. Appeals submitted with insufficient time to complete the appeal process (eight working days) by the first day of class will be reviewed for the following semester. The appeal process shall consist of the following steps:

STEP 1: Admissions Counselor or Admissions Staff Member

If an Admissions Counselor or staff member denies admission to an applicant, the Admissions counselor or staff member shall provide the applicant with an appeal process information sheet. If the applicant wishes to appeal the denial, the Counselor or staff member shall arrange an appeal meeting with the Director or Assistant Director of Entry Services within two working days of the denial.

STEP 2: Director or Assistant Director of Entry Services

(If admission was originally denied by the Director or the Assistant Director of Entry Services, the applicant may move directly to Step 3 of the appeal process.) The applicant must submit his/her appeal in writing to the Director or Assistant Director of Entry Services at least one working day prior to the appeal meeting. The Director or Assistant Director shall render a decision to the applicant within two working days of the appeal meeting and provide the applicant with a written copy of the decision. If the appeal is denied, the Director or Assistant Director shall discuss Step 3 of the appeal process with the applicant. If the applicant wishes to appeal the denial, the Director or Assistant Director shall assist the applicant in contacting the Appeals Coordinator.

STEP 3: The Board of Appeals

The Appeals Coordinator shall convene the Board of Appeals within three working days of the applicant's appeal to the Board and advise the applicant of the date, time, and location of the appeal meeting. The Board of Appeals Chairperson shall notify the applicant of the Board's decision within three working days from the date of the applicant's appeal meeting and shall provide the applicant with a written copy of the decision. The Board of Appeals shall consist of the following members:

- A. The Dean of Student and Academic Support (Chairperson) or his/her designee
- B. A member of the teaching faculty
- C. A counselor
- D. Appeals Coordinator or his/her designee (as recorder and non-voting member)

The appeals process for international students shall have the following modification in membership:

STEP 1 — International Admissions Specialist or his/her designee

STEP 2 — Director or Assistant Director of Entry Services

STEP 3 — Board of Appeals

- A. The Dean of Student and Academic Support (Chairperson) or his/her designee
- B. A member of the teaching faculty
- C. Bilingual Coordinator or Director of International Programs
- D. Appeals Coordinator or his/her designee (as recorder and non-voting member)

The decision of the Admissions Board of Appeals is final and will be reached by simple majority vote. A copy of the Board of Appeals decision shall be maintained in the Admissions Office for two years.

FINANCIAL AID INFORMATION

The Student Financial Aid/Veteran Services Program at Lansing Community College assists students, who demonstrate need, in meeting some of the college costs that cannot be met by personal or family resources. An objective method of need determination approved by the Federal government is used. Some scholarships are available that are based on academic achievement or talent.

Students are eligible to apply for financial assistance if they have graduated from high school, have completed a GED, or have demonstrated, through testing, the ability to benefit from courses or programs at Lansing Community College. They must enroll in LCC programs of study leading to a one-year certificate, two-year degree, or four-year transfer program and must be a U.S. citizen or eligible noncitizen. Enrollment in a program of study abroad that is approved for credit by Lansing Community College is considered to be enrollment at Lansing Community College for purposes of a student applying for federal student financial assistance.

Sources of Financial Assistance

Financial assistance programs are funded from federal, state, college, and private sources. Four major sources of financial services are scholarships, grants, loans, and employment. Most students receive a combination of these forms known as a financial aid "package."

Scholarships: Money that does not have to be paid back, usually awarded for academic achievement or talent that may or may not be based on need.

- Board of Trustees Scholarships are awarded to outstanding district high school graduates.
- Divisional Scholarships are awarded to outstanding students who are residents of the district and who apply directly to the College division or department in which the student wishes to study. Students may contact the Student Financial Aid/Veteran Services Office for information.
- Athletic Scholarships are awarded through the Athletic Department. Talented athletes should contact coaches in their respective sport areas.
- Michigan Competitive Scholarships are based upon a qualifying examination given during the junior and senior years in high school. Students may receive an "honorary" award not based on need or a monetary award based upon need.
- Private Scholarships are available through the College or private organizations. A Scholarship and Financial Aid Booklet is available in the Office of Student Financial Aid/Veteran Services giving information about private scholarships, grants, loans, employment and college transfer scholarships available to LCC students.
- Foundation Scholarships are provided through the Lansing Community College Foundation Office.

Grants: Money that does not have to be paid back, usually based upon need.

- Federal Pell Grants are based on need. Students must file an LCC Financial Aid/Veteran Services Form and a Free Application for Federal Student Aid. The Office of Student Financial Aid/Veteran Services must receive the results of this application to award the grant.
- Federal Supplemental Educational Opportunity Grants are awarded to "high" need students by submitting the same application forms as for Pell Grants.
- Michigan Educational Opportunity Grants are awarded to needy students who have been Michigan residents for at least 12 consecutive months.
- Michigan Adult Part-time Grants are awarded to self-supporting, part-time (3-11 credits), needy students who have been out of a high school program for at least two years and who have been Michigan residents for the past 12 months.
- Michigan Tuition Incentive Program (TIP) pays community college tuition and fees for students from low-income families who meet the basic criteria and low income financial guidelines. Eligible students must be United States Citizens and residents of Michigan according to institutional criteria, must be under 20 years of age, and must apply for certification to the State of Michigan prior to graduation from high school or completing the General Education Development (GED) Certificate.
- Lansing Community College's Women's Resource Center Grants are available for tuition and child care for displaced homemakers and special populations. Students apply through the Women's Resource Center, Student Personnel Services Building, 2nd floor.
- Center for Aging Education Tuition Assistance is available to persons 60 years of age or older for up to four (4) credits per semester. Students must meet moderate income guidelines. Students apply through the Center in Room 207 Old Central Building or call (517) 483-1179.

Loans: Money that must be repaid beginning six months after graduation or enrollment of less than six (6) credits, with the exception of the PLUS loans which must begin repayment upon disbursement.

- William D. Ford Federal Direct Student Loan Program includes both Subsidized and Unsubsidized Student Loans and the Parent Loan for Undergraduate Students (PLUS). Specific guidelines pertaining to eligibility and the application process are available in the Student Financial Aid/Veteran Services Office.
 1. Subsidized and Unsubsidized William D. Ford Direct Student Loans are available for students who meet eligibility requirements. Students apply by completing and submitting a Free Application for Federal Student Aid (FAFSA), an LCC Admissions Application, an LCC Financial Aid Application, and an LCC application for William D. Ford Direct Subsidized and Unsubsidized Student Loans.
 2. Parent Loans for Undergraduate Students (PLUS) are available to parents of undergraduate dependent students to pay college costs not

covered by other financial aid. Applications for William D. Ford Direct PLUS loans are available in the Student Financial Aid/Veteran Services Office.

- MI-LOAN is a Middle Income Loan provided by the State of Michigan. This is a credit-based loan.
- Short-Term Loans are available from Lansing Community College on a limited basis through the Student Financial Aid/Veteran Services Office.

Employment: Job opportunities may be available to assist students in earning money to meet part of their educational expenses. Employment at the College is based upon skills and abilities and not necessarily upon need.

- Federal College Work Study is based upon need. Students must submit an LCC Admissions Application, the Financial Aid Application Form, and a Free Application for Federal Student Aid to be considered.
- Michigan Work Study is awarded to needy students to help meet expenses while attending college. Students may be employed by the College, public non-profit organizations, private business and industry.
- Career and Employment Development Services at LCC posts federal work study jobs, student employee jobs, and off-campus part- and full-time jobs. Students obtain information at the Career and Employment Development Services Office and must interview at the department's or employer's office.
- Community Service Learning off-campus employment opportunities are available to students who are awarded Federal Work Study. Inquiries regarding these employment opportunities should be made to the Career and Employment Development Services Department.

Special Situation Funds: Funds are available for certain students. The College's Student Financial Aid/Veteran Services Office has information regarding the availability of funds and application procedures for the following programs:

- Armed Services
- Veterans' Benefits
- Children of Disabled or Deceased Veterans
- Federal Bureau of Indian Affairs
- Michigan Commission on Indian Affairs
- Michigan Rehabilitation Services
- Clubs, Organizations, and Business Scholarships
- Private Donor Scholarships

How and When to Apply

Students wishing to receive financial aid at Lansing Community College should submit a Free Application for Federal Student Aid (FAFSA) no later than February 15. Federal income tax information is necessary to complete the form. FAFSA forms are available at LCC or from high school counselors. The completed FAFSA form should be mailed in the envelope enclosed in the form to the federal processor. In four to six weeks the processor will send a Student Aid Report (SAR) to the student. The Financial Aid office at LCC must receive these results to award aid. Students whose results are received by April 15 will have their Award Letter no later than May 15. Application for Financial Aid must be completed each academic year that a student plans to attend college.

To make application for financial assistance at the College, additional forms must be submitted:

1. New students must complete the LCC Application for Admission and the Financial Assistance form and return them to: 1120-STUDENT FINANCIAL AID/VETERAN SERVICES, LANSING COMMUNITY COLLEGE, 430 N. CAPITOL, P.O. BOX 40010, LANSING, MI, 48901-7210. New students must complete the Free Application for Federal Student Aid and submit the application to the federal processor.
2. Returning students must complete the LCC Financial Assistance Form and submit it to the Office of Student Financial Aid/Veteran Services, and must complete the Free Application for Federal Student Aid and submit it to the federal processor.

William D. Ford Federal Direct Student Loans (Subsidized, Unsubsidized, and PLUS) are available by completing the aforementioned forms and the loan application form. Loan applications are available in the Student Financial Aid/Veteran Services Office.

LCC Board of Trustees Scholarship forms are available through district high schools' counseling offices.

Divisional Scholarships are available directly from the respective College division or department of the student's major area of study.

The LCC Foundation has scholarships available through the Student Financial Aid/Veteran Services Office, or students may call the LCC Foundation Office at (517) 483-1985.

Processing of the student's application for financial assistance will be completed and the student will be notified when the student has submitted the LCC Application for Admission to the Admissions Office and the LCC Financial Assistance Application to the Office of Student Financial Aid/Veteran Services, and when the Office of Student Financial Aid/Veteran Services receives the results of the federal application for student financial assistance. Students transferring from other colleges must submit a Financial Aid Transcript from their previous colleges when they apply for financial assistance, along with any additional documents required by the Office of Student Financial Aid/Veteran Services.

The amount of the student's award will be based on a standardized cost of attending LCC, less the expected student's and family's contribution. The College will attempt to meet a student's need based upon available funds. All financial assistance applications are confidential.

Rights and Responsibilities of Students Receiving Financial Assistance

As a recipient of financial assistance, a student enters into an agreement with Lansing Community College which affects the receipt and continuation of assistance. Therefore, students should be sure to read this information carefully.

Need and Financial Assistance Package

Financial need is determined by subtracting the expected family contribution and other financial resources from the appropriate College budget. The College will attempt to meet the student's need within the limitations of available resources. Also, if any errors are made by the College in determining eligibility for assistance or awarding of assistance, they will be corrected. Should any major changes occur in the student's financial circumstances or other aid be provided to the student, the student will report these changes to the Office of Student Financial Aid/Veteran Services.

Expected Family Contribution

If a student is a dependent student, the College assumes that parents have the first obligation to provide for the student's cost of education to the extent that they are able, based on a standardized method of determining parental contribution. The second obligation falls upon the student to contribute to his/her own education from personal assets and earnings, which may include the need to borrow against future earnings.

If a student is a self-supporting or independent student, the College assumes that since a student is the prime beneficiary of education, the student has a primary obligation to provide for the cost of education to the extent the student is able, based on a standardized method of determining student contribution. The student's expected contribution will come from personal earnings, spouse's earnings, if applicable, savings and assets, which may also include the need to borrow against future earnings.

Selection Criteria

Students are selected to receive need-based financial aid on a first-come first-served basis. Students with the highest need are selected first until available funds are exhausted. Students with bachelor's degrees may receive Federal Work Study if funds permit. These students may also apply for Federal Direct Student Loans.

Falsification of Information

Falsification of information submitted by the student or parents for the purpose of receiving financial assistance may result in cancellation of assistance, billing back for assistance received, and referral to the appropriate federal authorities.

The Office of Student Financial Aid/Veteran Services may be required to verify information provided on the Financial Assistance Form by requiring income tax statements or other documentation of financial status.

Credit Hour Load

Fall and Spring Semester

Financial assistance is offered to students based on enrollment as a full-time student, 12 credit hours or more per semester. If a student enrolls for fewer than 12 credits, his/her award is prorated to meet his/her enrollment. For example, if a student enrolls for 9–11 credits, he/she would receive 75 percent of his/her award. If a student enrolls for 6–8 credits, he/she would receive 50 percent of

his/her award. If a student enrolls for fewer than six credit hours, he/she may be eligible for some federal programs. A student enrolled for 3–11 credits may be eligible for the Michigan Adult Part-time Grant.

Summer Session

Summer session is shorter than fall and spring semesters. Students need only be enrolled for six credits to be considered full-time for purposes of financial aid, five credits to be considered three-quarter time, and three credits to be considered half-time. Enrollment for less than three credits will make a student ineligible for most financial aid. The length of the summer session also makes a difference in the calculation for the maximum financial aid allowable for that period. Generally, the amount of financial aid will be less for a student enrolled in the summer session compared to the regular fall and spring semesters.

Short Course Eligibility

Payment for courses that are less than a semester in length is permitted. Students enrolling in these courses must prove attendance. Students who enroll in a short course, receive payment for the course, and then do not attend will be required to repay any financial assistance attributed to that course. In addition, students who receive payment for a short course that is subsequently canceled will be required to repay any financial assistance attributed to that course.

Student Budgeting of the Financial Aid Package

The student is responsible for properly budgeting all financial aid offered for each semester. The financial aid package will be distributed to the student in the following manner:

1. Tuition and fees will be deducted from the financial aid during registration if sufficient funds are available and if tuition and fees are not paid by the student or other sources;
2. The student will receive an advanced financial assistance check during the first full week of classes, if the student is eligible; and
3. The student will receive the balance of grants, loans, or scholarships approximately 21 days after the first day of the semester.

The student must be prepared to meet his/her living expenses during the period prior to check distribution.

Financial Assistance Advance Check

CHECK DISTRIBUTION: Checks are issued two times each semester at the Cashier's Office if financial aid awards exceed the amount of tuition and fee charges. Students use this money for books, supplies, transportation, and room and board. Advance checks are printed during the first two weeks of the semester. Final checks are printed by the 21st day of the semester. Students who receive an advance check normally receive a final check.

ADVANCE CHECKS: Advance checks are automatically calculated for financial aid students if their awards are complete and if they are registered by the last day of on-campus registration. The financial assistance advance check will be calculated by subtracting the amount of tuition and fees owed for the semester from the adjusted amount based on credit enrollment and writing a check for a portion of the remainder.

College Work Study

If a student has been offered College Work Study eligibility, the student must first secure employment through the Career and Employment Development Services Office (Room 211, Gannon Vocational Technical Center) prior to receiving these funds which will be disbursed on a regular hourly salary payment schedule.

Tuition Refunds

Tuition refunds for financial aid students are based on federal regulations. Refunds for first-time students who completely withdraw are made through the first 60 percent of the semester. Students who are not first time students and completely withdraw will have refunds through the first 50 percent of the semester. Tuition will be refunded in the following order:

- a. To outstanding balances on FFEL Program Loans
- b. To outstanding balances on Federal Direct Loans
- c. To outstanding balances on Federal Perkins Loans
- d. To Federal Pell Grant Awards
- e. To Federal SEOG awards

- f. To state financial aid awards
- g. To institutional financial aid awards
- h. To private or public donor awards
- i. To the student

An administrative fee of the lesser of five percent of the refund or \$100 will be held by the College.

Repayment of Grants

If a student withdraws from Lansing Community College or is withdrawn by the College because of non-attendance, a portion of any grants paid to the student may have to be repaid, and grades received for these courses may affect continuation of aid.

Satisfactory Academic Progress Requirements

To continue on financial assistance, students must maintain satisfactory academic progress each semester. Satisfactory academic progress for students receiving federal financial assistance is defined as follows:

1. Students must maintain a grade point average (GPA) of a 2.00 or above on a semester and cumulative basis.
2. Students must earn 65 percent or more of the credits attempted on a semester and cumulative basis.
3. Students receiving financial aid at Lansing Community College for the first time and who do not make satisfactory academic progress will receive an academic warning letter.
4. After five semesters of enrollment, students are required to have a cumulative grade point average (GPA) of 2.00 or above and have earned a minimum of 65 percent of credits attempted. If a student is suspended because of unsatisfactory progress, with more than one semester but less than five semesters of enrollment, the student may be readmitted and allowed to re-enroll under an educational contract with Project STAY. A student will be considered as making satisfactory academic progress for financial assistance programs as long as the student adheres to the terms of the educational agreement, or until the student has raised his/her cumulative grade point average to a 2.00 or greater and has a cumulative completion ratio of at least 65 percent of all courses attempted.

Students who do not successfully complete the semester of their educational contract with Project STAY will be canceled from financial assistance.

After five semesters, students with GPAs lower than 2.00, or students who have earned less than 65 percent of credits attempted, will have their aid eligibility canceled. When they have improved their academic standing, they may be reconsidered for financial aid.

Students applying for the William D. Ford Federal Direct Student Loans must have completed at least one semester of prerequisites or core courses with a 2.0 GPA at 65 percent completion prior to submitting their application for a loan. During the student's loan period, the student must earn a minimum of six credits and maintain a 2.0 minimum grade point average each semester. In addition, the student must maintain a cumulative grade point average of at least 2.0 and earn at least 65 percent of all credits attempted.

Appeals

It is the student's right to appeal in writing or in person any decisions made regarding the assistance application or package. The student may meet with a financial assistance advisor to discuss his/her package. The student may meet with a financial assistance advisor to discuss extenuating circumstances to above policies or any other policies affecting the student as an assistance recipient. Extenuating circumstances are those considered beyond the student's control and must be documented. A financial assistance review committee will meet periodically to consider written appeals.

Rights to Information

It is the student's right to obtain information pertaining to financial aid programs available through the College and to discuss with a financial aid advisor information pertinent to the student's assistance application, file folder (records), and assistance package. However, all student information is confidential and will not be released over the telephone or to anyone other than the student.

Renewal of Financial Assistance

Financial assistance is not automatically renewed. Awards are granted for one year only. A student must reapply for assistance for the following year by completing all required application forms by stated deadlines on the application. For renewal, a student must be enrolled in a certificate or degree program.

To continue on financial assistance, the student must not be in default on any past educational loans at LCC or other colleges. Also, the student must not owe any repayments for educational grants due to withdrawing from college or being withdrawn from college because of non-attendance.

A student will not be awarded federal financial assistance at Lansing Community College beyond attempting 95 credits. A transfer student will not be awarded federal financial assistance beyond 95 attempted credits, including transfer credits accepted by LCC.

Student Financial Services Committee

A college-wide committee on student financial assistance has been established at Lansing Community College. The membership of this committee is as follows:

1. The Director of Student Financial Aid/Veteran Services (Chairperson)
2. One faculty member from each of the instructional divisions to be appointed by the appropriate deans
3. Two students to be appointed by the President of Student Government with the consent of Student Government
4. The Director of Student Life
5. The Business Manager (or his/her designee)
6. The Dean of Student and Academic Support Division (or his/her designee)

The functions for this committee are:

1. To assist in the development of programming and procedure with the Office of Student Financial Aid/Veteran Services of the College;
2. To assist in the evaluation of existing procedures and programming within the Office of Student Financial Aid/Veteran Services of the College;
3. To assist in the area of communications about the student financial assistance program and to provide input from the various sub-populations of the College.

Veterans Information

Veterans Services helps veterans file applications for education, counseling, loans, tutorial assistance, and/or any other entitlements allowed through the Veterans Administration. Lansing Community College is approved as a school for veterans of military service under provisions of Chapters 30, 31, 32, 35, and 106 of the U.S. Code.

Lansing Community College cautions veterans matriculating under this program to be prepared to pay their expenses for at least two months after the beginning of the academic year. ALL TUITION AND FEES MUST BE PAID AT THE TIME OF REGISTRATION. Once the veteran's application is approved and the award processed, monthly checks will be issued if the veteran is prompt in maintaining satisfactory academic progress and following a chosen curriculum.

New student veterans and veterans wishing advance payment should apply at the Office of Student Financial Aid/Veteran Services at least five (5) weeks prior to the beginning of a semester. Monetary allowances provided for by the G.I. Bill vary according to the level at which the veteran is pursuing an academic program as indicated by the following schedule:

LEVEL OF ATTENDANCE	REQUIRED CREDIT HOURS
Full time	Minimum of 12
Three-quarter time	9, 10 or 11
Half time	6, 7 or 8

After enrollment, veterans should direct their inquiries concerning eligibility to the Office of Student Financial Aid/Veteran Services in the Student and Academic Support Division.

Lansing Community College, in recognition of the special needs of active-duty service persons in having access to and completing programs, has been designated as a Servicemember's Opportunity College.

In addition, the College participates in the Army College Fund, Michigan National Guard Co-op, Air Force ROTC Program, Army ROTC Program, and USMC Open Admissions Program.

Satisfactory Progress for Veterans' Benefits Eligibility

In compliance with Veterans Administration statutory requirements of subparagraph 56, section 1775 of chapter 36, Title 38 U.S. Code, Lansing Community College student veterans' benefits recipients will not be certified as eligible for benefits when their academic progress (cumulative grade point average) places them in the academic warning range (probation) beyond two semesters of enrollment. Re-certification of eligibility for benefits will not be considered until after the semester in which the student regains academic good standing (see Academic Standing Scale).

Certification Policy for Veterans Administration Educational Benefit Recipients

Lansing Community College will notify the U.S. Department of Veterans Affairs if a student receiving veteran's educational benefits is awarded a grade of 0.0, "W" or "Z" for course work pursued. In this event, the College will report the first day of the certified attendance period as the last date of attendance, unless the benefit recipient provides to the Lansing Community College Veterans Office a written and signed statement indicating a different last date of attendance. Veterans' educational benefit recipients neglecting to request an official evaluation for credits earned at colleges other than Lansing Community College and for active duty military service will not have their enrollment certified beyond their second semester of attendance.

HOUSING

Lansing Community College maintains no housing units for students, nor does it enter into third party contracts or supervise off-campus housing.

REGISTRATION INFORMATION

REGISTRATION PROCEDURES

Each semester Lansing Community College publishes the *Class Schedule*, which identifies courses offered for that semester. This booklet includes general information on the dates, times, and location of registration. Students may register for classes according to instructions which are published in the booklet.

Some courses require basic skills proficiency levels which must be met prior to enrollment. Students are strongly encouraged to arrange for testing and advising prior to registration.

SEMESTER CLASS SCHEDULES

Lansing Community College offers a highly diversified program of evening, Saturday, and Sunday courses on campus and at off-campus learning centers for those who choose to attend class outside of regular daytime class sessions. Lansing Community College offers packaged courses which are scheduled in eight-week segments.

TUITION AND FEES

Residency

I. Eligibility for Paying Resident Tuition

- A. A student must be an American citizen, refugee, immigrant, or permanent resident and meet one of the following qualifications before being eligible to pay resident tuition.
 1. The following applies to students under 18 years of age:
 - a. The student's parents or legal guardians have resided within the LCC district for at least six months immediately prior to the first day of the semester.
 - b. The student is married and has resided within the LCC district at least six months immediately prior to the first day of the semester.
 - c. The student is unmarried and is recognized as "emancipated" (receives no financial support from parent or legal guardian) and has resided within the LCC district for at least six months immediately prior to the first day of the semester.
 - d. The student is enrolled under the provisions of Act 245, Public Acts of 1935, as amended by Act 371, Public Acts of 1965 (students receiving benefits under the Michigan Veterans' Trust Fund).
 - e. The student is an employee of a business or industrial firm within the LCC district, and the employer agrees in writing to pay directly to the

College all tuition and fees of the sponsored student for employer-approved classes.

2. The following applies to students 18 years of age or older:
 - a. The student has resided within the LCC district at least six months immediately prior to the first day of the semester.
 - b. The student is an employee of a business or industrial firm within the LCC district, and the employer agrees to pay directly to the College all tuition and fees of the sponsored student for employer-approved classes.
 - c. The student is enrolled under the provisions of Act 245, Public Acts of 1935, as amended by Act 371, Public Acts of 1965 (students receiving benefits under the Michigan Veterans' Trust Fund).

II. Proof of Residency

All students must provide proof of residency at the time of registration (Michigan House Bill No. 4166, 1985). Lansing Community College reserves the right to make the final decision on residency eligibility. Residency is based on where a student has resided for the six months immediately prior to the first day of the semester of enrollment. Any one of the following documents is acceptable as proof of residency, providing that the six months prior to the first day of the semester for which residency is being sought is covered.

1. Current Michigan driver's license or State identification card issued not less than six months prior to the first day of the semester in which residency is being sought
2. Property tax receipts
3. Rental or lease agreement
4. Utility bills with the student's name and address for each of the six months prior to the first day of the semester

III. Residency Classification

- A. Resident Students* — Students who provide proof of residency within the LCC district for the six months immediately prior to the first day of the semester of enrollment are charged resident tuition.
- B. Non-Resident Students* — Students who provide proof of residency within the State of Michigan, but outside the LCC district for the six months immediately prior to the first day of the semester of enrollment are charged non-resident tuition.
- C. Out-of-State* — Students who provide proof of residency in a state other than Michigan for the six months immediately prior to the first day of the semester of enrollment are charged out-of-state tuition.
- D. International Students — Students who have been admitted to the United States in a temporary, non-resident status are charged international tuition. Individuals who have refugee, immigrant, or resident alien status are not international students.

*International Students are not eligible for the resident, non-resident, or out-of-state residency classifications.

IV. Residency Status for Military Personnel and Dependents

Residency is based on the location of the present domicile of the applicant with the six-month requirement waived if the applicant can provide any of the documents listed below. This waiver is extended to the dependents (spouse and children) of the person named on the Department of Defense 214 or 899 who reside at the same address.

- A. Department of Defense 214, Separation from Active Duty Form, showing separation date within 120 days from the first day of the semester;
- B. Department of Defense 899, Change of Station Form, showing the Lansing area as the duty station;
- C. Department of Defense 899, Change of Station Form, showing a change of duty station for the head-of-household to an overseas destination or as the result of an emergency mobilization.

V. Petitioning for a Change in Residency Status

Upon registering, a student shall be notified of his/her residency status.

1. If the student feels that his/her residency status is not correct, the student may furnish the required proof of residency and the residency status will be corrected.
2. After acceptance into the College as a non-resident or out-of-state resident, a student who has resided in the College district for six (6) months and furnishes the required proof of residency can have his/her residency status changed.
3. If a change of residency status is approved by the published deadline date and the student is eligible for a refund, the difference between the previous residency status and the new residency status shall be refunded.

4. Adjustments in tuition due to a change in residency are not retroactive to previous semesters.

VI. Non-Resident Owners of In-District Property

Non-resident students or their guardians owning property in the LCC district will receive credit once a year for property taxes paid in support of the College by himself/herself or his/her guardian. The taxes paid must be in support of the current academic year and the credit cannot exceed the differential between resident and non-resident tuition rates for the current academic year. To obtain this credit, the student must provide the Office of the Registrar with the paid property tax receipt.

Payment of Tuition and Fees*

All students attending Lansing Community College must pay tuition and fees at the time of registration or by the published payment deadline. Tuition and fees are as follows:

Tuition per Credit Hour*

Resident Students	\$ 42.00
Non-Resident Students	\$ 71.00
Out-of-State Students	\$100.00
International Students	\$100.00

Tuition for apprenticeship students varies according to the program of study.

Fees for All Students*

Application Fee (new students and guest students, not refundable)	\$10.00
Registration Fee (all students, each semester, not refundable)	\$20.00
Activities Fee (each semester)	
.25–6 credit hours	\$1.50
7–11 credit hours	\$4.50
12 or more credit hours	\$7.50

A fee will be charged for dishonored check or credit card transactions.

Course fees vary and are published in the *Class Schedule* booklet each semester.

*TUITION AND FEES ARE SUBJECT TO CHANGE THROUGH THE ACTION OF THE BOARD OF TRUSTEES.

Refund Policy (Applies to Semester-Length Classes Only)

Fall and Spring Semesters and Summer Session

Withdrawal during first week of semester 100% of tuition and fees
Withdrawal during second week of semester 50% of tuition only
Withdrawal after second week of semester No refund

Students receiving financial aid will receive refunds only if repayment to financial aid sources is not required.

Refunds are not retroactive to previous semesters. Questions relating to refunds should be addressed to the Cash Operation Office.

STUDENT CREDIT REQUIREMENTS

Student credit requirements are as follows:

Fall and Spring Semesters

full-time enrollment	12 credits
three-quarters enrollment	9 credits
one-half enrollment	6 credits

Summer Session (8 weeks)

full-time enrollment	6 credits
three-quarters enrollment	5 credits
one-half enrollment	3 credits

CANCELED CLASSES

The College reserves the right to cancel classes which do not have sufficient enrollment. Students enrolled in classes that are cancelled will have the opportunity to add another class or receive a refund.

DROPS AND ADDS

During the drop/add period specified in the *Class Schedule* booklet, a student may make changes in his/her schedule. A student may withdraw from a course before the end of the fourth week without academic penalty. Drops will not be processed after the last day of the semester.

Dropping and adding courses involves the following procedures which must be completely carried out by the student so that the student's records in the Office of the Registrar may be accurately maintained:

1. Pick up a Drop-Add Form at the Office of the Registrar.
2. Fill out the form completely with information requested.
3. Return the form to the Office of the Registrar for proper recording. Do not leave until processing of the form has been completed and a copy has been received.

Departmental signatures and grade at time of drop are required on the drop-add form after the fourth week of the semester.

REPEAT COURSES

When repeating a course, the highest grade earned will be used in computing the LCC cumulative grade point average. Both the repeated and repeating courses will appear on the academic record and be appropriately identified. An updated copy of the student's academic record will be mailed to the student when the repeat grade has been processed. A student must indicate that he/she is repeating a course when registering.

AUDITING

A student who desires to attend a class regularly, but does not wish to take final examinations or receive an achievement grade and credit, may register as an auditor. All students have the option of changing from "credit" to "audit" or from "audit" to "credit" through the end of the fourth week of classes. Students electing to change from audit to credit are responsible for having coursework up to date at the time the change is made and must have instructor approval after the first week of the semester. In addition, students should be aware that exercising this option may have an impact on their financial assistance or on student employment at the College. Any student balance due created by a change in credit or audit status must be paid by the student. Changes in audit or credit status must be requested by the student through the Office of the Registrar.

WITHDRAWAL

I. Student-Initiated Withdrawal

- A. If a student finds it necessary to withdraw from the College, he/she should contact the Office of the Registrar immediately and complete a drop-add form.
- B. If the withdrawal takes place within the established refund period for each semester, a student withdrawing will receive a refund.
- C. If a student withdraws from a semester-length class prior to the end of the fourth week of the semester, a final grade is not issued and the withdrawn class is not recorded on the academic record. A copy of the student-initiated drop-add form is maintained in the Office of the Registrar.
- D. If a student withdraws from a semester-length class after the end of the fourth week of the semester, a grade is issued by the instructor at the time of the withdrawal. A grade will be placed on the final grade report and recorded on the academic record.

II. Administrative Withdrawal

It may be in the best interest of the student and/or the College community that a student be withdrawn from a class or a group of classes. This process is known as "administrative withdrawal."

An administrative withdrawal may be initiated by a classroom instructor in accordance with written procedures established by each department and with the co-recommendation of the respective departmental chairperson. An administrative withdrawal may be based on the following: (1) student non-attendance; (2) lack of prerequisites for a particular course; and/or (3) student behavior that interferes with the instructional process.

- A. When a student fails to meet the attendance requirements of the class, the instructor may initiate an administrative withdrawal through the Office of the Registrar.

- B. When a student does not have the prerequisites for a particular course, the classroom instructor consults with the student regarding the potential of administrative withdrawal. At this time, the instructor may recommend that the student withdraw from the particular course. If the student chooses not to withdraw, the instructor may initiate an administrative withdrawal through the Office of the Registrar.
- C. When a student behaves in a manner that interferes with the instructional process, the classroom instructor consults with the student regarding the potential of administrative withdrawal and establishes guidelines for retaining enrollment in the class. If the guidelines are not satisfactorily met by the student, or if the student does not respond to an invitation to meet with the classroom instructor, the classroom instructor, with the co-recommendation of the appropriate departmental chairperson, may initiate an administrative withdrawal. The classroom instructor, with the co-recommendation of the appropriate departmental chairperson, may also recommend that a member of the counseling staff meet with the instructor and the student to review the circumstances of the student's behavior and to work out a possible alternative.

In all cases of administrative withdrawal, a student who is withdrawn from a semester-length class prior to the end of the fourth week of the semester will not receive a grade, and a record of attempting the class will not appear on the academic record. A copy of the administrative withdrawal form is maintained in the Office of the Registrar. A student who is withdrawn from a semester-length class after the end of the fourth week of the semester will be given a grade at the time of withdrawal.

Any student who is administratively withdrawn may appeal the withdrawal. Lines of appeal for administrative withdrawal are presented in the catalog in the section entitled "Due Process" under the heading entitled "Student Appeals."

III. Procedure for Resolving Health-Related Student Problems

In a situation in which a serious (physical or emotional) health-related problem becomes evident in a student, the College's responsibilities are to assist the student and take necessary action to maintain order consistent with a positive learning environment for other students. If a student's health-related behavior becomes disruptive or clearly inappropriate, the following procedures shall be followed:

- A. Call the Department of Public Safety and the Office of the Dean of the Student and Academic Support Division if:
 1. Emergency health services are required, or
 2. It appears that there has been or is likely to be a violation of the law.
- B. Call only the Office of the Dean of Student and Academic Support if it appears that there has been a violation of a College regulation that is not also a violation of the law.
- C. If there is no apparent violation of the law or College regulation and no emergency exists, the student should be encouraged to seek help from an appropriate health or counseling office or agency, on or off campus. Assistance from the Office of the Dean of Student and Academic Support and/or College counselors should be sought if needed.
- D. If there appears to be a violation of the law or a College regulation, the Office of the Dean of Student and Academic Support (or designee) shall contact the counseling staff, and a member of the counseling staff will meet with the student and recommend:
 1. Continued counseling if the problem is within the ability of the Counseling Department to handle.
 2. Referral back to the Office of the Dean of Student and Academic Support when no health-related problem is evident or when it is determined that the Counseling Department can be of no further service.
 3. Referral to other appropriate professional assistance if the problem is beyond the ability of the Counseling Department to handle. If the problem significantly compromises the rights or safety of other persons at the College, or if a professional recommendation to withdraw the student is made, the Office of the Dean of Student and Academic Support may institute procedures for administrative withdrawal of the student from the College until he/she provides evidence from a licensed and appropriate health care professional stating that the student is able to function effectively with the stresses and demands of a College setting. The student may appeal the withdrawal decision to the Board of Appeals.
 4. Whenever possible, the counseling staff, working with the student's physician and/or relatives, shall make a recommendation to the student as to his/her future course of action.

ACADEMIC INFORMATION

ACADEMIC DEFINITIONS

The following are definitions of academic terms commonly used at Lansing Community College.

Associate Degree: The associate degree consists of a minimum of 60 semester credits in designated courses. It is earned with a minimum of a 2.00 cumulative GPA, successful completion of a specified course in government, and is recorded on the official academic record. At least 20 semester credits must be earned in attendance at Lansing Community College.

Certificate of Achievement: The certificate of achievement consists of a minimum of 30 semester credits in designated courses. It is earned with a minimum of a 2.00 cumulative GPA and is recorded on the official academic record. At least 10 semester credits must be earned in attendance at Lansing Community College.

Certificate of Completion: The certificate of completion consists of fewer than 30 semester credits in designated courses. It is earned with a minimum of a 2.00 cumulative GPA and is not recorded on the official academic record.

Credit Hour: A credit hour is an instructional unit carried out for the expressed purpose of eliciting some measure of educational change in a learner or group of learners. A credit can be awarded on a student's academic transcript when he/she successfully completes a unit of instruction of not fewer than 800 instructional minutes.

Course: A course is a sequence of planned learning experiences leading to a set of expected learning outcomes. Course activities are normally scheduled over an academic semester. A student's successful completion of a course earns academic credit based on contact hours in class or in laboratories. The student also earns an academic grade which evaluates the student's success in achieving the expected outcomes. A course routinely includes tests, quizzes, a final examination, and regular out-of-class assignments. At Lansing Community College, a standard college-wide course syllabus has been created for each course. A course is publicized in the *College Catalog* and the *Class Schedule Booklet*. A seminar, workshop, or fee-for-service learning/training unit is not a course.

Curriculum: A curriculum is a structured program of study leading to an associate degree or certificate. Each curriculum is assigned a number. (Certain transfer curricula do not lead to an associate degree.)

Major: A major is the predominant subject area within a curriculum.

Prerequisite: A prerequisite is a course or other requirement that must be successfully fulfilled prior to participation in a subsequent course or activity. It may also be a skill or behavior that is judged essential to learning a subsequent, more complex skill or behavior.

Program: A program is the organizational structure of the College which provides or delivers instruction and/or services.

GRADING SYSTEM

The following numerical system is used at Lansing Community College to evaluate academic work:

COLLEGE STANDARD	NARRATIVE EQUIVALENT	RECOMMENDED GUIDELINE FOR PERFORMANCE ACHIEVEMENT OF OBJECTIVES
4.0	Excellent	91% to 100%
3.5		86% to 90%
3.0	Good	81% to 85%
2.5		76% to 80%
2.0	Satisfactory	71% to 75%
1.5		66% to 70%
1.0	Poor	60% to 65%
0.0	Failure	0% to 59%

Instead of a numerical grade, students may receive an alphabetical letter for their coursework if they have audited a course (X), withdrawn from a course (W), or did not complete coursework (I). Specific regulations regarding these alphabetical letters are as follows:

1. An "I" (**incomplete**) designation is temporary. It is not a grade. An instructor may approve a student-initiated request for an incomplete if 80% of the course work has been completed and if, in the instructor's judgment, there was good reason why the student could not complete the balance of the required work during the time of enrollment. "Incompletes" will not be counted toward the establishment of an earned grade point average (GPA)

or toward graduation from Lansing Community College. If the request for an incomplete is not approved, the grade earned consistent with the course requirements will be assigned when the final grades are submitted.

All incompletes must be completed by the end of the next regular semester unless an extension is requested in writing by the student and approved in writing by the instructor and department by the last day of the semester.

- An "X" (audit) grade is given when a student chooses to audit a course. No credit is granted, but enrollment is reflected on the student's academic record.
- A "W" (withdrawal) indicates a withdrawal from a course with achievement in the course above the failure level at the time of withdrawal. If a request for withdrawal from a semester-length class is received by the Office of the Registrar prior to the end of the fourth week of the semester, no grade will be recorded on the student's academic record. For withdrawals after the fourth week of the semester, a final grade which is consistent with the course requirements will be assigned by the instructor.

COMPUTING GRADE POINT AVERAGE

A student's grade point average is determined on the following basis:

NUMERICAL GRADE	HONOR POINTS
4.0	4.0
3.5	3.5
3.0	3.0
2.5	2.5
2.0	2.0
1.5	1.5
1.0	1.0
0.0	0.0

"W", "X", and "I" grades are not included in calculating grade point averages. Thus, a student who receives five credit hours of 4.0, five credit hours of 3.0 and five credit hours of 2.0 would have a total of 45 honor points. To compute the grade point average (GPA), the number of honor points earned is divided by the number of credit hours taken during the semester.

CREDIT/NO-CREDIT GRADING (P-Z)

The credit (P)/no credit (Z) grading system has been established as a departmental option. This system is reserved for special course offerings where a credit/no-credit grading system is most appropriate for the goals and objectives of the course.

- Course prerequisites and other criteria for enrolling in courses offered on the P-Z grading system shall be determined by the department offering the course.
- Courses using the P-Z grading system will be published as being graded on the P-Z grading system only, and the course syllabus shall be explicit regarding this fact.
- Courses graded on the P-Z system may be counted toward an associate degree or certificate based on approval of the appropriate dean. A maximum of 10 percent of the total credits required for a degree or certificate may be acquired on the P-Z system.

Grading procedure of the credit/no-credit system is as follows:

- Grades on the P-Z system are not included in computing the semester or cumulative grade average.
- The grades granted on the P-Z system are determined with definition of P and Z as follows:
 - P (credit)** represents a level of performance equivalent to a regular number grade of 2.00 or above on a 4.00 system; credit is granted.
 - Z (no credit)** represents a level of performance less than a 2.00 on a 4.00 system; no credit is granted.

All courses attempted on the P-Z grading system will appear on the student's academic record.

GRADE REPORTS

An official academic grade report will be mailed to the student approximately 7 to 10 business days after the close of each semester. The grade report will be withheld if the student has an overdue indebtedness to the College.

GRADE CHANGES

Students may petition an instructor for a grade change of a final grade in a course. The line of appeal for grade change petitions can be found in the College's Due Process statement. A student's final grade in a course may be changed by the course instructor. Grade changes by instructors are initiated by submitting signed grade change forms to the departmental office for review and approval by the departmental chair or lead faculty member. The completed grade change form is then forwarded to the Office of the Registrar for posting on the student's permanent academic record. Completed grade change forms are not to be carried by the petitioning student to the Office of the Registrar and will not be processed if they are so received. Students will be officially notified in writing by the Office of the Registrar after a grade change has been completed.

ACADEMIC STANDING POLICIES

Table for Determining Academic Standing

Following is the table for determining your academic standing at Lansing Community College. To use this table do the following:

- On your grade report or academic transcript, locate your cumulative grade point average (GPA) and the total number of credits completed.
- Find your position in the left-hand column of the table according to your total number of credits.
- Read across the page to your right until you locate the column which includes your current cumulative grade point average (GPA). This column heading indicates whether you are in the Good Standing Range, the Warning Range, or the Withdrawal Range.

Definitions of the various academic ranges at Lansing Community College are listed immediately after the table. Please refer to these definitions for an explanation of your academic status.

NOTE: Students in certain selective admission programs may be placed on program probation or receive academic warning for deficiencies in their clinical performance even though the student's cumulative GPA may be within the overall College's Good Standing Range.

ACADEMIC STATUS

SEMESTER CREDITS COMPLETED	GOOD STANDING CUMULATIVE GPA	WARNING RANGE CUMULATIVE GPA	WITHDRAWAL RANGE CUMULATIVE GPA
1-7	1.88 and above	1.00 - 1.87	0.99 or less
8	1.89 "	1.01 - 1.88	1.00 "
9	1.89 "	1.04 - 1.88	1.03 "
10	1.90 "	1.06 - 1.89	1.05 "
11	1.90 "	1.09 - 1.89	1.08 "
12	1.91 "	1.11 - 1.90	1.10 "
13	1.91 "	1.14 - 1.90	1.13 "
14	1.92 "	1.16 - 1.91	1.15 "
15	1.92 "	1.18 - 1.91	1.17 "
16	1.93 "	1.21 - 1.92	1.20 "
17	1.93 "	1.23 - 1.92	1.22 "
18	1.94 "	1.26 - 1.93	1.25 "
19	1.94 "	1.28 - 1.93	1.27 "
20	1.95 "	1.30 - 1.94	1.29 "
21	1.95 "	1.33 - 1.94	1.32 "
22	1.96 "	1.35 - 1.95	1.34 "
23	1.96 "	1.38 - 1.95	1.37 "
24	1.97 "	1.40 - 1.96	1.39 "
25	1.97 "	1.42 - 1.96	1.41 "
26	1.98 "	1.45 - 1.97	1.44 "
27	1.98 "	1.47 - 1.97	1.46 "
28	1.99 "	1.50 - 1.98	1.49 "
29	1.99 "	1.52 - 1.98	1.51 "
30	2.00 "	1.54 - 1.99	1.53 "
31	2.00 "	1.57 - 1.99	1.56 "
32	2.00 "	1.59 - 1.99	1.58 "
33	2.00 "	1.62 - 1.99	1.61 "
34	2.00 "	1.64 - 1.99	1.63 "
35	2.00 "	1.66 - 1.99	1.65 "
36	2.00 "	1.69 - 1.99	1.68 "
37	2.00 "	1.71 - 1.99	1.70 "

38	2.00	"	1.74 – 1.99	1.73	"
39	2.00	"	1.76 – 1.99	1.75	"
40	2.00	"	1.78 – 1.99	1.77	"
41	2.00	"	1.81 – 1.99	1.80	"
42	2.00	"	1.83 – 1.99	1.82	"
43	2.00	"	1.86 – 1.99	1.85	"
44	2.00	"	1.88 – 1.99	1.87	"
45	2.00	"	1.90 – 1.99	1.89	"
46	2.00	"	1.93 – 1.99	1.92	"
47	2.00	"	1.95 – 1.99	1.94	"
48	2.00	"	1.97 – 1.99	1.96	"
49	2.00	"	1.97 – 1.99	1.96	"
50	2.00	"	1.97 – 1.99	1.96	"
51	2.00	"	1.97 – 1.99	1.96	"
52	2.00	"	1.97 – 1.99	1.96	"
53	2.00	"	1.97 – 1.99	1.96	"
54	2.00	"	1.97 – 1.99	1.96	"
55	2.00	"	1.97 – 1.99	1.96	"
56	2.00	"	1.97 – 1.99	1.96	"
57	2.00	"	1.97 – 1.99	1.96	"
58	2.00	"	1.97 – 1.99	1.96	"
59	2.00	"	1.97 – 1.99	1.96	"
60+	2.00	"	1.97 – 1.99	1.96	"

Satisfactory Progress

Good Standing Range: A student whose cumulative grade point average is in the Good Standing Range is making satisfactory academic progress.

Warning Range: A student whose cumulative grade point average is in the Warning Range is making minimum satisfactory academic progress. This student is strongly advised to consult with the course instructor or department chair or lead faculty member, see a counselor, or request a tutor. Information about services to support student learning is available in the LCC *Student's Guidebook*.

NOTE: Veterans' benefits recipients and students receiving financial aid should refer to the Financial Aid Information section of the catalog for additional information regarding academic progress.

Unsatisfactory Progress

Withdrawal Range: The academic progress of students is monitored each semester by the College using the Table for Determining Academic Standing. Students who fail to meet the academic standards of the College, that is, when their cumulative grade point average falls into the withdrawal range, may be academically dismissed for at least one semester before being considered for readmission. For further information, contact the Counseling Services Department at (517) 483-1184.

STUDENT RECORDS

The Office of the Registrar maintains the official permanent academic record of every student who attends the College. Each enrolled student's record is updated at the close of each semester. The student's academic record includes courses waived, courses attempted and completed, courses and credits transferred, credits awarded for experiential learning, credit hours, honor points, Lansing Community College grade point average, and associate degrees and certificates of achievement awarded at Lansing Community College.

The College reserves the right to correct any error made on an academic record or evaluation. The College will notify the student in writing of any record or evaluation correction.

STUDENT ACCESS TO RECORDS

A student and/or parent of a student, if the student is a dependent and/or is less than 18 years of age, shall have the right, upon proper identification, to inspect and review any and all official records, files, and data directly related to the student. These records include, but are not limited to, identifying data, academic work completed, standardized test scores, attendance data, inventory results, health data, family background data, and instructor or counselor ratings and observations. Requests to inspect and review student files shall be in writing to the Office of the Registrar and shall be responded to within a reasonable period of time, but in no case more than 45 days after the request is made.

The student shall have an opportunity for a hearing before a College official designated by the President to challenge the contents of the student's records;

to ensure that the records are not inaccurate, misleading, or otherwise in violation of the privacy or other rights of the student; and to provide an opportunity for the correction or deletion of any such inaccurate, misleading, or otherwise inappropriate data.

Written approval by the student or parent concerned is required before release will be given of personally identifiable information from the student's records or files. Exceptions to this statement include releasing information to:

1. Academic and administrative officials of Lansing Community College. Academic and administrative officials are defined as those members of the College who act in the student's educational interest within the limitations of the official's need to know. Officials may include faculty, administration, clerical and professional employees, and other persons who manage student record information.
2. High schools, colleges, and other educational institutions in which the student is enrolled or intends to enroll. Students will be notified as to the information released if the request does not emanate from the student.
3. Individuals and organizations who provide financial aid or scholarships to students.
4. Authorized representatives of the Comptroller General of the United States, the Secretary of the Department of Health and Human Services, the Department of Veterans Administration, the Department of Education, and administrative heads of state and federal educational agencies authorized by law.
5. Appropriate authorities in compliance with judicial orders and pursuant to lawfully issued subpoenas. The student shall be notified of any such orders or subpoenas by the College.
6. Accrediting organizations carrying out their accrediting function.
7. Persons in an emergency, if the knowledge of the information in fact is necessary to protect the health or safety of students or other persons.
8. Parents of a student who have established that student's status as a dependent according to internal Revenue Code of 1954, Section 152.

Those individuals, agencies, or organizations external to the College, who desire access to student records and files and who fall in the exclusions above, shall sign a written form indicating specifically the legitimate interest for seeking the information. The forms shall include the names and addresses of the individual and/or agency requesting the information. These forms shall be maintained in the Office of the Registrar for five years.

Records of request and student file disclosures need not be maintained for those requests made by academic and administration officials of the College. Each academic and administrative official of the College is subject to the requirements of the Family Educational Rights and Privacy Act of 1974, as amended, which prohibits the release of personally identifiable information without the student's written consent.

A hold may be applied to the release of a transcript or other information requested from the academic records of a student who has an overdue indebtedness to the College, except that the student shall have personal access to such records.

Students may request that their academic records be given to any person or group by submitting their requests in writing to the Office of the Registrar.

Student lists shall not be distributed to non-College agencies.

STUDENT TRANSCRIPTS

Official transcripts of a student's record at Lansing Community College will be mailed at the written request of the student. An official transcript is one which has the school seal and states the date of graduation if a degree has been granted.

A fee is charged for each transcript. All transcript requests require two working days' notice.

TRANSFER OF CREDITS

A student expecting to transfer to a four-year institution is advised to examine the current catalog of the college he/she expects to enter and to follow as closely as possible its recommendations for particular programs of study. More specific information about transferring credits may be obtained from a counselor.

ACCEPTANCE AND EVALUATION OF TRANSFER CREDITS FROM OTHER INSTITUTIONS OF HIGHER EDUCATION

Only official transcripts will be evaluated for transfer credit. The credit value of each of the courses will be determined by Lansing Community College. The College will accept as official transcripts only incoming transcripts that have appropriate signatures and official college seals and that are mailed directly to the

Lansing Community College Office of the Registrar from an issuing institution. Transcripts or copies of transcripts carried by individuals may be used for academic advising or counseling, but transfer credits will NOT be posted to the Lansing Community College academic record from transcripts that are not received directly from the issuing institution. It is the function of the Office of the Registrar of the College to verify the official status of all incoming transcripts prior to the evaluation and posting of transfer credit. All transcripts submitted to LCC for evaluation become the property of LCC.

The following evaluation information applies to transcripts received from both accredited and non-accredited institutions of higher education. Additional evaluation information which applies to transcripts from non-accredited institutions may be found under the section entitled "Non-Accredited Institutions."

Accredited and Non-Accredited Institutions

1. Freshman and sophomore level courses are accepted in transfer. Higher level credits are accepted if they correspond to a specific course at Lansing Community College. In most cases, an accepted course will be considered an equivalent of a corresponding Lansing Community College course or an elective credit. In cases where Lansing Community College does not have a department or area similar to the courses on incoming transcripts, no credit will be given.
2. Credits only, not grades, are transferred. When the overall grade point average of a transferring student is at or above a 2.00 on a 4.00 scale, the 1.0–1.5 or "D" grades will be accepted. When the transferring overall grade point average is below 2.00 on a 4.00 scale, only courses graded 2.00 ("C") or higher will be accepted. In such cases, the student may petition the departmental chairperson of his/her academic department to waive a degree or certificate course requirement(s) in which he/she has previously earned the 1.0–1.5 or "D." Waiver of a course requirement does not provide credit for a course. The departmental chairperson of the department concerned will notify the Office of the Registrar of waivers.
3. No evaluation is made when a student has received a two- or four-year degree from another institution. This may be done upon request, but it is assumed that the student is pursuing an entirely different curriculum and will not need previous course work.
4. A student may request a change in the evaluation if he/she feels that a course description differs from the way in which it was evaluated. A determination on the evaluation will be made by the departmental chairperson in conjunction with the Office of the Registrar. Verification of the change can be made through the Office of the Registrar.

Non-Accredited Institutions

The following evaluation information applies to transcripts from non-accredited institutions:

1. The Office of the Registrar will forward a transcript from a non-accredited institution to the departmental chairperson of the department in which the student has enrolled.
2. The departmental chairperson has the following four prerogatives in evaluating transcripts issued by non-accredited institutions:
 - a. Credit may be granted with demonstration by the student of skills commensurate with the performance required for satisfactory completion of existing courses.
 - b. Credit may be granted upon review of the content, goals, and objectives of a particular course with determination of whether the course is on a par with existing courses of the College. It is the responsibility of the student to provide requested materials to enable proper evaluation.
 - c. Credit may be granted upon demonstration of proficiency in a particular existing course by a comprehensive examination.
 - d. Credit may not be granted.
3. The departmental chairperson will return the transcript to the Office of the Registrar and indicate in writing the credits granted and the course equivalency at Lansing Community College. The final transcript evaluation will have the signature of the appropriate divisional dean.
4. When two or more instructional departments are involved, the departmental chairperson of the department in which the student is enrolled will be responsible for consulting with the additional departmental chairpersons. When two or more departments are involved, the written reply to the Office of the Registrar will include the signatures of each respective departmental chairperson and the respective dean.

5. Credits from non-accredited institutions are evaluated by the departmental chairperson of the area in which the student enrolled. If the student changes his/her curriculum, he/she should notify the Office of the Registrar, because there may be a difference in the evaluation.

CREDIT FOR PREVIOUSLY ACQUIRED KNOWLEDGE AND LEARNING EXPERIENCE

Lansing Community College recognizes that learning outside of the classroom is valid. Therefore, it is the College's function to assess extra-institutional learning as part of its credentialing responsibility. Any student who is currently enrolled at Lansing Community College may apply for experiential learning credit by obtaining an Experiential Learning Processing Form from the Office of the Registrar, Student and Academic Support Building, (517) 483-1266.

NOTE: Lansing Community College's decision to award credit for experiential learning does not obligate any other institution to accept such credits in transfer. Receiving institutions reserve the right to assess transcripts of incoming students and award credit as they see fit. Credits received by students that are based on experiential learning may not be used for financial aid or veteran's benefits eligibility.

Lansing Community College does not accept the transfer of credit for experiential learning awarded at other institutions.

Application Procedures

Relevant aspects of personal and professional experience gained through actual job-related activities and special training experiences may be applied to an academic program. Learning experiences must be directly related to the program (curriculum) or degree and must be pursued at Lansing Community College. These experiences must have been obtained from a non-academic source or not otherwise be available for academic credit through the transfer process outlined earlier. Prior to payment of the processing fee and submitting a portfolio of supporting documents, the student is requested to review with the academic department in which credit is being sought the probability of credit being granted. Students must then submit the completed Experiential Learning Processing Form to the Office of the Registrar, including as much supporting documentation as possible. The student must also attest by his/her signature that the information submitted is true to the best of his/her knowledge. The processing fee must accompany submission of the form and portfolio. The processing fee is not refundable.

A fee of the resident tuition rate per credit hour will be charged for those credits which are determined awardable and which apply to the student's program (curriculum). Fees are subject to change by the Board of Trustees without prior notice.

Assessment Committee

The completed Experiential Learning Processing Form and portfolio of supporting documents will be forwarded by the Office of the Registrar to the respective divisional dean. The dean will assign the portfolio to an appropriate and impartial assessor for review and credit assessment. Assessors have the responsibility for evaluation and assignment of academic credit for experiential learning.

In the evaluation process, the assessor will verify the accuracy and validity of the information stated on the Experiential Learning Processing Form and the accompanying supporting documents by contacting various references and former employers whose names have been provided. If all is in order, the assessor will determine whether the student's experiential learning fits into appropriate competency and subject areas within the student's educational program (curriculum) at Lansing Community College. The assignment of credit must be stated in terms of equivalent courses which are offered by the respective divisions of Lansing Community College.

Documentation

All experiential learning must be documented by the student. Documentation may be defined as, but not limited to, complete job descriptions, copies of course materials and outlines, certificates, training reports, signed supervisory verifications and evaluations on letterhead, and any other descriptive information that may provide a clear understanding of a student's background and competencies. Lansing Community College requires certification that the work or training experience is the student's own. The portfolio containing the Experiential Learning Processing Form and all supporting documents will be retained by the College. A maximum of 40 semester hours of experiential learning may be applied towards

an LCC associate degree. (Twenty credits must be earned in attendance at Lansing Community College.)

Applicability of Credit

The assessor will determine what credit granted can be applied to the student's program on an LCC course equivalency basis. In determining whether it is appropriate to accept a student's experiential learning for credit, the major considerations should be the student's educational objective and extra-institutional learning achievement. Credit for experiential learning will be recorded on a student's official transcript on the basis of a course-by-course equivalency and shall be prominently identified as credit for experiential learning.

Student Appeal Procedures

Students who believe their evaluation of experiential learning is incorrect may file a written appeal to the dean of the division in which the experiential learning credit is being sought. Appeals must be received within six months from the date the credit authorization was approved. In such instances, the dean will conduct a procedural review to ensure that the student has been treated in a fair and non-discriminatory manner. The decision of the dean shall be final.

CREDIT BY EXAMINATION

Comprehensive Exams

A student may obtain credit for certain courses at the discretion of an instructor and department head by passing comprehensive examinations only during the semester in which the student is enrolled. The procedure a student uses to obtain comprehensive examination credit is as follows:

1. The student picks up an application for credit by examination at the Office of the Registrar.
2. The student completes the required information on the application and takes the application to the department for instructor and departmental chairperson signatures of approval.
3. After obtaining the required signatures, the student returns the signed application to the Cashier's Office for payment of tuition.
4. The student will complete an examination for each course in which he/she hopes to receive credit.
5. An examination will not be given by the instructor until the student presents the appropriate payment receipt. No more than one examination will be given for a single payment.
6. The examination, after being evaluated by the instructor, will be maintained on file in the departmental office.
7. The Office of the Registrar will contact the department and request the grade which was earned upon completion of the examination. A grade will be recorded for each comprehensive examination given.
8. The student will receive an official notice of the grade earned at the end of the semester in which the examination was taken or when processing has been completed.

Other Examinations

Lansing Community College accepts credit based on results from the following examinations: College Level Examination Program (CLEP), Advanced Placement Examination (APE), and the Defense Activity for Non-Traditional Education Support (DANTES). Students in need of information about these examinations should contact the Office of the Registrar.

GRADUATION REQUIREMENTS, CERTIFICATES, AND DEGREES

INSTITUTIONAL REQUIREMENTS FOR CERTIFICATES OF ACHIEVEMENT

Certificates of achievement are granted to all students who meet graduation requirements. A minimum of 30 semester credit hours is required for this certificate. **No more than 10 percent of these credits may be acquired on the credit/no credit (P-Z) grading system.**

To graduate from Lansing Community College with a certificate of achievement, a student must do the following:

1. Complete a course of study approved by the College.
2. Maintain a minimum grade point average of 2.0.
3. Earn toward graduation at least 10 semester credits in attendance at Lansing Community College.
4. File an application for graduation with the Office of the Registrar one semester preceding the semester of graduation.
5. Satisfy all general and specific requirements of Lansing Community College including the fulfillment of all financial obligations.
6. Have the approval of the administration and the Board of Trustees.

NOTE: Students seeking a certificate of achievement may not follow curricular guides which predate their first semester of enrollment.

INSTITUTIONAL REQUIREMENTS FOR ASSOCIATE DEGREES

Associate degrees are granted to all students who meet graduation requirements. A minimum of 60 semester credit hours is required for an associate degree. **No more than 10 percent of these credits may be acquired on the credit/no credit (P-Z) grading system.** Those students who maintain a 3.75 or higher grade point average will be graduated summa cum laude; those who maintain a 3.50–3.74 grade point average will be graduated magna cum laude; those with a 3.25–3.49 will be graduated cum laude. Students must complete 40 semester credit hours of work at Lansing Community College to qualify for honors.

To graduate from Lansing Community College with an associate degree, a student must meet the following institutional requirements:

1. Complete a course of study approved by the College.
2. Maintain a minimum grade point average of 2.0.
3. Earn toward graduation at least 20 semester credits in attendance at Lansing Community College.
4. File an application for graduation with the Office of the Registrar one semester preceding the semester of graduation.
5. Complete a course in political science. POLS 120, American Political System, or POLS 121, State and Local Government, will satisfy this requirement for all degree programs. (NOTE: LABR 208, Labor Relations, will satisfy this requirement for certain programs only as indicated on specific curriculum guides.)
6. Satisfy all general and specific requirements of Lansing Community College including the fulfillment of all financial obligations.
7. Have the approval of the administration and the Board of Trustees.

NOTE: Students seeking an associate degree may not follow curricular guides which predate their first semester of enrollment.

Starting fall semester 1996, the College plans to begin implementation of a general education core as an institutional requirement for graduation with an associate degree.

CRITERIA FOR THE ASSOCIATE DEGREE IN ARTS AND THE ASSOCIATE DEGREE IN SCIENCE

In addition to meeting the institutional associate degree requirements previously outlined, students seeking an associate degree in arts or an associate degree in science must also meet the following criteria effective fall semester 1995:

- A. The student is required to take a core of at least eight (8) credits in each of the following areas: **Writing/English, Humanities, Science/Mathematics, and Social Science.**

1. The eight required hours in the **Writing/English** area can be fulfilled by taking either WRIT 121 and ENGL 122, or WRIT 121 and WRIT 122. Those students permitted to waive WRIT 121 must elect a second course with any of the course codes below and with a number 200 or higher.

ENGL	HUMS	PHIL	SPCH
FREN	JAPN	RELG	WRIT
GRMN	JRNL	SIGN	
HIST	LING	SPAN	

2. The eight required hours in the **Humanities** area must include any course from Group A and any course from Group B.

Group A courses are: ENGL 211, HIST 211, HUMS 211, HUMS 213, PHIL 211, or RELG 211.

Group B courses are: ENGL 212, HIST 212, HIST 214, HUMS 212, HUMS 214, PHIL 212, or RELG 212.

It is recommended that students take a course from Group A before Group B.

- The eight required hours in the **Social Science** area must include one four-credit course chosen from POLS 120 or POLS 121 and at least four credits chosen from the following courses and course pair: ECON 120, ECON 201 and 202, GEOG 200, PSYC 200, SOCL 120.
- The eight required credits in the **Science/Mathematics** area may be fulfilled either by Option A or Option B.

Option A

Four credits in physical science, including laboratory experience, from the following courses and course pairs:

ASTR 201	GEOL 221	ISCI 131	PHYS 215 & 225
CHEM 135	GEOL 222	METR 220	
CHEM 151 & 161	GEOL 230	OCNL 225	
GEOL 200	ISCI 121	PHYS 201 & 225	

and four credits in biological science, including laboratory experience, from the following courses and course pair:

ANAT 145	BIOL 121	BIOL 201	BIOL 260	MICRO 203 & 204
ANAT 151	BIOL 127	BIOL 210	ISCI 122	
ANAT 201	BIOL 128	BIOL 250	ISCI 132	

Option B

Four credits in physical or biological science, including laboratory experience, from any of the courses and course pairs in Option A and four credits of mathematics from courses with the course code MATH and with numbers 121 or higher.

- In addition to Requirements and Limited Choice Requirements specified on curriculum guides, other courses may be counted toward arts or science degrees. These courses must be selected from the following:
 - Unrestricted number of credit hours—from courses with any of the course codes below and with numbers 120 and higher:

ANAT	CPSC	FREN	HUMS	MATH	PHYS	SIGN	VCBL
ANTH	ECON	GEOG	INST	METR	POLS	SOCL	WRIT
ASTR	EDUC	GEOL	ISCI	MICR	PSYC	SPAN	
BIOL	ENGL	GRMN	JAPN	OCNL	READ	SPCH	
CHEM	ENRI	HIST	JRNL	PHGY	RELG	SPEL	
CHIN	ESLA	HONR	LING	PHIL	SCIS	STAT	
 - Unrestricted number of credit hours from the following courses:

CHIN 101	GRMN 101-102	SPAN 101-102
FREN 101-102	JAPN 101-102	
 - Credit hours restricted to six, from courses with any course codes listed in B.1. above, and with numbers 110 through 119.
 - Credit hours restricted to six, from the following courses:

ARTS 101	GERO 100	HUSE 112	IMAG 207	MGMT 228	MUSC 199
ARTS 132	GERO 101	IMAG 111	IMAG 226	MTEC 110	OEDC 110
ARTS 201	HUSE 100	IMAG 114	LABR 200	MUSC 168	OEDC 111
BUSN 118	HUSE 101	IMAG 117	LEGL 215	MUSC 182	
CHDV 101	HUSE 110	IMAG 202	LEGL 216	MUSC 185	
- Courses which are not listed in these criteria do not count toward the associate degrees in arts or in science.
- Students pursuing an arts or science degree must follow an approved curriculum guide. Consultation with an LCC academic advisor is recommended.

Students may request specific course substitutions by submitting a "Course Substitution and Waiver Authorization for Degree Screening" form to the Office of Academic Affairs of the Liberal Studies Division.

A student may appeal a decision not to grant an associate degree in arts or in science for lack of fulfillment of the above criteria. Students may submit appeals to the Office of Academic Affairs of the Liberal Studies Division.

CRITERIA FOR THE ASSOCIATE DEGREE IN APPLIED ARTS AND THE ASSOCIATE DEGREE IN APPLIED SCIENCE

In addition to meeting the institutional associate degree requirements previously outlined, students seeking an associate degree in applied arts or an associate degree in applied science must also complete course requirements of specific programs for specialized areas of study as presented in the curricular guide for each degree program.

CRITERIA FOR THE ASSOCIATE DEGREE IN BUSINESS

In addition to meeting the institutional associate degree requirements previously outlined, students seeking an associate degree in business must complete

the requirements of specific programs within an area of study as presented in the curricular guide for each degree program.

CRITERIA FOR THE GENERAL ASSOCIATE DEGREE

Students seeking a general associate degree must fulfill the institutional associate degree requirements previously outlined. In some cases, there may be no specific course requirements other than political science for the general associate degree. Credits earned from any course offered by Lansing Community College will apply toward the 60-hour credit requirement for this degree. To fulfill the institutional political science requirement, students must complete POLS 120, American Political System, or POLS 121, State and Local Government.

HOW TO APPLY FOR THE ASSOCIATE DEGREE OR CERTIFICATE OF ACHIEVEMENT

The student submits his/her Application for Diploma/Certificate to the Office of the Registrar. It is important that the student attach copies of any authorized course substitutions or waivers and a copy of the curricular guide he/she has been following to the application. Transition students must also attach a copy of the Curriculum Completion Plan form to the application. Copies of the student's academic record, current semester schedule, and curricular guide (if not submitted by the student) are attached to the application.

- If any requirements remain after initial review by the Office of the Registrar, the student will be sent a Degree Audit Report along with an unofficial copy of his/her transcript. Any exceptions to the courses listed on the audit report must be noted on the form by the student's departmental chairperson or authorized representative, stamped by the departmental office, and returned to the Office of the Registrar. A copy will be attached to the Application for Diploma/Certificate. The student will be responsible for completing the remaining courses unless a revised form is submitted to the Office of the Registrar.
- If no requirements remain after the initial review, the application will be sent to the appropriate department and division for approval. When the application is returned to the Office of the Registrar, the student is sent a letter indicating he/she must successfully complete the current semester.

The application is held on file until the current semester grades are recorded and successful completion of the semester is verified. Applications for students who do not successfully complete the semester are recycled and are held on file until all requirements are met for up to one year. It is important that a student make application for his/her degree at least one semester in advance of graduation. The procedure outlined above may take a full semester to complete. Soon after the end of the semester, an official copy of the student's LCC transcript, noting the degree and date of completion, will be sent to the student. This transcript is official notification that all course requirements have been met. Diplomas are mailed within two months after the last day of the semester.

SEMESTER TRANSITION PROGRAM COMPLETION INFORMATION

In the fall of 1993, Lansing Community College changed from a quarter to a semester system. Students who first enrolled at the College for fall semester 1993 and thereafter are considered semester students. The semester system requirements apply to them, and they must follow semester curricular guides.

Students who started degree or certificate programs at LCC prior to fall semester 1993 and are continuing their studies on the semester system are considered transition students. In order to complete college requirements or curriculum requirements for their declared major, transition students should meet with an academic advisor to complete an individual Curriculum Completion Plan.

PLEASE NOTE: All Curriculum Completion Plans must be approved by departmental chairpersons.

Transition students must be on either the Quarter Option or the Semester Option. No mixing of quarter and semester requirements is permitted. The options are described below.

Quarter Option: The Quarter Option is a Curriculum Completion Plan for completing unfulfilled quarter system requirements with semester credits and courses. Transition students with fewer than 45 earned quarter credits (including those transferred from another institution) toward a specific degree—or less than 50 percent earned quarter credits toward a certificate—must choose the Semester Option.

Semester Option: The Semester Option is a Curriculum Completion Plan indicating how quarter courses and credits will be applied to semester system requirements. All transition students are eligible to choose the Semester Option.

Lansing Community College curricular guides are valid for a period of five years. The inclusive dates are printed on each guide. All quarter-based curricular guides will expire at the end of Summer Session 1997.

TRANSFER INFORMATION

Students planning to transfer to another institution should be aware that universities and colleges differ widely in the courses they accept for transfer. A student intending to transfer should follow the transfer curriculum guide of the institution to which he/she intends to enroll. Transfer guides are not LCC degree guides. As indicated on certain transfer guides, however, a student may receive an LCC degree for completing a specific transfer guide if additional LCC requirements are also met. In order to achieve maximum transferability of courses, students should consult with an academic advisor.

MACRAO Transfer Agreement

In 1973 the Michigan Association of Collegiate Registrars and Admissions Officers proposed the MACRAO Transfer Agreement. The MACRAO Transfer Agreement was created to simplify the transfer of students from one institution to another. The agreement stipulates that 30 semester credit hours of 100-level and above, compatible, general education course work will be granted smooth transferability to participating universities. These credits will be applied toward a student's general education requirements. **Completion of requirements for the MACRAO Transfer Agreement does not necessarily mean that a student has completed the requirements for a specific Lansing Community College associate degree.**

The basic two-year requirements are:

English Composition	6 semester hours minimum
Science and Mathematics	8 semester hours minimum
Social Science	8 semester hours minimum
Humanities	8 semester hours minimum

An approved list of Lansing Community College courses under the four major distribution requirements for the MACRAO Transfer Agreement is available in the LCC Counseling Office (Room 103 Arts and Sciences Building) or in the LCC Admissions Office (Room 232 Gannon Vocational-Technical Center).

The following four-year institutions are signatory to the MACRAO Transfer Agreement:

- *Adrian College
- Albion College
- *Alma College
- Aquinas College
- Baker College
- *Calvin College
- Central Michigan University
- Cleary College
- Davenport College
- *Detroit College of Business
- *Eastern Michigan University
- Ferris State University
- *GMI Engineering and Management Institute
- Grand Valley State University
- *Hope College
- *Kalamazoo College
- *Lake Superior State University
- *Lawrence Technological University
- *Madonna University
- Michigan Christian College
- *Michigan State University
- *Michigan Technological University
- Northern Michigan University
- Northwood University
- *Oakland University
- Olivet College
- *Saginaw Valley State University
- *St. Mary's College
- *Siena Heights College
- Spring Arbor College
- Western Michigan University

*Some limitations may apply. Check with individual college/university.

REGULATION FOR THE GRANTING OF ADDITIONAL ASSOCIATE DEGREES

Any student who has received an associate degree from Lansing Community College or any other accredited community college may be awarded a second associate degree subject to the following stipulations:

1. For each additional associate degree, a minimum of 10 semester credit hours must be completed at LCC in the division in which the degree is sought, nonrepetitive of previously earned credits.
2. All requirements for an associate degree in either arts, applied arts, business, science, or applied science must be met.
3. No additional degree will be granted in the same program or curriculum in which the first degree was earned.
4. An additional degree must be within a specific program or curriculum.
5. Exceptions to the above should be appealed to the office of the respective dean.

REGULATION FOR GRANTING AN ASSOCIATE DEGREE WHEN THE STUDENT HAS AN EARNED BACHELOR'S DEGREE

A student who has earned a bachelor's degree from an accredited American college or university which has a general education requirement may be awarded an associate degree at Lansing Community College subject to the following requirements:

1. For each associate degree, a minimum of 10 semester credit hours must be completed at Lansing Community College in the division in which the associate degree is sought. The Lansing Community College cumulative grade point average must be at or above a 2.0 level.
2. All requirements for an associate degree in either arts, applied arts, business, science, or applied science must be met.
3. The College's requirement of completing a political science course is waived.
4. The associate degree must be within a specific program or curriculum.
5. Exceptions to the above should be appealed to the office of the dean of the division in which the associate degree is sought.

ASSURANCE OF QUALITY

Lansing Community College offers assurance—a guarantee—to its students; prospective employers; and receiving transfer colleges, universities, and technical training institutions, that individuals who have earned LCC degrees or certificates are competent to perform in their areas of major study.

Transferring students who have earned an official Lansing Community College certificate or degree should be able to perform competently in the area in which they majored or specialized at Lansing Community College.

Non-transferring students who have earned an official Lansing Community College certificate or degree should be able to perform competently in the area in which they majored or specialized at Lansing Community College.

A Lansing Community College graduate may be permitted to retake a specified course or courses, when next offered, with no tuition or fee charge by submitting his/her request to the Office of the Registrar along with supporting documentation from the institution to which he/she has transferred or from his/her employer, whichever is appropriate.

Because unused skills and knowledge can decay rapidly, the assurances offered herein will be in effect for one year from the date the course or courses in question were taken at Lansing Community College.

STUDENT RIGHTS, RESPONSIBILITIES, AND CONDUCT

The College adheres to the principle that the campus climate provide for students maximum freedom and necessary order. In order to ensure this principle, the College has established procedures for the redress of grievances by the individuals accused in such proceedings. In addition, general rules and regulations have been established by the College to ensure the protection of student rights and the efficient operation of College programs. In cases of non-compliance with

these regulations, the College will impose discipline which is consistent with the impact of the offense on the College community. The College also reserves the right to pursue criminal and/or civil action where warranted.

STUDENT RESPONSIBILITIES

Attendance

Students are expected to attend all sessions of each course in which they are enrolled. Failure to do so will result in academic penalty or withdrawal from the class.

Absence for any reason, including illness or late registration, in no way relieves the student of the responsibility for completing all work in the course to the satisfaction of the instructor in charge.

When a student receives a faculty-initiated notice of non-attendance, it is the student's responsibility to contact the instructor.

When a student cannot attend class due to illness or other extenuating reasons, the class instructor should be notified. This can be done by telephoning the departmental office in which the instructor is a member and leaving a message for that instructor.

Examinations

Students are required to take examinations at the appointed time and place in order to receive credit for a course.

Generally, examinations are given during the regularly scheduled class period during the last week of the semester.

Disclosure of Health Concerns

Lansing Community College takes appropriate and reasonable precautions to protect the health and safety of students in the classroom. However, some courses may require students to work with chemicals and/or equipment which may be hazardous to some students, such as those with certain medical conditions. Students should inform instructors of any special health-related conditions which may be negatively affected by instructional materials or equipment used in the classroom. Students with special health concerns are strongly encouraged to raise any questions about such matters prior to their enrolling in a class.

Student Evaluation of Instructional Quality

Because students expect quality in their learning experiences, Lansing Community College provides opportunities for students to participate in the evaluation and improvement of instruction. These opportunities include the following:

1. Completing Student Evaluation Forms at the conclusion of each course. The forms are distributed by a person other than the instructor, and the instructor is not present at the time the students complete the forms.
2. Presenting suggestions regarding instructional quality to their instructors, their instructor's departmental chairperson or the instructor's divisional dean. These written or verbal suggestions are also reviewed by the College to improve instruction and assess instructional effectiveness.
3. Serving on various councils, boards, and committees of the College in order to provide input and student perspective in the development and evaluation of both instructional and support-service programs. These councils, boards, and committees are located in the various divisions of the College. Those students who have interest in serving on or contacting members of these bodies may contact the Student Life Office or the office of the dean in the appropriate divisions.

Specific questions regarding student participation in the evaluation of instruction may be directed to the Office of the Dean of Student and Academic Support for clarification or appropriate referral.

Conduct - Interim Due Process Suspension

If a student's misconduct gives cause for belief that the physical or emotional safety of any member of the College community is threatened, or that any personal or public property is jeopardized, the student's right to be on campus can be immediately suspended. Also, violation by a student of any civil or criminal laws while on campus or at College-sponsored events is cause for suspension. A suspension of this type, called an Interim Due Process Suspension, will take effect immediately upon direction of the dean of the division where the misconduct occurred and will last for no more than 10 days. A procedural due process hearing

with proper notifications will be established during this 10-day period. (See section entitled "Due Process.") Forms of misconduct that may result in an Interim Due Process Suspension include, but are not limited to the following:

- Assaults
- Unauthorized or illegal assembly
- Illegal possession, use, or distribution of drugs or alcohol
- Fighting
- Gambling
- Obstructing and jostling
- Vandalism/theft
- Illegal possession, use, or distribution of weapons or explosives

(Refer to section entitled "General Rules and Regulations" for further policy and definitions regarding these areas.)

Laws

Students shall obey the laws enacted by federal, state, and local governments. It is appropriate that the students be aware of Act 26 of the Public Acts of 1970:

Sec. 1. A person is guilty of a misdemeanor, punishable by a fine of not more than \$500.00, or by incarceration in the county jail for not more than 30 days, or both:

1. When the chief administrative officer of a publicly owned and operated institution of higher education, or his/her designee, notifies the person that he/she is such an officer or designee and that the person is in violation of the properly promulgated rules of the institution; and
2. When the person is in fact in violation of such rules; and
3. When, thereafter, such officer or designee directs the person to vacate the premises, building, or other structure of the institution; and
4. When the person thereafter willfully remains in or on such premises, building, or other structure; and
5. When, in so remaining therein or thereon, the person constitutes
 - A. a clear and substantial risk of physical harm or injury to other persons or of damage to or destruction of the property of the institution, or
 - B. an unreasonable prevention or disruption of the customary and lawful functions of the institution, by occupying space necessary therefore or by use of force or by threat of force.

Sec. 2. A person is guilty of a misdemeanor, punishable by a fine of not less than \$200.00 and not more than \$1,000.00, or by incarceration in the county jail for not more than 90 days, or both, who enters on the premises, building, or other structure of a publicly owned and operated institution of higher education, with the intention to, and therein or thereon does in fact, constitute (a) a clear and substantial risk of physical harm or injury to other persons or of damage to or destruction of the property of the institution, or (b) an unreasonable prevention or disruption of the customary and lawful function of the institution, by occupying space necessary therefore or by use of force or by threat of force.

Sec. 3. This act shall take effect August 1, 1970.

GENERAL RULES AND REGULATIONS

Academic Honesty

Each student is expected to be honest in his/her work. Dishonesty in assignments, examinations, or other academic work is considered an extremely serious offense by the faculty and students and the student is subject to disciplinary action. Alteration, duplication, or falsification of a College document, form, or authorized signature is considered by the College to be an extremely serious offense and is subject to disciplinary action. In addition to imposing internal disciplinary action for such offenses, the College reserves the right to pursue legal action when it is deemed appropriate.

Assaults

Assault and/or battery, and threatening, attempting, or using physical force or intimidation against (a) any person on the College premises or at a College-sponsored function (athletic events, activities, etc.), or (b) any College student or employee in connection with the performance of his/her College duties, are prohibited. For the purpose of this regulation, assault is defined as an attempt or offer, with force and violence, to do corporal hurt to another, with apparent present means of carrying out the attempt. Battery is an injury which results from an assault. Battery is an injury, regardless of intent, actually done to a person by another in an angry, revengeful, rude, or insolent manner.

Assembly

No person or persons shall assemble in a manner which obstructs the free movement of persons about the campus or the free and normal use of College buildings and facilities, or prevents or obstructs the normal operations of the College.

Dress

Students are expected to dress in an appropriate fashion, having in mind the activity in which they are engaged, while on College property and when attending College-sponsored events. Specific attire, not limited to but including appropriate footwear, safety glasses, safety hats, shields and aprons, may be required when the health and safety of the individual student or other members of the College community are to be protected.

Drug and Alcohol Regulations

In recognition of (1) the serious health risks associated with the illegal use of controlled substances and (2) the abuse of alcohol, and in conformance with the Board of Trustees policies 4416 and 7820, as well as the Drug-Free Schools and Communities Act Amendments of 1989 (20 U.S.C. 3171, et seq.), the following regulations are effective immediately:

1. Students, employees, and guests may not manufacture, distribute, dispense, possess, or use alcoholic beverages on College premises.
2. Students, employees, and guests may not unlawfully possess, use, or distribute controlled substances and alcohol on College premises or when engaged in College activities such as conferences or field trips.
3. No College student activity funds will be used for the purpose of purchasing alcoholic beverages or controlled substances.
4. Being under the influence of alcohol or any controlled substance while on College premises or engaged in College activities is prohibited.
5. Students, employees, and guests are personally accountable for knowledge of federal, state, and local laws relating to alcoholic beverages and controlled substances, the minimum drinking age, transporting open containers of alcoholic beverages, and false representation of age by a minor.
6. As a condition of his/her employment, each employee of the College shall agree to abide by the terms contained within this policy. Violation of any of these terms by College employees may result in disciplinary action, up to and including termination. The College may require satisfactory participation in a substance or alcohol abuse assistance or rehabilitation program for an employee who violates any of the prohibitions listed above.
7. As a further condition of his/her employment, each employee of the College shall agree to notify the College of any criminal drug statute conviction for a violation occurring on College premises or while engaged in College activities, no later than five (5) days after such a conviction. Upon receiving notice of such conviction, the College shall take appropriate disciplinary action within thirty (30) days thereafter.
8. Violation of this regulation by students may result in disciplinary action up to and including expulsion from the College and referral for prosecution. A lack of legal conviction or relevant laws is not a defense in a charged violation of this regulation (3).
9. Guests on College premises are expected to follow the above requirements. Failure to do so may result in a request to leave College property or College activities.
10. In the spirit of providing a safe, healthy and drug-free environment, the College will:
 - a. Continue to offer educational programs that support a drug-free campus and workplace as a normative social value;
 - b. Continue to offer opportunities for substance abuse counseling accessible by students and College employees;
 - c. Continue to make referrals to appropriate counseling professionals and/or agencies within the community to help students and employees who may benefit from such counseling;
 - d. Incorporate in classes throughout the curriculum, where appropriate, references and class-related assignments related to the medical, legal, social, and wellness issues inherent in a drug-free campus and workplace;

- e. Distribute copies of this regulation to all new students and employees.
 1. Substance abuse is a serious but treatable condition or disease that can lead to short-term or long-term physical and psychological consequences, including but not limited to dependence, damage to the nervous system, heart and respiratory conditions, and death.
 2. A "controlled substance" is defined as one: 1) which is not legally obtainable; 2) which is being used in a manner different from that prescribed; or 3) which is legally obtainable but has not legally been obtained. (21 U.S.C.821:MCLA, 333.7101, et. seq.)
 3. A "conviction" under this policy is defined as a defendant pleading guilty or no contest and/or a guilty finding by a court of law.

Field Trips

Student organization field trips must be planned, organized, and approved according to the Student Life Policies and Procedures for Student Organizations, and where applicable the parking and transportation services unit of the Public Safety Department. Organizations who function outside of these policies and procedures may be put on probation and suspended if appropriate.

Fighting

Fighting on College property is prohibited except for contests or exhibitions held or sponsored by the College or a recognized College organization.

Financial Responsibility

Students owing money to the College in respect to such matters as fees, loans, library fines, driving or parking penalties, etc., will be subject to disciplinary action if such accounts are not paid when due. In particular, it should be noted that if any accounts are outstanding at the end of an academic semester, the publication of the student's grade report and/or official transcripts will be delayed, and the student will not be permitted to register for a succeeding semester until such accounts are paid.

Games and Recreational Activities

Gambling in any form is prohibited at all times on College property. Games of any kind may only be played in the recreational or athletic facilities which have been designated to be used for such games. Applications for permission to play any game other than in an area designated for that purpose must be obtained from the Director of Student Life.

Guest Speakers

College regulations with respect to the participation of guest speakers are outlined in the Policy for Guest Speakers. The College requires orderly conduct, non-interference with College functions or activities, and identification of the sponsoring groups or individuals. Under no circumstances are members of the College community to be forced to be involuntary audiences.

Identification Cards

All Lansing Community College students are issued an identification card. Students are expected to show their I.D. card whenever they check out books at the College libraries, vote in student elections, etc., or when they are requested by a member of the faculty or staff of the College. Misuse of College identification to obtain privileges to which the student or to which others are not entitled under existing regulations is a College offense that may result in suspension or dismissal.

Meetings

"American parliamentary law is built upon the principle that rights must be respected: rights of the majority, of the minority, of individuals, of absentees, and rights of all these together." Therefore, *Robert's Rules of Order (Revised)*,* will be followed in any meetings held upon the College campus.

*Robert, Henry M., *Roberts Rules of Order (Revised)*, Scott Foresman and Co., 1951, p. 5

Obstructing and Jostling

The following acts are prohibited on College property: obstruction of or threatening to obstruct, without express permission from an administrative official of the College, any street, sidewalk, hallway, stairway, classroom, elevator, doorway, vestibule, entry, building, annex, wing, patio, balcony, or any other College property by impeding or threatening to impede the free and uninterrupted passage of vehicles or individuals, or interfering in any way with the free and uninterrupted use of College property; and jostling or roughly crowding persons in or on any of the above-mentioned locations.

Organizations

No student or student organization may use campus facilities, solicit funds, business, or support on the College campus unless such a student or student organization has been authorized by the Director of Student Life. Approval of College clubs and organizations must be in accordance with the Student Government Constitution.

Pets

In order to protect the health and safety of the members of the College community and preserve order on the campus, no pets, including but not limited to, dogs, cats, birds, and rodents, shall be permitted within the buildings of Lansing Community College. This is not intended to exclude seeing eye dogs used by the visually impaired or animals designated for laboratory experimentation purposes.

Plagiarism

A student is guilty of plagiarism when he/she fails to give credit for any ideas or material taken from another for either written or oral presentation. The offering of materials assembled or collected by others in the form of projects or collections without acknowledgement also is considered plagiarism. Plagiarism is considered by the faculty and students as an extremely serious offense for which the student will be subject to disciplinary action.

Records

It is the responsibility of the student to give honest and complete replies to all questions included in application forms and other documents required by the College.

Smoking

In continuing compliance with the Michigan Clean Indoor Act, P.A. 198 of 1986, and in the interest of providing a safe and healthy environment for the College's students, employees, and visitors, smoking will not be permitted in Lansing Community College facilities.

Vandalism/Theft

Property of the College, as well as that of individuals, should be respected. Vandalism or theft of any kind, the destruction or mutilation of media resources materials, equipment, buildings, or grounds of the College, is inconsistent with the objectives of the College and good citizenship and will result in disciplinary action.

Video Cassette

The federal copyright law, Title 17 of the United States Code, provides copyright protection of "original works of authorship," including "motion pictures and other audiovisual works." Thus, the use of video cassettes and films is restricted to private showings, and public showings are prohibited without the copyright owner's consent. Under the "fair use" limitation, copyrighted cassettes, motion pictures, and other audiovisual works may be used for purposes such as "teaching (including multiple copies for classroom use), scholarship, or research" without violation, and audiovisual materials purchased or rented by the College have the written consent of the copyright owners and, therefore, are legally appropriate for classroom use.

Weapons and Explosives

Explosives, firecrackers, and firearms are not permitted on College property. Provided, however, that the foregoing shall not prohibit fencing foils and other athletic equipment intended for such use, nor shall it apply to persons holding concealed weapons permits and duly constituted police officers who are authorized by law to carry weapons.

Poster Regulations

Lansing Community College is continually sensitive to the fact that there is a need for students, staff, and offices to communicate regarding various activities, events, and services. The College is also sensitive to the right of freedom of expression, particularly as provided for in the First Amendment of the Constitution of the United States. At the same time, the College is responsible for providing reasonable procedures and regulations to protect public and private property, and provide for the general safety and welfare of all members of the College community, and which preclude disruption of the normal functions of the College.

The following statements are designed to regulate the use of posters within the College facilities while providing students, College personnel, and College properties reasonable protection from commercial exploitation and court suits. While the courts have said that College property is considered a "public trust," these same courts have ruled that College property is not "public property" subject to unregulated use by any and all individuals. This regulation is designed to facilitate communication through the use of posters while complying with the legislated instructional mission of the College.

DEFINITION: A poster is any written communication designed to apply to a wall or other surface for the purpose of relating information about an event, service, idea, or activity. A poster may be in the format of, but not limited to, a sign, an announcement, or banner.

General Poster Regulations

1. Within any and all buildings, placement of all signs and posters is restricted to approved bulletin boards.
2. Each poster must identify the sponsoring organization, department, or individual (no abbreviations). Each poster must display a telephone number or an office location where more complete information can be obtained.
3. All posters should be in English, or when in another language, a literal English translation should be supplied with each poster copy. When a foreign language poster is used, its complete English translation should be:
 - a. Clearly printed on the same poster and in the same size letters as the letters used in the original foreign language poster, or
 - b. Attached to each copy of the foreign language poster, clearly printed, and in the same size letters as the letters of the original foreign language poster. The English translation must remain with the poster for the duration of its posting.
4. Each poster is required to have in the lower left-hand corner, its posting date (month, day, and year) and in the lower right-hand corner, its date (month, day, and year) to be removed. Each poster should be up for a reasonable length of time depending upon the activity.
5. Designated bulletin boards are available in each building for the posting of student and staff personal notices. All student and staff personal notices will be confined to these designated bulletin boards.
6. A poster shall not exceed 18 inches by 24 inches except when given special permission by the appropriate office of approval.
7. No poster shall be placed in such a way that it covers all or part of a previously posted approved poster whose take-down date has not expired.
8. The removal of posters at or prior to the take-down date shall be the responsibility of the sponsoring organization or individual. No posters shall be removed prior to the take-down date by unauthorized individuals.

POSTERS: Offices of Approval

 - a. Students and student organizations wanting to post posters must gain approval in the Office of Student Life.
 - b. College staff and faculty must gain approval in their departmental office or from the office of their administrative supervisor.
 - c. Student and College staff personal notices placed in designated bulletin boards within the College buildings do not need approval. Examples of personal notices are selling used books, sharing a ride, sharing an apartment, and selling personal articles. Profit-making commercial notices are not considered personal and will be removed.
9. Lansing Community College respects the constitutional rights of freedom of expression. There are, however, responsibilities which are attendant to

the exercising of these constitutional rights. The following statements are made to provide an operational balance between the rights and responsibilities of the freedom of expression regarding the contents of posters:

- a. The content of posters shall avoid the liabilities of libel; obscenity; invasion of privacy; and incitement of disorder, violence, and disruption of the normal operation of the College.
- b. The contents of posters shall support the principles of nondiscrimination against individuals and groups of individuals based on race, color, religion, sex, national origin, age, height, weight, marital status, handicap, and sexual orientation.
- c. The contents of posters should avoid projecting a negative image of individuals and groups of individuals based on race, color, religion, sex, national origin, age, height, weight, marital status, handicap, and sexual orientation.

Student or Student Organization Appeal of Poster Denial or Removal

If a student or student organization feels that a denial of posting or removal of a poster infringes upon their First Amendment rights or is in violation of this regulation, an informal appeal may be made by the poster sponsor to the Director of Student Life. A meeting will be held between the appealing poster sponsor or sponsors with the Director of Student Life to discuss the appeal. If the appeal is not resolved, a formal appeal may be presented to the Director of Student Life. This appeal must be in writing, must indicate the reason(s) for the appeal, and must be dated and signed by the appealing party. The Director of Student Life will gather information and respond to the appealing party within five (5) days of receipt of the appeal. If the student or student organization is not satisfied with the response of the Director of Student Life, a second written appeal may be made to the Dean of Student and Academic Support Division. This written appeal must contain the reason(s) for the appeal, and a copy of the poster must be made available to the Dean of Student and Academic Support Division for review. The appeal to the Dean of Student and Academic Support Division must be dated and signed by the appealing party. The Dean of Student and Academic Support Division will gather information and respond to the appealing party within five (5) days of receipt of the appeal, giving the decision rendered and reason(s) therefore. The decision of the Dean of Student and Academic Support Division shall be final.

Failure to comply with the above regulations will lead to the denial of approval, the removal of posters, and/or disciplinary action. In order to protect the student body, individual members of the College community and the resources of the College, the College reserves the right and accepts the responsibility to deny approval or remove any poster or posters which it believes to cause significant disruption of the normal function and operation of the College.

Poster Regulations for Off-Campus Organizations and Individuals

Lansing Community College is sensitive to the fact that there is a need for some off-campus organizations and individuals involved in non-commercial enterprises to communicate with Lansing Community College students and staff members concerning various activities, events, and services. The College is also sensitive to the right of expression, particularly as provided for in the First Amendment of the Constitution of the United States. At the same time, the College is responsible for providing reasonable procedures and regulations to protect public and private property and providing for the general safety, welfare, and positive learning environment for all members of the College community.

Therefore, the College has provided a kiosk, centrally located on the downtown campus, for the use of non-commercial groups and individuals who are not affiliated with the College. Such groups and individuals may place their posters on this kiosk without seeking prior approval from any College office, and the College disclaims any and all responsibility for items posted.

Regulations for Use of Student Literature Table

Lansing Community College is continually aware of and supportive of the concepts of freedom of expression, particularly those provided by the First Amendment of the Constitution of the United States. The College also perceives that one of its functions is to provide a wide range of learning experiences and learning opportunities for the students of the College. At the same time, the College is mandated to provide orderly processes which avoid material disruption, protect public and private property, and provide for the general safety and welfare of students, faculty, and College staff.

The following statements are designed to facilitate student distribution of literature within the College facilities, while providing students and College personnel and property reasonable protection from commercial exploitation and

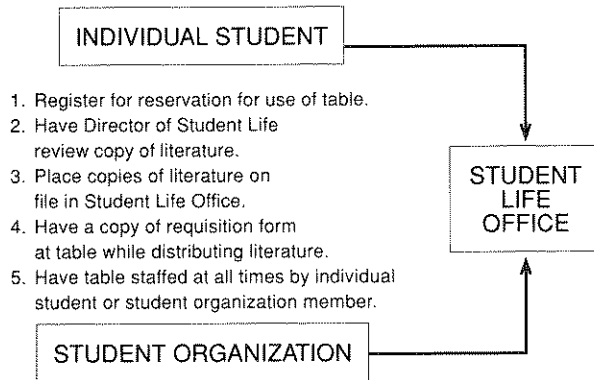
legal actions. Court rulings have determined that College buildings, while considered a public trust, are not considered public property subject to unregulated use by any and all individuals. The procedural regulations below are designed to facilitate the legislated instructional mission of the College to serve the citizens of the College community. The following procedural regulations shall be followed:

1. The distribution of literature within College buildings by students shall be limited to student literature tables made available for such distribution. Student literature tables will be made available in the following areas within the College buildings:
 - a. In the entry lobby outside the second floor cafeteria of the Arts and Sciences Building.
 - b. In the Washington Avenue Mall lobby between the Health Physical Education Building and the Applied Arts and Sciences Building.
 - c. In the second floor lobby area of the Old Central Building.

At least two single tables will be available in each of these areas. The maximum number of tables made available in any area will be determined in a reasonable manner based on the use of the area and regulations regarding fire safety and student welfare.

2. Only registered students and College-recognized student clubs and organizations shall have access to the student literature tables. Non-students who wish to use college facilities must gain permission by following procedures established for this purpose through the Office of the Dean of the Division of Student and Academic Support.
3. The student literature tables will be available Mondays through Thursdays from 8 a.m. to 10 p.m. and Fridays 8 a.m. to 5 p.m. during the days of regularly scheduled semesters.
4. The Director of Student Life must review materials to be distributed. Registered students and College-recognized clubs and organizations are required to register for the use of the student literature tables with the Student Life Office at least 72 hours prior to the time of desired use. Registrations will be accepted on a first request-first serve basis. Individual students and recognized student clubs or organizations may register for the use of a table for three consecutive days. If there are no pending requests, a registration may be renewed at the end of a previous registration. If there are no pending requests, a recognized student club or organization may request the use of more than one table or more than one location. If during the use of multiple tables or locations, additional students or recognized student groups request the use of a table or location and additional tables or locations are not available, the multiple user or users will be required to give up the multiple use of tables and locations to provide for the new request.
5. A copy of the completed registration form obtained from the Student Life Office must be available at the student literature table while distribution is taking place.
6. In order to determine accountability, a sample of the material to be distributed must be placed on file with the Student Life Office at the time of the registration for use. In addition, a recognized student club or organization must have a copy of the material to be distributed on file with the club's or organization's advisor.
7. The student literature table will be staffed at all times by the individual student or members of the recognized student club or organization registered for the use of the tables while the distribution of materials is taking place. The registered student or recognized club or organization will have the responsibility to ensure that the distribution process is orderly at all times and that the general area surrounding the student literature tables is not littered.
8. Individuals shall have the option to pick literature from the tables or receive a copy from the individuals sitting at the tables. No literature shall be forced upon any individual nor shall there be any obstructions created in the path of the general flow of traffic.
9. Individual students or recognized student clubs and organizations may collect funds for worthy causes, such as muscular dystrophy, blood drives, or College-sponsored activities. There shall be no commercial solicitations of funds or business, nor shall individual students solicit funds for personal gain.
10. The College has the right and responsibility to halt the distribution of literature which it believes to be libelous, obscene, an invasion of privacy, or literature designed to cause immediate disruption of classes, violence, or substantial disorder of the normal operations of the College.
11. Failure to comply with the above procedural regulations may lead to the denial of the use of the student literature tables and/or may lead to disciplinary action.

Literature Table Use Request Flow Chart

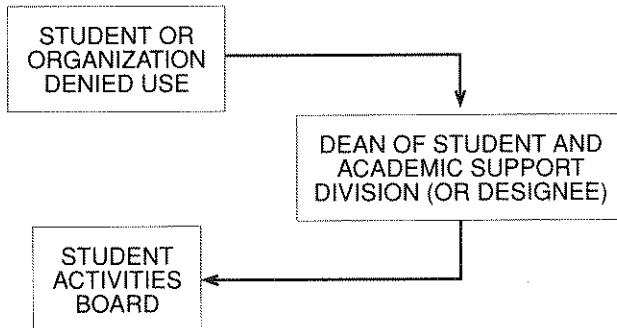


Appeal of Denial of Use of Literature Table

Any individual, registered student or recognized student club or organization which has been denied access to the student literature tables or has been required to halt distribution based on procedure 10 may appeal the denial or requirement to halt distribution. The appeal shall be in writing and shall be directed to the Dean of Student and Academic Support Division (or designee) within 10 calendar days of the denial or requirement to halt distribution. The Dean of Student and Academic Support Division (or designee) shall make a prompt investigation of the appeal, contacting the parties involved, and shall, within 10 calendar days from the date of appeal, make a decision to reinstate the distribution rights denied or halted or to uphold the original decisions. If the decision of the Dean of Student and Academic Support Division is not satisfactory, the individual student or recognized student club or organization may appeal the Dean's decision to the Student Activities Board of the College. This second appeal must be in writing and presented to the Chairperson of the Student Activities Board within 10 calendar days of the decision of the Dean of Student and Academic Support Division. The Student Activities Board shall make a prompt investigation of the appeal, contacting parties involved, and shall within 10 calendar days from the date of the appeal, make a decision to reinstate the distribution rights or upholding the denial or required halt of distribution. The decision of the Student Activities Board shall be final.

Where it is contemplated that a violation of the student literature distribution procedural regulation warrants the imposition of disciplinary action upon an individual student, disciplinary action shall be taken in accordance with "Due Process" as outlined in this Lansing Community College Catalog.

Appeal of Denial Flow Chart



Sexual Harassment and Discrimination

Sexual Harassment

Sexual harassment is not acceptable behavior on the College campus or at College-sponsored events off campus. Violation of this regulation by students or College employees can result in disciplinary action.

Sexual harassment is defined in the Michigan Civil Rights Act as follows:
 "... Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct or communications of a sexual nature when:

1. Submission to such conduct or communication is made a term or condition, either explicitly or implicitly to obtain employment, public accommodations or public services, education, or housing.

2. Submission to or rejection of such conduct or communication by an individual is used as a factor in decisions affecting such individual's employment, public accommodations or public services, education, or housing.
3. Such conduct or communication has the purpose or effect of substantially interfering with an individual's employment, public accommodations or public services, education, or housing environment."

For the purpose of the above regulation, the College interprets the unwelcome to mean:

1. Conduct or communication which a reasonable person in a similar circumstance would consider unwelcome;
2. Conduct or communication which continues after notice is given that the conduct or communication is unwelcomed.

Discrimination

Lansing Community College affirms its commitment to the practice of no discrimination on the basis of race, color, religion, sex, national origin, age, height, weight, marital status, handicap, or sexual orientation. This commitment has evolved from efforts to comply with several laws and public acts that pertain to the area of no discrimination. Notable of these acts and laws are the following:

1. Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin;
2. Title IX of the Educational Amendment of 1972, which prohibits discrimination on the basis of sex;
3. Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of handicap;
4. Michigan's "Elliot-Larson Civil Rights ACT" MIL. 37.2101, et seq, as amended, which prohibits all forms of discrimination and defines sexual harassment.

Sexual Harassment/Discrimination Complaint Process

The guidelines/procedures below apply to LCC students who may desire to file a complaint regarding sexual harassment/discrimination. The investigation of all sexual harassment/discrimination complaints will be handled through the Affirmative Action/Equal Employment Opportunity (AA/EEO) Office. Sexual harassment/discrimination is unlawful and all complaints of sexual harassment/discrimination must be reported.

I. Responsibility to Report

Prompt reporting of all complaints is strongly urged since it is often difficult to trace the facts of an incident or incidents long after they have occurred. It is recommended that complaints be filed within sixty (60) calendar days of the alleged incident. All complaints will be investigated. Individuals making a complaint or taking part in the investigation of a complaint will not be subject to retaliation.

II. Filing a Complaint

Students who feel they are being sexually harassed or discriminated against should contact the AA/EEO Office, (517/483-1858). In addition to meeting with the AA/EEO Officer or designee, students filing a complaint will be asked to complete a sexual harassment/discrimination complaint form. (Sexual harassment/discrimination complaint forms are available in the following offices: Personnel Department, offices of Divisional Deans, and the Affirmative Action Office.)

III. Investigation Procedures

- A. Investigator(s).** After receiving a complaint, the AA/EEO Officer will designate a specially trained person or persons to investigate the alleged complaint. Besides investigating complaints of sexual harassment/discrimination, this investigation team (or individual) may make recommendations for resolution, corrective action, and/or disciplinary action when designated by the AA/EEO Officer.
- B. Timetable.** An investigation will begin no later than twenty (20) working days of receipt of the sexual harassment/ discrimination complaint form or immediately following a request from the AA/EEO Officer.
- C. Complainants.** The AA/EEO Officer will contact the complainant and inform him/her when the investigation will occur. The complainant may be asked to submit additional information, if necessary, for the investigation to continue.
- D. Notification.** The AA/EEO Officer will inform the alleged harasser/discriminator of the complaint as soon as is practicable or necessary. The results of the investigation will be revealed to the alleged harasser/discriminator upon the completion of the investigation.
- E. Confidentiality.** At each step of this procedure, the College will take appropriate action to protect the privacy of individuals involved in the

complaint. Both in fact-finding and in the final disposition of the complaint, efforts will be made to maintain confidentiality. During the investigation stage, the College may have to contact witnesses or other individuals involved. This will not be considered a breach of confidentiality.

IV. Resolution

Based on the results of the investigation, appropriate action will be taken by the College. Complaints may be dismissed or resolution could include disciplinary action up to and including dismissal.

If through an investigation of sexual harassment/ discrimination other wrongdoings are found, these issues will be dealt with separately from the sexual harassment/discrimination complaint.

Regulation Revisions and Additions

Lansing Community College reserves the right to change or add to the rules and regulations at any time.

DUE PROCESS

Lansing Community College holds firm to the philosophy that matriculation in college does not deny any rights of citizenship to a student. At the same time, matriculation in college does not relieve a student of the essential responsibilities of citizenship. Thus, the College is constantly aware of the joint responsibilities, shared by the student body and the College, to uphold the principles of "due process" in all disciplinary action.

When a student is accused of violating general rules and regulations of the College, except those involving Academic Standing Policies, the procedures described below will be followed:

1. The student will be notified by certified letter that an alleged violation has occurred. In the letter, the student will be directed to make an appointment with the appropriate College official to review the facts concerning the alleged violation in order to determine if formal charges should be prepared. In the event that the student fails to contact the appropriate College official within ten (10) class days (excluding Saturday and Sunday) of receiving the certified letter, a "hold" will be placed on the student's record which will result in the student's enrollment being delayed.
2. If a decision is made to prepare formal charges, the student shall be notified by an appropriate College official that he/she is being accused of violating a regulation and that he/she may elect to do one of the following:
 - a. The student may admit the alleged violation and request, in writing, that the administrative officer take whatever action seems necessary;
 - b. The student may admit the alleged violation and request a hearing before the Judicial Board regarding the discipline imposed;
 - c. The student may deny the alleged violation, in which case the administrative officer shall refer him/her to the Judicial Board.
3. Prior to the Judicial Board hearing, the student shall be entitled to the following:
 - a. Written notification of the time and place of the hearing;
 - b. A written, detailed statement of the charges so that the student may prepare his/her defense;
 - c. Written notification of the names of the witnesses directly responsible for having reported the alleged violation or written notification of how the alleged violation came to the Board's attention.
4. The student shall be entitled to appear in person and present his/her defense to the Judicial Board and may call witnesses in his/her behalf. The student may also elect not to appear before the Judicial Board. Should he/she elect not to appear, the hearing shall be held in his/her absence.
5. The student shall be entitled to be accompanied by a person of his/her choice. If this person is in the form of legal counsel, the student must notify the Office of the Dean of the Student and Academic Support Division at least ten (10) days prior to the scheduled hearing date.
6. The student or his/her representative may be allowed to ask questions of the Judicial Board or of any witnesses.
7. The student shall be entitled to an expeditious hearing of his/her case.
8. The student shall be entitled to an explanation of the reasons for any decision rendered against him/her.
9. A student who wishes to contest the decision of the Judicial Board may request that the President of the College (or his/her designee) review the decision of the Judicial Board. The student must request this review within ten (10) scheduled class days (excluding Saturday and Sunday) of

notification of the Judicial Board's decision. Decisions rendered by the President (or his/her designee) will be final.

The standard of proof to be followed by the Judicial Board of Lansing Community College is the standard of "preponderance of evidence." Decisions rendered by the Judicial Board will be made by a simple majority vote of the total membership of the Judicial Board. In addition, the Judicial Board shall be empowered to make recommendations based on decisions rendered.

Membership of the Judicial Board

The Judicial Board will consist of the following members:

1. The Dean of the Student and Academic Support Division or his/her designee; (NOTE: This member will serve as chairperson. However, when the Judicial Board is hearing an appeal based on a disciplinary decision of the Office of the Dean of the Student and Academic Support Division, the Dean of the Student and Academic Support Division will relinquish the chair, and a temporary chairperson will be elected by the remaining members of the Judicial Board.)
2. One College administrator appointed by the Dean of the Student and Academic Support Division;
3. Two students from the student body appointed by the President of the Student Government or his/her designee or equivalent, with consent of the Student Government or their designee or equivalent, with one alternate appointed in the same way to serve in the absence of any student member;
4. Two faculty members appointed by the dean of the division in which the concerned student is enrolled or matriculating, with one alternate faculty member appointed in the same way, to serve in absence of any faculty member.

Disciplinary Action

Students violating the general rules and regulations of the College and students committing academic offenses, other than those involving Academic Standing Policies, shall be subject to disciplinary action which is appropriate to the nature of the offense and which may take into account the student's previous conduct record. Disciplinary action may be imposed by the Dean of the Student and Academic Support Division (or his/her designee) or, in the case of academic offenses, by the classroom instructor or divisional dean (or his/her designee). Examples of such disciplinary action include the following:

1. Reprimand
2. Probation
3. Restrictions on activities or privileges
4. Requirements of restitution
5. Denial or revocation of a College honor or degree
6. Suspension
7. Dismissal
8. Permanent dismissal
9. Criminal and/or civil action

The student may appeal any decision regarding disciplinary action as described below.

Student Appeals

The Judicial Board will hear cases referred to it by administrative officers of the College or by individual students through the established lines of appeal. An appeal is defined as a review of a previous decision and the process used in reaching that decision. Before using the formal appeal process, students are encouraged to first meet with faculty members to attempt to resolve issues in an informal manner.

The line of appeal used will depend upon the type of case involved. In all cases, students are required to state their appeal (or complaint) in writing at the time they begin the formal appeal process.

1. **Student Appeal of Disciplinary Action for Violation of General Rules and Regulations.** In appealing a disciplinary action based on a violation of general rules and regulations of the College (explosives, alcoholic beverages, or mistreatment of College property, for example), the student shall use the following line of appeal:
 - a. The Dean of the Student and Academic Support Division (or designee)
 - b. The Judicial Board of the College
 - c. The President (or his/her designee)

Note: A student will have 10 scheduled class days (excluding Saturday and Sunday) to appeal a decision after notification of that decision at a prior level.

2. **Student Appeal of a Violation of Academic Rules and Regulations or of Academic Disciplinary Action.** In appealing an academic charge based on a violation of the academic rules and regulations (plagiarism or cheating, for example), and in appealing academic disciplinary action (loss of credit, for example), the student shall use the following line of appeal:
 - a. The faculty member involved (when appropriate)
 - b. The dean of the division involved (or his/her designee) in consultation with the department chair
 - c. The Judicial Board of the College
 - d. The President (or his/her designee)

In cases involving an academic charge or academic disciplinary action, the faculty members serving on the Judicial Board will be faculty members from the division which offers the class where the academic charge or disciplinary action is being appealed.

Note: A student will have 10 scheduled class days (excluding Saturday and Sunday) to appeal a decision after notification of that decision at a prior level.

3. **Student Grade Appeals.** When a student wishes to appeal a grade, he/she must do so by the end of the sixth week of the following semester or summer session. The line of appeal shall be as follows:
 - a. The faculty member involved (when appropriate)
 - b. The dean of the division involved (or his/her designee) in consultation with the department chair
 - c. The Judicial Board of the College
 - d. The President (or his/her designee)

When cases involving student grade appeals are heard by the Judicial Board, the faculty membership on the Judicial Board will be two faculty members from the division which offers the class where the grade is being appealed.

Note: A student will have 10 scheduled class days (excluding Saturday and Sunday) to appeal a decision after notification of that decision at a prior level.

4. **Student Complaints.** When a student wishes to lodge a complaint against an instructor for alleged mistreatment of students, except in cases of sexual harassment/discrimination (found in this catalog under "Sexual Harassment/Discrimination"), the line of appeal in the complaint process shall be as follows:
 - a. The faculty member involved (when appropriate)
 - b. The dean of the division involved (or his/her designee) in consultation with the department chair
 - c. The Judicial Board of the College
 - d. The President (or his/her designee)

When cases involving student complaints are heard by the Judicial Board, the faculty membership on the Judicial Board will be two faculty members from the division which offers the class where the complaint for alleged mistreatment is being lodged.

Note: A student will have 10 scheduled class days (excluding Saturday and Sunday) to appeal a decision after notification of that decision at a prior level.

5. **Student Appeal of Administrative Withdrawal.** Whenever the Office of the Registrar receives the recommendation for an administrative withdrawal, the Office of the Registrar will notify the student in writing that he/she is being administratively withdrawn. The lines of appeal for administrative withdrawal decisions are as follows:

Line of Appeal of Administrative Withdrawal for Non-Attendance and for Lack of Course Prerequisites

- a. The instructor (if appropriate)
- b. The dean of the division involved (or his/her designee) in consultation with the departmental chair
- c. Judicial Board of the College
- d. President (or his/her designee)

Line of Appeal of Administrative Withdrawal for Inappropriate Classroom Behavior

- a. The dean of the division involved (or his/her designee) in consultation with the departmental chair
- b. Judicial Board of the College
- c. President (or his/her designee)

If a student appeals an administrative withdrawal to the dean of the appropriate division (as noted above in the lines of appeal), the student will

receive written notification of the time and place of the appeal. If the student does not attend the appeal conference, the dean will review the appeal in the student's absence. The dean will notify the student in writing of the recommendation of the review and of the reasons for the recommendation. The dean will forward a copy of the student's written notification to the Office of the Registrar for disposition.

Note: In cases of administrative withdrawal, a student will have five scheduled class days (excluding Saturday and Sunday) to appeal a decision after notification of that decision at a prior level.

COLLEGE RESPONSIBILITIES*

Lansing Community College is committed to providing an environment and resources which promote student learning. All College employees contribute to this goal. Our commitment to learning is reflected by these responsibilities.

1. The College will maintain appropriate prerequisites so that students will enter courses with a reasonable chance of success.
2. The College will provide facilities that are safe, secure, clean, and conducive to learning.
3. The College will provide a clear and fair process for handling student complaints and concerns.
4. Faculty will be articulate and enthusiastic about their field and will establish a positive, stimulating learning atmosphere.
5. Faculty will prepare for each class; organize course concepts and present them clearly; exhibit comprehensive knowledge of the subject; teach the application of skills appropriate to course content; and make appropriate and timely use of student and instructional support services.
6. Faculty will respect students as individuals, recognizing learning styles and managing student learning accordingly.
7. Faculty will encourage classroom discussion when appropriate and represent various sides of an issue.
8. Faculty will give students a standard course syllabus at the beginning of the semester; provide appropriate instructional materials and assistance; and meet classes at the scheduled times.
9. Faculty will evaluate students fairly and objectively, maintain records of student achievement, and keep students informed of their progress.
10. Faculty will encourage students to think intelligently and independently.
11. Faculty will be available to assist students outside the classroom, including during regularly scheduled and posted office hours.
12. Faculty will know curriculum/program requirements and general career opportunities in their field. They will be able to advise students in their program area and refer students for academic and/or career counseling.

STUDENT RESPONSIBILITIES

In order to be successful learners, students must assume an active role in the learning process. The student responsibilities listed below emphasize behaviors that contribute directly to student academic success, and they apply to all students enrolled at the College.

1. Students will take responsibility for their own learning and for succeeding in their courses by:
 - a. Following course requirements as presented in course syllabi;
 - b. Attending all of their classes;
 - c. Preparing for classes and completing assignments on time;
 - d. Contacting their instructor regarding work missed in the case of an absence;
 - e. Cooperating with their instructor and other students to create a positive learning atmosphere;
 - f. Contributing effectively to class activities.
2. Students will be academically and intellectually honest in all classes, examinations, and learning activities. (The College, by regulation, will discipline students who cheat and/or copy the work of others; dishonesty is a serious offense and will be dealt with appropriately.)
3. Students will contribute to a positive learning environment by conducting themselves appropriately. (The College prohibits acts which interfere with the rights of others to seriously pursue an education. For more details on the regulations of the College, see section entitled "Student Rights, Responsibilities, and Conduct.")

*Sources: Recommendations of the College-Wide Faculty Evaluation Committee; Current Agreement between the Board of Trustees and the Lansing Community College Chapter the Michigan Association for Higher Education.

SPECIAL PROGRAMS AND SERVICES

Lansing Community College provides many special programs and services for students, including those which are briefly described below. For a comprehensive listing, descriptions, and locations of all special programs and services available at the College, students should consult *The Student's Guidebook*. Copies of *The Student's Guidebook* may be obtained from the Student Life Office, Room 201, Student Personnel Services Building.

Career and Employment Development Services offers career testing, planning, and counseling services for members of the community, local businesses, industry, and students. Services also include assistance with job search, full- and part-time employment (including college Work Study), help with writing resumes and cover letters, and information about interviewing and other techniques for use in seeking employment. All services provided are related to career planning and employment readiness.

Counseling and Academic Advising Services include personal counseling to identify and assist in resolving students' personal and interpersonal issues and concerns; educational planning to facilitate career decisions, choice of major, and course selection; evaluation of the need for additional academic preparation to strengthen such basic skill areas as reading, writing, and mathematics; transfer planning for successful transition to bachelor level programs; referral to community human services agencies for further professional assistance; and academic advising to assist students with information and course selection.

Extension and Community Education provides information about and coordination of LCC off-campus classes conducted in school district locations within a 30-mile radius of the College's main Lansing campus.

International Programs coordinates overseas study through such programs as the Japan Adventure and Japan Horizon Programs and a network of sister college exchange relationships.

The Lansing Community College Foundation supports students, faculty, programs, and facilities through philanthropic initiatives in the College and community. Scholarship awards to students and allocations to LCC programs are coordinated by the Foundation Board of Directors in support of the mission and goals of the College.

Library Information Services provides a computer catalog listing library resources, information and research assistance, interlibrary loan services, computerized information research service, individual and group library orientations, book renewals by phone, library use guides, and dial access to LCC library catalog and area libraries.

The Limited English Proficiency Program provides counseling, academic advising, registration assistance, financial aid assistance, and intensive English training for students with limited English skills.

Minority Outreach and Recruitment provides a Special Assistant to interact with all offices providing student support services in order to facilitate minority student access to these services. The Special Assistant recruits potential minority students; develops and maintains community contact with various minority organizations, clubs, and associations; identifies problems and barriers of the minority student population and proposes appropriate responses; coordinates and plans special cultural/ethnic observations and celebrations; and serves as an advocate on behalf of minority student needs.

The Student Life Office sponsors numerous campus activities and programs that provide for academic, social, and personal growth. These include student government, which provides a wide range of activities throughout the year and serves as a voice for students; student clubs and organizations; student activities, such as low-cost student travel opportunities, campus programming of guest artists, student workshops, lectures, and forums; and opportunities to work on the staff of *The Lookout*, Lansing Community College's student newspaper.

The Tutorial Program, offered through Library Information Services, provides peer tutors and professional tutorial technicians to help develop classroom competencies and study skills. Individual appointments, drop-in tutoring, and study group sessions are available.

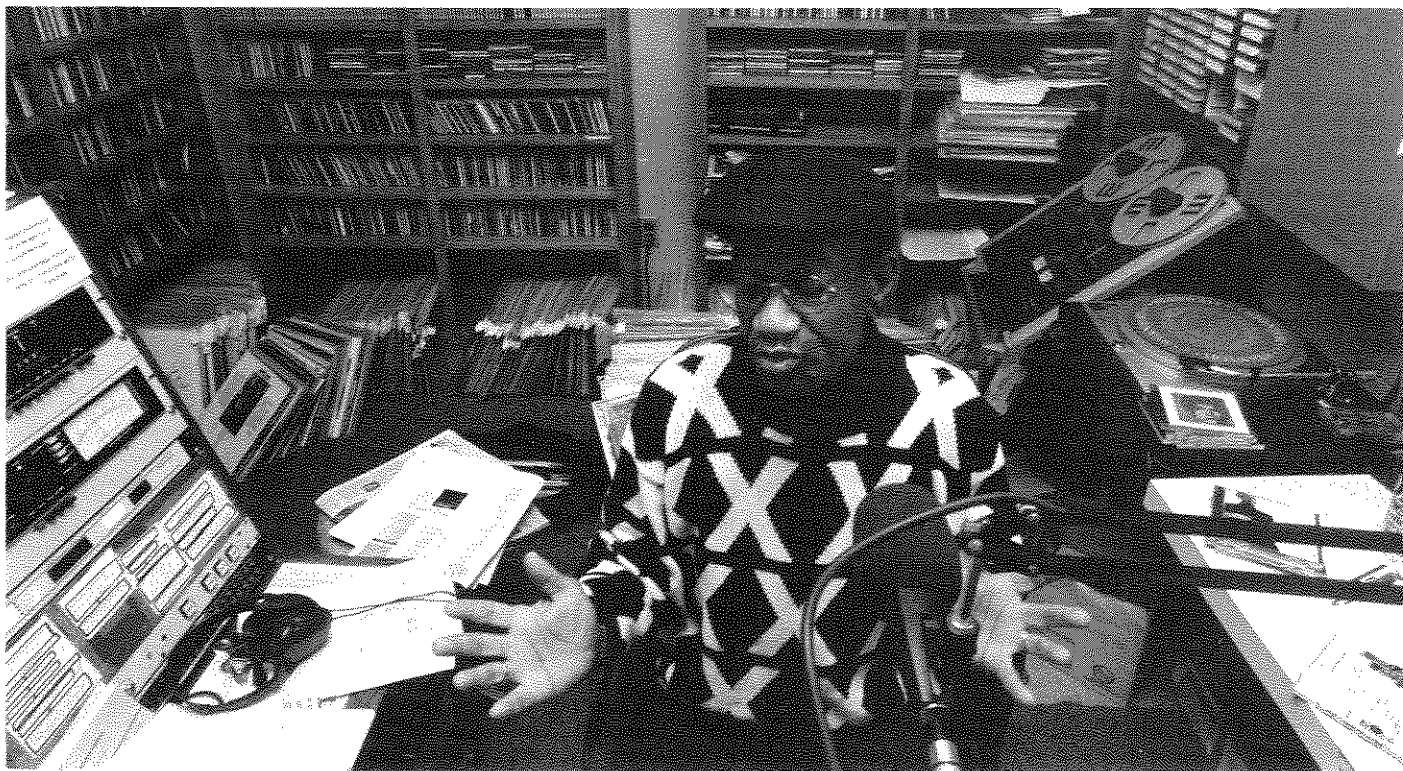
Volunteer Services provides volunteer, mentoring, and service learning opportunities for students, faculty, staff, and the community to nurture, promote, and instill the spirit of volunteerism.

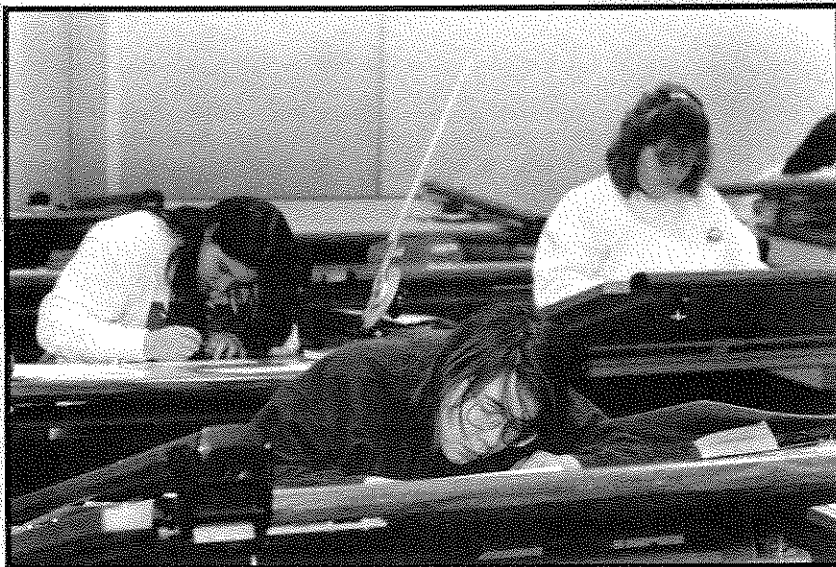
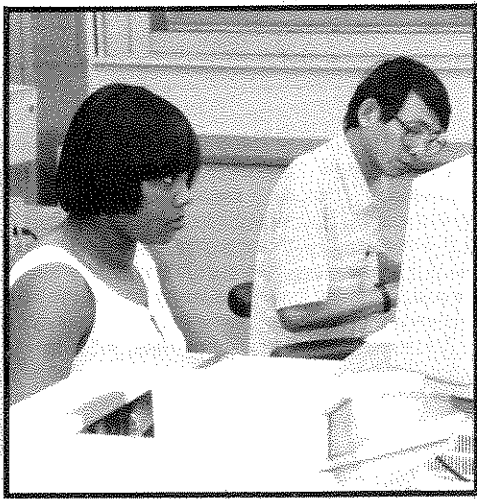
The Women's Resource Center offers services and programs in support of women and men at Lansing Community College, including financial assistance, displaced homemaker services, free programs, and referral services.

Information for Persons with Disabilities

Lansing Community College is committed to making accommodations and providing services for persons with disabilities. The College has administrative and faculty specialists who respond to visual, hearing, mobility, and alternative learning accommodation needs. They can be reached in the Office of Disability Support Services (517) 483-1207. The College adheres to the standards and guidelines set forth in the "Americans With Disabilities Act."

Handicapper parking is available and clearly identified at Lansing Community College. For more information, call the office of Parking Services at (517) 483-1798.

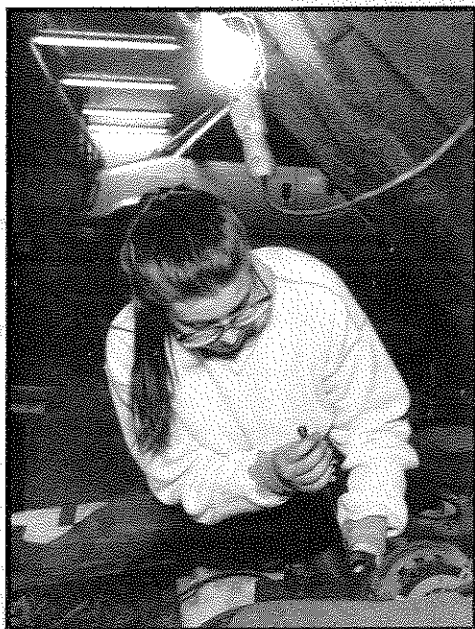




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C A T A L O G

DEGREE
AND
CERTIFICATE
PROGRAMS



DEGREE AND CERTIFICATE PROGRAMS

The following is a list of degree and certificate programs offered by Lansing Community College. Copies of curriculum guides for each of these programs are available in department offices, file drawers around campus, and the counseling office. For additional information about these programs a student should contact the counseling office or an academic advisor.

Programs Leading to an Associate Degree

Accounting

Associate Degree Business

Accounting, C.P.A. Exam Preparation

Associate Degree Business

Administrative Assistant

Associate Degree Business

African American History Major

Associate Degree Arts

American Studies Major

Associate Degree Arts

Architectural Technology

Associate Degree Applied Science

Architectural Technology/Computer Graphics

Associate Degree Applied Science

Auto Body Repair

Associate Degree Applied Science

Automotive Technology

Associate Degree Applied Science

Aviation Flight Technology

Associate Degree Applied Science

Aviation Maintenance Technology

Associate Degree Applied Science

Avionics

Associate Degree Applied Science

Banking Management, AIB Diploma Program

Associate Degree Business

Biology

Associate Degree Science

Building Maintenance

Associate Degree Applied Science

Business Administration

Associate Degree Business

CAD/CAM Engineering Technician

Associate Degree Applied Science

Chemical Technology

Associate Degree Science

Chemistry

Associate Degree Science

Child Development

Associate Degree Arts

Civil Technology

Associate Degree Applied Science

Computer Graphics - Animation

Associate Degree Applied Arts

Computer Graphics - Commercial Art

Associate Degree Applied Arts

Computer Sales Specialist

Associate Degree Business

Computer Science

Associate Degree Science

Computer Security and Controls

Associate Degree Business

Computerized Numerical Control Programmer

Associate Degree Applied Science

Court and Conference Reporting

Associate Degree Business

Credit Union Management

Associate Degree Business

Criminal Justice, Corrections

Associate Degree Business

Criminal Justice, Law Enforcement

Associate Degree Business

Criminal Justice

Associate Degree Business

Dance Career

Associate Degree Applied Arts

Dance Transfer

Associate Degree Applied Arts

Dental Hygienist

Associate Degree Applied Science

Diesel Engine Technology

Associate Degree Applied Science

Drafting and Design

Associate Degree Applied Science

Drafting and Design, Body Design

Associate Degree Applied Science

Educational Sign Language Interpreter

Associate Degree Applied Arts

Electrical Technology

Associate Degree Applied Science

Electronics Technology, Biomedical Option

Associate Degree Applied Science

Electronics Technology, Communications Option

Associate Degree Applied Science

Electronics Technology, Digital Option

Associate Degree Applied Science

Emergency Medical Services

Associate Degree Applied Science

English Major

Associate Degree Arts

Field Sales and Marketing

Associate Degree Business

Fine Art Foundation

Associate Degree Applied Arts

Fire Science Technology

Associate Degree Applied Science

Foreign Language

Associate Degree Arts

General Science

Associate Degree Science

Geographic Resource and Environmental Technology

Associate Degree Applied Science

Geoscience

Associate Degree Science

Gerontology

Associate Degree Arts

Graphic Design

Associate Degree Arts

Heating, Air Conditioning and Refrigeration

Associate Degree Applied Science

History Major

Associate Degree Arts

Horticulture
Associate Degree Applied Science

Hotel-Motel/Food Management Specialist
Associate Degree Business

Humanities Major
Associate Degree Arts

Human Resource Management
Associate Degree Business

Human Services (General)
Associate Degree Arts

Illustration
Associate Degree Applied Arts

Industrial Automation
Associate Degree Applied Science

Industrial Technology
Associate Degree Applied Science

Information/Word Processing
Associate Degree Business

International Business
Associate Degree Business

International Studies
Associate Degree Arts

Landscape Architecture
Associate Degree Applied Science

Legal Assistant
Associate Degree Business

Liberal Arts
Associate Degree Arts

Machine Maintenance
Associate Degree Applied Science

Machinist Toolmaker
Associate Degree Applied Science

Management - General
Associate Degree Business

Managerial Accounting
Associate Degree Business

Marketing
Associate Degree Business

Mathematics
Associate Degree Science

Media Technology
Associate Degree Applied Science

Microcomputer Support Specialist
Associate Degree Business

Microcomputer Systems
Associate Degree Business

Molecular Biology
Associate Degree Science

Music Commercial Performance
Associate Degree Applied Arts

Music Transfer
Associate Degree Applied Arts

Nursing, Second Year Career Ladder
Associate Degree Applied Science

Personnel/Labor Relations
Associate Degree Business

Philosophy and Religion Major
Associate Degree Arts

Photographic Imaging
Associate Degree Applied Science

Physical Fitness and Wellness
Associate Degree General

Physics
Associate Degree Science

Pre-Accounting Transfer
Associate Degree Business

Pre-Business Transfer
Associate Degree Business

Pre-Economics Transfer
Associate Degree Business

Pre-Professional Interior Design Assistant
Associate Degree Applied Science

Programmer/Analyst
Associate Degree Business

Property Valuation and Assessment Administration
Associate Degree Business

Psychology
Associate Degree Arts

Quality Assurance
Associate Degree Applied Science

Quality Management
Associate Degree Applied Science

Radiation Therapy
Associate Degree Applied Science

Radiologic Technology
Associate Degree Applied Science

Real Estate
Associate Degree Business

Residential Building
Associate Degree Applied Science

Respiratory Therapist
Associate Degree Applied Science

Secretarial
Associate Degree Business

Sign Language Interpreter
Associate Degree Applied Arts

Sign Language Interpreter
Associate Degree Arts

Social Science
Associate Degree Arts

Speech Communication
Associate Degree Arts

Substance Abuse
Associate Degree Arts

Technology General
Associate Degree Applied Science

Theatre, Acting Transfer
Associate Degree Applied Arts

Theatre, Design/Directing Transfer
Associate Degree Applied Arts

Theology, Pre-Professional Major
Associate Degree Arts

Tourism: Airline And Travel Agency Operations
Associate Degree Business

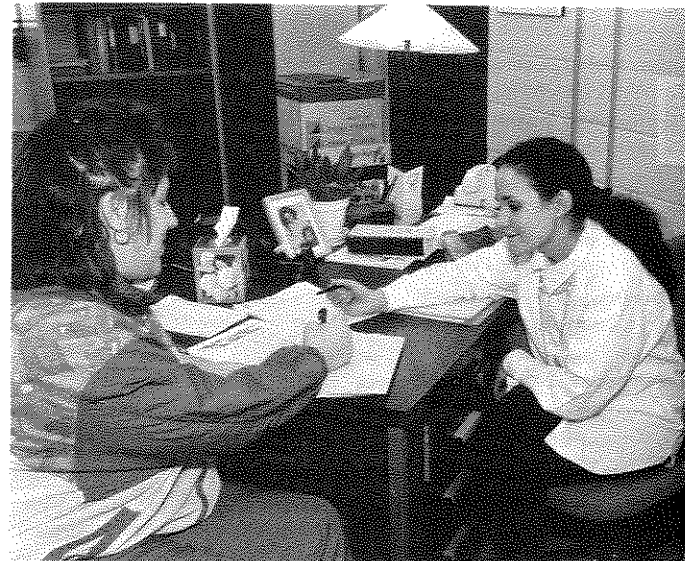
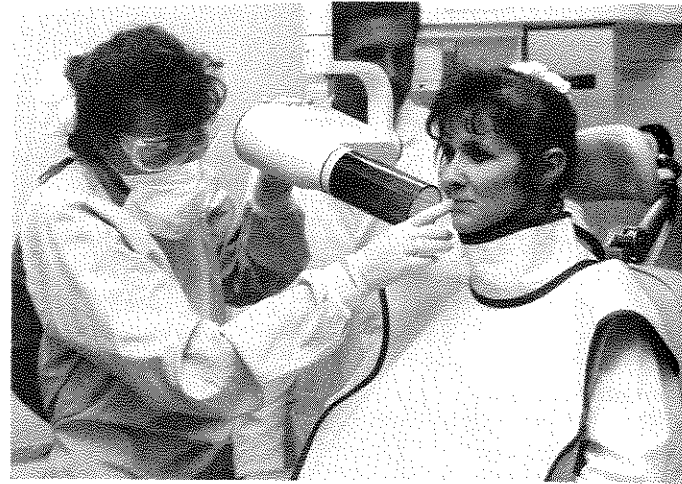
Veterinary Technology
Associate Degree General

Veterinary Technology
Associate Degree Science

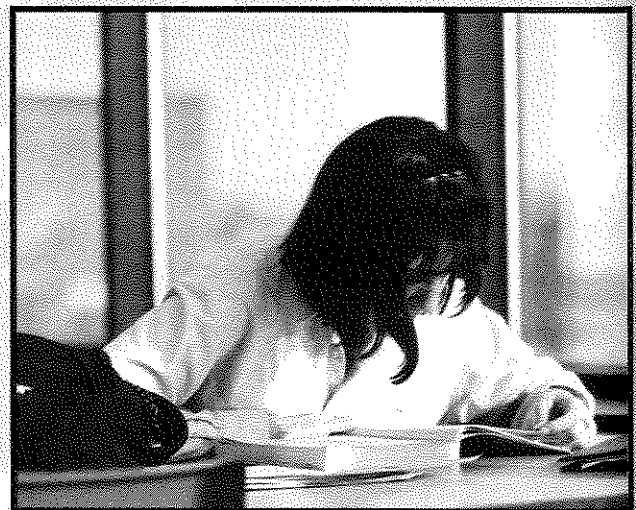
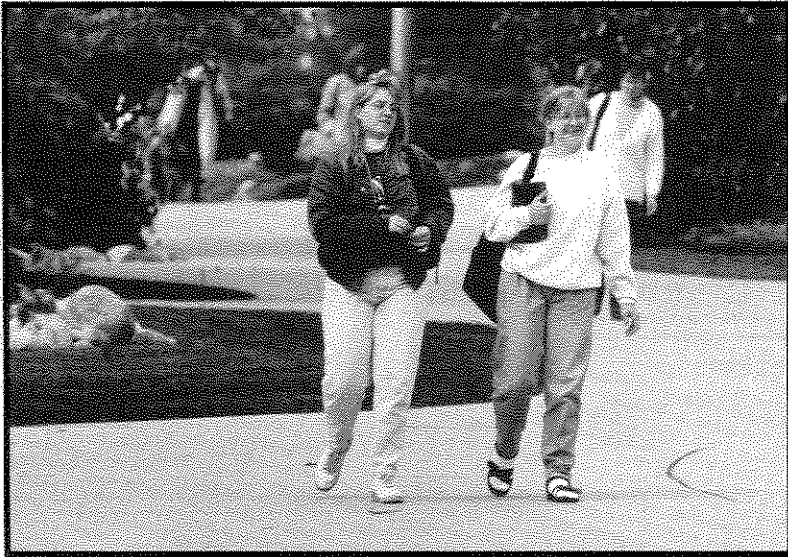
Welding Technology
Associate Degree Applied Science

Programs Leading to a Certificate of Achievement

Accounting
Auto Body Repair
Automated Office Specialist
Automotive Technology
Banking Management, AIB Diploma Program
Basic Emergency Medical Services
Building Maintenance
Child Development
Computer Repair Technician
Dance Teaching
Dental Assistant
Diagnostic Medical Sonography
Diesel Engine Technology
Drafting and Design
Field Sales and Marketing
Gerontology
Heating and Air Conditioning
Industrial Technology
Information/Word Processing
Machine Repair
Magnetic Resonance Imaging
Management
Management, Advanced
Manual Communication Specialist
Marketing
Medical Assistant
Microcomputer Systems
Millwright
Nursing, First Year Career Ladder
Office Support
Paramedic
Power Equipment Repair
Residential Building
Sign Language Interpreter
Stenographer
Substance Abuse
Surgical Technology
Tool and Die Maker
Welding Technology







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C A T A L O G

COURSE DESCRIPTIONS

HOW TO READ COURSE DESCRIPTIONS

Each course description has six (6) categories of information as follows:

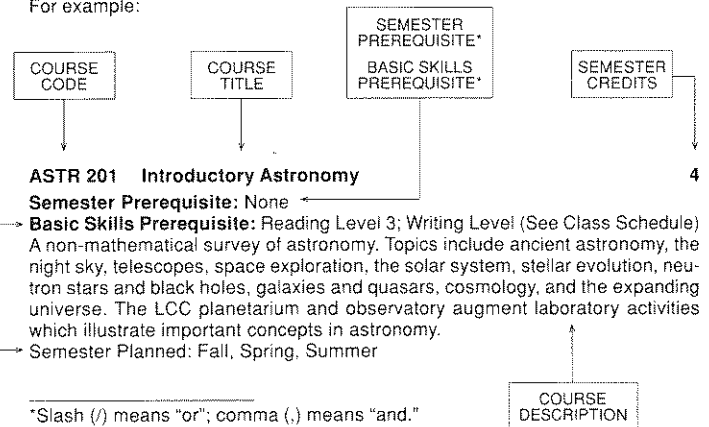
1. Course code
2. Course title
3. Number of semester credit hours
4. Semester prerequisite**
5. Course description
6. Semester planned

**Some courses may have an additional category for Basic Skills Prerequisite.

Basic skill levels required for enrollment. Involves student testing and/or advising before registration. **Other prerequisites may be added.** See *Class Schedule* or department each semester for current information.

Indicates when department plans to offer course, but **does not guarantee** that the course will be offered. See *Class Schedule* or department each semester for current information.

For example:



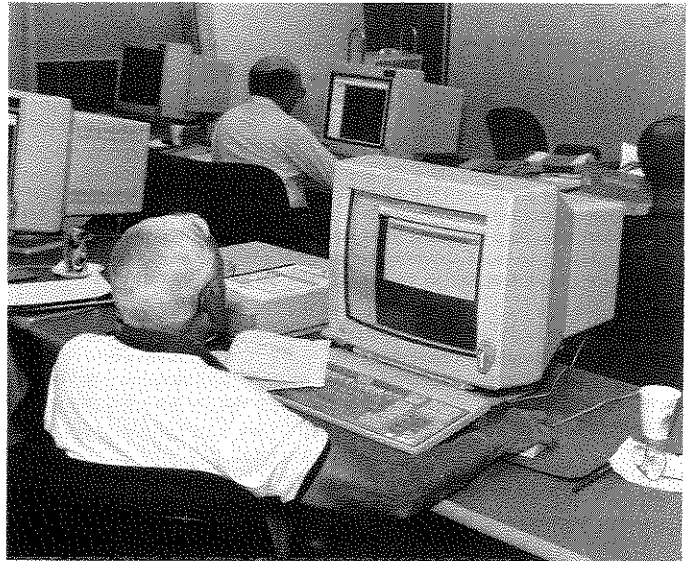
COURSE CODES USED IN DESCRIPTIONS

Courses are listed in course code order. The sequence is as follows:

ACCG	Accounting
AERO	Aerospace Studies
AHCC	Allied Health Courses
AIBL	American Institute of Banking: Lansing Area
ANAT	Anatomy
ANTH	Anthropology
ARCH	Architecture
ARTS	Art
ARWS	Art Seminars and Workshops
ASTR	Astronomy
AUTO	Automotive
AVAF	Aviation Airframe Maintenance
AVCE	Aviation Continuing Education
AVEL	Aviation Electronics
AVFT	Aviation Flight Training
AVGM	Aviation General Maintenance
AVGS	Aviation Ground School
AVIR	Aviation Instrument Repair
AVPP	Aviation Powerplant Maintenance
AVST	Aviation Simulator Training
BDCS	Business Development Seminars
BIOL	Biology
BLDR	Building Related
BLDT	Building Trades
BUSN	Business
CABS	Computer Applications Using Business Software
CACR	Court and Conference Reporting
CHCE	Continuing Health Careers
CHDV	Child Development
CHEM	Chemistry
CHIN	Chinese
CHSE	Community Health Services
CISB	Computer Information Systems for Business
CIVL	Civil Technology
CJUS	Criminal Justice
CNCP	Computerized Numerical Control Program
COOP	Cooperative Education
CPOA	Computer Office Applications
CPSC	Computer Science
CUIA	Credit Union Accounting and Insurance
CUMA	Credit Union Management
DADH	Dental Assistant/Dental Hygiene
DANC	Dance
DAST	Dental Assisting

DHYG	Dental Hygiene
DNTS	Dental Service Courses
DTDS	Drafting and Design
ECON	Economics: Business
EDUC	Education
ELCT	Electronics Technology
ELTE	Electrical Technology
EMSA	Emergency Medical Services
EMSB	Emergency Medical Services Seminars
EMTA	Emergency Medical Technology
ENGL	English
ENRI	Enrichment
ESLA	English as a Second Language
ESLT	English as a Second Language: Technical
FIRE	Fire Science
FREN	French
GEOG	Geography
GEOL	Geology
GERO	Gerontology
GRET	Geographical Resource and Environmental Technology
GRMN	German
HIST	History
HMFS	Hotel/Motel and Food Service Operations
HONR	Honors
HORT	Horticulture
HSAB	E.I.S.D. Auto Body
HAH	E.I.S.D. Allied Health
HSAM	E.I.S.D. Auto Mechanics
HSAT	E.I.S.D. Architecture
HSBK	E.I.S.D. Banking
HSCA	E.I.S.D. Commercial Art
HSCS	E.I.S.D. Computer Information Systems
HSDD	E.I.S.D. Drafting
HSEC	E.I.S.D. Electronics Technology
HSHF	E.I.S.D. Hotel and Food Service Operations
HSIA	E.I.S.D. Industrial Automation
HSMK	E.I.S.D. Marketing
HSWT	E.I.S.D. Welding Trades
HUMS	Humanities
HUSE	Human Services
HVAC	Heating, Ventilating, and Air Conditioning
IASM	Industrial Automation Seminars
IDMS	Diagnostic Medical Sonography
IMAG	Photography Technology
IMRI	Magnetic Resonance Imaging
INAU	Industrial Automation

INSU	Insurance
INTR	Interior Design
IPFL	International Program in Foreign Language
IPFT	International Program in Foreign Travel
IRAD	Radiation Therapy Technology
IRXT	Radiologic Technology
ISCI	Integrated Science
JAPN	Japanese
JRNL	Journalism
LABR	Labor Relations
LAND	Landscape
LEGL	Legal Assistant/Law
LING	Linguistics
MACH	Machine Tool Technology
MASG	Massage Therapy
MATH	Mathematics
MDCR	Management Development Restricted
MDCS	Management Development Seminars
MEDA	Medical Assistant
METR	Meteorology
MFGM	Manufacturing Maintenance
MGMT	Management
MICR	Microbiology
MILS	Military Science
MKTG	Marketing
MTEC	Media Technology
MUSC	Music
NURS	Nursing
OADM	Office Administration
OCNL	Oceanology
PARA	Paramedic
PFAQ	Physical Fitness: Aquatics
PFCW	Physical Fitness: Combative/Weight Training
PFDA	Physical Fitness: Dance Courses
PFFT	Physical Fitness: Fitness Courses
PFHC	Physical Fitness: Health/Fitness Cardiac
PFHW	Physical Fitness: Health/Fitness Wellness
PFIS	Physical Fitness: Individual Sport/Interest
PFOA	Physical Fitness: Outdoor Activity
PFPR	Physical Fitness: Professional Courses
PFTS	Physical Fitness: Team Sport
PHGY	Physiology
PHIL	Philosophy
PHON	Phonics
PHYS	Physics
POLS	Political Science
PSYC	Psychology
PVAA	Property Valuation and Assessment Administration
QSEM	Quality Assurance Seminars
QUAL	Quality Assurance
RDGR	Reading: Restricted
READ	Reading
REAL	Real Estate
RELG	Religion
RESP	Respiratory Therapy Courses
ROMS	Resource and Operations Management Systems
RSEM	Resource and Operations Management Systems Seminars
SAFE	Safety
SCIS	Science Seminars
SDEV	Student Development
SIGN	Sign Language
SOCL	Sociology
SOWK	Social Work
SPAN	Spanish
SPCH	Speech Communication
SPEL	Spelling Development
STAT	Statistics
SURG	Surgical Technology
TDTP	Truck Driver Training Program
TECH	Technology General
THEA	Theater
TRVL	Tourism: Airline and Travel Agency Operations
VCBL	Vocabulary Improvement
WELD	Welding Technology
WRIT	Writing



DESCRIPTIONS

<p>ACCG 100 Practical Accounting for Non-Majors 3</p> <p>Semester Prerequisite: None</p> <p>In this course the student will learn how to prepare basic financial statements and perform other bookkeeping procedures, such as journalizing and posting economic information, and preparing trial balances and payroll. Students will be able to accomplish these tasks according to generally accepted accounting principles. Semester Planned: Fall, Spring, Summer</p> <p>ACCG 101 Accounting Information for Management 3</p> <p>Semester Prerequisite: None</p> <p>Given an entity's financial information, such as an income statement or balance sheet, the student will be able to use this information for analysis, budgeting, and decision-making according to industry guidelines. Semester Planned: Fall, Spring, Summer</p> <p>ACCG 140 Individual Income Taxes 3</p> <p>Semester Prerequisite: None</p> <p>Given an individual's transactions for the year, such as income and expense items, students will be able to complete an individual income tax return and supporting schedules according to the Internal Revenue Code. The focus is on the completion of forms rather than the theoretical aspects of the tax law. Semester Planned: Fall, Spring</p> <p>ACCG 160 Payroll Systems and Business Taxes 2</p> <p>Semester Prerequisite: ACCG 100/Equivalent</p> <p>Students will calculate payroll and payroll taxes manually and with microcomputer accounting software. Students will complete tax forms for payroll taxes, sales and use taxes, and personal property taxes. Students will analyze systems for maintaining adequate payroll records and good internal control. Students will learn about laws affecting payroll including types of employees, hiring requirements, fringe benefits, and pensions. Semester Planned: Summer</p> <p>ACCG 210 Principles of Accounting I 4</p> <p>Semester Prerequisite: MATH 062/Equivalent</p> <p>Basic Skills Prerequisite: Reading Level 6; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule)</p> <p>Principles of Accounting is a two-semester sequence. Principles I focuses on financial accounting including accounting for service organizations and merchandisers. Topics include accounting for cash, receivables, inventory, property, plant and equipment, bonds and other liabilities, and stockholders' equity. Semester Planned: Fall, Spring, Summer</p> <p>ACCG 211 Principles of Accounting II 4</p> <p>Semester Prerequisite: 2.0 Minimum in ACCG 210, MATH 112/Equivalent</p> <p>This is the second course in the two-semester introduction to accounting sequence. After completing the course students will be able to: record transactions and prepare statements for manufacturing operations, prepare statement of cash flows, prepare budgets and other managerial reports, and do capital budgeting and short term decision-making. Semester Planned: Fall, Spring, Summer</p> <p>ACCG 220 Intermediate Accounting I 4</p> <p>Semester Prerequisite: 2.0 Minimum in ACCG 211</p> <p>The purpose of this course is to review and expand upon the concepts of financial accounting that were covered in the Principles courses, to master time value of money concepts, and to cover the more complex and theoretical aspects of accounting for revenue recognition, cash, receivables and inventory. Semester Planned: Fall, Spring</p> <p>ACCG 221 Intermediate Accounting II 4</p> <p>Semester Prerequisite: 2.0 Minimum in ACCG 220</p> <p>This course provides an in-depth coverage of long-term assets and liabilities, financial instruments, leases, pensions, accounting for income taxes, stockholders' equity, earnings per share and inflation accounting. Semester Planned: Spring</p> <p>ACCG 230 Cost Accounting 4</p> <p>Semester Prerequisite: 2.0 Minimum in ACCG 211, ACCG 260</p> <p>This course develops the more complex aspects of break-even analysis, job and process costing, standards and budgets, capital budgets, and material management. Lotus and dBASE applications are stressed. Also, this course reviews the concepts of cost accounting which were covered in Principles of Accounting II. Semester Planned: Fall</p>	<p>ACCG 231 Managerial Accounting 4</p> <p>Semester Prerequisite: 2.0 Minimum in ACCG 230</p> <p>This course covers the more complex control and managerial aspects of information gathering, relevance, and decision-making in the areas of pricing, profitability, cost allocation, uncertainty, variance investigation, decentralization, executive performance measurement and strategic control systems. Semester Planned: Spring</p> <p>ACCG 235 Budgeting 2</p> <p>Semester Prerequisite: ACCG 211</p> <p>This course will cover the budget cycle of an organization from a managerial perspective. Both the public and private general budgetary process will be covered with more emphasis on the public sector. Topics to be covered: budgetary terms, concepts and general format; performance budgeting; program budgeting; zero base budgeting; budgetary approval process; budgetary control and the auditing phase of a budget. Semester Planned: Fall</p> <p>ACCG 240 Federal Income Tax I 4</p> <p>Semester Prerequisite: 2.0 Minimum in ACCG 211</p> <p>This class is the first in a two semester sequence covering federal income tax law. After completing this course students will be able to complete a federal individual income tax return. Students will understand the federal laws governing the income an individual must report and allowable expenses and credits. Semester Planned: Fall, Spring</p> <p>ACCG 241 Federal Income Tax II 4</p> <p>Semester Prerequisite: ACCG 240</p> <p>This is the second of two semester classes covering federal income taxes. After completing this course students will be able to compute a federal corporate income tax return. They will understand and apply the underlying laws governing taxation of corporations, partnerships, and tax-exempt entities. Semester Planned: Spring</p> <p>ACCG 245 Accounting Internship 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This internship provides the student with on-the-job experience in the accounting field. It requires 160 hours of work experience. Semester Planned: Fall, Spring, Summer</p> <p>ACCG 250 Advanced Accounting 4</p> <p>Semester Prerequisite: 2.0 Minimum in ACCG 221/Departmental Approval</p> <p>This course covers business consolidations, foreign currency accounting and partnerships in depth. In addition, the course provides an overview of governmental and nonprofit accounting. Semester Planned: Spring</p> <p>ACCG 251 Accounting Seminar 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>With this course students will learn special topics of current interest. Semester Planned: Fall, Spring, Summer</p> <p>ACCG 260 Microcomputer Accounting Systems 4</p> <p>Semester Prerequisite: 2.0 Minimum in ACCG 210</p> <p>The Accounting Systems course is designed to prepare students to deal with problems and issues related to computer based information systems and related accounting software with an emphasis on systems. Semester Planned: Fall, Spring, Summer</p> <p>ACCG 266 Independent Study in Accounting 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>With this course students will learn advanced accounting topics as a part of a class, an independent study, or a project. Grading criteria and course objectives are determined at the first meeting. The course requires a minimum for each credit earned of either 16 classroom hours or 48 independent study hours. Semester Planned: Fall, Spring, Summer</p> <p>ACCG 271 Principles of Finance 3</p> <p>Semester Prerequisite: ACCG 211</p> <p>This course emphasizes the short- and long-term decisions a financial manager may face. Topics include working capital management, risk, cost of capital, capital markets, long-term debt, stocks and dividend policy, mergers and acquisitions, and international financial markets as these topics relate to obtaining financing for a business. Semester Planned: Fall, Spring</p>
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ACCG 280 Governmental Accounting	4	AHCC 104 Patient Care Principles	3
Semester Prerequisite: ACCG 211 Given a public or not-for-profit entity's financial data, students will be able to record transactions and prepare financial statements according to the Governmental Accounting Standard Board's guidelines. Semester Planned: Fall		Semester Prerequisite: Admission to Program, ANAT 145 Recommended Principles of basic patient care are presented to assist the student in managing patients in the health-care setting. Information and simulated practice will include surgical aseptic techniques, infection control procedures, taking vital signs, handling medical emergencies, and other practices emphasizing the physical and emotional aspects of basic patient care. Semester Planned: Fall, Spring	
ACCG 290 Auditing	3	AHCC 106 Introduction to Pathology	2
Semester Prerequisite: ACCG 221/Departmental Approval In this course the student will learn the theory and practice of auditing in accordance with generally accepted auditing standards. Semester Planned: Fall		Semester Prerequisite: ANAT 145, Health Careers Applicant/Student General principles of pathology are discussed, rather than specific disease entities, to develop a new way of thinking about disease processes. Concepts of disease processes and their effect on normal structure and function of the body are emphasized. Semester Planned: Fall, Spring, Summer	
ACCG 295 CPA Review - Tax, Managerial & Cost, Government and Nonprofit	1	AHCC 110 Pharmacology-Allied Health	2
Semester Prerequisite: Meet Requirement for CPA Exam The course is designed to provide C.P.A. exam candidates with a review of federal taxation, cost, managerial, governmental and nonprofit accounting. Emphasis is given to typical exam questions and strategies to answer them correctly. Semester Planned: Spring, Summer		Semester Prerequisite: Health Careers Applicant/Student This course is designed to familiarize the student with common medications encountered in the health care occupations. Emphasis is on drug categories and the responsibilities associated with medication administration. Semester Planned: Fall, Spring, Summer	
ACCG 296 CPA Review - Business Law	1	AIBL 101 Principles of Banking	3
Semester Prerequisite: Meet Requirement for CPA Exam This course is designed to provide C.P.A. exam candidates with a review of Business Law, especially the provisions of the Uniform Commercial Code. Emphasis is given to typical exam questions and strategies to answer them correctly. Semester Planned: Spring, Summer		Semester Prerequisite: None This course is an introduction to the field of commercial banking, designed not only for newcomers to the field, but also for students presently employed in banking who desire to broaden their knowledge and/or increase their opportunities for advancement. Semester Planned: Fall, Spring, Summer	
ACCG 297 CPA Review - Auditing	1	AIBL 120 Economics for Bankers	3
Semester Prerequisite: Meet Requirement for CPA Exam This course is designed to provide C.P.A. exam candidates with a review of audit concepts, assumptions, and procedures. Emphasis is given to typical exam questions and strategies to answer them correctly. Semester Planned: Spring, Summer		Semester Prerequisite: None This course provides bankers with an introduction to the fundamental principles of economics. Special emphasis is placed on topics of importance to bankers. The text covers the basics of economic theory and examples of the application of economics to banking. Semester Planned: Fall	
ACCG 298 CPA Review - Financial Accounting and Reporting	1	AIBL 130 Financial Planning for Bankers	2
Semester Prerequisite: Meet Requirement for CPA Exam This course is designed to provide C.P.A. exam candidates with a review of the theory and practice of Financial Accounting and Reporting for business enterprises. Emphasis is given to typical exam questions and strategies to answer them correctly. Semester Planned: Spring, Summer		Semester Prerequisite: None This course addresses the perspectives, principles, and practices of financial planning in an understandable, step-by-step format. Students will develop an understanding of the comprehensive process that looks at a customer's total financial picture and recommends strategies to achieve the customer's objectives. Semester Planned: Fall	
AERO 111 Organization of the U.S. Air Force	1	AIBL 160 Understanding and Selling Bank Products	2
Semester Prerequisite: None This course reviews the doctrine and mission of the U.S. Air Force and its history, organization, and structure. Oral and written communication skills will be developed. Includes a leadership laboratory. Semester Planned: Fall		Semester Prerequisite: None Working from the customer's perspective, this course shows a student how to identify and practice six human relations skills that encourage smooth, clear, and personal communication. Includes the basic steps in selling, information about bank products and product benefits (rather than features) that appeal to a customer, and how to identify customer needs. Semester Planned: Fall	
AERO 112 U.S. Strategic Offensive and Defensive Forces	1	AIBL 170 Preparing for Supervision	1
Semester Prerequisite: None This course reviews the mission and functions of specific Air Force commands and role of commands in U.S. defense policy. It reviews the employment of contemporary military equipment and systems. Includes a leadership laboratory. Semester Planned: Spring		Semester Prerequisite: None This seminar is designed to help the employee (student) prepare for the transition to supervisor, and/or to help those who wish to evaluate their own capabilities and desires to move toward a supervisory role. Semester Planned: Fall	
AERO 211 The Development of Air Power: Ascension to Prominence	1	AIBL 171 Customer Service for Bank Personnel	1
Semester Prerequisite: None This course reviews the factors contributing to the change in nature of the military. It examines conflict and history of air power from its earliest beginnings through World War II. The evolution of air power concepts and doctrine is also reviewed. A leadership laboratory is included. Semester Planned: Fall		Semester Prerequisite: None A seminar that emphasizes the development of better communications skills to benefit employees, customers, and the bank. Students will learn effective ways of establishing contact, exploring customer needs, defining and resolving problems, and closing the encounter. Semester Planned: Spring	
AERO 212 The Development of Air Power: Key to Deterrence	1		
Semester Prerequisite: None This course examines the history of air power from the end of World War II through present times. It also reviews the role of technology in the growth of air power employment in military and non-military operations. Includes a leadership laboratory. Semester Planned: Spring			

<p>AIBL 174 Personnel and the Law 1</p> <p>Semester Prerequisite: None</p> <p>This seminar is designed to provide an introduction and overview to the principles and application of laws affecting banking personnel policies and procedures. The seminar will be most applicable to bank personnel officers, managers, branch managers, and supervisors.</p> <p>Semester Planned: Spring</p>	<p>AIBL 208 Commercial Lending and Loan Documentation 3</p> <p>Semester Prerequisite: ACCG 210/Departmental Approval</p> <p>This course focuses on how the commercial lending business is organized, how it contributes to bank profitability, and the total commercial lending process. Students will learn the credit-granting process which will help ensure asset quality, avoid pitfalls, and protect the bank's integrity.</p> <p>Semester Planned: Spring</p>
<p>AIBL 175 Bank Security for Customer Contact Personnel .5</p> <p>Semester Prerequisite: None</p> <p>This course is designed to teach students how to prevent security problems from arising by developing good security habits. It develops students' ability to detect security threats and to handle them in a way that ensures personal safety and minimizes the loss of depositor funds.</p> <p>Semester Planned: Fall, Summer</p>	<p>AIBL 212 Analysis of Financial Statements 3</p> <p>Semester Prerequisite: ACCG 210/Equivalent</p> <p>Provides the opportunity to further develop the skills necessary to conduct a comprehensive and effective financial analysis of a business borrower in order to assess repayment capacity.</p> <p>Semester Planned: Fall, Spring</p>
<p>AIBL 176 Compliance Management 1</p> <p>Semester Prerequisite: None</p> <p>This seminar takes students through the steps leading to an effective compliance program. The course provides guidelines for determining how the compliance function fits with the overall bank structure. It also explains how to implement a valid program and discusses ways to monitor and audit the program.</p> <p>Semester Planned: Fall</p>	<p>AIBL 214 Law and Banking: Principles 3</p> <p>Semester Prerequisite: None</p> <p>Legal principles and a general review of legal problems pertaining to business and banking. Includes contracts, consideration, statute of frauds, commercial paper, bank deposits, bank collections, sales, titles, agencies, and extracts from the uniform commercial code.</p> <p>Semester Planned: Spring</p>
<p>AIBL 177 Officer Calling Skills .5</p> <p>Semester Prerequisite: None</p> <p>Calling on business loan prospects is a skill and an art. This course is designed to assist appropriate bank personnel in developing their skills more completely. Students will learn and practice techniques designed to generate and maintain solid business relationships with commercial clients.</p> <p>Semester Planned: Spring</p>	<p>AIBL 215 Law and Banking: Applications 2</p> <p>Semester Prerequisite: AIBL 214 Recommended</p> <p>This course is an introduction to laws pertaining to secured transactions, letters of credit, and the bank collection process. Students will review the legal implications of normal activities and transactions in banking operations, the impact of the law, and applicable bank regulations.</p> <p>Semester Planned: Spring</p>
<p>AIBL 178 Problem Loans 1</p> <p>Semester Prerequisite: None</p> <p>This course outlines an effective program of loan analysis, points out the early warning signals of problem loans, and shows students how to minimize losses should a problem loan occur.</p> <p>Semester Planned: Fall, Spring</p>	<p>AIBL 221 Branch Banking Series 3</p> <p>Semester Prerequisite: None</p> <p>A variety of topics are presented in this class to help new and prospective branch managers prepare for their new responsibilities. "Credit," "human resource management," "managing sales in the branch," and "marketing" are presented to help students sharpen their skills and perform their job more effectively.</p> <p>Semester Planned: Fall</p>
<p>AIBL 179 Consumer Bankruptcy .5</p> <p>Semester Prerequisite: None</p> <p>This seminar presents, in non-technical terms, the history and development of the bankruptcy code, the specific provisions of the 1984 bankruptcy amendments and Federal Judgeship Act affecting Chapters 7 and 13 filings, and the ways in which banks can minimize losses from customer bankruptcies.</p> <p>Semester Planned: Spring</p>	<p>ANAT 145 Introductory Anatomy and Physiology 3</p> <p>Semester Prerequisite: None</p> <p>An introductory course in human anatomy and physiology which combines lecture and laboratory experiences to provide a basic understanding of the structure and function of body systems. Designed for vocational programs, including dental assistant and medical transcriptionist, as well as non-science majors.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>AIBL 180 Mortgage/Loan Documentation 2</p> <p>Semester Prerequisite: None</p> <p>This course emphasizes the basics of loan processing and underwriting. Students will develop skills necessary to conduct loan interviews, process loan applications, act on a loan decision and close real estate loans.</p> <p>Semester Planned: Spring</p>	<p>ANAT 151 Anatomy and Physiology I 3</p> <p>Semester Prerequisite: None</p> <p>First course of a two-semester sequence in human anatomy and physiology emphasizing the structure and function of cells and tissues; the skeletal, muscular and nervous systems; and special sense organs.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>AIBL 181 Personal Banker .5</p> <p>Semester Prerequisite: None</p> <p>This course provides an overview of the personal banking concept and explains how personal banking skills are integrated into each job. It also outlines general sales, communication, and problem-solving skills needed to assume the personal banker role and how those skills work within relationship banking.</p> <p>Semester Planned: Spring</p>	<p>ANAT 152 Anatomy and Physiology II 3</p> <p>Semester Prerequisite: 2.0 Minimum in ANAT 151</p> <p>The second of a two-semester sequence emphasizing structure and function of the endocrine, digestive, respiratory, circulatory, urinary and reproductive systems. Includes fetal development and genetics.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>AIBL 206 Money and Banking 3</p> <p>Semester Prerequisite: AIBL 120/Departmental Approval</p> <p>This course presents a fundamental treatment of how money functions in the U.S. and world economies. Topics include the concept of money supply, the role a bank plays as a money creator and participant in the nation's payment mechanism, monetary and fiscal policies, the federal reserve, and more.</p> <p>Semester Planned: Spring</p>	<p>ANAT 201 Human Anatomy 4</p> <p>Semester Prerequisite: BIOL, CHEM Recommended</p> <p>A study of the anatomy of the human body that includes the structures of the skeletal, muscular, nervous, sensory, circulatory, respiratory, digestive, excretory, endocrine, and reproductive systems.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>AIBL 207 Consumer Lending and Loan Training 3</p> <p>Semester Prerequisite: None</p> <p>This course offers essential information about the maze of regulations that govern credit practices and reviews loan processing, cross-selling, and collections. Case studies and role plays are offered to acquaint students with effective loan interviewing skills and hands-on training to improve the quality of the credit decision.</p> <p>Semester Planned: Fall</p>	<p>ANTH 270 Cultural Anthropology 3</p> <p>Semester Prerequisite: SOCL 120</p> <p>This course compares ways of life for societies worldwide using anthropological theory and methodology. Basic institutions of human society such as kinship, religion, law, politics, and economics are examined to provide a better understanding of the diversity of contemporary societies.</p> <p>Semester Planned: Fall</p>

<p>ANTH 275 Physical Anthropology and Archeology 3</p> <p>Semester Prerequisite: SOCL 120</p> <p>Introduces human biological and cultural evolution, mechanisms of evolution, biological and cultural evidence from the fossil record, culture as an adaptive mechanism, and modern human variation.</p> <p>Semester Planned: Spring</p>	<p>ARCH 128 Residential Planning 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed for beginning through advanced students of architecture who want to study the theories behind the design of the American single-family residence. Architectural styles, planning concepts, the writing of design criteria programs, and the production of basic diagrams through finished concept drawings will be accomplished.</p> <p>Semester Planned: Fall, Spring</p>
<p>ANTH 276 Prehistoric Archeology 3</p> <p>Semester Prerequisite: SOCL 120</p> <p>A general survey of archeology. Includes an overview of the history of the field and the basic theories and methods employed in the study of archeological cultures. Archeological sites and cultures are used as examples.</p> <p>Semester Planned: Fall</p>	<p>ARCH 131 City Planning 3</p> <p>Semester Prerequisite: None</p> <p>This is an introduction to the field of urban and regional planning. The development of planning theory; process, and practices, such as urban design, environmental, and land-use planning; transportation; economic development; housing; and community facilities will be studied. The history of various cities and their development will also be studied.</p> <p>Semester Planned: Fall, Spring</p>
<p>ARCH 100 Introduction to Architecture 3</p> <p>Semester Prerequisite: None</p> <p>This course is for students with no previous experience in basic architectural drafting. Students will be introduced to the proper techniques of architectural line work, lettering, orthographic projection, and axonometric drawings. Techniques of architectural dimensioning, the use of symbols, and the production of a basic floor plan will be accomplished.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ARCH 138 Architecture Portfolio 4</p> <p>Semester Prerequisite: TECH 130, Second Year Student</p> <p>This course will allow students to prepare a portfolio of previous classroom and professional work to be used for employment interviews and/or transfer to four year institutions. Portfolios will be prepared using a variety of graphic techniques and will introduce the students to computer generated portfolio presentations.</p> <p>Semester Planned: Fall, Spring</p>
<p>ARCH 101 Architectural Drafting I 4</p> <p>Semester Prerequisite: ARCH 100/Equivalent</p> <p>This course is the first of a four-part (core) series of residential and light commercial architectural drafting courses. Students will use previously obtained basic drafting techniques to draw a series of residential details. The development of professional quality drafting, lettering, research, and communication techniques will be emphasized.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ARCH 141 Architectural History I 3</p> <p>Semester Prerequisite: None</p> <p>Beginning with ancient times, this course studies the major civilizations which have contributed to the development of the architecture of world civilizations. A wide variety of visual media will be used to present the major theories, works personalities in architecture, and the decorative arts through the Renaissance.</p> <p>Semester Planned: Fall, Spring</p>
<p>ARCH 102 Architectural Drafting II 4</p> <p>Semester Prerequisite: ARCH 101, ARCH 121/Concurrently</p> <p>This course is the second in a four-part (core) series of residential and light commercial architectural drafting courses. Students will use previously obtained basic drafting techniques and knowledge of residential detailing to design and draft basic architectural design problems, residential floor plans, elevations, and building sections.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ARCH 142 Architectural History II 3</p> <p>Semester Prerequisite: ARCH 141 Recommended</p> <p>This course, the second in a series, examines the greatest works and principal figures in world architectural history from the 1600s forward. Using a variety of visual media, this course will look at the principal works, theories, and individuals who have had the greatest impact on architecture and decorative arts to the present day.</p> <p>Semester Planned: Fall, Spring</p>
<p>ARCH 121 Visual Communication I 3</p> <p>Semester Prerequisite: ARCH 100/Equivalent</p> <p>Students with very little or no previous experience in the production of architectural graphics will be introduced to the basic techniques of sketching, axonometric, and perspective drawings. The theory and production of the most commonly used professional techniques of black and white architectural rendering and basic modeling will be studied.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ARCH 146 Preservation and Adaptive Reuse Architecture 3</p> <p>Semester Prerequisite: None</p> <p>This course is designed as an overview of the principles and practices of preservation, restoration, and adaptive re-use architecture. Students will have the opportunity to work on a project of their choosing while being introduced to research methods, publications, and examples of preservation and new uses for existing structures.</p> <p>Semester Planned: Fall, Spring</p>
<p>ARCH 122 Visual Communication II 3</p> <p>Semester Prerequisite: ARCH 121/Equivalent</p> <p>This course is a continuation of Visual Communication I. Students will gain knowledge of basic color rendering techniques using a variety of media.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ARCH 181 Barrier Free Design 3</p> <p>Semester Prerequisite: None</p> <p>This course covers the design, construction and inspection aspects of commercial buildings required to be accessible to the handicapped. Michigan and federal laws, barrier-free residential design, and design practice problems are included.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ARCH 123 Visual Communication III 3</p> <p>Semester Prerequisite: ARCH 122</p> <p>The ability to realistically depict three dimensional architectural spaces and related entourage, using the students' previously obtained graphic production knowledge, is the goal of this course. An emphasis on developing the use of light and shadow and the true depiction of textures and materials will be taught.</p> <p>Semester Planned: Fall, Spring</p>	<p>ARCH 182 Universal Design 2</p> <p>Semester Prerequisite: ARCH 100, ARCH 181</p> <p>This course is designed for students with some architectural drafting experience. Students will apply ADA laws as well as Michigan's Barrier Free or Universal Design to residential design. Both study cases and original design projects will be used.</p> <p>Semester Planned: Fall, Spring</p>
<p>ARCH 126 Model Building 2</p> <p>Semester Prerequisite: None</p> <p>Students in this course will enhance their design and communication skills by developing various techniques for building three-dimensional architectural models. Examples constructed will range from the most basic of study models, using readily available materials, to more sophisticated presentation models.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ARCH 201 Architectural Drafting III 4</p> <p>Semester Prerequisite: ARCH 102, ARCH 141</p> <p>This course is the third of a four-part (core) series of residential and light commercial architectural drafting courses. Students will use previously obtained drafting, research and presentation skills to design, delineate, present, and draft a light commercial project from basic schematics to working drawings.</p> <p>Semester Planned: Fall, Spring, Summer</p>

<p>ARCH 202 Architectural Drafting IV 4</p> <p>Semester Prerequisite: ARCH 201, ARCH 271/Concurrently</p> <p>This course is the conclusion in a four-part (core) series of residential and light commercial architectural drafting courses. Students will use previously obtained drafting, research and presentation skills to complete the working drawing floor plans, elevations, sections and details for the light commercial projects started in the preceding course.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ARCH 235 Architectural AutoCAD Project Lab 2</p> <p>Semester Prerequisite: ARCH 232, Approval Required</p> <p>This is an advanced-level computer-aided drafting and design independent study course using AutoCAD software. After completing all available structured AutoCAD courses, the student will outline, research, design, and construct a project of his/her own selection, with the approval and guidance of the instructor.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ARCH 211 Design Studio I 3</p> <p>Semester Prerequisite: ARCH 101/Concurrently</p> <p>This course is an introduction to the basic theories and methods of architectural design, problem-solving techniques and design methodologies using contemporary architects as examples. Students will be given a series of problem-solving exercises and will be instructed in developing presentation and verbal techniques to present their solutions.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ARCH 237 Architectural Computer Rendering 3</p> <p>Semester Prerequisite: ARCH 222/ARCH 232</p> <p>This course is intended for the advanced architectural computer graphics student. Using the three-dimensional graphics skills obtained in one or more of the architectural preliminary computer graphics courses, students will learn to produce three-dimensional wire frame models, advanced architectural computer renderings, and photo realistic pictorials.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ARCH 212 Design Studio II 3</p> <p>Semester Prerequisite: ARCH 211</p> <p>This course will use the skills developed in ARCH 211 to expand the student's understanding and processes for designing three-dimensional architectural space. Using models and various graphical mediums, students will explore the effects of scale, circulation, light, color and texture on the spaces and forms created.</p> <p>Semester Planned: Fall, Spring</p>	<p>ARCH 241 Architectural AES Computer Graphics I 4</p> <p>Semester Prerequisite: ARCH 100/Equivalent</p> <p>This course is designed as an entry-level computer-aided drafting and design course using the AES software. Students will learn to build command strings in the modeling program to construct 3-D geometry, edit, create layers, plot, apply text and dimensions, and to open and close graphic windows.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ARCH 213 Facilities Design 3</p> <p>Semester Prerequisite: ARCH 201/Equivalent</p> <p>In this course, students will explore, tour, and study the design theory behind a full range of structures used for office and manufacturing purposes. Systems of manufacturing and how they relate to the structures which house them will be studied.</p> <p>Semester Planned: Fall, Spring</p>	<p>ARCH 242 Architectural AES Computer Graphics II 4</p> <p>Semester Prerequisite: ARCH 241</p> <p>This course will build on the knowledge gained in ARCH 241 and will add additional applications in modeling, file management, plotting, and rendering.</p> <p>Semester Planned: Fall, Spring</p>
<p>ARCH 221 Architectural DataCAD I 4</p> <p>Semester Prerequisite: ARCH 100/Equivalent</p> <p>This entry level course introduces the computer-aided drafting and design software, DataCAD, on an IBM PC computer. Students will create basic residential plans using two dimensional editing functions. DataCAD's AEC and 3-D Modeler will also be used for presentations and commercial drawing applications. No previous computer experience is necessary.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ARCH 245 Architectural AES Project Lab 2</p> <p>Semester Prerequisite: ARCH 242, Approval Required</p> <p>This is an advanced-level computer-aided drafting and design independent study course using AES software. After completing all available structured AES courses, the student will outline, research, design and construct a project of their own selection with the approval and guidance of the instructor.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ARCH 222 Architectural DataCad II 4</p> <p>Semester Prerequisite: ARCH 221</p> <p>This advanced level course continues to develop the students' skills using the DataCAD software. Complex three dimensional entities including contours, mesh surfaces, and surfaces of revolution will be used on models and site plans. The photo-realistic rendering program, Velocity, will be introduced for a variety of perspective drawings.</p> <p>Semester Planned: Fall, Spring</p>	<p>ARCH 251 Architectural Intergraph 4</p> <p>Semester Prerequisite: ARCH 100/Equivalent</p> <p>This class is an introductory computer graphics course using Intergraph workstations. Students will learn to develop basic 2-D geometry, editing commands, file manipulation, and utilization of levels, views, text, dimensioning and plotting.</p> <p>Semester Planned: Fall, Spring</p>
<p>ARCH 225 Architectural DataCAD Project Lab 2</p> <p>Semester Prerequisite: ARCH 222, Approval Required</p> <p>This is an advanced level, computer-aided drafting and design, independent study course, using DataCAD software. After completing all available structured DataCAD courses, the students will outline, research, design, and construct a project of their own selection with the approval and guidance of the instructor.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ARCH 271 Structural Theory 4</p> <p>Semester Prerequisite: ARCH 101/Concurrently</p> <p>This course introduces the principles of statics and relates the application of physical forces to structural materials and elements. The structural and design properties of steel, wood, and concrete will be studied. The ability to read structural tables and accurately make calculations will be emphasized.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ARCH 231 Architectural AutoCAD I 4</p> <p>Semester Prerequisite: ARCH 100/Equivalent</p> <p>This entry level course introduces AutoCAD, a PC-based computer graphic system, for architectural applications. No computer experience is needed. Students will concentrate on two-dimensional drawing and editing functions for creating floor plans, elevations, and building sections. An introduction to three-dimensional modeling techniques will also be covered.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ARCH 273 Environmental Systems 4</p> <p>Semester Prerequisite: ARCH 101/Concurrently</p> <p>This course is designed for architecture and interior architecture students. All elements affecting the interior environment of a commercial or residential structure, such as lighting, HVAC systems, and acoustics will be studied. Calculations and the sizing of systems will be part of all sections.</p> <p>Semester Planned: Fall, Spring</p>
<p>ARCH 232 Architectural AutoCAD II 4</p> <p>Semester Prerequisite: ARCH 231</p> <p>This course is a continuation of AutoCAD I. Complex three-dimensional shapes and solids will be used to model designs for presentation graphics. The rendering program, AutoShade, will be used to realistically enhance the models. An introduction to Auto LISP programs will also be covered.</p> <p>Semester Planned: Fall, Spring</p>	<p>ARCH 274 Architectural Professional Practice 3</p> <p>Semester Prerequisite: ARCH 101</p> <p>Students will have the opportunity to study the configuration, responsibilities and ethics of professional architectural offices. This course will examine and visit various offices of the architectural, engineering and construction industry and explore job responsibilities, personnel and the procedures used in the production of construction documents.</p> <p>Semester Planned: Fall, Spring</p>
<p>ARCH 276 Alternative Structures 2</p> <p>Semester Prerequisite: None</p> <p>The study of post and beam, underground, stress skin and other alternative methods of construction will be studied in this course.</p> <p>Semester Planned: Fall, Spring</p>	

ARCH 278 Energy Systems 3	ARTS 137 Drawing II 3
Semester Prerequisite: None An examination of all commonly used passive and active energy systems, energy efficient design, and the materials relating to insulation of residential and commercial construction will be reviewed in this course. Semester Planned: Fall, Spring	Semester Prerequisite: ARTS 131 Basic principles of perspective drawing utilized in product and architectural illustration. Includes one-, two-, and three-point perspective. For both Commercial Art and Fine Art students. Semester Planned: Fall, Spring, Summer
ARCH 283 Materials of Construction 4	ARTS 140 Printmaking I 3
Semester Prerequisite: ARCH 101/Equivalent This course consists of the evaluation of the various characteristics of all materials commonly used in residential and light commercial structures. Students will develop a sensitivity to the use of building products based on a knowledge of their properties, limitations, and availability. Semester Planned: Fall, Spring	Semester Prerequisite: ARTS 102/Concurrently An introduction to the various printmaking techniques, tools, and vocabulary of the printmaker. Includes etching, embossing, monoprinting, and linoleum cut. Semester Planned: Fall, Spring, Summer
ARCH 295 Architectural Project Lab 2	ARTS 141 Printmaking II 3
Semester Prerequisite: 2nd Year Student/Approval This course provides the second-year architecture student with the opportunity to pursue a project of personal interest under the supervision of an instructor. With the approval and under the guidance of the instructor, the student will outline, research, design, and construct a project of his/her own selection. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: ARTS 140 Students expand on processes and concepts introduced in Printmaking (ARTS 140). Emphasizes refining technical skills and conceptual development. Semester Planned: Fall, Spring, Summer
ARCH 297 Architectural Project Lab 4	ARTS 142 Advanced Printmaking 3
Semester Prerequisite: 2nd Year Student/Approval This course provides the second-year architecture student with the opportunity to pursue a project of personal interest under the supervision of an instructor. With the approval and under the guidance of the instructor, the student will outline, research, design, and construct a project of his/her own selection. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: ARTS 141 An opportunity for the advanced student to continue with his/her personal exploration and development of printmaking skills under the guidance of an instructor. Semester Planned: Fall, Spring, Summer
ARTS 005 Computer Graphics Lab .5	ARTS 145 Screen Printing I 3
Semester Prerequisite: Currently Enrolled Art Student, Departmental Approval This course determines the time for the student's attendance in the Computer Graphics Laboratory; it is not a course. ARTS 005 enables the student to utilize the laboratory equipment and software to create individualized computer graphics for Art courses conducted in a traditional classroom environment. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: ARTS 102/Concurrently An introduction to basic silkscreen stencil processes with an emphasis on registration techniques. Includes constructing a frame and making a phototransparency. Semester Planned: Fall, Spring
ARTS 010 Figure Lab .5	ARTS 146 Screen Printing II 3
Semester Prerequisite: Currently Enrolled Art Student, Departmental Approval ARTS 010 determines the time for the student's attendance in the Figure Laboratory; it is not a course. ARTS 010 enables the student to utilize the laboratory equipment and figure model to create individualized artwork for Art courses conducted in traditional classroom environment. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: ARTS 145 Students expand on processes and concepts introduced in Screen Printing I (ARTS 145). Exploration and experimentation with more complex techniques and problems. An in-depth study of photographic processes and combining paper, cut film and block-out stencils. Semester Planned: Fall, Spring
ARTS 102 2-Dimensional Design 3	ARTS 147 Advanced Screen Printing 3
Semester Prerequisite: None Basic Skills Prerequisite: Reading Level 3; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule) A continuation of two-dimensional design principles with emphasis on color theory, color interaction, properties, principles, and qualities of color. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: ARTS 146 An opportunity for the advanced student to continue with his/her personal exploration and development of screen printing skills under the guidance of an instructor. Semester Planned: Fall, Spring
ARTS 103 3-Dimensional Design 3	ARTS 151 Computer Graphic Art 3
Semester Prerequisite: ARTS 102 Line, shape, form, value, and texture are explored using a variety of three-dimensional materials and applying principles and elements of design. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: ARTS 102, ARTS 131, Departmental Approval A beginning course for students interested in creating artistic images with the aid of a computer. Emphasis is hands-on training using sophisticated, user-friendly artistic software. Students must show evidence of design and drawing skills to receive department approval. Semester Planned: Fall, Spring, Summer
ARTS 131 Drawing I 3	ARTS 162 Typography and Layout Indication 3
Semester Prerequisite: ARTS 102/Concurrently A studio class using a variety of tools and methods. Introduces realism, abstraction, and stream of consciousness, using materials such as pencil, ink, and conte crayon. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: ARTS 102/Concurrently Use of type in communication design with an emphasis on creativity. Includes the history of typography, type style identification, classification, and selection. Student will be introduced to the tools, materials, and techniques necessary to professionally render comprehensive layouts. Semester Planned: Fall, Spring, Summer
ARTS 132 Life Drawing 3	ARTS 163 Commercial Art Production Techniques 3
Semester Prerequisite: ARTS 131 Basic concepts, approaches, and techniques involving drawing the human figure, using materials such as pencil, ink, charcoal, and conte crayon. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: None Keyline and paste-up techniques for pre-press production including pagination, color separations, copy preparation, and paper selection. Includes an overview of printing terminology and processes. Emphasis on professional accuracy. Semester Planned: Fall, Spring, Summer
	ARTS 170 Computer Graphics for Media 3
	Semester Prerequisite: Departmental Approval An introduction to computer graphic techniques for students whose major emphasis is video production. Semester Planned: Spring

<p>ARTS 171 Computer Graphics for Photography 3 Semester Prerequisite: ARTS 102/IMAG 114, Departmental Approval An introduction to computer manipulation of photographic images for Art and Photography majors. Semester Planned: Fall, Spring, Summer</p>	<p>ARTS 204 Watercolor I 3 Semester Prerequisite: ARTS 102, ARTS 131 An introduction to the art of transparent watercolor. Examines paper characteristics, degrees of wetness, brushes and tools, and various techniques in producing watercolor art works. Semester Planned: Fall, Spring</p>
<p>ARTS 175 Electronic Design I 3 Semester Prerequisite: ARTS 162/Concurrently An introductory hands-on course designed to provide the student with a working knowledge of page layout and related software programs utilizing a Macintosh computer. Emphasis is on electronic publishing applications. Semester Planned: Fall, Spring, Summer</p>	<p>ARTS 205 Watercolor II 3 Semester Prerequisite: ARTS 204 A continuation of Watercolor I (ARTS 204) emphasizing more advanced techniques and increasingly complex problems using watercolor. Semester Planned: Fall, Spring</p>
<p>ARTS 176 Electronic Design II 3 Semester Prerequisite: Departmental Approval An advanced hands-on course in electronic publishing techniques with an emphasis on graphic design and layout. Expands on concepts introduced in Electronic Design I (ARTS 185). Includes word processing, scanning, digitizing, and manipulation of graphics. Semester Planned: Fall, Spring</p>	<p>ARTS 206 Advanced Watercolor 3 Semester Prerequisite: ARTS 205 An opportunity for the advanced student to continue with his/her personal exploration and development of watercolor skills under the guidance of an instructor. Semester Planned: Fall, Spring</p>
<p>ARTS 180 Graphic Design I 3 Semester Prerequisite: ARTS 102, ARTS 162 An overview of the corporate image and the designer's role in developing relevant design materials, including the logotype and its varied applications. Color, paper, and type selection for the individual client will be emphasized. Semester Planned: Spring, Summer</p>	<p>ARTS 213 Illustration/Black and White 3 Semester Prerequisite: ARTS 132, ARTS 137 Illustrative techniques utilized to convert preliminary pencil drawings to finished ink drawings. Includes a variety of contemporary, realistic black and white techniques in both solid line and wash. Emphasis on sound draftsmanship and solving simple problems through illustration. Semester Planned: Fall, Spring</p>
<p>ARTS 181 Graphic Design II 3 Semester Prerequisite: ARTS 137, ARTS 180, ARTS 120/ARTS 175 An overview of publication and advertising design and the designer's role in the creative organization of typography, photography, and illustration. Emphasis on editorial concept, format, and design considerations. Semester Planned: Fall, Spring</p>	<p>ARTS 214 Illustration/Color 3 Semester Prerequisite: ARTS 200, ARTS 203, ARTS 204, ARTS 213 Full-color illustration techniques in tempera, watercolor, colored pencil, and mixed media. Stylized drawing techniques and design-oriented composition assignments with an emphasis on problem-solving for specific outlets such as editorial and collateral materials. Semester Planned: Fall, Spring</p>
<p>ARTS 182 Graphic Design III 3 Semester Prerequisite: ARTS 181, MKTG 140 An advanced course involving the design of promotional graphics, both two- and three-dimensional, and utilizing innovative design and media considerations. Students will work through the design process from initial concept to final presentation. Semester Planned: Spring</p>	<p>ARTS 216 Humorous Illustration I 3 Semester Prerequisite: ARTS 132 Cartoon illustrations from simple spots to complex compositions. Emphasis on strong stylized drawing, dramatic exaggerated action, simple but imaginative characterizations, and uncluttered ink rendering techniques. Exercises in pencil, fiber-tipped pen, and brush and ink. Semester Planned: Fall, Spring, Summer</p>
<p>ARTS 190 Matting and Framing Techniques 1 Semester Prerequisite: None An overview of the various materials and techniques for displaying and exhibiting artwork. Students will apply demonstrated techniques to matting and framing their work. Semester Planned: Fall, Spring</p>	<p>ARTS 217 Humorous Illustration II 3 Semester Prerequisite: ARTS 216 This course is designed to expand the student's cartooning and illustration skills through a variety of projects. These projects will reflect some of the many uses of humorous illustration. Semester Planned: Spring</p>
<p>ARTS 200 Painting I 3 Semester Prerequisite: ARTS 102, ARTS 131 An introduction to oil painting concepts in the Western tradition; ranging from Renaissance to Contemporary. Examines basic materials, tools, techniques, and modes of expression. Semester Planned: Fall, Spring, Summer</p>	<p>ARTS 218 Fashion Illustration I 3 Semester Prerequisite: ARTS 132 Drawing the fashion figure in contemporary proportion; accurate garment sketching in black and white techniques including marker, India ink wash, pencil, conte, and charcoal. Semester Planned: Fall, Spring</p>
<p>ARTS 201 Painting II 3 Semester Prerequisite: ARTS 200 A continuation of Painting (ARTS 200) emphasizing more advanced techniques and increasingly complex problems in painting. A variety of media, techniques, and approaches are encouraged. Semester Planned: Fall, Spring, Summer</p>	<p>ARTS 219 Fashion Illustration II 3 Semester Prerequisite: ARTS 218 A continuation of Fashion Illustration I (ARTS 218) using contemporary color techniques including pencils, markers, crayons, watercolor, acrylic paints, and paper squares. Layout, composition with multiple figures, and collage are introduced. Emphasis on development of personal drawing style and creative decision-making. Semester Planned: Fall, Spring</p>
<p>ARTS 202 Advanced Painting 3 Semester Prerequisite: ARTS 201 An opportunity for the advanced student to continue with his/her personal exploration and development of painting skills under the guidance of an instructor. Semester Planned: Fall, Spring, Summer</p>	<p>ARTS 220 Advanced Fashion Illustration 3 Semester Prerequisite: ARTS 219 An opportunity for the advanced student to continue with his/her personal exploration and development of fashion illustration skills under the guidance of an instructor. Semester Planned: Fall, Spring</p>
<p>ARTS 203 Figure Painting 3 Semester Prerequisite: ARTS 102, ARTS 132 An introductory course in the human figure using various media with primary concentration on oil painting. Semester Planned: Fall, Spring</p>	

ARTS 221 Airbrush Techniques I 3	ARTS 270 Computer Graphics Independent Study 3
Semester Prerequisite: None Introduction to the operation and techniques of the airbrush in shading and creating textures in both black and white and color. Assignments include rendering metallic surfaces and transparent objects and working with multiple light sources. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: Departmental Approval Individual pursuit of special projects not incorporated in regular class offerings. The student must submit a written application detailing his/her project to receive department approval. Semester Planned: Fall, Spring, Summer
ARTS 222 Airbrush Techniques II 3	ARTS 272 Printmaking Independent Study 3
Semester Prerequisite: ARTS 102, ARTS 131, ARTS 221 A continuation of Airbrush Techniques I (ARTS 221) with an emphasis on more complex airbrushing problems including product rendering and textiles applications with work on areas of specialization. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: Departmental Approval Individual pursuit of special projects not incorporated in regular class offerings. The student must submit a written application detailing his/her projects to receive department approval. Semester Planned: Fall, Spring, Summer
ARTS 223 Advanced Airbrush Techniques 3	ARTS 274 Commercial Art Independent Study 3
Semester Prerequisite: ARTS 222 An opportunity for the advanced student to continue with his/her personal exploration and development of airbrush skills under the guidance of an instructor. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: Departmental Approval An individual pursuit of special projects not incorporated in regular course offerings. Students must submit a written application detailing their projects for department approval. Semester Planned: Fall, Spring, Summer
ARTS 230 Computer Graphics/Business Presentations 3	ARTS 276 Art Independent Study 3
Semester Prerequisite: ARTS 120/ARTS 175, ARTS 111/ARTS 151, Departmental Approval Presentation and analytical graphics for business applications with emphasis on composition and artistic enhancement. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: Departmental Approval Individual pursuit of special projects not incorporated in regular class offerings. The student must submit a written application detailing his/her project to receive department approval. Semester Planned: Fall, Spring, Summer
ARTS 232 Computer Graphics/2-D Animation 3	ARTS 280 Computer Graphics Internship 3
Semester Prerequisite: ARTS 216, ARTS 111/ARTS 151, Departmental Approval 2-D character animation using the computer as a tool. Emphasis is on the history, theory, and principles of animation. Semester Planned: Fall, Spring	Semester Prerequisite: Departmental Approval An off-campus field study. Students will gain pre-career experience by working in a studio environment under the supervision of a professional artist/designer. Regularly scheduled progress reports will be given and discussed with supervising faculty member. A minimum of 15 hours per week. Semester Planned: Fall, Spring, Summer
ARTS 233 Computer Graphics/2-D Interactive 3	ARTS 281 Art Internship 3
Semester Prerequisite: ARTS 232, Departmental Approval A course which uses 2-D animation skills to create interactive presentations. Emphasis is on basic programming concepts. Semester Planned: Spring	Semester Prerequisite: Departmental Approval An off-campus field study. Students will gain pre-career experience by working in a studio environment under the supervision of a professional artist/designer. Regularly scheduled progress reports will be given and discussed with supervising faculty member. A minimum of 15 hours per week. Semester Planned: Fall, Spring, Summer
ARTS 234 Computer Graphics/3-D Animation I 3	ARTS 282 Commercial Art Internship 3
Semester Prerequisite: ARTS 111/ARTS 151, Departmental Approval An introduction of 3-D solid modeling, rendering techniques and animation on a desktop graphics system. Introduction of the principles of designing for video. Semester Planned: Fall, Spring	Semester Prerequisite: Departmental Approval An off-campus field study, students will gain pre-career experience by working in a studio environment under the supervision of a professional artist/designer. Regularly scheduled progress reports will be given and discussed with supervising faculty member. A minimum of 15 hours per week. Semester Planned: Fall, Spring, Summer
ARTS 235 Computer Graphics/3-D Animation II 3	ARWS 120 Basic Drawing 1
Semester Prerequisite: ARTS 234, Departmental Approval A continuation of 3-D Animation I (ARTS 234). Emphasis on creation of more complex models and animations. Introduction of sound and video editing. Semester Planned: Spring	Semester Prerequisite: None An introductory course using a variety of materials including pencil, charcoal, and ink. For non-majors. Semester Planned: Fall, Spring, Summer
ARTS 240 Basic Art for Elementary Teachers 3	ARWS 131 Computer Graphics Workshop 1
Semester Prerequisite: None Especially for elementary school teachers responsible for the student art experience. Emphasis on developing a greater art appreciation, awareness of art forms, and competency working with a variety of art media. Covers the creative and mental growth of children and their needs in an art situation. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: None A condensed hands-on workshop introducing computer graphics utilizing sophisticated, user-friendly artistic software. Programming skills are not necessary. Semester Planned: Fall, Spring, Summer
ARTS 262 Advanced Illustration 3	ARWS 132 Introduction to Quark Express 1
Semester Prerequisite: ARTS 214 An opportunity for the advanced student to continue with his/her personal exploration and development of illustration skills under the guidance of an instructor. The student must submit written application and portfolio to receive departmental approval. Semester Planned: Fall, Spring	Semester Prerequisite: None A condensed, hands-on workshop designed to provide the student with a working knowledge of Quark Express software utilizing a Macintosh computer. Emphasis is on desktop publishing applications. Semester Planned: Fall, Spring
ARTS 269 The Portfolio 2	ARWS 133 Introduction to Pagemaker 1
Semester Prerequisite: SDEV 127/Concurrently, Departmental Approval The student will assemble his/her best work under instructor supervision into a cohesive, relevant presentation for the purpose of securing employment in a chosen career area. This course is intended to be a final course in the Art Program. Semester Planned: Fall, Spring	Semester Prerequisite: None A condensed hands-on workshop designed to provide the student with a working knowledge of Aldus PageMaker software utilizing a Macintosh computer. Emphasis is on desktop publishing applications. Semester Planned: Fall, Spring, Summer

<p>ARWS 134 Introduction to Freehand 1</p> <p>Semester Prerequisite: None</p> <p>A condensed hands-on workshop designed to provide the student with a working knowledge of Aldus FreeHand software utilizing a Macintosh computer. Emphasis is on desktop publishing applications.</p> <p>Semester Planned: Fall, Spring</p>	<p>ARWS 226 Newsletter Design Workshop 1</p> <p>Semester Prerequisite: None</p> <p>Students will learn to produce a visually appealing newsletter with emphasis on designing for optimal readability. Includes design of masthead and format and use of typography for text, headings, and subheadings. Use of graphics and photography.</p> <p>Semester Planned: Spring</p>
<p>ARWS 135 Desktop Design Fundamentals .75</p> <p>Semester Prerequisite: None</p> <p>A seminar focusing on basic graphic design concepts to help the student improve the appearance and effectiveness of desktop publishing projects. This is not a hands-on computer course.</p> <p>Semester Planned: Fall, Spring</p>	<p>ASTR 201 Introductory Astronomy 4</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Reading Level 3; Writing Level (See Class Schedule)</p> <p>A non-mathematical survey of astronomy. Topics include ancient astronomy, the night sky, telescopes, space exploration, the solar system, stellar evolution, neutron stars and black holes, galaxies and quasars, cosmology, and the expanding universe. The LCC planetarium and observatory augment laboratory activities which illustrate important concepts in astronomy.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ARWS 136 Introduction to Adobe Illustrator 1</p> <p>Semester Prerequisite: None</p> <p>A condensed, hands-on workshop designed to provide the student with a working knowledge of Adobe Illustrator software utilizing a Macintosh computer. Emphasis is on desktop publishing applications.</p> <p>Semester Planned: Spring</p>	<p>AUTO 100 Auto Service I 3</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Reading Level 3; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule)</p> <p>This course is intended to provide the student with an extensive orientation to an automotive repair facility, while developing tool and equipment usage skills needed to advance in the automotive repair field.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ARWS 137 Introduction to Adobe Photoshop 1</p> <p>Semester Prerequisite: None</p> <p>A condensed, hands-on workshop designed to provide the student with a working knowledge of Adobe Photoshop software utilizing a Macintosh computer. Emphasis is on desktop publishing applications.</p> <p>Semester Planned: Fall</p>	<p>AUTO 101 Basic Automotive Seminar .25</p> <p>Semester Prerequisite: None</p> <p>This seminar is designed to introduce the student to the techniques and requirements of basic automotive maintenance.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ARWS 138 Introduction to MacroMind Director 1</p> <p>Semester Prerequisite: None</p> <p>A condensed, hands-on workshop designed to provide the student with a working knowledge of MacroMind Director software utilizing a Macintosh computer. Emphasis is on desktop publishing applications.</p> <p>Semester Planned: Summer</p>	<p>AUTO 110 Auto Electrical Theory 5</p> <p>Semester Prerequisite: AUTO 100/Concurrently/Approval</p> <p>This course presents the fundamental principles of theory, operation, construction, diagnosis, service, and repair of the electrical components of automobiles and trucks.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ARWS 141 Watercolor Workshop 1</p> <p>Semester Prerequisite: None</p> <p>A condensed learning experience introducing the student to the art of transparent watercolor. Emphasis is on the use of different papers, degrees of wetness, tools, and techniques. Students will progress to more complex problems as ability develops.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>AUTO 120 Auto Drive Train 2.5</p> <p>Semester Prerequisite: AUTO 100/Concurrently/Approval</p> <p>This course presents the techniques necessary to service and repair manual transmissions, both rear and front-wheel drive, clutches, drive shafts, and differentials.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ARWS 145 Landscape Painting and Drawing 1</p> <p>Semester Prerequisite: None</p> <p>Emphasis is on the use of color, perspective and compositional strategies of the landscape. Most sessions spent in the field. All types of media are acceptable.</p> <p>Semester Planned: Summer</p>	<p>AUTO 121 Automatic Transmissions 5</p> <p>Semester Prerequisite: AUTO 100, AUTO 120/Approval</p> <p>A course in rear and front-wheel-drive automatic transmission repair covering theory of operation, vocabulary, diagnosis techniques, repair procedures, and testing methods.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ARWS 200 Handmade Paper 1</p> <p>Semester Prerequisite: None</p> <p>A condensed learning experience introducing the student to the art of handmade paper. Emphasis on pulpmaking and casting techniques. Students will progress to more complex problems as ability develops.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>AUTO 122 Advanced Transmission 2.5</p> <p>Semester Prerequisite: AUTO 121</p> <p>This course focuses on larger transmissions such as those used in large vans and medium-duty trucks. (4WD automatics are included.)</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ARWS 221 Calligraphy I 1</p> <p>Semester Prerequisite: None</p> <p>Introduces the student to the art of fine writing using italic pens. Emphasis on hand lettering, surveying different styles and scripts used in early manuscripts, and adaptation to modern use.</p> <p>Semester Planned: Fall, Spring</p>	<p>AUTO 130 Automotive Engines 2.5</p> <p>Semester Prerequisite: AUTO 100/Concurrently/Approval</p> <p>This course provides a background in principles, design, operation, and service procedures of gasoline engines and preparation for practical experience in engine maintenance and service.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ARWS 222 Calligraphy II 1</p> <p>Semester Prerequisite: ARWS 221</p> <p>A continuation of Calligraphy I (ARWS 221) emphasizing a variety of tools, materials, and techniques. Students will progress to more complex problems and experiment with aesthetic expression as skills progress.</p> <p>Semester Planned: Spring</p>	<p>AUTO 133 Small Engine Repair 2.5</p> <p>Semester Prerequisite: None</p> <p>This is a basic course covering servicing and repair of two-cycle and four-cycle small gas engines. Each student is required to supply a small engine for laboratory work.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ARWS 224 Cartooning Workshop 1</p> <p>Semester Prerequisite: None</p> <p>Emphasizes simple but imaginative characterizations and dramatic exaggerated action in a variety of media including pencil, fibertipped pen, and brush and ink. Previous drawing experience helpful.</p> <p>Semester Planned: Fall, Spring</p>	<p>AUTO 135 Chain Saw Repair 2.5</p> <p>Semester Prerequisite: None</p> <p>This is a basic course for chain saw owners and mechanics covering basic maintenance, safe operation, tune-up, troubleshooting, major repair, chain oilers, and chain sharpening and repair.</p> <p>Semester Planned: Fall, Spring, Summer</p>

AUTO 136 Marine Engine Repair	2.5	AUTO 186 Advanced Painting	5
Semester Prerequisite: None This course covers the basics of outboard engine servicing including carburetion, ignition, and troubleshooting malfunctions. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: AUTO 185 This course teaches advanced auto painting techniques for spot repair, color matching, and troubleshooting including auto painting techniques for refinishing a complete auto in enamel and acrylic lacquer. Includes estimating the cost of materials and overhead costs of operating a paint shop. Semester Planned: Fall, Spring, Summer	
AUTO 137 Motorcycle Repair	2.5	AUTO 188 Auto Body Repair and Painting	4
Semester Prerequisite: None This course covers the theory of operation of a motorcycle and basic service procedures, including tune-up, wheel service, brake service, and drive mechanism. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: AUTO 180, AUTO 182, AUTO 185 This is a combined course of auto body repair and painting. It provides an opportunity to practice the techniques learned in Auto Body Welding/Metal Finishing (AUTO 180) and Basic Auto Painting (AUTO 185). Semester Planned: Fall, Spring, Summer	
AUTO 140 Automotive Brakes	2.5	AUTO 200 Basic Diesel Maintenance	5
Semester Prerequisite: AUTO 100/Concurrently/Approval This course covers servicing both drum and disc brakes, including adjustment, shoe replacement, drum and disc turning, pad replacement and hydraulic system service. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This course covers the operational theory of heavy-duty diesels, maintenance operations, model identification, and system maintenance including fuel systems, lubrication system, cooling system, and naturally-aspirated, supercharged, and turbocharged intake systems and their repair. Semester Planned: Fall, Spring, Summer	
AUTO 150 Automotive Suspension	2.5	AUTO 202 Diesel Engine Rebuilding	5
Semester Prerequisite: AUTO 100/Concurrently/Approval This course covers the suspension systems on automobiles and light trucks. Included is inspection, parts replacement, and extensive instruction on the use of four-wheel alignment equipment. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: AUTO 200 This course covers rebuilding, including proper disassembly procedures, and inspection and repair of diesel engine components. Emphasis is on proper engine analysis prior to overhaul and proper run-in upon completion of overhaul. Semester Planned: Fall, Spring, Summer	
AUTO 160 Auto Air Conditioning	2.5	AUTO 203 Diesel Fuel Systems	2.5
Semester Prerequisite: AUTO 110/Approval Instruction in the operating principles of auto air conditioning systems and repair procedures. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: AUTO 200 A complete course on diesel fuel systems covering fuel classification, fuel system functions, pumps and injectors, proper diagnosis, troubleshooting, and rebuilding the complete fuel system. Semester Planned: Fall, Spring, Summer	
AUTO 165 General Auto Mechanics	2.5	AUTO 215 Engine Performance/Tune-Up	5
Semester Prerequisite: None Automobile owners will gain a better understanding of the automobile and be able to make some repairs. Areas covered include preventive maintenance, tune-ups, brakes, engines, electrical systems, drive lines, front end, and steering. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: AUTO 110/Approval A broad-based course covering the technology necessary to diagnose and repair driveability and electrical and fuel-related problems in automobiles and light trucks. This course will include instruction on carburetors and mechanical fuel pumps. Semester Planned: Fall, Spring, Summer	
AUTO 166 General Auto Mechanics and Women	2.5	AUTO 220 Truck Drive Lines	2.5
Semester Prerequisite: None Student will gain fundamental understanding of how an automobile works and will be able to perform basic maintenance and repair procedures. Topics include engines, fuel and exhaust, electrical system, cooling and lubrication, steering, brakes, and suspension. Lab work includes changing oil and filters, belts, hoses, tires, bulbs, and fuses. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: AUTO 100/Concurrently/Approval This course covers the theory and application of the power train system including clutches, torque converters, transmissions and final drives. Semester Planned: Fall, Spring, Summer	
AUTO 180 Auto Body Welding/Metal Finishing	5	AUTO 225 Automotive Computers	5
Semester Prerequisite: None This course presents metal welding as it applies to auto body repair. Included are gas, spot, and wire-feed welding, brazing, heat shrinking, and plasma arc cutting. This course also teaches basic sheet metal repair, body shop tools and their proper use, along with materials used to repair minor damaged panels. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: AUTO 215 This course covers the theory of operation and repair procedures on computerized engine and fuel-control systems and operation of duty-cycle meters, tachometers, computerized engine analyzers, digital high-impedance multimeters, and other equipment used in servicing electronic engine-control systems. Semester Planned: Fall, Spring, Summer	
AUTO 182 Major Collision Repair	5	AUTO 230 Supplemental Inflatable Restraint/ABS Brake Systems	3
Semester Prerequisite: AUTO 180 This course teaches the restoration of a collision-damaged automobile to its original condition, including estimating the total job, glasswork, and painting. Instruction in repair of larger, dented panels with an emphasis on replacing panels. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: AUTO 110, AUTO 140, AUTO 225 For experienced technicians with component electrical skills. This course will train technicians in the new General Motors Air Bag Systems and ABS Brake Systems. Will include hands-on troubleshooting of system faults, reading and clearing of system codes, proper handling procedures for system components, and proper disposal procedures for inflator modules. Semester Planned: Fall, Spring, Summer	
AUTO 184 UniBody and Frame Repair	2.5	AUTO 240 Air Brakes	2.5
Semester Prerequisite: AUTO 180 This course is an introduction to the basics of frame straightening, covering aligning the frame, or unitized body to original specifications. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: AUTO 100/Concurrently/Approval This course covers brake systems, their component parts, troubleshooting, design, and control systems. Semester Planned: Fall, Spring, Summer	
AUTO 185 Basic Auto Painting	2.5		
Semester Prerequisite: None This is an auto painting course designed to teach basic refinishing procedures. The student must refinish at least one panel in acrylic enamel and acrylic lacquer by the end of the course. Semester Planned: Fall, Spring, Summer			

AUTO 272 Tune Up and Electrical Laboratory	6	AVAF 209 Aircraft Structures II	4
Semester Prerequisite: AUTO 215, Instructor Approval This is a laboratory course designed to develop trade-entry skills in tune-up and electrical repair. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Program Approval Covers assembly and rigging of fixed wing and rotary wing aircraft control structures. Provides practical application in removal, installation, and adjustment of flight controls by balancing, cable tension, and motion studies. Also includes aircraft inspection procedures to insure conformity with flight safety standards. Semester Planned: Fall	
AUTO 273 Brake Laboratory	6	AVAF 210 Aircraft Structures III	3
Semester Prerequisite: AUTO 140, Instructor Approval This is a laboratory course designed to develop trade-entry skills in brake repair. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Program Approval An advanced course covering the inspection, repair, lay out, bending and assembly of aircraft sheet metal. Inspection, testing, and repair of fiberglass, plastics, honeycomb, and composite and laminated structures is practiced. Installation and removal of special fasteners for bonded and composite structures and servicing of aircraft windows, doors, and interior furnishings is included. Semester Planned: Fall, Spring	
AUTO 274 Suspension Laboratory	6	AVAF 211 Aircraft Electrical I	4
Semester Prerequisite: AUTO 150, Instructor Approval This is a laboratory course designed to develop trade-entry skills in suspension repair. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Program Approval The intermediate aviation electrical course concentrating on the theory, calculation, and measurement of A.C. electrical systems. Includes reading and interpreting aircraft electrical circuit diagrams, including those with solid-state devices and logic functions. Also the installation, checking, and servicing of airframe and engine wiring, controls, switches, indicators and protective devices is covered. Semester Planned: Spring, Summer	
AUTO 276 Automatic Transmission Laboratory	6	AVAF 212 Aircraft Electrical II	4
Semester Prerequisite: AUTO 122, Instructor Approval This is a laboratory course designed to develop trade-entry skills in transmission repair. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Program Approval Studies the repair of airframe and engine electrical system components with emphasis on the inspection, checking, servicing, and repair of alternating and direct current systems. Also, general troubleshooting techniques are practiced with special emphasis on A.C. and D.C. electrical systems. Semester Planned: Summer	
AUTO 280 Automotive Service Laboratory	6	AVAF 246 National Airframe Certification Procedures	1
Semester Prerequisite: AUTO 100, Instructor Approval This laboratory course is designed to provide work experience and develop trade-entry skills in general and light-line repair. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Program Approval Study of the Federal Aviation Regulations pertaining to national certification as a licensed airframe mechanic. Includes testing in all required areas of study as prerequisite to receiving authorization to take the general and airframe national certification test administered by representatives of the Federal Aviation Administration. Semester Planned: Fall	
AUTO 285 Automotive Internship	6	AVAF 252 Helicopter Maintenance I	3
Semester Prerequisite: Director Approval Students are able to earn credits while employed as a technician in auto mechanics, auto body, or diesel heavy equipment repair. A pre-enrollment interview between the student and department director is required. The director must approve the training station and working conditions. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Program Approval Covers the theory of flight, structural designs and systems of helicopters. Also studies maintenance practices used in the construction, inspection and repair of helicopters. Semester Planned: Fall, Spring, Summer	
AVAF 125 Aircraft Systems I	2	AVAF 254 Helicopter Maintenance II	3
Semester Prerequisite: Program Approval The study of fuel management, transfer, defueling, and fuel pump systems. The course covers the procedures used to inspect, check, service, troubleshoot, and repair aircraft fuel systems and fuel system components. Course material emphasizes fluid quantity indicating, fluid pressure, and warning systems. Semester Planned: Spring		Semester Prerequisite: Program Approval Advanced studies in maintenance practices used in the construction, inspection and repair of helicopters. Semester Planned: Fall, Spring, Summer	
AVAF 126 Aircraft Systems II	6	AVCE 131 VFR Pilot Refresher Seminar	.5
Semester Prerequisite: Program Approval The study, analysis, repair of aircraft landing gear and brake systems and their related warning systems. Includes the study, inspection, servicing, and repair of aircraft hydraulic and pneumatic systems and their related components. Semester Planned: Spring		Semester Prerequisite: Private Pilot License This course is designed to update the knowledge of the private pilot. The focus of the course is on significant changes in Federal Aviation Regulations, Air Traffic Control Procedures, and pilot weather briefings. Semester Planned: Spring	
AVAF 127 Aircraft Systems III	3	AVCE 132 IFR Pilot Refresher Seminar	.5
Semester Prerequisite: Program Approval Covers the inspection, checking, troubleshooting, servicing, and repair of aircraft heating, cooling, air-conditioning, pressurization, oxygen, ice and rain control, and fire protection systems. Semester Planned: Summer		Semester Prerequisite: Instrument Rating This seminar is designed to update the knowledge of instrument-rated pilots. The focus of the course is on reviewing enroute and approach procedures, recent significant changes in Federal Aviation Regulations and Air Traffic Control Procedures, and pilot weather briefings. Semester Planned: Fall	
AVAF 134 Aircraft Instruments	2	AVCE 133 Aviation Law Seminar	.5
Semester Prerequisite: Program Approval Course covers inspection, checking, servicing, troubleshooting, repair of electronic flight instrument systems, both mechanical and electrical speed, altitude, temperature, pressure and flow instrument systems. Also, special removal and installation techniques applicable to aircraft instruments is included. Semester Planned: Summer		Semester Prerequisite: None This seminar acquaints the student with the legal aspects of aviation. The student will become familiar with Federal Aviation Administration enforcement actions, methods for limiting liability, buying and selling aircraft, titles and liens and contracts. Semester Planned: Spring	
AVAF 208 Aircraft Structures I	4		
Semester Prerequisite: Program Approval This course introduces the procedures for identification, inspection, testing, and repairing of wood, fabric-covered, and sheet metal aircraft. This course also covers the installation and removal of conventional rivets, the forming of aircraft sheet metal, the installation of special rivets and fasteners, and an introduction to applying finishing materials. Semester Planned: Spring			

AVCE 134 Using LORAN-C	.5	AVEL 221 Avionics Systems I Lab	4
Semester Prerequisite: None This seminar is designed to introduce the student to the principles of operation of LORAN-C. The student will understand the procedures for approval for using LORAN-C receivers during VFR and IFR operations, including the en route and terminal environment. The student will be familiar with the function of LORAN-C receiver components. Semester Planned: Spring		Semester Prerequisite: Program Approval A hands-on study of the communications, navigation, and other systems found in modern aircraft, focusing on component level repair and testing to manufacturer's specifications. Semester Planned: Fall	
AVEL 100 Avionics for Pilots Seminar	.5	AVEL 224 Avionics Regulation	3
Semester Prerequisite: Program Approval Familiarization with the avionics systems used in modern aircraft focusing on their proper use. Methods of testing the systems in the aircraft without complex test equipment will be discussed. The terminology used in the avionics industry will be explored in order to enhance the students' communication with avionics technicians. Semester Planned: Summer		Semester Prerequisite: Program Approval This course covers various Federal Aviation Administration rules and regulations as they pertain to avionics shop operation. Federal Communication Commission regulations are discussed to prepare the student to successfully complete the General Radiotelephone Operator Examination. Semester Planned: Fall, Spring	
AVEL 130 Avionics Installations	3	AVEL 230 Avionics Systems II	3
Semester Prerequisite: Program Approval This course includes familiarization with the various types of wires and connectors used in the construction of aircraft wiring harnesses. The student will develop skills in soldering, aircraft wiring diagram reading, standard procedures, and weight and balance calculation. Semester Planned: Fall		Semester Prerequisite: Program Approval A study of navigation, microwave pulse equipment, and other systems found in modern aircraft, focusing on component level repair and testing to manufacturers' specifications. Students will have the opportunity to obtain factory certification of the repair of various systems. Semester Planned: Spring	
AVEL 150 Avionics Test Generation	3	AVEL 231 Avionics Systems II Lab	4
Semester Prerequisite: Program Approval Covers the operational characteristics and proper operation of basic and specialized test equipment found in the avionics industry. Equipment covered includes multimeters, oscilloscopes, power supplies, multifunction ramp and bench test generators, wattmeters, time domain reflectometers, and spectrum analyzers. Semester Planned: Spring		Semester Prerequisite: Program Approval A hands-on study of navigation, microwave pulse equipment, and other systems found in modern aircraft, focusing on component level repair and testing to manufacturers' specifications. Semester Planned: Spring	
AVEL 151 Avionics Test Generation Lab	2	AVEL 295 International Avionics Systems	2
Semester Prerequisite: Program Approval Test equipment and theory discussed in AVEL 150 will be put to practical use in the laboratory. Student builds and calibrates own VOM. Common electronic and specialized avionics test equipment is used in the lab. Semester Planned: Spring		Semester Prerequisite: Program Approval Familiarization with safety practices near large aircraft. Review of instrument systems and discussion on how these systems are designed in airliners. Discussion of navigation, communication, and pulse systems as used in transport category aircraft. Discussion of the differences and similarities between FAA regulations and those of other countries. Semester Planned: Summer	
AVEL 190 Receiver Troubleshooting	2	AVEL 297 Avionics Internship	2
Semester Prerequisite: Program Approval Familiarization with basic superhetrodyne receiver principles and operation using block diagrams and component level theory. Various logical troubleshooting techniques are discussed. Semester Planned: Summer		Semester Prerequisite: Program Approval Twenty hours per week as an Aviation Electronics intern. Independent study. Part-time occupational internship in Avionics Technology. The internships will be at certified repair stations as established by the intern coordinator. Semester Planned: Summer	
AVEL 191 Receiver Troubleshooting Lab	2	AVEL 299 Advanced Avionics Laboratory	2
Semester Prerequisite: Program Approval Familiarization with basic superhetrodyne receiver principles and operation. Various logical troubleshooting techniques will be put to practical use in the laboratory. Students construct, align, and troubleshoot an AM superhetrodyne receiver. Semester Planned: Summer		Semester Prerequisite: Program Approval Students will further develop troubleshooting and installation skills acquired in other courses. Students will work in an environment close to actual working conditions in most avionics repair stations. Semester Planned: Summer	
AVEL 200 Flight Line Testing	2	AVFT 099 Flight for Technicians	7.5
Semester Prerequisite: Program Approval A study of the Avionics systems found aboard modern aircraft focusing on the flight line testing of such systems as VHF communications, VHF navigation, ADF, radar, autopilots, and others. Semester Planned: Fall, Summer		Semester Prerequisite: Program Approval Provides in-flight and ground training in the single-engine, non-complex aircraft culminating in aeronautical knowledge, experience and skill in accordance with the Federal Aviation Administration Private Pilot Practical Test standards. Semester Planned: Fall, Spring	
AVEL 201 Flight Line Testing Lab	2	AVFT 201 Flight Training I	7.5
Semester Prerequisite: Program Approval A practical study of the electronics systems found aboard modern aircraft, focusing on the flight line testing of such systems as VHF communications, VHF navigation, ADF, radar, autopilots, and others. Semester Planned: Summer		Semester Prerequisite: Program Approval Provides in-flight and ground training in the single-engine, non-complex airplane culminating in aeronautical knowledge, experience and skill in accordance with the Federal Aviation Administration Private Pilot Practical Test standards. Semester Planned: Fall, Spring	
AVEL 220 Avionics Systems I	3	AVFT 202 Flight Training II	5
Semester Prerequisite: Program Approval A study of the communications, navigation, and other systems found in modern aircraft, focusing on component level repair and testing to manufacturer's specifications. Students will have the opportunity to obtain factory certifications for the repair of various systems. Semester Planned: Fall		Semester Prerequisite: Program Approval Provides in-flight and ground training in single-engine, non-complex airplane developing students' instrument, night, and cross-country flying skills. Semester Planned: Fall, Spring, Summer	

<p>AVFT 203 Flight Training III 5.5</p> <p>Semester Prerequisite: Program Approval</p> <p>Provides instruction in complex, single-engine airplane developing students' skill at IFR navigation and ATC procedures in en route and terminal environment.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>AVGM 112 Aviation General II 6</p> <p>Semester Prerequisite: Program Approval</p> <p>Introduces the Federal Aviation Regulations involving the mechanic's privileges and limitations and related aviation operations. Includes the selection and use of aviation publications, maintenance forms, records, reports, aircraft drawings, graphs and charts, symbols, blueprints and system schematics. Also focuses on aircraft ground operations and servicing of related aircraft systems.</p> <p>Semester Planned: Fall, Spring</p>
<p>AVFT 204 Flight Training IV 5</p> <p>Semester Prerequisite: Program Approval</p> <p>Provides in-flight and ground instruction in complex airplane developing students' skill in IFR navigation and ATC procedures in en route and terminal environment. Student will develop skills at performing commercial proficiency flight maneuvers. At completion of course, student will take practical test for commercial/instrument pilot airplane.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>AVGM 113 Aviation General III 4</p> <p>Semester Prerequisite: Program Approval</p> <p>This initial aviation electrical course offering instruction in basic electrical theory and its aviation application. It includes: the calculation and measurement of voltage, current resistance, continuity, and power; the theory, inspection and servicing of aircraft lead-acid and ni-cad batteries; and the construction of a volt-ohm meter.</p> <p>Semester Planned: Fall, Spring</p>
<p>AVFT 205 CFI Flight Training 3.5</p> <p>Semester Prerequisite: Program Approval</p> <p>Provides in-flight and ground training in common primary training and complex airplanes. Student will develop instructional skills necessary to train pilots to certification in accordance with Federal Aviation Regulations. Student will take practical test for Certified Flight Instructor Airplane upon completion.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>AVGM 114 Material and Processes 5</p> <p>Semester Prerequisite: Program Approval</p> <p>This course covers identification and selection of the appropriate aviation hardware, hand tools, cleaning materials, fluid lines and non-destructive testing methods. Included is performance of non-destructive testing, precision measurements, aircraft cleaning and corrosion control, fabrication, installation and testing of fluid lines.</p> <p>Semester Planned: Fall, Spring</p>
<p>AVFT 206 Flight Instructor Instrument Flight Training 2.5</p> <p>Semester Prerequisite: Program Approval</p> <p>Provides in-flight and ground training in non-complex aircraft. Student will develop instructional skills necessary to train pilots for the instrument rating. Student will take practical test for the instrument flight instructor rating airplane upon completion.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>AVGS 101 Private Pilot Ground School 4</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Reading Level 4; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule)</p> <p>This course prepares the student for successful completion of the Federal Aviation Administration private pilot written examination. The student will learn: basic aerodynamic theory; principles of aircraft/powerplant operation and performance; Federal Aviation Regulations; air traffic control procedures; meteorology; navigation and flight physiology.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>AVFT 207 Multi-Engine Flight Training 1.5</p> <p>Semester Prerequisite: Program Approval</p> <p>Provides in-flight and ground instruction in multi-engine airplane. Student will take multi-engine practical test upon completion.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>AVGS 121 Aviation Meteorology 4</p> <p>Semester Prerequisite: AVGS 101/Private Pilot License</p> <p>This course focuses on the application of meteorological theory to the practical aspects of flight planning. The student will understand basic concepts of weather theory; obtain weather briefings by using a personal computer; interpret weather charts, forecasts and reports, both domestic and international, (ICAO); make appropriate "go/no go" decisions.</p> <p>Semester Planned: Spring</p>
<p>AVFT 208 Multi-Engine Instructor Flight Training .75</p> <p>Semester Prerequisite: Program Approval</p> <p>Provides in-flight and ground instruction in multi-engine airplane. Student will develop instructional skills necessary to train students for multi engine practical test. Student will take multi-engine instructor practical test upon completion of course.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>AVGS 141 Fundamentals of Air Traffic Control 4</p> <p>Semester Prerequisite: Program Approval</p> <p>This course will cover the history of ATC; procedures and regulations; field experience at local ATC facilities as well as working with "UNICOM"; analysis and prevention of traffic conflicts and an introduction to international ATC procedures, e.g., Eurocontrol.</p> <p>Semester Planned: Fall</p>
<p>AVFT 209 Airline Transport Pilot Flight Training 1.25</p> <p>Semester Prerequisite: Program Approval</p> <p>Provides in-flight and ground training in multi-engine aircraft. At completion of course, student will take Airline Transport Pilot practical test.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>AVGS 211 Instrument Pilot Ground School 4</p> <p>Semester Prerequisite: AVGS 101/Private Pilot License</p> <p>This course prepares the student for the successful completion of the FAA instrument rating written examination. The student will learn operation and interpretation of the flight instruments, the use of enroute, approach, SID, and STAR charts for navigation, air traffic control procedures, and meteorology as it applies to the instrument pilot.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>AVFT 259 Intern Flight Instructor 3.75</p> <p>Semester Prerequisite: Program Approval</p> <p>Provides in-flight and ground practical experience with mentor/instructor supervision for the entry-level flight instructor. Programmed for one semester with one student per entry-level instructor.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>AVGS 221 Commercial Pilot Ground School 4</p> <p>Semester Prerequisite: AVGS 101/Private Pilot License</p> <p>This course prepares the student for the successful completion of the FAA commercial pilot written examination. The student will develop knowledge of aerodynamics, high performance aircraft systems, aircraft performance, Federal Aviation Regulations, navigation and flight planning, and meteorology as it applies to commercial pilots.</p> <p>Semester Planned: Fall</p>
<p>AVFT 290 Turbine Aircraft 2</p> <p>Semester Prerequisite: Program Approval</p> <p>Provides in-flight and ground training in turbine-powered, multi-engine aircraft. Culminates in aeronautical knowledge, experience, and maneuvering skills commensurate with that required of the entry-level first officer position for commercial turboprop aircraft.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>AVGM 111 Aviation General I 4</p> <p>Semester Prerequisite: Program Approval</p> <p>This course is designed to develop the skills and knowledge required to weigh an aircraft and record the appropriate data. It involves mathematical and basic physics principles related to aviation, including aerodynamics, theory of flight, aircraft structural design and simple machines.</p> <p>Semester Planned: Fall, Spring</p>

AVGS 222 Flight Instructor Ground School	4	AVPP 261 Turbine Engine II	4
Semester Prerequisite: Program Approval This course will prepare the student for the successful completion of the FAA Fundamentals of Instructing and the Flight Instructor-Airplane and Advanced Ground Instructor written exams. The student will develop a flight training syllabus with lesson plans for use in training pilots. Semester Planned: Spring		Semester Prerequisite: Program Approval Covers inspection, checking, servicing, repair, removal, installation, and troubleshooting of turbine engines and systems. Detailed study of the lubrication system and inspection procedures to insure conformity with F.A.A. specifications and standards is included. Semester Planned: Spring, Summer	
AVIR 140 Avionics Instruments I	1	AVPP 263 Turbine Engine Systems	2
Semester Prerequisite: Program Approval Familiarization with common aircraft instruments to include principles of operation, interpretation of indications, testing, proper handling, repair and calibration. Students will learn the proper use of test equipment and instrument repair procedures. Semester Planned: Fall		Semester Prerequisite: Program Approval This course is a detailed study of turbine-engine ignition, pneumatic and electric starters, exhaust and thrust reverser, fire detection and protection, fuel metering and electronic fuel control systems, and components. Study also includes inspection, checking servicing, repair, and troubleshooting procedures. Semester Planned: Summer	
AVPP 185 Preventive Maintenance	2	AVPP 265 Powerplant Instruments	2
Semester Prerequisite: None This course will cover the items described in the Federal Aviation Regulation Part 43, Appendix A, titled Preventive Maintenance. These items include the removal and installation of tires, servicing of wheel bearings, and cleaning fuel and oil strainers or filter elements. The safety, responsibility, and operations of various aircraft systems will be discussed. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Program Approval Covers the inspection, servicing, checking, troubleshooting, and repair of both reciprocating and turbine engine electrical and mechanical fluid rate-of-flow indicating, temperature, pressure, R.P.M., airflow and related systems and components. Semester Planned: Spring, Summer	
AVPP 241 Reciprocating Engine	8	AVPP 267 National Powerplant Certification Procedures	1
Semester Prerequisite: Program Approval Presents the theory and practices used in the removal, inspection, overhaul, service, repair, and installation of reciprocating engines. This course also studies the inspection, service, repair, and troubleshooting of reciprocating engine lubrication systems. Semester Planned: Fall		Semester Prerequisite: Program Approval Study of the Federal Aviation Regulations pertaining to national certification as a licensed powerplant mechanic. Includes testing in all required areas of study as prerequisite to receiving authorization to take the powerplant national certification tests administered by representatives of the Federal Aviation Administration. Semester Planned: Spring, Summer	
AVPP 251 Reciprocating Engine Systems	2	AVST 211 Flight Simulator I	1
Semester Prerequisite: Program Approval This course covers the inspection, servicing, troubleshooting, and repair of reciprocating engine cooling and exhaust systems. In addition, the inspection requirements necessary to meet established conformity and standards of airworthiness are studied, and reciprocating engine operations and adjustments are conducted using F.A.A. and maintenance publication procedures. Semester Planned: Fall, Spring		Semester Prerequisite: AVGS 101/Concurrently Provides flight simulator and ground training to develop student's basic attitude instrument flying skills. Course is intended to be taken concurrently with AVFT 201. Simulator used is GAT-I (or other approved simulator). Semester Planned: Fall, Spring, Summer	
AVPP 253 Reciprocating Ignition Systems	5	AVST 212 Flight Simulator II	1
Semester Prerequisite: Program Approval This course covers the operation, analysis, inspection, service, and repair of reciprocating engine ignition systems and components. This includes magnetos, ignition harnesses, spark plugs, and starter systems. Semester Planned: Fall, Spring		Semester Prerequisite: AVGS 101, AVST 211 Provides flight simulator and ground training to develop student's skills in IFR navigation and ATC procedures in terminal environment. Course intended to be taken concurrently with AVFT 202. Simulator used is GAT-1 (or other approved simulator). Semester Planned: Fall, Spring, Summer	
AVPP 255 Reciprocating Induction Systems	4	AVST 213 Flight Simulator III	1
Semester Prerequisite: Program Approval Study and analysis of reciprocating engine fuel systems and components. Includes inspection; checking, servicing, troubleshooting, and repair of carburetors, water injection systems, heat exchangers, superchargers, intake and induction manifolds, and other engine fuel system components. Also includes carburetor overhaul procedures. Semester Planned: Fall, Spring		Semester Prerequisite: AVGS 211, AVST 212 Provides flight simulator and ground training to further develop student's skills at IFR navigation and ATC procedures in enroute and terminal environment. Course intended to be taken concurrently with AVFT 203. Simulator used is GAT-I (or other approved simulator). Semester Planned: Fall, Spring, Summer	
AVPP 257 Aircraft Propeller Systems	4	AVST 214 Flight Simulator IV	1
Semester Prerequisite: Program Approval Covers the study, analysis, service and repair of aircraft propellers, systems, and controls. Includes propeller synchronizing, ice control, lubrication, balancing, pitch control, repair procedures and removal, and installation of both fixed-pitch and variable-pitch propellers. Semester Planned: Fall, Spring		Semester Prerequisite: AVGS 211, AVST 213 Provides flight simulator and ground training to develop student's skill to level of instrument rating practical test standards. Student will perform simulated flights in enroute and terminal environment including compliance with emergency procedures. Course intended to be taken concurrently with AVFT 204. Simulator used is GAT-I (or other approved simulator). Semester Planned: Fall, Spring, Summer	
AVPP 259 Turbine Engine I	4	AVST 215 Multi Engine Flight Simulator	1
Semester Prerequisite: Program Approval Covers the theory of operation and design of the varied turbine engine and turbine-driven auxiliary power unit types including the induction and cooling systems of each. Semester Planned: Fall, Spring		Semester Prerequisite: AVST 214 Provides flight simulator training culminating in aeronautical knowledge and maneuvering skills in support of advanced visual and instrument flight training in multi-engine aircraft. Intended for the Flightmatic multi-engine simulator. Semester Planned: Fall, Spring, Summer	
		BDCS 201 Starting a Business	.5
		Semester Prerequisite: None Entrepreneurs are usually required to wear many "hats" and may have no idea what skills and processes are involved in starting and operating a business. If you decide that owning a business is feasible, this class can help you find assistance to begin and maintain a business. Semester Planned: Fall, Spring, Summer	

<p>BDCS 202 Pitfalls to Avoid When Opening or Operating a Business .5</p> <p>Semester Prerequisite: None</p> <p>This seminar, presented by a successful business person, can save you both problems and money. What to AVOID! What to LOOK OUT FOR! Where to SEEK HELP! Where to CUT COSTS! How to help ensure your chances of a successful business venture! Come and learn from those who can help.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>BDCS 223 Franchising/Evaluating and Buying a Business .5</p> <p>Semester Prerequisite: None</p> <p>This program will familiarize the participants with the statistics needed, legalities involved, and the evaluation of the best seller's book in order to determine the business' worth. It will also acquaint participants with the considerations and background information needed to buy a franchise.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>BDCS 205 Systems for Record Keeping .5</p> <p>Semester Prerequisite: None</p> <p>This seminar increases the participants' working knowledge of the accounting process and the maintenance of accounting records, ledgers, and income statements, and the preparation for income tax time.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>BDCS 225 Writing A Business Plan .5</p> <p>Semester Prerequisite: None</p> <p>Participants can expect to become familiar with business planning and how to develop and maintain a business plan. Most creditors require a business plan before reviewing a loan application. Be prepared. Write your business plan with the information provided at this seminar.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>BDCS 209 Financial Management for Small Business .5</p> <p>Semester Prerequisite: None</p> <p>This seminar offers practical presentation, application, and practice of basic financial management techniques, such as analyzing and applying information from balance sheets, income statement, and cash flow statements.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>BDCS 230 Small Business Taxes .75</p> <p>Semester Prerequisite: None</p> <p>Federal, state and local governments assess a variety of taxes on business. This seminar will identify the various taxes which pertain to small businesses in Michigan and provide information on the tax returns used and filing responsibilities of the business.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>BDCS 210 Customer Relations .5</p> <p>Semester Prerequisite: None</p> <p>Anyone who sells, greets or provides services to customers can discover new ways for creating good customer relations. By communicating effectively, understanding customer personalities and how to deal with them, and assessing their own motivation and esteem needs, participants can serve their customers in a positive manner.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>BIOL 121 Biology 4</p> <p>Semester Prerequisite: Chemistry Recommended</p> <p>Basic Skills Prerequisite: Reading Level 2; Writing Level (See Class Schedule)</p> <p>Topics include organic molecules, biological molecules, metabolism, cell structure and function, passage of materials across membranes, harvesting energy, mitosis, meiosis, introductory genetics, and the relationship between DNA, RNA, and protein synthesis.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>BDCS 211 Advertising for Small Business .5</p> <p>Semester Prerequisite: None</p> <p>This seminar will teach how to plan, create, select, and evaluate advertising. Entrepreneurs can learn to develop an advertising plan that is unique to the special needs of their organizations.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>BIOL 127 Cell Biology 4</p> <p>Semester Prerequisite: CHEM 125/High School Chemistry</p> <p>One of two biology courses for science majors. Lecture topics include chemistry of carbohydrates, lipids and proteins; structure and function of prokaryotic and eukaryotic cells; biochemistry of respiration and photosynthesis; genetics and the regulation of gene expression. Laboratory stresses techniques of cell and molecular biology as well as genetics.</p> <p>Semester Planned: Fall, Spring</p>
<p>BDCS 212 Professional Sales .5</p> <p>Semester Prerequisite: None</p> <p>This seminar is designed for salespeople who have attained the level of professional selling. They must increase knowledge, develop new techniques, and recognize and deal with obstacles. The seminar will help participants recognize how they achieved success, how to maintain status, and how to identify and use tools to continue their success.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>BIOL 128 Organismal Biology 4</p> <p>Semester Prerequisite: None</p> <p>This course examines adaptations of organisms to changing environments. Major emphasis is on physiological adaptations, natural selection, ethology, and ecology. Aquatic systems are examined in the laboratory; sampling techniques and statistical methods are used to analyze a local river.</p> <p>Semester Planned: Spring, Summer</p>
<p>BDCS 213 How to Staff Your Small Business .5</p> <p>Semester Prerequisite: None</p> <p>A seminar to familiarize the participants with aspects of employment procedures including interviewing, evaluating, and the law.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>BIOL 201 Zoology I 4</p> <p>Semester Prerequisite: None</p> <p>Introduces characteristics of animal life. Includes chemical and physical aspects of life, cellular structures and their functions, cell division, introduction to histology and study of the integumentary, skeletal, muscular, digestive, respiratory, urinary, circulatory, nervous, endocrine and reproductive systems. Emphasis is on the vertebrates, principally the mammals.</p> <p>Semester Planned: Fall</p>
<p>BDCS 214 Retail Selling for Small Business .5</p> <p>Semester Prerequisite: None</p> <p>This program is designed to stress the importance of the salesperson to the business and give the participants a chance to review, update, and add to their selling skills.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>BIOL 202 Zoology II 4</p> <p>Semester Prerequisite: 2.0 Minimum in BIOL 201</p> <p>Begins with an introduction to heredity, population genetics, the theory of evolution and ecology. Deals principally with the taxonomy and comparative anatomy of members found within the major animal phyla. A phylogenetic approach is used to study the various animal phyla from Protozoa through Chordata.</p> <p>Semester Planned: Spring</p>
<p>BDCS 215 Developing a Marketing Plan .5</p> <p>Semester Prerequisite: None</p> <p>This seminar familiarizes participants with marketing and provides an opportunity to write a marketing plan. Participants will learn to use a six-step process that involves obtaining data, developing the plan, and analyzing the results.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>BIOL 210 Natural Resource Conservation 4</p> <p>Semester Prerequisite: None</p> <p>This course examines the renewable natural resources and the policies which govern their use in the United States. Laboratory investigations include measurement techniques, land use evaluations, and environmental problem solving. These exercises will be oriented toward the completion of an environmental impact assessment covering a current local environmental situation.</p> <p>Semester Planned: Fall</p>
<p>BDCS 217 Computers for Small Business .5</p> <p>Semester Prerequisite: None</p> <p>In this seminar, participants learn the fundamentals of selecting and using computers in the small environment.</p> <p>Semester Planned: Fall, Spring, Summer</p>	

BIOL 250 Entomology	4	BLDR 107 Wood Joinery, Joint Strength and Methods	2.5
Semester Prerequisite: None An introduction to the study of insect biology, including morphology, development, life cycles, behavior, and ecology. Control techniques of medical, agricultural, and household pests will be covered, as will the characteristics of social and aquatic insect communities. Laboratory and field work will emphasize identification of common Michigan insects. Semester Planned: Summer		Semester Prerequisite: None In this course the students will receive instruction in various techniques for making wood joints. The strength and application of the various joints will be discussed. Semester Planned: Fall, Spring	
BIOL 260 Botany	4	BLDR 109 Build Your Own Cabinets	2
Semester Prerequisite: 1 Semester of Biology Recommended An introduction to the study of plants that includes structure and function, development, and ecology. Emphasis will be placed on the diversity, adaptations, and life cycles of major plant groups. Laboratory will complement the basic concepts with emphasis on physiology, systematics, and species of value to medicine and agriculture. Semester Planned: Spring		Semester Prerequisite: BLDR 101 This course offers a hands-on experience in building vanities, base cabinets, and wall cabinets. It also covers use of tools and machines, cabinet construction, drawer construction, door style options, and formica work. Students supply their own lumber. Semester Planned: Fall, Spring, Summer	
BIOL 270 Human Genetics	3	BLDR 110 Wood Projects	2
Semester Prerequisite: BIOL 121/Equivalent Presents general principles of genetics with specific human application. Topics include Mendelian genetics, mitosis and meiosis, chromosome structure and aberrations, sex determination and x-linkage, molecular basis of inheritance, gene mutations, genetics of immune system, cancer genes, recombinant DNA technology, and genetic screening and counseling. Semester Planned: Spring		Semester Prerequisite: BLDR 101/Equivalent This class is designed to offer students a shop in which to work on individual woodworking projects. All of the tools and equipment in the shop are available for student use. The instruction demonstrates uses of tools/equipment and consults with students on their individual projects. Semester Planned: Fall, Spring	
BIOL 275 Molecular Biology I	4	BLDR 111 Wood Staining and Finishing	2.5
Semester Prerequisite: BIOL 127/Departmental Approval Introduces basic principles of molecular biology, DNA/RNA structure and function, gene regulation, and recombinant DNA technology. Laboratory emphasizes reagent preparation, culturing bacteria, isolating and purifying both bacterial and plasmid DNA, restriction enzyme digests of DNA, and agarose gel electrophoresis of DNA. Semester Planned: Fall		Semester Prerequisite: None This course is designed to give the average craftsman a basic knowledge of new wood finishing processes. The course will include wood fillers, staining, bleaching, sealing, varnishing, brush, rags, and spray application. The course will include both lectures and "hands on" experience on the student's own projects. Semester Planned: Fall, Spring, Summer	
BIOL 276 Molecular Biology II	4	BLDR 122 Furniture Finishing, Antiquing and Refinishing	3
Semester Prerequisite: 2.0 Minimum in BIOL 275 Continuation of BIOL 275. Advanced lecture topics in bacteriophage biology, gene analysis, gene sequencing, and research applications of gene cloning. Gene cloning experiments with lambda bacteriophage and pUC plasmid vectors, and site-specific mutagenesis of M13 phage. Trip to Human Genome Laboratory at University of Michigan. Semester Planned: Spring		Semester Prerequisite: None This course is designed to give the craftsman a basic knowledge of the furniture finishing process. The course includes sealing, staining, tinting, spray and brush application, removal of old finishes, minor repairs, selection of new finish, and surface preparation. Students bring their own projects. Semester Planned: Fall, Spring	
BLDR 101 Basic Woodworking	2	BLDR 123 Basic Painting and Decorating	3
Semester Prerequisite: None The students learn about wood characteristics, hand and portable power tools, woodworking machinery, joint construction, fastening methods, woodworking techniques and procedures, and technical information to be applied to student-made projects. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This course covers the step-by-step procedures of interior and exterior painting, including surface prep, materials, tools, estimation, patching, wood staining, antiquing, wood graining, marbleizing and decorative stenciling techniques and procedures. Semester Planned: Fall, Spring	
BLDR 102 Hand Tools for Wood	2	BLDR 124 Paperhanging	3
Semester Prerequisite: None This course covers the selection, use, and maintenance of tools used by the woodworker working by hand. It examines the tradition of hand tools as it relates to woodworking today. Students learn how to sharpen and maintain tools and how to select tools for special purposes. Semester Planned: Fall, Spring		Semester Prerequisite: None This course covers the preparation of surfaces, selection and care of tools, selection of materials and adhesives, estimating materials, layout, avoiding and correcting faults, and applications of paper and vinyl. Semester Planned: Fall, Spring, Summer	
BLDR 103 Woodworking with a Router	1	BLDR 132 General Home Maintenance	2
Semester Prerequisite: BLDR 101/Equivalent This is an exploration of router applications and router techniques. Student projects are used to illustrate and demonstrate dovetail joints, decorative cuts, dados, rabbets, mortises and similar styles, design and construction of jigs and fixtures for special applications. The students furnish their own lumber for projects. Semester Planned: Fall, Spring		Semester Prerequisite: None This is an introductory course in general home maintenance. Areas to be covered will be basic tools, electrical, plumbing, framing, roofing, interior trim, drywall and painting, appliance maintenance and repair, and concrete flatwork and blocklaying. Semester Planned: Fall, Spring, Summer	
BLDR 106 Furniture Making	2	BLDR 134 Masonry Home Projects	2
Semester Prerequisite: BLDR 101 Design and construction of simple furniture, with emphasis on selection of materials, options in joint and fastening methods, construction techniques, assembly procedures and problem solving. Semester Planned: Fall, Spring		Semester Prerequisite: None This course shows how to build home masonry projects to include barbecue pits, patching and repairing masonry walls, and patios. The student will learn the proper use of tools, proper mixes for mortar, and laying masonry units through hands-on work. Semester Planned: Fall, Spring, Summer	
		BLDR 142 Build Your Own Patio Deck	2
		Semester Prerequisite: None Plan, estimate, lay out, and build your own patio floor or off-the-ground deck. Investigate materials, designs, structural considerations and costs. The course will include tips and techniques for getting the job done. Semester Planned: Fall, Spring	

<p>BLDR 144 Build Your Own Home 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed for students who wish to build their own homes. Included are design considerations, land acquisition, selection of materials, choosing contractors, scheduling of work, financing, and landscaping. Guest speakers, who are experts in their various fields, provide the instruction.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>BLDT 277 Construction Cost Estimating 4</p> <p>Semester Prerequisite: BLDT 103</p> <p>Students will learn to do a structural material takeoff and a complete estimate for residential and light commercial buildings. The course uses standard estimating practices to estimate the cost of buildings, based on detailed blueprints.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>BLDT 100 Introduction to Construction 3</p> <p>Semester Prerequisite: None</p> <p>This course covers basic concepts of construction, including city and regional planning, managing, contracting, designing, engineering, estimating, bidding, and inspecting, as well as the production work normally associated with construction.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>BLDT 281 BOCA/Uniform Code 3</p> <p>Semester Prerequisite: None</p> <p>Students will be introduced to the two most commonly used building codes in the United States. This course will emphasize the use, interpretation, and application of the Uniform and BOCA Building Codes. Requirement for materials, barrier-free design, and fire standards for residential and commercial construction will be emphasized.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>BLDT 103 Structural Print Reading 4</p> <p>Semester Prerequisite: None</p> <p>This course covers symbols, conventions and abbreviations used in structural blueprints. The students will be able to recognize conventions and verbally describe their interpretation in trade or lay terms, according to standard architectural practices. Residential and commercial prints are used to show the relationship between working drawings and specifications.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>BLDT 287 Residence Construction I 12</p> <p>Semester Prerequisite: Instructor Approval</p> <p>Students will study and construct a residential building. All aspects of residential construction will be covered to include purchase of land, design, financing, purchase of materials, contacting sub-contractors, hands-on building techniques, sales, and landscaping. Participation implies enrollment in BLDT 288. Class meets 20 hours per week.</p> <p>Semester Planned: Fall, Spring</p>
<p>BLDT 121 Residential Framing and Foundations 4</p> <p>Semester Prerequisite: None</p> <p>Students will learn to frame residential buildings using accepted framing techniques, such as framing member spacing, framing floor systems, interior and exterior walls, and creating rough openings. This course covers the various types of foundations and the advantages and disadvantages of each. Hands-on methods are used.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>BLDT 288 Residence Construction II 12</p> <p>Semester Prerequisite: BLDT 287</p> <p>Students will study and construct a residential building. All aspects of residential construction will be covered to include purchase of land, design, financing, purchase of materials, contacting sub-contractors, hands-on building techniques, sales, and landscaping.</p> <p>Semester Planned: Spring</p>
<p>BLDT 122 Framing Square 1</p> <p>Semester Prerequisite: TECH 100/MATH 050</p> <p>The students will learn how to use the information on the framing square to lay out the different types of rafters used in roof framing. The tables and scales on the framing squares will be explained. The use of the framing square to lay out stairs will also be explained.</p> <p>Semester Planned: Fall, Spring</p>	<p>BLDT 296 Ceramic Tile Seminar 5</p> <p>Semester Prerequisite: None</p> <p>This seminar will teach the basic principles for installation of ceramic tile. This includes the selection of types of tile, how to lay out the tile, preparation of the surface, care of tools used, and estimation of labor and materials.</p> <p>Semester Planned: Fall, Spring</p>
<p>BLDT 124 Remodeling, Shingling and Siding 4</p> <p>Semester Prerequisite: BLDT 121</p> <p>Students will learn to remodel, shingle, and side a residential building. This course covers the analysis, designing, estimating, problem solving, building practices, materials, and installation methods for remodeling, roofing, and exterior wall covering projects.</p> <p>Semester Planned: Fall, Spring</p>	<p>BLDT 298 Builders License Review 1</p> <p>Semester Prerequisite: None</p> <p>This is a two-day workshop designed to prepare individuals for the State of Michigan Residential Builder's Examination. This workshop will include concentrated instruction in blueprint reading, state regulations, building terms, basic math and construction codes.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>BLDT 126 Interior Carpentry 4</p> <p>Semester Prerequisite: BLDT 121</p> <p>Students will learn to finish the interior of a residential building. This course covers the materials, installation practices, and material takeoff to do the finish carpentry for a house to include windows, doors, base, chair rail, wood floors, stairs, simple built-ins, and cabinets.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>BUSN 118 Introduction to Business 3</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Reading Level 5; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule)</p> <p>Introduces students to principles, problems and practices related to the world of business. Topics covered include business management and organization, marketing, finance, economics, production, and international business.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>BLDT 127 Framing Square and Stair Layout 2</p> <p>Semester Prerequisite: None</p> <p>This course covers the proper use of the framing square. Students will lay out common, hip, valley and jack rafters. Layouts will also include gable and studs, cross bridging and stair stringers. Instruction will emphasize understanding of math and decimal conversions involved in using the square.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>BUSN 123 Principles of Association Management 2</p> <p>Semester Prerequisite: None</p> <p>An introductory course designed to provide an overview of the principles involved in managing non-profit associations and organizations. It will enable the student to understand the interrelationships between associations, business, government, and society.</p> <p>Semester Planned: Fall</p>
<p>BLDT 262 Builders Business License 4</p> <p>Semester Prerequisite: None</p> <p>This course covers the principles of residential builder organizations and business practices, along with other useful information to help students pass the State of Michigan Builders License Exam. Preparation for a residential project from planning to actual construction and sale of the project is covered.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>BUSN 125 Written Communication for Business 3</p> <p>Semester Prerequisite: Any BUSN/MGMT Course/Departmental Approval</p> <p>A course on how to write clearly, accurately, and quickly. Students will develop the skill of organizing their writing for the busy reader's needs by practicing writing letters, reports, memos and procedures—technical or non-technical in nature.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>BUSN 191 Independent Study in Management 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Students are allowed to undertake special research projects and/or individual readings to apply personal and professional experience to academic area of interest. Minimum of 16 hours work required, plus completion of written project report.</p> <p>Semester Planned: Fall, Spring, Summer</p>	

BUSN 192 Independent Study in Management	2	BUSN 271 A New Look at Employee Involvement	.5
Semester Prerequisite: Departmental Approval Students are allowed to undertake special research projects and/or individual readings to apply personal and professional experience to academic area of interest. Minimum of 32 hours work required, plus completion of written project report. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Employee attitudes and working conditions in today's workplaces are discussed with an overview of participatory approaches which have seen short-lived success and wide-spread failure. Key elements of effective approaches to employee involvement and democratization of the workplace are presented, including concepts that may shape the workplace of the nineties. Semester Planned: Fall, Spring, Summer	
BUSN 193 Independent Study in Management	3	BUSN 272 Providing Excellent Customer Service	.5
Semester Prerequisite: Departmental Approval Students are allowed to undertake special research projects and/or individual readings to apply personal and professional experience to academic area of interest. Minimum of 48 hours work required, plus completion of written project report. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Focuses on developing skills in employees who have direct customer contact. Targeted at organizations committed to empowering employees with the skills to deliver excellent service. Topics include understanding the importance of service excellence, understanding behavioral differences in people, and handling customer interactions, particularly conflict situations, in a professional, win/win manner. Semester Planned: Fall, Spring, Summer	
BUSN 201 International Business	3	BUSN 295 Small Business Management	3
Semester Prerequisite: BUSN 118/Equivalent Overview of international business: organizational, social, cultural, and economic variables that create change in the international market place. Includes exchange rates, resource allocation, import quotas and export controls, balance of payments, and free trade versus protectionism. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Small business operations, including business and managerial functions, principles of management, environment of small business, financial, marketing and production management of the "going concern," and legal and governmental relationships. Development of a small business plan is required. Semester Planned: Fall, Spring, Summer	
BUSN 229 Public Relations	2	CABS 100 Seminar: Special Subjects	.25
Semester Prerequisite: None Students will be introduced to principles involved in creating and maintaining good public relations. Techniques for developing improved employer-employee relations, customer relations, and the total public relations effort will be discussed and applied. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This series of seminars provides the successful participant with operational proficiency in using specific microcomputer software. The seminars also provide the students with some experience using commands, functions, and features of the software beyond the basic level. Extensive hands-on activity is the primary method used in learning. Semester Planned: Fall, Spring, Summer	
BUSN 250 Personal Finance	2	CABS 101 Beginning Keyboarding on the Computer	2
Semester Prerequisite: None Students will undertake a broad survey of topics including budgeting, smart shopping, buying a car, renting, buying or selling a home, credit requirements, investing, insurance, and estate and retirement planning. Not intended to be a financial planning course, but students will develop a fundamental knowledge of financial concerns. Semester Planned: Fall, Spring		Semester Prerequisite: None This course is designed for students having no previous typing experience. Basic keyboarding skills using the touch method for the microcomputer operator are developed. Emphasis is on speed and accuracy using the alphabetic keyboard, the figure keys, symbol keys, and the number pad. Skill level of 39 wpm is developed. Semester Planned: Fall, Spring, Summer	
BUSN 251 Stock Market Essentials	3	CABS 102 Microcomputers for Non-Majors	2
Semester Prerequisite: None Study of securities market to give framework with which to set investment goals and achieve desired results. Introduction to some of the more prevalent theories, concepts, and skills to aid in developing strategies and making sound investment decisions related to the stock market. Semester Planned: Fall, Spring		Semester Prerequisite: None Surveys concepts and uses of software applications: word processors, spreadsheets, and database managers. Terminology, problem solving, and acquisition factors associated with personal computers are discussed. Hands-on computer use. Semester Planned: Fall, Spring, Summer	
BUSN 252 Personal Financial Planning	2	CABS 103 Formatting Reports on the Personal Computer	1
Semester Prerequisite: None This course provides students with practical information to guide personal financial decisions. It is designed to facilitate learning the process of financial planning to help students make informed choices about financial matters. Semester Planned: Fall, Spring		Semester Prerequisite: CABS 101/CPOA 103/Equivalent This course emphasizes formatting styles for reports for personal use as well as reports for business use. Formatting for footnotes, endnotes, bibliographies, title pages, outlines, summaries, opinions, and table of contents is emphasized. Previous keyboarding experience is required since word processing software is used. Semester Planned: Fall, Spring, Summer	
BUSN 254 Introduction to Investments	2	CABS 104 Skillbuilding for Computers	2
Semester Prerequisite: None This course covers the fundamental principles of investing and its role in our economy. Emphasis will be on developing terminology, types of investments, and personal financial planning such as mutual funds, real estate, CDs, money market funds, limited partnerships, insurance, IRAs stock, and tax shelters. This is an overview course. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Previous Keyboarding This course is designed to develop speed and accuracy at the keyboard and to individualize the development of speed and accuracy for each student. Semester Planned: Fall, Spring, Summer	
BUSN 255 Advanced Investments	2	CABS 105 Advanced Keyboarding on the Computer	4
Semester Prerequisite: BUSN 254 Students will use their knowledge of investment options to develop and implement a personal investment strategy. Investment objectives and influencing factors will be examined. Semester Planned: Fall, Spring		Semester Prerequisite: CABS 101/CPOA 103/Equivalent In addition to building speed and accuracy developed in keyboarding, this course emphasizes formatting for personal letters and envelopes, post cards, basic business letters and envelopes, memorandums, reports, tabulated material, business forms, administrative and employment communications. Semester Planned: Fall, Spring, Summer	
BUSN 270 Updating Employee Policies—A Legal Perspective	.5		
Semester Prerequisite: None This seminar provides a comprehensive review of recent developments in employment laws and court decisions which impact employer policies and employee handbooks. Topics will include employment at will and just-cause standards, EEO/AA policies, handicapper accommodations, wage and hour rules, work rules, and benefits. Semester Planned: Fall, Spring, Summer			

<p>CABS 110 Microsoft Office 3</p> <p>Semester Prerequisite: None</p> <p>This course provides an introduction to MS Office. It is designed to develop basic operational proficiency while using MS Office (MS Word, MS Excel, MS Access and MS PowerPoint). Students learn how to use word processing, spreadsheets, data base and presentation software. Topics include creating letter, memos, simple spreadsheets, database structures, and desktop presentations.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CABS 122 Lotus 123 Self Taught 2</p> <p>Semester Prerequisite: None</p> <p>An introduction to using the Lotus 1-2-3 spreadsheet, graphics, and database management program. The course uses a variety of teaching techniques such as videotape and computer-assisted instruction. Provides hands-on experience in creating spreadsheets, producing graphs and reports, and searching and sorting databases.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CABS 111 Beginning WordPerfect for the Office 4</p> <p>Semester Prerequisite: CABS 105/OADM 100/Equivalent</p> <p>This course is designed to develop a basic word processing skill on the IBM micro-computer using WordPerfect software for the rapid production, revision, and retrieval of routine business documents, i.e., letters, envelopes, memorandums, tables, reports, short manuscripts, and repetitive correspondence.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CABS 123 Lotus 123 2</p> <p>Semester Prerequisite: None</p> <p>Provides the student with a working knowledge of the Lotus 1-2-3 spreadsheet program and enables the student to apply Lotus to routine business problems. Topics include spreadsheet navigation, basic functions, spreadsheet formatting, formulas, special functions, move, copy, and an introduction to graphs, macros, and database.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CABS 112 Advanced WordPerfect for the Office 4</p> <p>Semester Prerequisite: 2.0 Minimum in CABS 111/CPOA 205/Equivalent</p> <p>This course is designed to expand on the word processing skills previously developed in CABS 111 including basic desktop publishing features. Additional applications include the following: fonts, line draw, graphics, paper sizes, newspaper and parallel columns, outlines, headers and footers, footnotes and endnotes, macros, merges, sorting and selecting, styles, and tables of contents, indexes, and lists.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CABS 124 Advanced Lotus Release 2 2</p> <p>Semester Prerequisite: CABS 122/CABS 123</p> <p>Expands the students' working knowledge of the Lotus 1-2-3 by providing experience in applying advanced features of the program to routine business problems. Topics include an in-depth study of macros, database management, graphs and charts, data tables, user defined menus, and custom help screens. Uses release 2 of Lotus 1-2-3.</p> <p>Semester Planned: Fall, Spring</p>
<p>CABS 114 WordPerfect - Beginning for DOS 2</p> <p>Semester Prerequisite: Keyboard Familiarity</p> <p>Beginner-level instruction on use of WordPerfect. Topics include creating, editing, formatting, and storing word processing documents. Also learned are the use of the block technique, spell-checker, thesaurus, merge feature for form letters, and maintaining lists. Extensive hands-on activity.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CABS 125 Advanced Lotus Release 3 2</p> <p>Semester Prerequisite: CABS 122/CABS 123</p> <p>Expands the students' working knowledge of Lotus 1-2-3 by providing experience in applying advanced features of the program to routine business problems. Topics include an in-depth study of macros, database management, graphs and charts, data tables, user defined menus, and custom help screens. Uses release 3 of Lotus 1-2-3.</p> <p>Semester Planned: Fall, Spring</p>
<p>CABS 115 WordPerfect - Advanced for DOS 2</p> <p>Semester Prerequisite: CABS 114</p> <p>Instruction in the use of WordPerfect features such as macros, tables, columns, footnotes and endnotes, indexes, lists, table of contents, outline, boxes, graphics, and fonts. Includes techniques for improving the appearance of documents produced through use of appropriate fonts and other print capabilities.</p> <p>Semester Planned: Fall, Spring</p>	<p>CABS 126 Excel 2</p> <p>Semester Prerequisite: None</p> <p>Beginner-level training in the creating of spreadsheets and databases using the Microsoft Excel program. The instruction includes the manipulation and generation of reports, tables, and graphs. Also included is instruction in file handling, disk management, and macro creation and use.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CABS 116 WordPerfect - Advanced Format for DOS 2</p> <p>Semester Prerequisite: CABS 114</p> <p>Instructs microcomputer users on how to design, edit, and produce high-quality printed documents using WordPerfect. Hands-on activity will result in the production of letters, newsletters, brochures, flyers, and other similar documents.</p> <p>Semester Planned: Fall, Spring</p>	<p>CABS 127 Quattro Pro 2</p> <p>Semester Prerequisite: None</p> <p>Beginner-level training for the Quattro Pro spreadsheet program that provides the student with skills needed to apply Quattro Pro to routine business problems. Topics include basic operating concepts, functions, macros, and graphing.</p> <p>Semester Planned: Fall, Spring</p>
<p>CABS 117 Microcomputer Forms Design 2</p> <p>Semester Prerequisite: None</p> <p>This course covers the development and composition of business forms using forms design software on a microcomputer. Additional topics include forms layout, margins, type sizes, grades of paper, construction, reproduction, specifications and forms management.</p> <p>Semester Planned: Fall, Spring</p>	<p>CABS 128 Lotus 123 for Windows 2</p> <p>Semester Prerequisite: None</p> <p>Provides an introduction to the spreadsheet program Lotus 1-2-3 for Windows. Students develop a working knowledge of the program and the ability to apply Lotus to routine business problems through hands-on activities. Topics include: creating, modifying and enhancing a worksheet; graphing information; using databases; creating macros; and using multiple worksheets.</p> <p>Semester Planned: Fall, Spring</p>
<p>CABS 119 Word for Windows 2</p> <p>Semester Prerequisite: Keyboard Familiarity</p> <p>This course is designed to provide the person new to the "Word for Windows" program with the ability to perform the most common word processing functions. The course also covers less frequently used features, such as performing mail merge and creating tables.</p> <p>Semester Planned: Fall, Spring</p>	<p>CABS 129 Excel-Advanced 2</p> <p>Semester Prerequisite: CABS 126</p> <p>Advanced-level training in the creating of spreadsheets and databases using the Microsoft Excel program. The instruction includes the manipulation and generation of reports, tables, and graphs.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CABS 121 WordPerfect for Windows 2</p> <p>Semester Prerequisite: None</p> <p>Instruction in the use of WordPerfect for Windows. Topics include creating, editing, formatting, and storing word processing documents. Also learned are the use of the block technique, spell-checker, thesaurus, merge feature for form letters, and other related skills.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CABS 130 dBASE for Non-Majors 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed for the person who uses an existing dBASE program or who needs to develop a simple database. Students learn how to create database structures, enter and edit data, manipulate the data, and prepare printed reports. The programming mode is not addressed in this course.</p> <p>Semester Planned: Fall, Spring, Summer</p>

<p>CABS 132 Paradox Database 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed for the person who uses an existing Paradox database or who needs to develop a simple database application with Paradox. Students learn how to create database structures, enter and edit data, find data, and prepare printed reports. Students learn how to use the Paradox Personal Programmer.</p> <p>Semester Planned: Spring</p>	<p>CABS 195 Microsoft Windows 2</p> <p>Semester Prerequisite: None</p> <p>This course is for a novice in the use of the Microsoft Windows environment. Topics include the use of Windows features (icons, dialog boxes, etc.), functions (program manager, file manager, print manager, control panel), and applications included with Windows (Write, Paintbrush, Accessories, Recorder, Terminal).</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CABS 133 Microsoft Access Database 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed for the person who uses an existing Microsoft Access database or who needs to develop a simple database application with Access. Students learn how to create database structures, enter and edit data, find data, and prepare printed reports.</p> <p>Semester Planned: Fall</p>	<p>CABS 219 Advanced Microsoft Word 2</p> <p>Semester Prerequisite: CABS 119</p> <p>Advanced-level training in wordprocessing using the Microsoft Word program. The instruction includes footnotes, tables, using and defining styles, using graphics, creating forms, and advanced font and text formatting.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CABS 134 FoxPro Database for Windows 3</p> <p>Semester Prerequisite: None</p> <p>This course provides practical, hands-on experience using a database management software. Activities allow the student to create, maintain, search and retrieve records, and create reports using the software FoxPro for Windows.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CABS 221 Advanced Desktop Publishing, Integration of Office Software 4</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course is designed as an office simulation that incorporates all the automated office skills learned. Students show appropriate document creation integrating word processing, graphics, spreadsheets, database applications, importing/exporting, and advanced desktop publishing techniques.</p> <p>Semester Planned: Spring</p>
<p>CABS 135 FoxPro for Windows 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed for the person who needs to develop a simple database. Students learn how to create database structures, enter and edit data, manipulate the data, and prepare printed reports. The programming mode is not addressed in this course.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CABS 233 Advanced MicroSoft Access 2</p> <p>Semester Prerequisite: CABS 133</p> <p>Advanced-level training in the creation of database management using the Microsoft Access Program. The instruction includes the manipulation and generation of reports and tables.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CABS 136 SQL: Structured Query Language 2</p> <p>Semester Prerequisite: None</p> <p>This course covers the relational database language SQL. Topics include table definition, queries, special operators, the join operation, views, security, administration, and reports. A commercial SQL product is used to provide students with hands-on experience.</p> <p>Semester Planned: Fall, Spring</p>	<p>CACR 100 Machine Shorthand Theory 6</p> <p>Semester Prerequisite: Typing Speed 40 WPM, Admission to Program/Approval</p> <p>This course is specifically designed for basic stenographic shorthand conflict-free theory taught on a steno machine to develop notewriting accuracy from 94 to 100% and speeds up to and including 80 wpm for 5 minutes.</p> <p>Semester Planned: Fall, Spring</p>
<p>CABS 140 Business Graphics Using Harvard Graphics 2</p> <p>Semester Prerequisite: None</p> <p>This course uses the microcomputer as a tool to create and present information in a graphic form. Students learn to determine the most appropriate type of chart or graph to communicate specific kinds of information. They use Harvard Graphics software to produce and present information.</p> <p>Semester Planned: Fall, Spring</p>	<p>CACR 110 Machine Shorthand Speedbuilding I 6</p> <p>Semester Prerequisite: CACR 100</p> <p>This course is specifically designed for speedbuilding in machine shorthand at the rates of 80 to 100 wpm for 5 minutes at 97 to 100% accuracy in the areas of literary, jury charge, and Q & A dictation.</p> <p>Semester Planned: Spring, Summer</p>
<p>CABS 141 Business Graphics and Presentation 2</p> <p>Semester Prerequisite: None</p> <p>Graphics software is used to develop bar, line, and pie charts. Change features, such as type fonts, type size, shading, and other formats are included. Graphics are created from spreadsheet information. Instruction is given on the elements of a presentation.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CACR 120 Machine Shorthand Speedbuilding II 6</p> <p>Semester Prerequisite: CACR 110</p> <p>This course is specifically designed for speedbuilding in machine shorthand at the rates of 110 to 130 wpm for 5 minutes at 97 to 100% percent accuracy in the areas of literary, jury charge, and Q & A dictation.</p> <p>Semester Planned: Fall, Summer</p>
<p>CABS 171 Symphony 2</p> <p>Semester Prerequisite: None</p> <p>An introduction to Lotus Symphony. Hands-on training for use of Symphony's spreadsheet, business graphics, database manager, and word processor. Communications is discussed.</p> <p>Semester Planned: Fall, Spring</p>	<p>CACR 130 WordPerfect for Court Reporters .5</p> <p>Semester Prerequisite: Admission to Program</p> <p>This lecture and practical application course consists of the study and application of the use of Word Perfect for transcription purposes in the Court and Conference Reporting Program.</p> <p>Semester Planned: Fall, Spring</p>
<p>CABS 180 Desktop Publishing Using Pagemaker 3</p> <p>Semester Prerequisite: Windows Familiarity</p> <p>This course provides experience in producing documents with text and graphics using the desktop publishing program PageMaker. Good design of documents is emphasized in addition to the mechanics of producing the document. The basics of publishing are also discussed. Documents produced include reports, flyers, and newsletters.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CACR 140 English for Court Reporters .5</p> <p>Semester Prerequisite: Admission to Program</p> <p>This lecture and practical application course consists of the study and application of the proper use of grammar, punctuation and word usage to the transcription process for Court Reporting students.</p> <p>Semester Planned: Fall, Spring</p>
<p>CABS 182 Microsoft PowerPoint/Windows 2</p> <p>Semester Prerequisite: None</p> <p>MS PowerPoint for Windows is designed to give your computer the capabilities for desktop presentations. The user will learn to plan, compose and create complete presentations. MS PowerPoint makes it easy for the individual to present professional, high quality presentations.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CACR 201 Q and A I 3</p> <p>Semester Prerequisite: CACR 120</p> <p>This course includes Q & A testimony dictation and machine shorthand speedbuilding and testing from 130 to 170 wpm at 97 to 100% accuracy; as well as four-voice testimony.</p> <p>Semester Planned: Fall, Spring, Summer</p>

<p>CACR 202 Q and A II 3 Semester Prerequisite: CACR 201 This course includes Q & A testimony dictation and machine shorthand speedbuilding and testing from 170 to 200 wpm at 97% accuracy; as well as four-voice testimony. Semester Planned: Fall, Spring, Summer</p>	<p>CACR 250 Court Procedures and Fieldwork 3 Semester Prerequisite: CACR 120 Students placed in this field work will spend 200 hours with official reporters, deposition reporters, and hearings reporters writing, transcribing notes in proper form and producing 200 pages of transcript in order to learn courtroom, conference, hearings, and deposition techniques, procedures and transcript production. Semester Planned: Fall, Spring</p>
<p>CACR 203 Q and A III 3 Semester Prerequisite: CACR 202 This course includes Q & A testimony dictation and machine shorthand speedbuilding and testing from 200 to 230 wpm at 97% accuracy; as well as four-voice testimony. Semester Planned: Fall, Spring, Summer</p>	<p>CACR 260 CSR Preparation 5 Semester Prerequisite: Admission to Program This training and practice class is designed to prepare the Court and Conference Reporting student for the Certified Shorthand Reporter Examination using: goal setting projects, speedbuilding material, 5-minute timings (Literary at 180 words per minute and 1.6 syllabic intensity, Jury Charge at 200 words per minute, Q&A at 225 words per minute) and written knowledge test handouts. Semester Planned: Fall, Spring</p>
<p>CACR 210 Jury Charge I 2 Semester Prerequisite: CACR 120 This course includes jury charge dictation and machine shorthand speedbuilding and testing from 120 to 150 wpm at 97% accuracy. Semester Planned: Fall, Spring, Summer</p>	<p>CACR 270 Realtime Reporting 5 Semester Prerequisite: Admission to Program This course consists of instruction in realtime reporting through lectures, guest speakers, video tapes, audio tapes, and hands-on applications. Semester Planned: Fall, Spring</p>
<p>CACR 211 Jury Charge II 2 Semester Prerequisite: CACR 210 This course includes jury charge dictation and machine shorthand speedbuilding and testing from 150 to 180 wpm at 97% accuracy. Semester Planned: Fall, Spring, Summer</p>	<p>CHCE 100 Nurse Refresher 9 Semester Prerequisite: Current Michigan License For the inactive RN or LPN who would like to re-enter active practice. Includes theory and practice in nursing care, pharmacology, selected disease processes, and new concepts in delivery of health care. Clinical component is included. Semester Planned: Fall, Spring</p>
<p>CACR 212 Jury Charge III 2 Semester Prerequisite: CACR 211 This course includes jury charge dictation and machine shorthand speedbuilding and testing from 180 to 200 wpm at 97% accuracy. Semester Planned: Fall, Spring, Summer</p>	<p>CHCE 101 Suicide Seminar: Assessment and Prevention 5 Semester Prerequisite: None This seminar covers demographics, attitudes and theories regarding suicide. Assessment skills for identifying suicide potential, interventions for the prevention of suicide, videotapes, case studies, and group discussions are used to increase awareness regarding suicide, in addition to gaining insight in recognition, assessment, and prevention of suicide. Semester Planned: Fall, Spring</p>
<p>CACR 220 Literary I 3 Semester Prerequisite: CACR 120 This course includes literary dictation and machine shorthand speedbuilding and testing from 100 to 130 wpm at 97% accuracy. Semester Planned: Fall, Spring, Summer</p>	<p>CHCE 103 Psychiatric Technician Update 1.5 Semester Prerequisite: CHSE 213/Equivalent A course to update current mental health practices and to provide additional information for the practicing basic psychiatric technician. Course content will include those areas of new information or those identified by the contracting agency. Semester Planned: Summer</p>
<p>CACR 221 Literary II 3 Semester Prerequisite: CACR 220 This course includes literary dictation and machine shorthand speedbuilding and testing from 130 to 160 wpm at 97% accuracy. Semester Planned: Fall, Spring, Summer</p>	<p>CHCE 104 Long Term Care Nurse Refresher 6 Semester Prerequisite: Nurse Current Michigan License This course is designed for the inactive RN or LPN who would like to re-enter active practice in a geriatric setting. A variety of learning methods are included, as well as a clinical component. Semester Planned: Fall, Spring</p>
<p>CACR 222 Literary III 3 Semester Prerequisite: CACR 221 This course includes literary dictation and machine shorthand speedbuilding and testing from 150 to 180 wpm at 97% accuracy. Semester Planned: Fall, Spring, Summer</p>	<p>CHCE 106 Cardiac Dysrhythmia Interpretation 2.75 Semester Prerequisite: Health Professional This course introduces the student to identification of common dysrhythmias seen on a monitor or telemetry unit. Content will include criteria, causes, hemodynamic effects and treatment of dysrhythmias according to ACLS guidelines. Use of monitoring equipment is integrated within the course content. Semester Planned: Fall, Spring, Summer</p>
<p>CACR 230 Medical/Technical Testimony I 2 Semester Prerequisite: None This course includes medical and technical dictation and machine shorthand speedbuilding and testing from 100 to 130 wpm at 97% accuracy. Semester Planned: Fall, Spring, Summer</p>	<p>CHCE 107 Community Resources for Health Professionals .75 Semester Prerequisite: None A course designed to help health-care professionals identify and utilize community resources for their client population. Material will be presented through lecture by representatives of various local health-care providers for clients and/or families. Semester Planned: Fall, Spring</p>
<p>CACR 231 Medical/Technical Testimony II 2 Semester Prerequisite: CACR 230 This course includes medical and technical dictation and machine shorthand speedbuilding and testing from 130 to 160 wpm at 97% accuracy. Semester Planned: Fall, Spring, Summer</p>	<p>CHCE 108 Medical Emergencies in the Dental Office .5 Semester Prerequisite: Dental Professional Staff Covers common medical emergencies that may occur in the dental office and treatment for such emergencies. Instruction in taking a blood pressure, clearing airways, evaluating medical histories and emergency kits is given. Discussion includes caring for medically compromised dental patients and formulating an office emergency plan. Semester Planned: Fall, Spring</p>
<p>CACR 232 Medical/Technical Testimony III 2 Semester Prerequisite: CACR 231 This course includes medical and technical dictation and machine shorthand speedbuilding and testing from 150 to 180 wpm. Semester Planned: Fall, Spring, Summer</p>	
<p>CACR 240 C.A.T. 1 Semester Prerequisite: Instructor Approval This course is designed to give students a hands-on experience with computer-aided transcription for the court reporters. Semester Planned: Fall, Spring</p>	

CHCE 112 Dental Auxiliary X Ray	1.5	CHCE 193 Basic Cardiac Technician	2
Semester Prerequisite: Dental Auxiliary with One Year Experience/ Departmental Approval		Semester Prerequisite: RN/LPN/Technician, Departmental Approval	
This course is designed for the dental auxiliary to update his/her skills and gain knowledge in making intraoral radiographs of diagnostic quality. Includes theory and laboratory sessions in exposing, processing, mounting, and evaluation of radiographs. Upon successful completion, the student receives a certificate of completion. Semester Planned: Fall, Spring, Summer		This course offers an introduction to cardiac arrhythmias. The content includes interpretation of cardiac monitors, understanding basic cardiac anatomy and physiology, and an introduction to 12 lead EKG machine and Holter monitor. Semester Planned: Fall, Spring	
CHCE 114 Physical Assessment Skills for Nursing Practice	2.5	CHCE 194 Mental Health Nursing Seminar	1.5
Semester Prerequisite: RN/LPN/Nurse		Semester Prerequisite: Registered Nurse	
This course is designed for nurses in any area of practice. Emphasis is on techniques of physical examination: inspection, palpation, percussion, and auscultation. History taking and interpretation of physical findings are stressed. All major body systems are studied. Live models are used in supervised practice sessions. All equipment supplied. Semester Planned: Fall, Spring, Summer		This course is designed for registered nurses currently working with or who will work with clients with emotional problems. Students are taught the content for a mental status assessment, therapeutic communication techniques, psychotropic medications, patient teaching techniques, nursing interventions, and the evaluation of client progress. Semester Planned: Fall, Spring, Summer	
CHCE 115 Physical Assessment Refresher	.75	CHCE 195 Effective Interaction and Problem Solving Techniques	.5
Semester Prerequisite: CHCE 114/Equivalent		Semester Prerequisite: RN/LPN/Allied Health	
This seminar is designed for students who have already had formal training in physical examination skills. Course content is designed to help students recall important signs of pathology and normal physical findings. There is also ample opportunity, through supervised practice sessions, to improve specific techniques of physical examination. Semester Planned: Fall, Spring, Summer		This seminar stresses application of assertive communication skills. Personality and temperament styles are identified which determine conflict resolution, value clarification, and confrontational skills. Real and theoretical work situations are stressed to assist in effective problem-solving techniques. Semester Planned: Fall, Spring, Summer	
CHCE 117 Physical Assessment Techniques for the Corrections Nurse	2.75	CHCE 198 Geriatric Nursing Seminar	.5
Semester Prerequisite: Corrections Nurse/EMT		Semester Prerequisite: Nurse (RN/LPN/GN/SN)	
This course is designed for and restricted to Nurses/EMTs currently employed by Michigan Department of Corrections. Physical exam skills are studied and extensively practiced with special attention to modifications required in the corrections setting. Live models are used. Common pathological findings are emphasized. All equipment supplied. Semester Planned: Fall, Spring, Summer		This focused seminar is designed specifically for the nurse working in long-term care facilities. The student investigates concepts of nursing leadership and applies them to his/her own work environment. Issues of staff morale, staff turnover, realistic changes within economic and organization limitations are discussed. Semester Planned: Fall, Spring	
CHCE 119 Ventilation Care for Long Term Care Patients	1.75	CHCE 200 Managing Aggressive Behavior	1
Semester Prerequisite: RN/LPN		Semester Prerequisite: None	
This course is designed to educate the RN or LPN in patient care skills required to safely care for patients needing long-term ventilator support. A clinical component is included. Semester Planned: Fall, Spring		This course is designed for staff working where the potential for aggressive behavior exists. Michigan's mental health code is used as a basis for course content which includes cues to emotional crisis, causes for aggressive behavior, de-escalating techniques, self-protective maneuvers, and non-offensive physical controls. Practice sessions are included. Semester Planned: Fall, Spring, Summer	
CHCE 127 Physical Assessment for Community Mental Health Nurses	1.5	CHCE 202 Advanced Nursing Practice Seminar: Medical-Surgical Nursing	3
Semester Prerequisite: Community Health Nurse for Developmentally Disabled Clients		Semester Prerequisite: RN/LPN/GN	
Course content is specific for nurses working with the developmentally disabled and emotionally disturbed/elderly client in the community health setting. Physical exam techniques are learned and then modified for the problem situations encountered in community health settings. Emphasis is on detection of abnormal findings in major body systems. Semester Planned: Fall, Spring		This specialty course is designed to enhance nurses' knowledge of medical-surgical practices. Content focuses on patient assessment, current treatment modalities, and pharmacology. Specialized monitoring and treatment equipment or procedures are included where applicable. Important types of pathology and dysfunctional states are included with emphasis on the nursing management. Semester Planned: Fall, Spring, Summer	
CHCE 182 Acute Trauma/Emergency Nursing Seminar	2	CHCE 203 Oncology Nursing Practice	3
Semester Prerequisite: RN/LPN/EMT/AEMT		Semester Prerequisite: RN/LPN/GN	
Nurses and pre-hospital personnel will increase their knowledge of acute trauma and medical emergencies. Lecture, demonstrations, and simulated emergency practice sessions are all used to assist students in assessing, prioritizing, and providing emergency care in a safe, organized manner. Chest, abdomen, burns, face, extremities, and neuro trauma are included. Semester Planned: Fall, Spring, Summer		A specialized course for nurses pursuing a position in oncology or for those seeking professional growth. Course content includes the diagnosis and pathophysiology of cancer, principles of radiation, chemotherapy and surgical treatment, oncologic complications with related management, emotional adjustment issues, and bereavement. Strong emphasis on nursing care. Semester Planned: Fall, Spring, Summer	
CHCE 185 Lab Tests for Nurses	.5	CHCE 204 Essentials of Home Health Nursing Practice	3
Semester Prerequisite: None		Semester Prerequisite: RN/LPN/GN	
A seminar for nurses and other health-care personnel. Seminar content focuses on the systematic disease processes of specific lab tests, interpretation of test values, and application to practice. Mock lab reports and case study situations are used. Semester Planned: Fall, Spring		This course helps prepare nurses for work in home health care. Course content is extensive, including information about medicare/medicaid, DRGs, charting, patient assessment, personal safety, infection control, and effective communication. Cultural values affecting delivery of care, appropriate referrals, supervision, and planning effective home visits are also emphasized. Semester Planned: Fall, Spring, Summer	
CHCE 190 Pharmacology Math	1	CHCE 205 Intravenous Therapy	.5
Semester Prerequisite: Allied Health Professional		Semester Prerequisite: Nurse, Health Care Professional	
This course is designed for the registered nurse, licensed practical nurse, student of a nursing curriculum, pharmacy technician, and medical assistant. Its primary goal is to provide the student with a review of mathematics and a simplified method of calculating drug dosages in adult and pediatric patients. Semester Planned: Fall, Spring, Summer		This workshop will provide the most recent information on a variety of topics relating to intravenous therapy. Content can range from basic principles to advanced high-tech therapy. This seminar is designed for professional members of the health care team who routinely deal with IV therapy. Semester Planned: Fall, Spring	

<p>CHCE 208 Clinical Practicum for Professional Nurses 1</p> <p>Semester Prerequisite: RN/LPN/GN</p> <p>This practicum is designed for nurses requiring supervised clinical practice as part of their advanced study. A variety of clinical settings are used, including acute care, clinics, home care, and treatment centers. This course is most appropriate in conjunction with one of the advanced nursing practice courses/seminars.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CHCE 230 Advanced Cardiac Life Support Training Seminar 1.75</p> <p>Semester Prerequisite: Basic Cardiac Life Support Certification/Health Professional/Departmental Approval</p> <p>This seminar is designed for members of the health care team to develop knowledge and skills in Advanced Cardiac Life Support (ACLS). A combination of lecture and skills performance will prepare the student to achieve success in American Heart Association certification as an ACLS provider. Pre-preparation mandatory.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CHCE 210 Pediatric Advanced Life Support 1.5</p> <p>Semester Prerequisite: Basic Cardiac Life Support Certification/Health Professional</p> <p>This seminar is designed for members of the health-care team who work with pediatric patients. A combination of lecture and practice in skills stations will prepare the student for success in achieving American Heart Association certification as a Pediatric Advanced Life Support Provider. Prior assigned reading mandatory.</p> <p>Semester Planned: Fall, Spring</p>	<p>CHCE 234 Mental Health Update .75</p> <p>Semester Prerequisite: Nurse</p> <p>This seminar is for health-care personnel with the need to practice and expand their skills in working with the mentally ill. Content will focus on those areas prioritized by the contracting agency. Various teaching, learning and testing techniques will be utilized: lecture, role-playing, audio-visual, case studies, and written quizzes.</p> <p>Semester Planned: Fall, Spring</p>
<p>CHCE 211 Pediatric Advanced Life Support(PALS) Refresher .5</p> <p>Semester Prerequisite: Basic Cardiac Life Support, Pediatric Advanced Life Support Certification</p> <p>This seminar is designed to recertify, according to the American Heart Association (AHA) standards, those professionals currently possessing valid Pediatric Advanced Life Support (PALS) certification cards. Upon successful recertification, the AHA will issue each student a new PALS certification card. Prior assigned readings are mandatory.</p> <p>Semester Planned: Fall, Spring</p>	<p>CHCE 235 Advanced Cardiac Life Support (ACLS) Refresher Seminar .5</p> <p>Semester Prerequisite: Basic Cardiac Life Support, Advanced Cardiac Life Support Certificate</p> <p>This seminar is designed to recertify, according to the American Heart Association standards, those individuals currently possessing valid Advanced Cardiac Life Support (ACLS) cards. The American Heart Association will issue a certificate to each student upon successful completion of the program. Prior assigned readings are mandatory.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CHCE 215 Pediatric Physical Assessment 2.5</p> <p>Semester Prerequisite: RN/LPN</p> <p>Course content is designed for any nurse working with children. Students learn norms for stages of physical development and typical physical findings for each body system. Nurses learn to adapt the physical exam to the age, behavior, and acuity of the child.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CHCE 239 Emergency/Trauma/Update and Review 1.5</p> <p>Semester Prerequisite: RN/LPN Emergency Care Nurse</p> <p>This course is designed for nurses working in the specialty field of Emergency/Trauma Care. It may be used as an update in the current status of emergency/trauma nursing or as an adjunct in helping the emergency nurse prepare for the certification exam.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CHCE 218 Nursing Licensure Exam Preparation for RN-NCLEX and NLN Exams 2.25</p> <p>Semester Prerequisite: Graduate Nurse: Diploma/ADN/BSN</p> <p>This review course helps the graduate nurse organize and study important nursing care topics arranged by specialty: obstetrics, medical-surgical, pediatrics and psychiatric nursing. Nursing management, patient care decisions, treatment protocols, patient teaching, pharmacology, nutrition and test taking strategies are included. Students take mock exam and multiple practice tests.</p> <p>Semester Planned: Spring, Summer</p>	<p>CHCE 240 Cardiac Rehabilitation Cognate for Nurse Assistants 2.75</p> <p>Semester Prerequisite: CHSE 101</p> <p>Nurse assistant care of the monitored cardiac patient emphasizes recognition of heart waves, rates, and lethal arrhythmias; observation of various cardiac procedures; and clinical practice. Care of the cardiac patient is integrated with knowledge of effects of immobility, deconditioning, and aging and reporting of abnormal behavior or symptoms.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CHCE 222 Essentials of Emergency/Critical Care/Specialty Care Nursing 6</p> <p>Semester Prerequisite: RN/LPN/GN/AEMT</p> <p>This course embodies intensive education and training for nurses preparing to work in the acute specialty care setting. Physical assessment, recognition, and management of trauma and critical dysfunctional conditions are emphasized. Pharmacology, patient monitoring, and critical decision-making in simulations are included. Take concurrently with CHCE 208.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CHCE 244 Hospice Administration I: Quality Assurance 2</p> <p>Semester Prerequisite: Hospice Administrator</p> <p>This course combines current theory on quality assurance with application of concepts to hospice programs in all stages of development. A program evaluation will also be completed.</p> <p>Semester Planned: Summer</p>
<p>CHCE 227 New Dimensions in Nursing .5</p> <p>Semester Prerequisite: Nurse (RN/LPN/GN/SN)</p> <p>Seminar content is dependent upon course requirement.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CHCE 245 Hospice Administration II: Leadership and Management 3</p> <p>Semester Prerequisite: Hospice Administrator</p> <p>This course uses the hospice management model for the planning, organization and direction of hospice services to a community. The student will develop skills for sound personnel staffing to meet hospice needs. Included is an assignment to develop a fiscal management model to be used specific to a hospice setting.</p> <p>Semester Planned: Fall</p>
<p>CHCE 228 Nursing Management Strategies 2</p> <p>Semester Prerequisite: Health Professional</p> <p>This course provides an overview of the management function in a health-care setting. It's based on a conceptual understanding of the management functions of planning, organizing, leading, controlling, and dealing with change. Emphasis will be on developing practical skills needed to manage resources and set realistic goals.</p> <p>Semester Planned: Fall, Spring</p>	<p>CHCE 246 Hospice Administration III: Leadership/Public Relations 3</p> <p>Semester Prerequisite: Hospice Administrator</p> <p>Specifics covered in this course are planning and conducting family-patient conferences, doing a market survey of community needs for hospice services, identifying resources and support for hospice services, and working with local hospice boards.</p> <p>Semester Planned: Spring</p>
<p>CHCE 229 Nursing Practice Update Seminar .75</p> <p>Semester Prerequisite: RN/LPN/Health Professional</p> <p>Seminar topics are selected from current medical literature and/or prevailing community needs. Trends and issues in nursing, patient care advances and dilemmas, diagnostic and treatment protocols, medical-legal-ethical considerations and professional nursing concepts all form the basis for final topic selection. Specialized faculty participate in areas of their expertise.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CHCE 247 Techniques Update Course for RDHS .25</p> <p>Semester Prerequisite: Dentist/Dental Hygienist</p> <p>This course is designed for the Dental Hygienist/Dentist who wishes the opportunity to gain knowledge and develop the skills needed to perform advanced clinical procedures.</p> <p>Semester Planned: Fall, Spring, Summer</p>

CHCE 250 Patient Dental Anxieties/Pain Control .5	CHCE 280 TMJ Diagnosis and Management .5
Semester Prerequisite: Dental Personnel/Professional This seminar will provide dental professionals with the knowledge and skills to successfully treat the difficult and anxious dental patient. Semester Planned: Fall, Spring	Semester Prerequisite: Dental Personnel/Practitioner This course focuses on current concepts of diagnosis and management of the TMJ patient in a dental office. Topics include growth and development, functional anatomy and pathology, evaluation, treatment modalities and management. Case presentations, demonstrations, and hands-on are included. Semester Planned: Fall, Spring
CHCE 253 Dental Team Concepts .75	CHCE 282 Dental Auxiliary Seminar .5
Semester Prerequisite: Dental Office Staff This seminar is designed to update and motivate the dental team with current, practical information on "How to be a Successful, Happy Dental Office in the 90s." Topics include utilization of auxiliaries for maximum productivity, effective scheduling, and communication to break barriers. Semester Planned: Fall, Spring	Semester Prerequisite: Dental Auxiliary Seminar content is dependent upon course requirement. Semester Planned: Fall, Spring, Summer
CHCE 256 New Dimensions in Dental Hygiene .5	CHCE 285 Dental Office Infection Control .5
Semester Prerequisite: Dental Hygienist/Dental Professional Seminar content is dependent upon course requirement. Semester Planned: Fall, Spring	Semester Prerequisite: Dental Personnel/Professional Updates dental professionals on effective routine barrier techniques, aseptic procedures, and methods of sterilization to decrease the possibility of transmitting disease and inducing infection. Topics include HIV, AIDS, viral hepatitis, HBV, tuberculosis, herpes simplex, and the safe handling and disposal of infectious and hazardous waste. Semester Planned: Fall, Spring, Summer
CHCE 258 Techniques Update Course for RDAs .25	CHCE 286 Dental Specialty, Focus .5
Semester Prerequisite: Dental Assistant/Dentist This laboratory course is designed for Registered Dental Assistants/Dentists who wish a refresher in RDA functions. Utilization concepts, new procedures, advanced techniques, new products and instruments will be included. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: Dental Auxiliary/Professional This seminar will present the most recent information on a variety of dental specialty topics. The seminar is designed for all members of the dental team. Topics include lasers in dentistry, dental contributions to the forensic sciences, and dentistry for the geriatric dental patient. Semester Planned: Fall, Spring, Summer
CHCE 259 RDA Update .5	CHCE 290 Dental Hygiene Clinic Remediation 1
Semester Prerequisite: RDA/RDH/Dentist This seminar is designed especially for the Registered Dental Assistant who wishes an update on procedures they can legally perform in Michigan, current issues in the dental field and current issues in dental assisting. Topics may include expanded functions, utilization concepts, and political issues. Semester Planned: Fall, Spring	Semester Prerequisite: Dental Hygiene Program Director Approval The student's clinical skills related to the practice of dental hygiene are evaluated for weaknesses and strengths. The student is then guided through the appropriate clinical study activities and evaluated periodically to eliminate the practical skill deficiencies identified. Semester Planned: Fall, Spring, Summer
CHCE 265 Physical Assessment Skills for Geriatric Nursing 1.75	CHCE 291 Dental Hygiene Didactic Remediation 1
Semester Prerequisite: Nurse (RN/LPN/GN/SN) This course is designed for nurses working with the older client in any setting. Normal age-related physical changes are contrasted with clinical signs of pathology. Students practice new skills in supervised sessions with live models. There is emphasis on interpreting important findings and clearly documenting exam data. Semester Planned: Fall, Spring	Semester Prerequisite: Dental Hygiene Program Director Approval The student's cognitive skills related to the practice of dental hygiene are evaluated for weaknesses and strengths. The student is then guided through the appropriate independent study activities and evaluated periodically to eliminate the knowledge deficiencies identified. Semester Planned: Fall, Spring, Summer
CHCE 266 Focal Problems and Patient Care Issues in Geriatric Nursing 1.5	CHCE 292 Risk Management: Prevention and Reduction of Loss 3
Semester Prerequisite: Nurse (RN/LPN/GN/SN) This specialty course is designed for nurses working with the elderly client in any setting. Common, serious conditions are studied using physical assessment data to identify and document the problem. An overview of normal physical and physiologic changes in the aging client is the framework used to assess abnormal developments. Semester Planned: Fall, Spring	Semester Prerequisite: M.H.A.I.C. Selected, Approval Required Course provides an overview of the healthcare system and management functions necessary to control risk/promote quality; skills necessary to develop and maintain an effective loss prevention and risk financing program in a healthcare setting; healthcare law, the medical malpractice arena, and claims management principles. Semester Planned: Fall
CHCE 267 Therapeutic Communications .75	CHCE 293 Quality Review: Performance Evaluation and Process Improvement 3
Semester Prerequisite: Health Professional For health professionals with emphasis on the application of communication theory to practice in health care. Communication techniques useful in daily as well as crisis and difficult situations are included. Videotape, film clips, slides, role-playing, and a written assignment are utilized to enhance the student's learning. Semester Planned: Summer	Semester Prerequisite: M.H.A.I.C. Selected, Approval Required This course covers the history of quality assurance and the ways QA and QM have become integrated into the current healthcare system; the role of accreditation (JCAHO) and third party payor (MPRO) bodies in the review of physician practice and patient care; quality and peer review processes; data management; medical staff governance, credentialing, privileging; quality/risk issues in high risk clinical areas. Semester Planned: Spring
CHCE 273 Registered Nurse Critical Care Core Curriculum 3	CHCE 294 Practicum: Healthcare Risk Management and Quality Review 2.5
Semester Prerequisite: RN with Medical Surgery Experience A course for registered nurses practicing in critical care, preparing to work in critical care and/or considering taking the certification exam. Emphasis placed on the CCRN core course content which includes anatomy and physiology, pathophysiology of selected common conditions, related nursing interventions, and medical management. Semester Planned: Fall, Spring	Semester Prerequisite: M.H.A.I.C. Selected, Approval Required The student will select an approved topic and design an independent study/practicum related to risk management or quality review in their work setting. Each student may choose a CHCE 292, CHCE 293 faculty or an agency staff person as a mentor. A written project report is required from each student. Semester Planned: Spring
CHCE 274 Critical Care Registered Nurse Special Equipment .25	
Semester Prerequisite: CHCE 273/Departmental Approval This course emphasizes specific procedural guidelines for use of specialized equipment used to monitor the critically ill adult. Content includes pulmonary arterial lines, arterial lines, ventilatory management, temporary and permanent pacemakers, and intracranial pressure monitoring. Semester Planned: Fall, Spring	

<p>CHCE 295 Healthcare Risk Management and Quality Review Special Issues .5</p> <p>Semester Prerequisite: M.H.A.I.C. Selected, Approval Required This seminar will highlight a specially selected issue and examine how that issue impacts healthcare risk management and quality review. Semester Planned: Summer</p>	<p>CHDV 121 Child Care Curriculum: Cognitive & Language Development 1</p> <p>Semester Prerequisite: None This course provides an in-depth look at curriculum and activities which enhance cognitive and language development of children in early childhood programs. It focuses on designing developmentally appropriate activities which foster curiosity and exploration. Topics include math, science, language arts, and emergent literacy. CDA functional areas: cognitive and communication. Semester Planned: Fall</p>
<p>CHCE 296 Healthcare Risk Management and Quality Review Update 1</p> <p>Semester Prerequisite: M.H.A.I.C. Selected, Approval Required This seminar will be held yearly for graduates of the Healthcare Risk Management and Quality Review program to update their risk management skills and review new issues in loss prevention and quality review. Semester Planned: Fall</p>	<p>CHDV 122 Child Care Curriculum: Creative Development 1</p> <p>Semester Prerequisite: None This course provides an in-depth look at curriculum and activities which enhance the creative development of children in early childhood programs. Specific information on developmentally appropriate and open-ended activities in the areas of art, music, creative, and dramatic play with a variety of materials are shared. CDA functional area: creative. Semester Planned: Spring</p>
<p>CHCE 297 Dental Oral Pathology .5</p> <p>Semester Prerequisite: Dentist/RDHRDA Case histories will be presented where the student's objective is to formulate a differential diagnosis of an unknown oral lesion and propose a rational approach for evaluation and treatment of the patient. Lecture will also include a review of human embryology as it relates to developmental disturbances. Semester Planned: Fall, Spring</p>	<p>CHDV 130 Introduction to Child Care 1</p> <p>Semester Prerequisite: None This course introduces factors in providing quality day care. Topics include program planning and curriculum development; child growth and development; positive guidance and discipline skills; safety, health and nutrition; parent communication and involvement; professionalism. CDA functional area: learning environment, program management, and professionalism. Semester Planned: Fall, Spring, Summer</p>
<p>CHCE 299 Advanced Cardiac Life Support (ACLS) Instructor Seminar 2</p> <p>Semester Prerequisite: Basic Cardiac Life Support/ Advanced Cardiac Life Support Certification This course will train those health care professionals who are currently certified in Advanced Cardiac Life Support (ACLS), according to American Heart Association standards, as ACLS instructors. All participants are expected to recertify their ACLS skills at the time of the course. Prior assigned readings are mandatory. Semester Planned: Fall, Spring, Summer</p>	<p>CHDV 131 Family Day Care Management 2</p> <p>Semester Prerequisite: None This course presents a systematic approach to managing a family day care home and creating a positive learning environment for young children in a home setting. Topics include business aspects, program development, professionalism, managing personnel and organizing the environment. CDA functional areas: learning environment, program management, professionalism. Semester Planned: Spring</p>
<p>CHDV 101 Child Growth and Development: 0-5 years 4</p> <p>Semester Prerequisite: None Basic Skills Prerequisite: Reading Level 3; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule) This course examines the growth and development patterns of children (conception to 5 years) in physical, social, emotional, cognitive, and language development. Additional topics include nutrition, health, play, families, and the preschool experience. Students acquire skills in observing, recording, and interpreting child behavior. CDA: developmental context; functional area: healthy. Semester Planned: Fall, Spring, Summer</p>	<p>CHDV 151 Child Development Associate (CDA) Credentialing Preparation 2</p> <p>Semester Prerequisite: Departmental Approval This course examines credentialing procedures and competency standards for the Child Development Associate (CDA) Credentialing Assessment. Students complete the resource file, are observed using the CDA observation instrument and prepare for the CDA situational assessment. Content of the course covers the functional area of professionalism. Semester Planned: Spring</p>
<p>CHDV 111 Positive Guidance and Communication Skills With Children 4</p> <p>Semester Prerequisite: None This course, which includes field work, examines interaction skills and environmental structures which foster social and emotional growth in children. Topics include positive guidance and discipline; effective communication with children in child care; problem-solving; social skill development; group management; aggression prevention. CDA functional areas: self, social, guidance, communication, professionalism. Semester Planned: Fall, Spring</p>	<p>CHDV 184 Children and Stress 1</p> <p>Semester Prerequisite: None This course examines stress as it relates to children. Specific topics include symptoms and causes of stress; situations which are stressful for children; ways to help children cope with stress; techniques for reducing stress. Specific information on divorce, death, family violence and hospitalization are discussed. Semester Planned: Spring, Summer</p>
<p>CHDV 112 Building Relationships with Families in Child Care 2</p> <p>Semester Prerequisite: CHDV 111 Recommended This course examines ways to establish and maintain positive and productive relationships with families in child care programs. The focus includes understanding the parent's perspective, supporting the child's relationship with his/her family, encouraging parental involvement, communicating with parents. CDA functional area: families. Semester Planned: Spring, Summer</p>	<p>CHDV 185 Preventing Child Sexual Abuse: Teaching Personal Safety 1</p> <p>Semester Prerequisite: None This course explores preventing child sexual abuse through teaching personal safety to children. Topics include the sexually abusive situation, behavioral indicators, appropriate adult responses, legal mandates, and reporting protocol. It emphasizes appropriate ways of teaching personal safety to children, selecting personal safety materials, and adult concerns when teaching it. Semester Planned: Fall</p>
<p>CHDV 113 Health and Safety issues in Child Care 1</p> <p>Semester Prerequisite: None This course examines health and safety issues in child care homes and centers. Topics include understanding and preventing communicable illnesses; bloodborne pathogens; safe equipment and play areas; preventing accidents; dental hygiene; nutrition and health and safety education. It addresses the CDA competency of a safe, healthy, learning environment. Semester Planned: Fall</p>	<p>CHDV 186 Children's Self Esteem and Positive Discipline 1</p> <p>Semester Prerequisite: None This course looks at children's self esteem: what it is, where it comes from, how it can be fostered or changed in both homes and child care. It focuses on practical suggestions and teaches positive discipline techniques that build self esteem. CDA functional area: self, guidance. Semester Planned: Fall, Summer</p>
<p>CHDV 120 Child Care Curriculum: Physical Development 1</p> <p>Semester Prerequisite: None This course provides an in-depth look at developing curriculum and activities which enhance the development of physical and motor skills of children in early childhood programs. It includes specific information on developmentally appropriate activities for fine motor, gross motor, and sensory development for a variety of ages. CDA functional area: physical. Semester Planned: Summer</p>	<p>CHDV 188 Caring for Young Children with Special Needs 2</p> <p>Semester Prerequisite: None This course focuses on young children with special needs and their families. It addresses identification of children with disabilities or in "at-risk" categories; community services; inclusion in least restrictive environments; family-centered intervention; communication skills which enhance work with children with special needs and their families in various settings. Semester Planned: Summer</p>

- CHDV 189 Helping Children Value Diversity** 1
Semester Prerequisite: None
 This course explores the various cultural groups and family structures that children encounter. It presents activities that caregivers can use to aid children in recognizing, valuing, and respecting diversity. Development of multi-cultural and anti-bias curriculum is emphasized.
 Semester Planned: Spring
- CHDV 201 Meeting the Special/Diverse Needs of Children in Child Care** 3
Semester Prerequisite: None
 This course focuses on the special and diverse individual needs of children in the child-care setting, including handicapping conditions and cultural diversity. It includes identifications of various categories of exceptionality and at-risk factors; mainstreaming, identification of resources; working with the community support system and the family.
 Semester Planned: Fall
- CHDV 220 Curriculum and Learning Environments for Preschoolers** 4
Semester Prerequisite: CHDV 101, CHDV 111/Departmental Approval
 This course, with field work, explores developmentally appropriate preschool programming which promotes physical, cognitive, language and creative development. Emphasis is on active involvement of children in concrete experiences. Other topics include appropriate learning environments; materials and equipment; children's learning objectives. CDA functional areas: learning environment; creative, physical, cognitive, and communication.
 Semester Planned: Spring
- CHDV 221 Infant-Toddler Program Development** 3
Semester Prerequisite: CHDV 101/Concurrently
 This course, which includes field work, explores physical and emotional environments needed for quality child care for infants and toddlers. Focus includes developing nurturing skills; developmentally appropriate activities and materials; managing schedules and routines; observation and record-keeping skills. CDA functional areas: safe, healthy, learning environment; physical, cognitive, communication; program management.
 Semester Planned: Fall, Summer
- CHDV 222 School-Age Child Care Program Development** 2
Semester Prerequisite: None
 This course examines the development of programs to meet the developmental characteristics of school-aged children (ages 5–12) outside of the elementary classroom. Content includes growth and development patterns in the areas of physical, cognitive, social and emotional; appropriate equipment and activities; environment and program structure; individual and group management.
 Semester Planned: Spring, Summer
- CHDV 230 Child Care Center Administration** 2
Semester Prerequisite: CHDV 220/Departmental Approval
 This course examines the administrator's role in directing an early childhood center and in providing a systematic approach to program management. Topics include goal-setting, safety, licensing, health and nutrition, policy development, business techniques and personnel management. CDA functional areas: safe, program management, professionalism.
 Semester Planned: Spring
- CHDV 281 Issues in Teaching in Child Care** 2
Semester Prerequisite: CHDV 220, CHDV 282 Concurrently, Departmental Approval
 This course accompanies the Child Development Practicum, CHDV 282. It explores the professional role of the teacher in implementing the children's daily program. Students gain skill in planning, goal-setting and evaluation. CDA functional areas: program management, professionalism.
 Semester Planned: Fall, Spring
- CHDV 282 Child Development Practicum** 2
Semester Prerequisite: CHDV 220, CHDV 281 Concurrently, Departmental Approval
 A supervised field experience working directly with children in a child-care program. Students gain skill in planning and implementing the daily children's program, and in setting and assessing goals for individual children and the classroom.
 Semester Planned: Fall, Spring
- CHEM 120 Basic General, Organic and Biological Chemistry** 4
Semester Prerequisite: 2.0 Minimum in MATH 040/MATH 050/Placement Test
Basic Skills Prerequisite: Reading Level 2; Writing Level (See Class Schedule)
 Introduces topics in general, organic, and biological chemistry that are used in health-related occupations. Included are scientific measurement, atomic structure and bonding, chemical equations and stoichiometry, solutions, acids, bases, buffers, gas behavior, nuclear radiation, organic functional groups, and the biologically important compounds: carbohydrates, lipids, and proteins.
 Semester Planned: Fall, Spring, Summer
- CHEM 125 Basic Chemistry** 4
Semester Prerequisite: 2.0 Minimum in MATH 062/Placement Test
Basic Skills Prerequisite: Reading Level 2; Writing Level (See Class Schedule)
 Intended for students who have not had high school chemistry or who require a refresher course. Measurement, problem solving, chemical formulas, chemical equations, stoichiometry, atomic structure, chemical bonding, gas laws, solutions, and acids and bases are emphasized.
 Semester Planned: Fall, Spring, Summer
- CHEM 130 Biochemistry** 4
Semester Prerequisite: 2.0 Minimum in CHEM 120/CHEM 125
 This course is designed to provide an understanding of the chemistry of life processes. Topics include: organic functional groups, enzymes, carbohydrates, lipids, proteins, metabolic pathways, nucleic acids, biochemical genetics, blood and respiratory chemistry, urine, electrolytes, acid-base balance, hormones, and nutrition.
 Semester Planned: Fall, Spring, Summer
- CHEM 135 Chemistry in Society** 4
Semester Prerequisite: 2.0 Minimum in MATH 040/MATH 050/Placement Test
 A general education course which presents chemistry to non-science majors, who must function and make decisions in a society shaped by science and technology. Chemistry knowledge is introduced and applied on a need-to-know basis with respect to issues in society that have significant chemistry components.
 Semester Planned: Fall, Spring, Summer
- CHEM 151 General Chemistry Lecture I** 4
Semester Prerequisite: 2.0 Minimum in MATH 112, CHEM 125/High School Chemistry, Placement Test
 The first of two semester courses designed to provide an in-depth introduction to general chemistry for students who plan careers in the health professions, physical sciences, biological sciences, or engineering. Topics discussed include measurement, aqueous reactions, stoichiometry, thermochemistry, atomic structure, bonding, and modern materials.
 Semester Planned: Fall, Spring, Summer
- CHEM 152 General Chemistry Lecture II** 3
Semester Prerequisite: 2.0 Minimum in CHEM 151, MATH 121
 The second of two semester courses designed to provide an in-depth introduction to general chemistry for students who plan careers in the health professions, sciences, or engineering. Topics include kinetics, ionic equilibria, thermodynamics, electrochemistry, descriptive chemistry, and nuclear chemistry.
 Semester Planned: Fall, Spring, Summer
- CHEM 161 General Chemistry Laboratory I** 1
Semester Prerequisite: 2.0 Minimum in CHEM 151/Concurrently
 Laboratory course designed to complement CHEM 151. Stresses basic laboratory techniques, writing lab reports, and critical thinking exercises. Topics include density determination, synthesis, empirical formulas, crystallization, gas laws, pH and water hardness.
 Semester Planned: Fall, Spring, Summer
- CHEM 162 General Chemistry Laboratory II** 1
Semester Prerequisite: 2.0 Minimum in CHEM 161, CHEM 152/Concurrently
 CHEM 162 is the second semester general chemistry laboratory course. The main focus of the course is inorganic synthesis and analysis.
 Semester Planned: Fall, Spring, Summer
- CHEM 182 Introductory Organic Chemistry** 3
Semester Prerequisite: 2.0 Minimum in CHEM 151
 A survey of the principles of organic chemistry. Introduces the student to structure, nomenclature, chemical and physical properties, selected characteristics, preparations and reactions of the most common classes of organic compounds. Other topics include polymers, optical isomerism, and selected reaction mechanisms.
 Semester Planned: Spring

CHEM 192 Introductory Organic Chemistry Laboratory	1	CHEM 192 Introductory Organic Chemistry Laboratory	1
Semester Prerequisite: 2.0 Minimum in CHEM 182/Concurrently		Designed for students in majors such as packaging, agriculture, and forestry who require only one credit of organic lab. It gives students an introduction to common techniques, equipment, and chemicals found in an organic laboratory. Particular attention is given to compounds studied in CHEM 182.	
Designed for students in majors such as packaging, agriculture, and forestry who require only one credit of organic lab. It gives students an introduction to common techniques, equipment, and chemicals found in an organic laboratory. Particular attention is given to compounds studied in CHEM 182.		Semester Planned: Spring	
CHEM 251 Organic Chemistry Lecture I	4	CHEM 251 Organic Chemistry Lecture I	4
Semester Prerequisite: 2.0 Minimum in CHEM 152		The first lecture course of a two-semester sequence in organic chemistry for chemical engineering, chemistry, or preprofessional majors. Topics include structure and bonding, hybridization, nomenclature, stereochemistry, thermodynamics and kinetics of organic reactions, and functional groups including reactions and mechanisms.	
The first lecture course of a two-semester sequence in organic chemistry for chemical engineering, chemistry, or preprofessional majors. Topics include structure and bonding, hybridization, nomenclature, stereochemistry, thermodynamics and kinetics of organic reactions, and functional groups including reactions and mechanisms.		Semester Planned: Fall, Spring	
CHEM 252 Organic Chemistry Lecture II	4	CHEM 252 Organic Chemistry Lecture II	4
Semester Prerequisite: 2.0 Minimum in CHEM 251		Continuation of CHEM 251. Topics include aromatic compounds, spectroscopy, organometallic compounds, aldehydes and ketones, carboxylic acids and their derivatives, amines, enolates, phenols, carbohydrates, lipids, proteins, and nucleic acids.	
Continuation of CHEM 251. Topics include aromatic compounds, spectroscopy, organometallic compounds, aldehydes and ketones, carboxylic acids and their derivatives, amines, enolates, phenols, carbohydrates, lipids, proteins, and nucleic acids.		Semester Planned: Spring, Summer	
CHEM 262 Quantitative Analysis	2	CHEM 262 Quantitative Analysis	2
Semester Prerequisite: CHEM 162		Theory and procedures of classical analytical techniques, including gravimetric analysis and titrimetric methods. Use of instruments such as spectrophotometers, pH meters, and others is also included.	
Theory and procedures of classical analytical techniques, including gravimetric analysis and titrimetric methods. Use of instruments such as spectrophotometers, pH meters, and others is also included.		Semester Planned: Fall	
CHEM 272 Organic Chemistry Laboratory	2	CHEM 272 Organic Chemistry Laboratory	2
Semester Prerequisite: CHEM 251/Concurrently		Designed for students (in majors such as chemistry, pre-med, and pre-pharmacy) who require more than one credit of organic lab. It gives students experience with the chemicals, techniques, and equipment commonly employed in organic laboratories. Particular attention is given to compounds studied in CHEM 251 and 252.	
Designed for students (in majors such as chemistry, pre-med, and pre-pharmacy) who require more than one credit of organic lab. It gives students experience with the chemicals, techniques, and equipment commonly employed in organic laboratories. Particular attention is given to compounds studied in CHEM 251 and 252.		Semester Planned: Spring	
CHIN 101 Elementary Chinese I	4	CHIN 101 Elementary Chinese I	4
Semester Prerequisite: None		Designed to help students build a foundation of Chinese language learning. Students will develop the basic skills in the areas of speaking, listening, reading, and writing. Different aspects of the Chinese culture will be introduced.	
Designed to help students build a foundation of Chinese language learning. Students will develop the basic skills in the areas of speaking, listening, reading, and writing. Different aspects of the Chinese culture will be introduced.		Semester Planned: Fall	
CHIN 102 Elementary Chinese II	4	CHIN 102 Elementary Chinese II	4
Semester Prerequisite: CHIN 101		Second course of a two-semester sequence in elementary Chinese. Further work on the four basic skills in the areas of speaking, listening, reading and writing, with increasing emphasis on vocabulary building, conversation and character writing. Different aspects of the Chinese culture will be discussed.	
Second course of a two-semester sequence in elementary Chinese. Further work on the four basic skills in the areas of speaking, listening, reading and writing, with increasing emphasis on vocabulary building, conversation and character writing. Different aspects of the Chinese culture will be discussed.		Semester Planned: Fall, Spring, Summer	
CHIN 115 Conversational Chinese I	3	CHIN 115 Conversational Chinese I	3
Semester Prerequisite: None		Designed for people who have little background in the Chinese language and culture but wish to acquire conversational skills. Students will learn proper pronunciation, the four tones of Putonghua—the standard vernacular, basic sentence structures, and practical vocabulary for everyday use. Selected aspects of Chinese culture will be introduced.	
Designed for people who have little background in the Chinese language and culture but wish to acquire conversational skills. Students will learn proper pronunciation, the four tones of Putonghua—the standard vernacular, basic sentence structures, and practical vocabulary for everyday use. Selected aspects of Chinese culture will be introduced.		Semester Planned: Fall	
CHSE 101 Acute Care Nurse Assistant/Orderly	6.5	CHSE 101 Acute Care Nurse Assistant/Orderly	6.5
Semester Prerequisite: None		This course will prepare an individual for employment as a Nursing Assistant/Orderly in an acute-care hospital or home health care. The course will provide the knowledge and skills needed in order to provide basic patient care safely.	
This course will prepare an individual for employment as a Nursing Assistant/Orderly in an acute-care hospital or home health care. The course will provide the knowledge and skills needed in order to provide basic patient care safely.		Semester Planned: Fall, Spring, Summer	
CHSE 106 Long-Term Care Nurse Aide Update	1.5	CHSE 106 Long-Term Care Nurse Aide Update	1.5
Semester Prerequisite: Nurse Aide/Approval		This course is designed to update the patient care skills and knowledge of the certified long-term care nurse aide. This educational update may be individualized to meet the needs of nurse aides within a long-term care facility.	
This course is designed to update the patient care skills and knowledge of the certified long-term care nurse aide. This educational update may be individualized to meet the needs of nurse aides within a long-term care facility.		Semester Planned: Fall, Spring, Summer	
CHSE 108 Long-Term Care Nurse Aide	4	CHSE 108 Long-Term Care Nurse Aide	4
Semester Prerequisite: None		This course will prepare women and men to be members of the long-term nursing care team. This is a state-approved certified course and will provide specific knowledge and skills required for a nurse aide to function in a long-term care nursing facility.	
This course will prepare women and men to be members of the long-term nursing care team. This is a state-approved certified course and will provide specific knowledge and skills required for a nurse aide to function in a long-term care nursing facility.		Semester Planned: Fall, Spring, Summer	
CHSE 111 Medical Insurance Billing I	3	CHSE 111 Medical Insurance Billing I	3
Semester Prerequisite: CHSE 121/Equivalent		First course in a two-semester sequence introduces the student to insurance billing, diagnostic and procedure coding for physician billing, and comprehensive billing directions for Medicare. The student must have a grade of 2.5, or better, to continue with Medical Insurance Billing II.	
First course in a two-semester sequence introduces the student to insurance billing, diagnostic and procedure coding for physician billing, and comprehensive billing directions for Medicare. The student must have a grade of 2.5, or better, to continue with Medical Insurance Billing II.		Semester Planned: Fall	
CHSE 112 Medical Insurance Billing II	3	CHSE 112 Medical Insurance Billing II	3
Semester Prerequisite: 2.5 Minimum in CHSE 111		Second course in a two-semester sequence introduces the student to insurance billing, diagnostic and procedure coding for physician billing, and comprehensive billing directions for Medicare. The student must have a grade of 2.5, or better, to continue with Medical Insurance Billing II.	
Second course in a two-semester sequence introduces the student to insurance billing, diagnostic and procedure coding for physician billing, and comprehensive billing directions for Medicare. The student must have a grade of 2.5, or better, to continue with Medical Insurance Billing II.		Semester Planned: Spring	
CHSE 121 Medical Terminology for Allied Health I	2.5	CHSE 121 Medical Terminology for Allied Health I	2.5
Semester Prerequisite: None		Medical Terminology I will provide a basic knowledge of word building, and use, pronunciation, and spelling of medical terms. The use of medical terms in periodicals, textbooks, and medical care areas will be stressed. It provides a sound basis for those students interested in health careers.	
Medical Terminology I will provide a basic knowledge of word building, and use, pronunciation, and spelling of medical terms. The use of medical terms in periodicals, textbooks, and medical care areas will be stressed. It provides a sound basis for those students interested in health careers.		Semester Planned: Fall, Spring, Summer	
CHSE 122 Medical Terminology for Allied Health II	2.5	CHSE 122 Medical Terminology for Allied Health II	2.5
Semester Prerequisite: CHSE 121		Medical Terminology II will teach the student to utilize medical terminology in context by applying terms to the function and structure of body systems and specific disease conditions. Students will build on knowledge learned in Medical Terminology I.	
Medical Terminology II will teach the student to utilize medical terminology in context by applying terms to the function and structure of body systems and specific disease conditions. Students will build on knowledge learned in Medical Terminology I.		Semester Planned: Fall, Spring, Summer	
CHSE 126 Medical Terminology for Insurance Examiners	1.25	CHSE 126 Medical Terminology for Insurance Examiners	1.25
Semester Prerequisite: Medical Technician/Insurance Examiner/Approval		Medical terminology is a technically exact vocabulary used by professionals to speak and write precisely. This medical terminology course is designed for insurance examiners and insurance medical technicians. The use of medical terms in records and specific medical areas will be stressed.	
Medical terminology is a technically exact vocabulary used by professionals to speak and write precisely. This medical terminology course is designed for insurance examiners and insurance medical technicians. The use of medical terms in records and specific medical areas will be stressed.		Semester Planned: Fall, Spring, Summer	
CHSE 132 Health Unit Clerk/Coordinator	8	CHSE 132 Health Unit Clerk/Coordinator	8
Semester Prerequisite: CHSE 121		Course is designed to introduce the student to basic Health Unit Coordinator skills. Subject matter will include communication skills, computers, assertiveness, chart forms, admissions, surgicals, transfers, discharges, death and dying, pharmacology, laboratory tests, transcribing physician orders and job application skills. Clinical component is included.	
Course is designed to introduce the student to basic Health Unit Coordinator skills. Subject matter will include communication skills, computers, assertiveness, chart forms, admissions, surgicals, transfers, discharges, death and dying, pharmacology, laboratory tests, transcribing physician orders and job application skills. Clinical component is included.		Semester Planned: Fall, Spring	
CHSE 134 Health Unit Clerk Certification Update	5	CHSE 134 Health Unit Clerk Certification Update	5
Semester Prerequisite: Health Unit Clerk Coordinator		This seminar is to assist the Health Unit Coordinator in preparation for the HUC National Certification Exam. The seminar includes an introduction to anatomical structure, medical terms, patient charts, transcription of physician orders, HUC procedures, management of human relations, prioritizing, and communication skills.	
This seminar is to assist the Health Unit Coordinator in preparation for the HUC National Certification Exam. The seminar includes an introduction to anatomical structure, medical terms, patient charts, transcription of physician orders, HUC procedures, management of human relations, prioritizing, and communication skills.		Semester Planned: Fall, Spring, Summer	
CHSE 143 Phlebotomy Technician	4	CHSE 143 Phlebotomy Technician	4
Semester Prerequisite: None		This course is designed to prepare a person to function as a phlebotomy technician. It will provide the knowledge and skill necessary to safely and skillfully obtain a blood specimen from a patient. The course includes theory, lecture, campus practice laboratory, and clinical observation. Students practice on each other.	
This course is designed to prepare a person to function as a phlebotomy technician. It will provide the knowledge and skill necessary to safely and skillfully obtain a blood specimen from a patient. The course includes theory, lecture, campus practice laboratory, and clinical observation. Students practice on each other.		Semester Planned: Fall, Spring	

CHSE 145 Central Service Technician	4.5	CHSE 215 Health Careers Directed Study	1.5
Semester Prerequisite: None Prepares individuals to function competently in the Central Service Department of a health care facility. Duties include (but are not limited to) processing of patient care equipment, supplies, and instruments for use in all departments. Includes principles and practices of decontamination, cleaning, disinfection, sterilization, and distribution of medical/surgical supplies. Semester Planned: Fall		Semester Prerequisite: Graduate Nurse: Diploma/ADN/BSN/ Departmental Approval A directed study course for international students and inactive nurses. This course focuses on nursing practice in the American health-care system, including use of nursing process, roles, dependent/independent activities, specialty equipment, etc. Observations in local hospitals, lectures, skills practice sessions, and independent study may all be used. Semester Planned: Fall, Spring, Summer	
CHSE 146 Central Service Update	.5	CHSE 221 Management of Aggressive Behavior	1
Semester Prerequisite: Central Service Personnel This course shall provide a review of current concepts and practices and update new information within the Central Service Department. It shall provide needed education for Central Service personnel to perform with competence and maintain established standards as detailed by regulatory agencies. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Special Transportation Employee/Approval This course includes the assessment of individuals and environment, causes and exacerbators of aggressions, preventive measures to avoid or de-escalate a risk situation, and therapeutic interventions. Learned material will be reinforced with role-playing, assessment of videotaped situations, and demonstration of appropriate physical techniques. Semester Planned: Fall, Spring	
CHSE 182 Medical Hospital Billing	2	CHSE 222 Special Transportation Health Care	2
Semester Prerequisite: None This one-semester course is designed to teach the student each phase of hospital insurance billing, from receiving patient information until the payment is received. Participation in class discussions and work sessions is expected by all students. Presentation of materials will be lectures, discussions, and work sessions. Semester Planned: Fall, Spring		Semester Prerequisite: Special Transportation Employee/Approval Course is designed for special transportation health-care personnel/bus drivers/assistants who transport medically handicapped or mentally fragile individuals. This course covers various medical diseases and treatments, and provides practice skills pertinent for job performance. Semester Planned: Fall, Spring, Summer	
CHSE 201 Dietary Manager I	6	CHSE 223 Health Care Seminar—Special Transportation	.5
Semester Prerequisite: Departmental Approval The first course in a two-semester sequence which will prepare students for a career as a Dietary Manager. The course will include both classroom and field experience. Topics such as the role of the supervisor, quality assurance, and nutritional principles will be included. Semester Planned: Fall		Semester Prerequisite: Special Transportation Employee/Approval This course is for special transportation personnel and other human service personnel to teach ways of reducing exposure and transmission of various infectious diseases. The content will include etiology, sources of transmission and symptomology of various infections: Hepatitis B, HIV and Herpes. Semester Planned: Fall, Spring, Summer	
CHSE 202 Dietary Manager II	6	CHSE 224 Special Transportation Health Seminars	.25
Semester Prerequisite: CHSE 201 The second course in a two-semester sequence which will prepare students for a career as a Dietary Manager. This course will include both classroom and field experience. Students will be prepared to obtain both state and national credentials as a Dietary Manager. Semester Planned: Spring		Semester Prerequisite: None This seminar is designed as a yearly review and updating of skills in areas of need as designated by the contracting agency. It could include, but is not limited to, medical emergencies, airway management and oxygen therapy, communication skills, and physical management of aggressive behavior. Semester Planned: Fall, Spring, Summer	
CHSE 205 Advanced Dietary Therapy	2	CHSE 225 Care of the Medically Fragile Child	1.5
Semester Prerequisite: CHSE 201/Nutrition Class A one-semester course which is designed to provide advanced knowledge of diet therapy and nutritional care for Dietary Managers. The course will include knowledge of disease states, as well as laboratory data and nutritional assessment techniques as they relate to providing adequate nutritional care to patients. Semester Planned: Summer		Semester Prerequisite: None This course is designed for healthcare personnel who work with and/or provide care for the medically fragile child. Content will include diseases and medical conditions common to the fragile child. Basic anatomy and physiology, potential problems, medications and their side effects will also be covered. Semester Planned: Fall, Spring, Summer	
CHSE 207 Dietary Manager Update	.5	CHSE 226 School Bus Health Care	2
Semester Prerequisite: Dietary Manager Seminar designed for Dietary Managers. A variety of current issues and topics specific to the role of the DM will be included. This seminar would be helpful in preparation for the DM credentialing examination. Semester Planned: Fall, Spring		Semester Prerequisite: Special Transportation Employee/Approval Course is designed for special transportation health care personnel/bus drivers/assistants who transport medically handicapped or mentally fragile individuals. This course covers various medical diseases, treatments, and provides practice skills pertinent for job performance. This course includes dealing with aggressive behavior and steps in first aid. Semester Planned: Fall, Spring, Summer	
CHSE 210 RN State Board Update	.75	CHSE 231 Pharmacology of Substance Abuse	2
Semester Prerequisite: Graduate Nurse: Diploma/ADN/BSN/ Department Approval This course incorporates 12 hours of directed independent study in basic psychiatric nursing practice or medical-surgical, obstetrical, or pediatric nursing practice. Students work through progressive, structured activities including home study, class participation, group discussion, and practice tests to challenge critical-thinking skills in complex simulated patient scenarios. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Chemical and physiological nature of substances (alcohol, hard drugs, amphetamines) which have addiction possibilities will be discussed. Required course in the Substance Abuse Certificate Program. Emphasis on pharmacology of substance abuse, detection, and identification of physiological responses specific to various substances. Includes psychological aspects of substance use and abuse. Semester Planned: Fall	
CHSE 213 Basic Psychiatric Technician	4		
Semester Prerequisite: Interview, Departmental Approval This course covers concepts of personality development, identification of mental illnesses, patient rights, aspects of confidentiality, therapeutic interventions, and specific means of evaluating patient care. Supervised clinical experience provides opportunities for students to apply classroom material to practical situations. Semester Planned: Fall, Spring			

<p>CHSE 232 Overdose Crisis Intervention 1.5</p> <p>Semester Prerequisite: None</p> <p>Students will attain crisis intervention knowledge of how to recognize a drug/alcohol overdose, assess the degree and type of impairment, and learn how to provide related life-support aid. Students will learn how to use existing resources in supplementing aid and transporting patients.</p> <p>Semester Planned: Spring</p>	<p>CISB 105 Advanced Microcomputer Applications 3</p> <p>Semester Prerequisite: CISB 100</p> <p>Students in this course work with and expand software skills learned in CISB100. Students learn spreadsheet skills such as linked files, macros, and database; database skills such as indexing and query criteria; word processing skills such as mailmerge and macros. Data communications and business graphics are also covered.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CHSE 235 Pharmacy Technician 4</p> <p>Semester Prerequisite: MATH 040/MATH 050 Competency</p> <p>This course is designed to introduce students to the skills necessary for a pharmacy technician position in a hospital or retail pharmacy. Students will be prepared to function with knowledge and accuracy in dispensing and control of drugs in either setting.</p> <p>Semester Planned: Fall</p>	<p>CISB 107 DOS Management 1</p> <p>Semester Prerequisite: CISB 104</p> <p>Advanced concepts in managing a DOS based operating system. Techniques are presented in the areas of memory, allocation, system organization, batch files, software conflict detection and correction, disk compression, and virus detection and prevention. Assignments include the use of DOS provided and third party software in diagnosing and optimizing system performance.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CHSE 236 Pharmacology Technician Externship 2</p> <p>Semester Prerequisite: CHSE 235</p> <p>The Pharmacology Technician Externship emphasizes the technical nature of the skills required to practice in a pharmacy setting. The course is designed to provide practical application of classroom theory to the health care setting.</p> <p>Semester Planned: Spring</p>	<p>CISB 110 Documentation of Computer Systems 3</p> <p>Semester Prerequisite: None</p> <p>This course provides the student with an understanding of the various types of documentation used in professional computer systems. Topics include analytical documentation, system documentation, program documentation, operations documentation, standards and procedures manuals, and training manuals.</p> <p>Semester Planned: Spring</p>
<p>CHSE 240 Dietary Aide 5.5</p> <p>Semester Prerequisite: None</p> <p>This course is designed to educate the student in the principles of dietary job responsibilities. The student will learn knowledge of diets, food preparation, sanitation and safety techniques. The course content will be subdivided into lecture, campus lab, and clinical lab.</p> <p>Semester Planned: Fall, Spring</p>	<p>CISB 111 Introduction to Operations 3</p> <p>Semester Prerequisite: CISB 100/Concurrently</p> <p>This course is an introduction to the concepts and terminology used in computer operations. Topics include the classifications, functions, and operations of hardware, operating systems, and software. The responsibilities of the computer operator are discussed.</p> <p>Semester Planned: Fall</p>
<p>CHSE 241 Housekeeping Aide 5.5</p> <p>Semester Prerequisite: None</p> <p>This course is designed to educate the student in the principles of housekeeping job responsibilities. The student will learn knowledge of various cleaning techniques and their application in specialty clinical areas. The course content will be subdivided into lecture, campus, and clinical lab.</p> <p>Semester Planned: Fall, Spring</p>	<p>CISB 119 Introduction to Windows Programming With Visual BASIC 4</p> <p>Semester Prerequisite: MATH 062/Equivalent</p> <p>This course introduces students to windows programming using the Visual Basic programming environment. Students learn to develop business applications by designing and creating a user interface and writing the necessary procedures. Students also learn and use logic development tools and object oriented programming techniques.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CHSE 245 Executive Housekeeping 1</p> <p>Semester Prerequisite: Housekeeping Employee</p> <p>A series of seminars on required or elective topics defined by the NEHA. Topics include (but are not limited to): housekeeping techniques, safety, work controls, management, budgeting, and purchasing. Upon successful completion of this program, the student will be eligible for certification by NEHA.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CISB 120 Introduction to Programming and Logic Using BASIC 4</p> <p>Semester Prerequisite: MATH 062/Equivalent</p> <p>A first course in computer programming and programming logic for computer information majors and others wanting an intensive introduction to problem-solving techniques using the QuickBASIC programming language.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CISB 100 Introduction to Computer Information Systems 3</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Reading Level 3; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule)</p> <p>This course provides an introduction to computers, their role in managing business information systems, their influence on society, and their use in personal productivity. A hands-on introduction to major microcomputer tools, including DOS and word processing, spreadsheet, database management, desktop publishing, and communication applications.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CISB 121 Programming in BASIC Language 3</p> <p>Semester Prerequisite: CISB 100, CISB 120</p> <p>This course is a second in the sequence of two courses in BASIC language programming. Topics include sequential and random access files, screen formatting and editing, menu-driven systems, simulations, and program maintenance.</p> <p>Semester Planned: Fall, Spring</p>
<p>CISB 101 Business Communications Technology 2</p> <p>Semester Prerequisite: None</p> <p>This course presents telecommunications technology in the perspective of business use. It provides a non-technical framework to understand and effectively use the latest technology. Subject areas include telephone systems and computer communications systems. Applications explored include on-line databases, facsimile systems, and computer networks.</p> <p>Semester Planned: Fall, Spring</p>	<p>CISB 122 Advanced Windows Programming With Visual BASIC 3</p> <p>Semester Prerequisite: CISB 100, CISB 119</p> <p>A second course in the Visual Basic programming sequence. This course presents programming in the Windows environment and leads to the creation of functional Windows application programs. Topics include advanced form design, sequential and random access files, calling objects from a DLL and using DDE and MDI in Windows.</p> <p>Semester Planned: Fall, Spring</p>
<p>CISB 104 Introduction to DOS 1</p> <p>Semester Prerequisite: None</p> <p>Students in this course develop skill in applying the most common commands of the disk operating system (DOS) used by IBM type microcomputers. Students also learn how to work with disk directories and how to create batch files.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CISB 125 Pascal for Business 3</p> <p>Semester Prerequisite: CISB 100, CISB 120</p> <p>Students will design, write, and test programs solving business related problems using structured techniques with Turbo Pascal. The syntax and style of modern Pascal programming in a business environment is introduced. Students learn the relationship between data structures and program complexity. Students explore object-oriented programming techniques and Windows interfaces.</p> <p>Semester Planned: Fall, Spring</p>

<p>CISB 130 Data Communications 3</p> <p>Semester Prerequisite: CISB 100, CISB 119/CISB 120</p> <p>The course provides a comprehensive introduction to data communications systems: the major components, how they are integrated, and the differences between the various networks and network carriers. Students learn the terminology and major protocols to a depth adequate to design application programs and discuss data communication topics with other professionals.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CISB 200 Information Systems Technology and Problem Solving 3</p> <p>Semester Prerequisite: None</p> <p>Fundamental changes have occurred in organizations with the application of computer technology. This course chronicles the source of that technology in science, explores the limitations of computer technology, examines the impact of the technology in business organizations and society, and develops problem-solving techniques for use in conjunction with computers. Students will practice TQM and work in teams.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CISB 140 Client/Server Computing 3</p> <p>Semester Prerequisite: CISB 100, CISB 119/CISB 120</p> <p>The student will study the various features of the client/server environment including both software and hardware components. Communications technology, network operating systems, and training issues are investigated. Case studies are used.</p> <p>Semester Planned: Fall, Spring</p>	<p>CISB 201 Information Systems Auditing 3</p> <p>Semester Prerequisite: CISB 100</p> <p>This course covers basic concepts important in the auditing of computer systems. The use of general and application controls of information systems will be discussed. Other topics include computer crimes, computer ethics, and auditing standards.</p> <p>Semester Planned: Fall</p>
<p>CISB 145 Operations Internship 1 2</p> <p>Semester Prerequisite: CISB 100, CISB 111, CISB 119/CISB 120</p> <p>This internship provides the student with on-the-job experience as a computer operator. The student may take the second internship concurrently with the first at a different site. This internship requires 160 hours of experience.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CISB 210 dBASE Programming 3</p> <p>Semester Prerequisite: CISB 105, CISB 120</p> <p>In this course students learn to use the dBASE language to develop applications programs. The course covers the major dBASE programming concepts and constructs and teaches how to use them in developing structured programs. Students also learn to use the Applications Generator and Template Language to simplify the programming task.</p> <p>Semester Planned: Fall, Spring</p>
<p>CISB 146 Operations Internship 2 2</p> <p>Semester Prerequisite: CISB 145</p> <p>This internship provides the student with on-the-job experience as a computer operator. The student may take the first internship concurrently with the second at a different site. This internship requires 160 hours of experience.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CISB 227 Advanced Concepts in Computer Information Systems .25</p> <p>Semester Prerequisite: Departmental Approval</p> <p>With this course students will learn advanced computer information systems topics as part of a class, an independent study, or a project. Grading criteria and course objectives are determined at the first meeting. The course requires a minimum of either 8 classroom hours or 12 independent study hours.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CISB 165 Forms Design and Control 2</p> <p>Semester Prerequisite: CISB 100</p> <p>This course covers all phases in the life-cycle of a form, from the initial recognition that a form is needed through the utilization of the form. Topics include layout of items, design of margins and print spacing, grades of paper, reproduction, binding, and forms processing by users.</p> <p>Semester Planned: Fall</p>	<p>CISB 228 Advanced Concepts in Computer Information Systems .5</p> <p>Semester Prerequisite: Departmental Approval</p> <p>With this course students will learn advanced computer information systems topics as part of a class, an independent study, or a project. Grading criteria and course objectives are determined at the first meeting. The course requires a minimum of either 16 classroom hours or 24 independent study hours.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CISB 170 COBOL I 4</p> <p>Semester Prerequisite: CISB 100, CISB 120</p> <p>An introductory course in COBOL programming emphasizing syntax, structured program design, and business application processing concepts. Coding standards and program documentation are introduced. Topics include control breaks, table processing, data validation, sort report processing, and sequential file maintenance.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CISB 229 Advanced Concepts in Computer Information Systems 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>With this course students will learn advanced computer information systems topics as part of a class, an independent study, or a project. Grading criteria and course objectives are determined at the first meeting. The course requires a minimum of either 32 classroom hours or 48 independent study hours.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CISB 175 Beginning RPG on the AS/400 3</p> <p>Semester Prerequisite: CISB 100</p> <p>Develops competence in RPG programming. This course includes problem definitions, file procedures, control-level processing, physical and logical file processing, and fundamentals of interactive programming. An AS/400 computer will be used and RPG/400 topics covered.</p> <p>Semester Planned: Fall, Spring</p>	<p>CISB 230 Introduction to Local Area Networks 3</p> <p>Semester Prerequisite: CISB 130</p> <p>The student in this course learns how to install and maintain a Local Area Network (LAN). Topics start with basic network concepts and terms, then advances students to a point where they can install and maintain a particular network system such as Novell.</p> <p>Semester Planned: Fall, Spring</p>
<p>CISB 176 AS/400 Environment 1</p> <p>Semester Prerequisite: None</p> <p>This course will provide the student with a customized set of materials about the AS/400 computer environment. The student and instructor will establish the specific course content from the available AS/400 tutorials and IBM Discover/Education courses the first week of class.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CISB 231 Advanced Local Area Networks 3</p> <p>Semester Prerequisite: CISB 230/Equivalent</p> <p>The student in this course learns advanced administration techniques for a typical Local Area Network such as Novell NetWare. Topics start with an in-depth review of networking technology, then advance students to a point where they can tune a network to achieve maximum performance.</p> <p>Semester Planned: Fall, Spring</p>
<p>CISB 177 AS/400 Operations 3</p> <p>Semester Prerequisite: CISB 176</p> <p>A hands-on course in AS/400 operations. The course will cover the AS/400 architecture and facilities; operational requirements, such as save and restore; hardware and software installation; configurations for local and remote communications, CL and CMD programming; system problem determination; and problem resolution.</p> <p>Semester Planned: Spring</p>	<p>CISB 235 Microcomputer Hardware Support 3</p> <p>Semester Prerequisite: CISB 100, CISB 104, CISB 130</p> <p>This course provides the student with practical, hands-on experience in installing, maintaining, and trouble-shooting microcomputer hardware and software. Topics include CPU, storage devices, add-on boards, video displays, printers, communication devices, software installation, and configuration.</p> <p>Semester Planned: Fall, Spring</p>
<p>CISB 180 C Programming with Business Application 3</p> <p>Semester Prerequisite: CISB 100, CISB 120</p> <p>Students will use professional development tools to become familiar with the "C" programming language by designing, implementing, and testing programming projects. Topics include pointers, linked lists, data structures, and dynamic memory allocation.</p> <p>Semester Planned: Fall, Spring</p>	

<p>CISB 236 Microcomputer Software Support 3</p> <p>Semester Prerequisite: CISB 107, CABS 195, CISB 119/CISB 120</p> <p>This course provides students with the skills necessary to diagnose and correct problems that microcomputer users frequently encounter in using software. The course covers installing operating systems, installing and upgrading applications, memory optimization, printer fonts, printer emulation, remote site support, telephone support, and software training.</p> <p>Semester Planned: Fall, Spring</p>	<p>CISB 260 Systems Analysis and Design 4</p> <p>Semester Prerequisite: CISB 100, CISB 119/CISB 120</p> <p>This course presents concepts and techniques used in development of computer business application systems. The traditional approach for systems development is presented and compared to the approach used in a Fourth Generation Environment. Structured techniques are utilized in the development approach as well as Computer Assisted Software Engineering (CASE) tools.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CISB 240 Operating Systems 3</p> <p>Semester Prerequisite: CISB 100, CISB 119/CISB 120</p> <p>Covers what operating systems are, why they exist, what they do, and how they interface with the operators and programmers. Main memory management and processor scheduling are studied. The MS-DOS, Windows, OS/2, UNIX, MUSIC, MVS, and VM operating systems are discussed.</p> <p>Semester Planned: Fall, Spring</p>	<p>CISB 261 Systems Implementation with CASE Tools 3</p> <p>Semester Prerequisite: CISB 260</p> <p>This course applies the concepts and techniques of systems analysis and design developed in CISB 260 into working systems. Computer Assisted Software Engineering tools will be used to develop a business computer system. Students will be formed into project teams for the course project.</p> <p>Semester Planned: Fall, Spring</p>
<p>CISB 245 Programming Internship 3</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This internship provides the student with on-the-job experience as a computer programmer. Two hundred hours of experience at a local computer information systems site are required. The student is expected to write or maintain programs, create documentation, learn job control commands, and work on interactive systems.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CISB 270 COBOL II 3</p> <p>Semester Prerequisite: CISB 170</p> <p>An advanced COBOL course covering indexed file creation and updating, sub-program concepts, and writing interactive programs. Copy libraries are used, and a system of related programs is completed as a class project.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CISB 247 Microcomputer Project 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>With this course students apply what they have learned about programming and systems development as a part of an internship, an independent study, or a project. Grading criteria and course objectives are determined at the first meeting. The course requires a minimum of 160 internship hours or 96 independent study hours.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CISB 271 COBOL/400: Implementing the COBOL Language on the AS/400 3</p> <p>Semester Prerequisite: CISB 170, AS/400 Experience</p> <p>This course provides the student with information and support necessary to master the implementation of Cobol programming in the AS/400 environment. Students will learn to use the user interfaces and relational file format native to the AS/400 as well as learning how to communicate between programs.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CISB 248 Advanced Concepts in Computer Information Systems 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>With this course students will learn advanced computer information systems topics as part of a class, an independent study, or a project. Grading criteria and course objectives are determined at the first meeting. The course requires a minimum for each credit earned of either 16 classroom hours or 48 independent study hours.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CISB 275 Advanced RPG on the AS/400 4</p> <p>Semester Prerequisite: CISB 175</p> <p>A detailed course covering fundamentals of the modern RPG programming language. The course will cover RPG/400 programming techniques, modular programming, relational database manipulation and techniques, and system interaction. The course will use an AS/400 computer in the native AS/400 environment.</p> <p>Semester Planned: Fall, Spring</p>
<p>CISB 249 Advanced Concepts in Computer Information Systems 3</p> <p>Semester Prerequisite: Departmental Approval</p> <p>With this course students will learn advanced computer information systems topics as part of a class, an independent study, or a project. Grading criteria and course objectives are determined at the first meeting. The course requires a minimum for each credit earned of either 16 classroom hours or 48 independent study hours.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CISB 278 Applied Integrated CASE 4</p> <p>Semester Prerequisite: CISB 260/CISB 275</p> <p>This detailed course covers computer assisted software engineering (CASE) in the Midrange environment as implemented using SYNON. The course will cover basic concepts of CASE, the role of CASE in system development, the role of data modeling, and system implementation using CASE. SYNON will be used on the AS/400 computer.</p> <p>Semester Planned: Fall</p>
<p>CISB 250 Database Concepts 3</p> <p>Semester Prerequisite: CISB 100, CISB 119/CISB 120</p> <p>Learning the objectives of a database organization and investigating the extent to which these objectives are met by current database management software. Normalization and database design are studied. The relational and CODASYL models are used.</p> <p>Semester Planned: Fall, Spring</p>	<p>CISB 280 C++ Language with OOP 4</p> <p>Semester Prerequisite: CISB 180</p> <p>Students will use the Borland Integrated Environment to become familiar with the C++ programming language and object-oriented programming and design by designing, implementing, and testing programming projects.</p> <p>Semester Planned: Fall, Spring</p>
<p>CISB 255 Hands-on Modern Expert System Development 3</p> <p>Semester Prerequisite: CISB 100, CISB 119/CISB 120</p> <p>In this hands-on course, students will learn the basics of expert system development and actually develop a small, working expert system. The techniques and development of more complex systems are studied. The general development and application of Artificial Intelligence is surveyed.</p> <p>Semester Planned: Spring</p>	<p>CISB 281 Visual C++ Programming 3</p> <p>Semester Prerequisite: CISB 122</p> <p>An introduction to the fundamentals of the modern usage of C++ as a control/linking program in the Windows environment. Emphasis will be placed on using existing classes and visual tools to rapidly create applications and linkages between applications. Students will learn to use object oriented techniques with a wide collection of existing C++ tools.</p> <p>Semester Planned: Fall, Spring</p>
<p>CISB 256 Multimedia in Business 3</p> <p>Semester Prerequisite: CISB 119/CISB 120</p> <p>A detailed course covering fundamentals of modern usage of multimedia in business. Students will not only apply problem-solving skills and instructional design techniques to evaluate multi-media applications, they will also develop and modify simple, but practical, multimedia applications and demonstrate skills learned in a multimedia project.</p> <p>Semester Planned: Spring</p>	<p>CISB 282 C/400: Implementing the C Language on the AS/400 3</p> <p>Semester Prerequisite: CISB 180, AS/400 Experience</p> <p>This course provides the student with information and support necessary to master the implementation of C programming in the AS/400 environment. Students will learn to use the user interfaces and relational file format between programming applications.</p> <p>Semester Planned: Fall, Spring, Summer</p>

<p>CISB 284 Certified Data Processor Exam Specialty Area Preparation .5 Semester Prerequisite: None Review seminar for the Certified Data Processor (CDP) exam. This seminar focuses on the portion of the exam unique to those seeking the CDP designation; concentration is on management topics. ICCP Core Exam seminars are recommended in addition to this seminar. Semester Planned: Spring, Summer</p>	<p>CIVL 126 Highway Construction Survey I 5 Semester Prerequisite: None This course introduces basic skills and techniques used in construction surveying. Covers office computations and developing skills necessary to do field work. Semester Planned: Fall, Spring</p>
<p>CISB 285 Certified Systems Professional Exam Specialty Preparation .5 Semester Prerequisite: None Review seminar for the Certified Systems Professional (CSP) exam. This seminar focuses on the portion of the exam unique to those seeking the CSP designation; concentration is on systems development topics. ICCP Core Exam seminars are recommended in addition to this seminar. Semester Planned: Spring, Summer</p>	<p>CIVL 127 Highway Construction Survey II 5 Semester Prerequisite: CIVL 126 Students will learn how to interpret highway construction plans, then develop horizontal and vertical control data needed to construct both bridges and roads. Semester Planned: Fall, Spring</p>
<p>CISB 286 Certified Computer Programmer Exam Specialty Preparation .5 Semester Prerequisite: None Review seminar for the Certified Computer Programmer (CCP) exam. This seminar focuses on the portion of the exam unique to those seeking the CCP designation, concentrating on procedural programming topics. ICCP Core Exam seminars are recommended in addition to this seminar. Semester Planned: Spring, Summer</p>	<p>CIVL 131 Traffic Technology 3 Semester Prerequisite: None This course introduces the basic principles of traffic engineering design, signing and pavement marking, traffic signalization and how these elements are used to improve motorists' safety. Emphasis is placed on the use of these devices in and around construction zones. Basic concepts on traffic flow and capacity analysis will be presented. Semester Planned: Fall, Spring</p>
<p>CISB 287 ICCP Core Exam Review Session 1 .5 Semester Prerequisite: None Review seminar for the certification exams from the Institute for Certification of Computer Professionals (ICCP). The other two core review seminars are recommended in addition to this seminar, as is the review seminar for either the CCP, CDP, or CSP. This seminar reviews (1) human and organizational framework and (2) associated disciplines. Semester Planned: Spring, Summer</p>	<p>CIVL 132 Construction Materials 5 Semester Prerequisite: TECH 110/Placement Test The students will study techniques and equipment used in constructing bridges, buildings, highways, and pipelines. Deals with the determination of properties of aggregates, concrete, and other bituminous materials. Teaches methods of designing concrete mixes for different uses and methods of sampling and testing. Comparison of building codes and construction specifications will be covered. Semester Planned: Fall, Spring, Summer</p>
<p>CISB 288 ICCP Core Exam Review Session 2 .5 Semester Prerequisite: None Review seminar for the certification exams from the Institute for Certification of Computer Professionals (ICCP). The other two core review seminars are recommended in addition to this seminar, as is the review seminar for either the CCP, CDP, or CSP. This seminar reviews (1) systems concepts and (2) systems development. Semester Planned: Spring, Summer</p>	<p>CIVL 135 Soils Technology 3 Semester Prerequisite: TECH 110/Placement Test Exploring, sampling, testing, and evaluating subsurface materials and their effect on construction are covered in this course. Introduction to methods of subsurface drainage, soil classifications and physical properties of soils. Includes discussion, demonstration, and performance with equipment used in density testing. Semester Planned: Fall, Spring</p>
<p>CISB 289 ICCP Core Exam Review Session 3 .5 Semester Prerequisite: None Review seminar for the certification exams from the Institute for Certification of Computer Professionals (ICCP). The other two core review seminars are recommended in addition to this seminar, as is the review seminar for either the CCP, CDP, or CSP. This seminar reviews (1) data and information and (2) technology. Semester Planned: Spring, Summer</p>	<p>CIVL 136 Hydrology and Highway Technology 5 Semester Prerequisite: TECH 110/Placement Test, CIVL 131 This course is an introduction to highway inventory, planning, organization, rudiments of finance, geometric design, earthwork, and drainage structures. Emphasis is placed on these elements as components of final highway plans. Analysis of precipitation and the attendant runoff and recharge will be introduced. Semester Planned: Fall, Spring</p>
<p>CIVL 101 Civil Drafting 4 Semester Prerequisite: TECH 090/DTDS 100 Civil Drafting is a course which emphasizes traverse and topographical drawing problems. The course will equip the student with the skills and line techniques, and the ability to prepare a clear, readable, graphical presentation from rough notes furnished by the survey party. Semester Planned: Fall, Spring, Summer</p>	<p>CIVL 188 Concrete Paving Inspector 3 Semester Prerequisite: Construction Experience This is an intensive course on the practical aspects of inspection and quality control of Portland Cement concrete paving projects. Semester Planned: Fall, Spring</p>
<p>CIVL 115 Survey Fieldwork 2 Semester Prerequisite: None This course consists of fieldwork using surveying equipment and techniques related to construction projects such as cloth tape, drag chain, chaining pins, levels, level rods, and transits. Semester Planned: Fall, Spring</p>	<p>CIVL 189 Concrete Paving 2 Semester Prerequisite: On-the-job Construction Experience/ Appropriate Technical Training This is a course on the practical aspects of inspection and quality control of Portland Cement concrete paving projects. Semester Planned: Fall, Spring</p>
<p>CIVL 120 Surveying 4 Semester Prerequisite: TECH 090/DTDS 100, TECH 110 Concurrently Introduces basic surveying practices and techniques. The course primarily consists of basic computational techniques along with field work involving the use of various pieces of surveying equipment and procedures (cloth tape, drag chain, level, transit, laser level, and electronic Total Station). Semester Planned: Fall, Spring</p>	<p>CIVL 200 Civil Mathematics 5 Semester Prerequisite: TECH 110 This course covers the applications of differential calculus and integral calculus to practical technical problems. Topics include related rates, maximum and minimum problems, and areas under curves. Semester Planned: Fall, Spring, Summer</p>
<p>CIVL 124 Route Survey 4 Semester Prerequisite: CIVL 120, Trigonometry This course covers computations involved in basic surveying along with construction surveying applications. Semester Planned: Fall, Spring</p>	<p>CIVL 241 Statics and Strength of Materials 5 Semester Prerequisite: TECH 110, CIVL 200/Concurrently This course introduces structural terminology and concepts. The general behavior of structural members in compression, stress, strain, creep, fatigue, yield, tension, shear, bending, and torsion due to different loading conditions are studied. Loads and forces, conditions of stability and equilibrium in structural frames, and free body analysis for reactions and member forces are considered in the course. Semester Planned: Spring</p>

<p>CJUS 101 Introduction to Criminal Justice 3</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Reading Level 6; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule)</p> <p>A survey course designed to provide students with a current, coordinated, and comprehensive overview of criminal justice as an institution and as a system. Emphasizes historical, philosophical, constitutional, and organizational perspectives.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CJUS 171 Emergency Dispatching II 4</p> <p>Semester Prerequisite: CJUS 170</p> <p>This course has been designed to introduce the student to effective communication skills, dispatch techniques, first aid and CPR techniques, telephone techniques, call-intake processing, and emergency medical dispatching. Simulation exercises are included.</p> <p>Semester Planned: Fall, Spring</p>
<p>CJUS 102 Crime Causes and Conditions 3</p> <p>Semester Prerequisite: None</p> <p>Why do some individuals pursue a life of crime? This course introduces and analyzes the past, present, and future of criminology. Sociological, psychological, and biological factors are examined to determine their interaction with and impact on criminal behavior.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CJUS 201 Criminal Justice Organization and Administration 3</p> <p>Semester Prerequisite: CJUS 101</p> <p>Examines the primary concepts of criminal justice organization and administration emphasizing processes and theories, communications, leadership, personnel, budgeting, planning, information management, and community relations.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CJUS 103 Criminal Law 3</p> <p>Semester Prerequisite: CJUS 101</p> <p>Study of substantive criminal law. Includes classification of crimes, common law concepts, and elements of specific crimes.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CJUS 202 Criminal Justice Management and Supervision 2</p> <p>Semester Prerequisite: None</p> <p>Identifying and analyzing managerial and supervisory functions in a diverse criminal justice work force. Focusing on the implementation of policy and procedure and upon the roles and responsibilities of supervising employees.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CJUS 106 Juvenile Problems: Control and Prevention I 3</p> <p>Semester Prerequisite: None</p> <p>This course emphasizes the legal foundation, as defined by Michigan law, upon which the criminal justice practitioner must rely in dealing with the juvenile offender and the juvenile victim.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CJUS 203 Criminal Procedure 3</p> <p>Semester Prerequisite: CJUS 101, CJUS 103</p> <p>Study of criminal procedural law. Includes laws of arrest, search and seizure, and admissions and confessions; suspect identification and rules of evidence.</p> <p>Semester Planned: Fall, Spring</p>
<p>CJUS 107 Juvenile Problems: Control and Prevention II 3</p> <p>Semester Prerequisite: CJUS 106</p> <p>Focuses on police and court procedures established for dealing with juveniles with an emphasis on the Michigan juvenile justice system and the agencies connected to the system.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CJUS 204 Criminal Investigation 4</p> <p>Semester Prerequisite: CJUS 103</p> <p>Examines the fundamentals of criminal investigation such as crime scene procedures, collection and preservation of physical evidence, interviewing, interrogation, and latent investigation.</p> <p>Semester Planned: Fall, Spring</p>
<p>CJUS 131 Introduction to Corrections 3</p> <p>Semester Prerequisite: None</p> <p>Introduction to agencies and processes within the correctional system. An examination of correctional officer behavior, corrections legislation, the courts, correctional institutions and their operation, and administration. Includes overview of history sentencing, probation, parole, and community corrections. This course is required for the corrections officer vocational certificate.</p> <p>Semester Planned: Fall, Spring</p>	<p>CJUS 205 Policing into the 21st Century 3</p> <p>Semester Prerequisite: CJUS 101</p> <p>This course is designed to provide the student with an understanding of the philosophy of Community Policing. As such, the components and processes involved in the implementation of non-traditional policing methods as well as the development of a partnership between the community and the police will be examined.</p> <p>Semester Planned: Fall, Spring</p>
<p>CJUS 133 Juveniles in Corrections 3</p> <p>Semester Prerequisite: None</p> <p>Legal aspects of the juvenile court process, detention case supervision, and juvenile after-care will be examined. Both public and private agencies will be discussed in the treatment of the juvenile offender.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CJUS 206 Interview and Interrogation 2</p> <p>Semester Prerequisite: None</p> <p>Provides students with the techniques and procedures utilized in conducting lawful, admissible, and successful investigative interviews and interrogations.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CJUS 134 Probation and Parole 3</p> <p>Semester Prerequisite: CJUS 101/CJUS 131</p> <p>An introductory level course in probation and parole with strong emphasis on counseling, interviewing skills, and supervision techniques. Students will also learn the mechanics of writing violation, progress, and pre-sentence reports.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CJUS 208 Organized Crime Activity 2</p> <p>Semester Prerequisite: None</p> <p>Provides a comprehensive overview of the nature, history and current status of organized crime. Analyzes the evolution of crime as an economic entity in legitimate, as well as illegitimate, areas of the business world.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CJUS 135 Legal Issues in Corrections 3</p> <p>Semester Prerequisite: CJUS 101/CJUS131</p> <p>Study of current constitutional, federal and state law as it pertains to penal institutions, inmates, and correctional employees. The course will provide students with insight into policy considerations behind state and federal law, legal process, court decisions, and inmate rights. This course is required for the correctional officer vocational certificate.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>CJUS 211 War on Drugs 2</p> <p>Semester Prerequisite: None</p> <p>This is a survey course covering the impact of drugs upon society in terms of work, law enforcement, schools, prevention treatment, prisons, and recovery programs and how it relates to the users, close family members, associates, or co-workers. Attention is given to what a criminal justice worker can do.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CJUS 170 Emergency Dispatching I 4</p> <p>Semester Prerequisite: None</p> <p>This course has been designed to introduce the student to the history and role of the telecommunicator, equipment systems utilized in dispatching, the correct spelling of police/fire/medical terminology, stress management, legal issues, reference sources, emergency plans, history of police/fire/EMS services, and hazardous materials.</p> <p>Semester Planned: Fall, Spring</p>	<p>CJUS 215 The Criminal Mind 2</p> <p>Semester Prerequisite: None</p> <p>An introduction to the working of the criminal mind. Basic concepts of mental functioning will be addressed with emphasis on behavioral motivation in criminal conduct.</p> <p>Semester Planned: Fall, Spring, Summer</p>
	<p>CJUS 216 Psychology of Sex Offenders 2</p> <p>Semester Prerequisite: None</p> <p>Examines the motivation of the sexual offender; background, personality characteristics, and common behaviors. Investigative techniques and procedures are also emphasized.</p> <p>Semester Planned: Fall, Spring, Summer</p>

CJUS 217 Psychology of Homicide	2	CJUS 261 Michigan Criminal Law and Procedure	3
Semester Prerequisite: None		Semester Prerequisite: Departmental Approval	
An introduction to the psychodynamics of homicide that establishes the basis of behavioral analysis and the fundamentals of crime scene investigation.		Designed for hands-on, practical instruction in criminal law and procedure as it pertains to law enforcement in the state of Michigan. Topics include crimes against persons and property, regulatory crimes, public order crimes, juvenile law admissions/confessions, laws of arrest, search and seizure, and suspect identification.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
CJUS 236 Basic Combat Firearms	3	CJUS 262 Patrol Procedures and Tactics	3
Semester Prerequisite: CJUS 235, Departmental Approval		Semester Prerequisite: Departmental Approval	
Intermediate instruction as a transition from bull's eye to field and combat shooting.		The course is designed to identify and utilize proper patrol techniques and procedures necessary for a police officer to function safely and effectively. Topics include preparation for patrol, types of patrol, responding to crimes in progress, road-blocks, civil process, handling abnormal persons, and officer survival.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
CJUS 242 Unarmed Defense	3	CJUS 263 Standard First Aid	2
Semester Prerequisite: None		Semester Prerequisite: Departmental Approval	
Hands-on techniques to prepare students to properly and effectively handle law enforcement related physical confrontations. Includes use of force decision-making skills, pressure points, control holds, and handcuffing.		Designed to identify the roles and responsibility of a law enforcement officer at the scene of a medical emergency based upon American Red Cross standard first aid and CPR training.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
CJUS 245 Report Writing in Criminal Justice	2	CJUS 264 Report Writing in Law Enforcement	1
Semester Prerequisite: CJUS 101/CJUS 131/CJUS 150/Approval		Semester Prerequisite: Departmental Approval	
Designed to meet the needs of criminal justice writing. Components include grammar, punctuation, sentences, paragraphs, styles of writing, and proper documentation of work effort. Frequent writing practice.		Designed to prepare the student to effectively and efficiently write a proper police report that will serve as a basis for the issuance of a warrant and court prosecution. Topics include obtaining information, basic English skills, criminal justice terminology, and proper formatting.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
CJUS 248 Physical Fitness for Criminal Justice	3	CJUS 265 Highway Traffic Operations	3
Semester Prerequisite: None		Semester Prerequisite: Departmental Approval	
Designed to assist the students in developing and enhancing their level of health and physical fitness in order that they may successfully complete certification and re-certification physical fitness criteria established in law enforcement and corrections. The course includes aerobic, strength building and stretching exercises along with nutrition information.		This course is designed to familiarize the student with the proper procedures for traffic control and enforcement. Emphasizes state motor vehicle laws and procedures, arrests and citations, O.U.I.L., and accident investigation.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
CJUS 250 Correctional Institutions	3	CJUS 266 Basic Police Science	3
Semester Prerequisite: None		Semester Prerequisite: Departmental Approval	
Examines the historical development of corrections institutions in the United States. The organizational structure, purpose, programs, security aspects, and prisoner due-process rights as well as the future of institutions will be examined. This course is required for the correctional officer vocational certificate.		The course studies are concerned with technical and physical techniques employed in the investigation of crime. The course involves traditional classroom as well as field experiences.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring	
CJUS 251 Correctional Clients	3	CJUS 267 Law Enforcement Physical Training	2
Semester Prerequisite: None		Semester Prerequisite: Departmental Approval	
Emphasis is placed on the needs, identities and development of the recipient of correctional services. Students will gain insight into the behavior and motivations of the corrections client and learn intervention strategies. This course is required for the correctional officer vocational certificate.		Designed to assist law enforcement students in developing and improving their physical fitness. The course includes running, aerobics, calisthenics, and stretching.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
CJUS 252 Community Based Corrections	3	CJUS 268 Precision Driving	3
Semester Prerequisite: CJUS 101/CJUS 131		Semester Prerequisite: Departmental Approval	
This course examines in detail the multitude of programs and services at the local level for the treatment of the offender. The impact of certain political, economic, and societal influences on corrections will also be reviewed.		The course is designed to identify and utilize proper driving techniques and procedures using the principles of precision driving. Course involves both classroom and hands-on driving.	
Semester Planned: Fall, Spring		Semester Planned: Fall, Spring	
CJUS 255 Human Relations in Criminal Justice	3	CJUS 281 Directed Independent Study	1
Semester Prerequisite: CJUS 101/CJUS 131		Semester Prerequisite: Departmental Approval	
This course focuses on understanding those aspects of interpersonal relations most directly linked to attainment of organizational and individual goals in work settings. This course is required for the correctional officer vocational certificate.		Sixteen hours of study and research are assigned per credit. Students are given criminal justice-related research assignments which will introduce them to research procedures and resources.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
CJUS 260 Criminal Investigation and Procedures	3	CJUS 282 Directed Independent Study	2
Semester Prerequisite: Departmental Approval		Semester Prerequisite: Departmental Approval	
Designed for hands-on, practical instruction in the following areas: crime scene processing, on-scene preliminary investigation, witness interviewing, suspect identification, latent prints, photography, child abuse, sexual assault, narcotics, and preparation for court.		Sixteen hours of study and research are assigned per credit. Students are given criminal justice-related research assignments which will introduce them to research procedures and resources.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	

<p>CJUS 283 Directed Independent Study 3</p> <p>Semester Prerequisite: Departmental Approval Sixteen hours of study and research are assigned per credit. Students are given criminal justice-related research assignments which will introduce them to research procedures and resources. Semester Planned: Fall, Spring, Summer</p>	<p>COOP 210 Cooperative Education (Technology) 3</p> <p>Semester Prerequisite: Departmental Approval This course provides technical students with professional and practical work experience in their career field. The student works for a co-op employer as a paid, temporary, part-time employee trainee in a planned, structured and supervised work experience. Students apply knowledge and skills learned in academic courses to real world situations. Semester Planned: Fall, Spring, Summer</p>
<p>CJUS 285 Law Enforcement Field Study 2</p> <p>Semester Prerequisite: Departmental Approval Sixteen eight-hour shifts are scheduled with an approved police department. Written reports are required. Semester Planned: Fall, Spring, Summer</p>	<p>CPOA 130 Seminar: Special Subjects .5</p> <p>Semester Prerequisite: None Seminars are designed to expand skills and abilities in the word processing field and are continually upgraded. Seminars CPOA 130 and CPOA 131 cover specific functions on various software packages. Semester Planned: Fall, Spring, Summer</p>
<p>CJUS 288 Corrections Field Study 3</p> <p>Semester Prerequisite: Departmental Approval The student will be placed in a local or state corrections facility that will allow him/her to experience many facets of correction operations. Weekly written reports are required and periodic meetings are mandatory. A minimum of 160 hours is required. Semester Planned: Fall, Spring, Summer</p>	<p>CPOA 131 Seminar: Special Subjects .75</p> <p>Semester Prerequisite: None Seminars are designed to expand skills and abilities in the word processing field and are continually upgraded. Seminars CPOA 130 and CPOA 131 cover specific functions on various software packages. Semester Planned: Fall, Spring, Summer</p>
<p>CNCP 100 Basic Machining Processes 3</p> <p>Semester Prerequisite: TECH 101, TECH 130 This course is designed for non-machinist/Computerized Numerical Control (CNC) programming majors who need an introduction to machining processes and systems. Topics covered will include conventional machining processes, basic CNC programming, and Computer Aided Manufacturing (CAM) operations. Semester Planned: Fall, Spring, Summer</p>	<p>CPSC 120 Introduction to Computers 3</p> <p>Semester Prerequisite: None Basic Skills Prerequisite: Reading Level 4; Writing Level (See Class Schedule) In this survey course, the student learns of the application of computers in society, considers their social and economic implications, examines questions of privacy and security, and considers recent advances in computer technology. In addition, the student is exposed to beginning instruction and practice in word processing, spreadsheet and data base applications, the programming language BASIC, and user networks. Semester Planned: Fall, Spring, Summer</p>
<p>CNCP 110 Foundations of CNC Programming 4</p> <p>Semester Prerequisite: TECH 101, TECH 130, DTDS 110, MACH 105 This course lays the foundation for all other Computerized Numerical Control (CNC) courses. Methods of CNC programming including linear, circular and helical interpolation, z-axis cycles, roughing and pocketing cycles, tool diameter compensation, macros, and subroutines are examined. Students will write programs for 3-axis and 5-axis mills, 3-axis lathe, and 4-axis wire-EDM. Semester Planned: Fall, Spring, Summer</p>	<p>CPSC 150 FORTRAN 3</p> <p>Semester Prerequisite: MATH 122/MATH 126 Structured programming techniques are applied in the design of algorithms and their implementation in FORTRAN 77. Topics included are Nassi-Schneiderman designs, stepwise refinement outlines, control structures, functions and sub-routines, input and output procedures, data types, arrays, and string processing. Semester Planned: Fall, Spring, Summer</p>
<p>CNCP 130 Machine Controls and Set-up 4</p> <p>Semester Prerequisite: CNCP 110 Focuses on the set-up and operation of a variety of CNC machines ranging from simple 3-axis to sophisticated 5-axis conversational controls. Topics will include proper machine start-up and shut-down, tool data management, fixture alignment, program loading and editing. Semester Planned: Fall, Spring</p>	<p>CPSC 230 Algorithms and Computing in Pascal 4</p> <p>Semester Prerequisite: MATH 151 This course is designed to establish an understanding of fundamental computational procedures required for continuing study in computer science. Techniques of structured design are applied in the implementation of algorithms in Pascal. Topics included are program development, control structures, functions, procedures, recursion, file operations, data types, arrays and string processing, and linked lists. Semester Planned: Fall, Spring, Summer</p>
<p>CNCP 194 Computerized Numerical Control Project Lab 4</p> <p>Semester Prerequisite: Departmental Approval Further skills are pursued involving modern concepts of numerical control of machine tools, including the interrelationship of these new manufacturing methods in the various departments of a company. Semester Planned: Fall, Spring, Summer</p>	<p>CPSC 240 C++ Programming 2</p> <p>Semester Prerequisite: CPSC 230/Departmental Approval A course in the language C++ for students with programming experience. Topics include functions, strings, arrays, file access, pointers, bitwise operations, storage classes, dynamic allocation and data structures. Knowledge of simple data structures is helpful. Semester Planned: Spring, Summer</p>
<p>CNCP 210 SMART-CAM 4</p> <p>Semester Prerequisite: CNCP 110 SMART-CAM is a powerful graphics based programming software for CNC machine tools. SMART-CAM software is designed to generate CNC programs from mechanical CAD drawings. Students will use SMART-CAM to solve CNC programming problems in both 2-D and 3-D environments and run selected programs on CNC equipment. Semester Planned: Fall, Spring</p>	<p>CPSC 260 Discrete Structures in Computer Science 4</p> <p>Semester Prerequisite: MATH 151, CPSC 150/CPSC 230 Introduction to logical and algebraic structures and techniques required for further study in computer science. Topics include statement logic and proof techniques, relations, functions, directed and undirected graphs and their matrix representations, Boolean algebras and logic networks, regular expressions, finite-state machines, and Turing machines. Semester Planned: Spring</p>
<p>CNCP 215 Manufacturing Expert 4</p> <p>Semester Prerequisite: CNCP 110 Manufacturing Expert (MEX) is an advanced 3-D surface design and CNC software. This course will cover surface creation including Bezier and Nurbs, primitives such as cones and toroids, and surface filleting. Full 5-axis CNC programs will be created, run, and checked on a coordinate measuring machine. Semester Planned: Fall, Spring</p>	<p>CPSC 270 Assembly Language and Computer Organization 4</p> <p>Semester Prerequisite: CPSC 230 An introduction for computer science majors to machine structure and operations (using DEC/VAX computers). C++ is introduced; assembly language programming and interfaces to Pascal and C++ are studied. Topics include machine representation of data and instructions, register use, and fundamental file input-output. Semester Planned: Spring</p>
<p>CNCP 284 CNC Seminar 4</p> <p>Semester Prerequisite: None This seminar may deal with a variety of subjects dealing with modern concepts of numerical control of machine tools, including the interrelationship of these new manufacturing methods in the various departments of a company. Semester Planned: Fall, Spring, Summer</p>	

<p>CPSC 280 Data Structures 3</p> <p>Semester Prerequisite: CPSC 230</p> <p>Advanced techniques and related theory for representation and access of information. Algorithms concerning sorting, searching, hashing and graph representation are included. Program analysis and abstract data types including stacks, queues, and trees are also studied.</p> <p>Semester Planned: Summer, Fall</p>	<p>CUMA 201 Credit Union Financial Counseling 2</p> <p>Semester Prerequisite: None</p> <p>This course is an overview of financial counseling techniques and skills for credit union employees. Emphasis is placed on skill-building exercises to enable students to develop a basic understanding of financial alternatives available to their customers.</p> <p>Semester Planned: Spring</p>
<p>CPSC 290 VAX System Support 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An introduction to Digital VAX Computer systems. Projects to be completed will cover VAX hardware and software systems, including DCL (Digital Command Language), LMS (Learning Management System), spreadsheets, text and word processing software, graphics software, and networking software.</p> <p>Semester Planned: Spring</p>	<p>CUMA 215 Business Law for Credit Unions 3</p> <p>Semester Prerequisite: None</p> <p>Covers fundamental principles of law applicable to credit union personnel. This course will prepare students to perform the legal responsibilities of their jobs more knowledgeably. Course content includes study of contracts, personal and real property, torts, crimes, and the nature and sources of law as related to credit union operations.</p> <p>Semester Planned: Fall</p>
<p>CPSC 295 Independent Study in Computer Science 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An independent study in some area of computer science not covered by an existing course. The student works independently under the supervision of a faculty member. Student devotes three or more hours per week to this study in addition to their work with the assigned instructor.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>DADH 124 Dental Radiography 4</p> <p>Semester Prerequisite: Dental Assistant/Dental Hygiene Semester I Courses</p> <p>Lectures discuss production and emission of dental x-radiation, indications for exposure, techniques of exposure, processing, evaluation and interpretation of dental radiographs. Individualized laboratory sessions provide students practice in exposing, processing, mounting and evaluating radiographs.</p> <p>Semester Planned: Spring</p>
<p>CPSC 296 Independent Study in Computer Science 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An independent study in some area of computer science not covered by an existing course. The student works independently under the supervision of a faculty member. Student devotes six or more hours per week to this study in addition to their work with the assigned instructor.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>DANC 100 Introduction to Dance 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed for the student with no dance experience. Students will explore the basic techniques of the core dance forms, including ballet, modern, tap and jazz. Different aspects of dance are covered, including dance as art, the choreographer, the dancer, the viewer, dance production, dance in education, and dance careers.</p> <p>Semester Planned: Fall, Spring</p>
<p>CPSC 297 Independent Study in Computer Science 3</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An independent study in some area of computer science not covered by an existing course. The student works independently under the supervision of a faculty member. Student devotes nine or more hours per week to this study in addition to their work with the assigned instructor.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>DANC 101 Beginning Ballet I 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed for the student with no dance experience. Included are basic alignment principles, ballet vocabulary and steps, and elementary combinations of ballet technique for the beginning dance student. Basic barre and center floor combinations will be included.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CPSC 298 Independent Study in Computer Science 4</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An independent study in some area of computer science not covered by an existing course. The student works independently under the supervision of a faculty member. Student devotes 12 or more hours per week to this study in addition to their work with the assigned instructor.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>DANC 102 Beginning Modern Dance I 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed for the students with no dance experience. Included are basic alignment training techniques, spatial relationships, and elementary combinations. Some improvisation will be used throughout the course to assist in developing kinesthetic, spatial, cognitive, and physical awareness.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>CUAI 102 Credit Union Accounting 3</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course emphasizes those areas of financial accounting relevant to external reporting by credit unions.</p> <p>Semester Planned: Spring</p>	<p>DANC 103 Beginning Jazz I 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed for the student with no dance experience. Included are basic alignment, warm up, and isolations in jazz dance technique for beginning dance students. Spatial relationships and rhythm are emphasized.</p> <p>Semester Planned: Fall, Spring</p>
<p>CUAI 202 Risk Management 3</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course familiarizes the student with the risk management process: identification, measurement and evaluation, and control and financing. The course is designed to help participants prepare for the Certified Credit Union Executive Program (CCUE) examination.</p> <p>Semester Planned: Fall</p>	<p>DANC 104 Beginning Tap I 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed for the student with no dance experience. Included are basic tap origins, vocabulary, steps, combinations, and rhythms. Basic alignment training techniques, spatial relationships, and elementary combinations are explored.</p> <p>Semester Planned: Fall, Spring</p>
<p>CUMA 100 Introduction to Credit Union Operations 3</p> <p>Semester Prerequisite: None</p> <p>This course provides students with an overview of the credit union movement, its position in the financial services industry, and basic credit union operating procedures. Directed toward staff, management and elected officials of credit unions who wish to increase their knowledge of both the credit union movement and operations.</p> <p>Semester Planned: Fall</p>	<p>DANC 105 Jazz Beginning I Summer 1</p> <p>Semester Prerequisite: None</p> <p>This course includes basic alignment, warm-up, and isolation in jazz dance technique for beginning dance students. Spatial relationships and rhythm are emphasized.</p> <p>Semester Planned: Summer</p>
<p>CUMA 200 Credit and Collections 3</p> <p>Semester Prerequisite: None</p> <p>This course covers the basic fundamentals of the credit/collection industry. Emphasis on learning the basics of the credit decision and the collection of past due loans. The course is designed for credit union personnel who want to better understand the relevant laws and regulations of credit union credit and collections.</p> <p>Semester Planned: Spring</p>	<p>DANC 106 Tap Beginning I Summer 1</p> <p>Semester Prerequisite: None</p> <p>This course includes basic tap origins, vocabulary, steps, combinations, and rhythms for the beginning dance students. Basic alignment training techniques, spatial relationship, and elementary combinations are explored.</p> <p>Semester Planned: Summer</p>

<p>DANC 110 High School Dance Workshop 3</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is designed for the talented high school student. It is an intensive course of study in basic tap, ballet, modern and jazz. This includes basic alignment training techniques, spatial relationships, and elementary combinations. Some improvisation used to develop kinesthetic, spatial, cognitive and physical awareness. Basic performance skills are developed using all dance disciplines.</p> <p>Semester Planned: Summer</p>	<p>DANC 127 Performance Techniques 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course is designed to acquaint the level II student with the practice of performing. Emphasis is placed on projection, musicality, flow, articulation, clarity of intent, motivation, phrasing, gesture, and production process.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>DANC 111 Beginning Ballet II 2</p> <p>Semester Prerequisite: DANC 101</p> <p>Designed for the student who has successfully completed Beginning Ballet I, this course includes a continuation of movement theory, alignment, increased training practices, vocabulary and longer combinations. The student will begin to explore the aspects of building a personal movement style.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>DANC 131 Character Dance 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed to provide students with a basic knowledge of character dance as applied to classical ballet dance. Emphasis is placed on Eastern European styles such as Czardas and Mazurka in addition to Spanish.</p> <p>Semester Planned: Fall, Spring</p>
<p>DANC 112 Beginning Modern Dance II 2</p> <p>Semester Prerequisite: DANC 102</p> <p>This course includes a continuation of movement theory, alignment, increased training practices, spatial relationships, vocabulary and longer combinations. Improvisation will be used to develop kinesthetic, spatial, cognitive, and physical awareness. The student will begin to explore the aspects of building a personal movement style.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>DANC 132 Spanish Dance 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed for the beginning level student. It is an introduction to the origins and techniques of Spanish dance as performed in Spain. Included are traditional music, footwork, body work, costumes, customs, and use of castanets.</p> <p>Semester Planned: Fall, Spring</p>
<p>DANC 113 Beginning Jazz II 2</p> <p>Semester Prerequisite: DANC 103</p> <p>This course includes a continuation of alignment, vocabulary, jazz movement theory, increased training practices and longer combinations. A more comprehensive use of body isolations and movement rhythms will be explored. The student will begin to explore the aspects of building a personal movement style.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>DANC 133 Ethnic Dance Workshop 2</p> <p>Semester Prerequisite: None</p> <p>Ethnic Dance class will provide instruction in warm-up exercises, combinations, and routines or dance indigenous to a given culture. Each semester the content of this class will concentrate on the dance traditions of a different culture including African, Mexican, Oriental, European, or Slavic. Students will comprehend the specific culture through its dance form and understand its history, social customs, religion, and other cultural elements.</p> <p>Semester Planned: Fall, Spring</p>
<p>DANC 114 Beginning Tap II 2</p> <p>Semester Prerequisite: DANC 104</p> <p>Designed for the student who has successfully completed Beginning Tap I, this course includes a continuation of tap, vocabulary, steps, combinations, and rhythms. Emphasis is placed on increased complexity in rhythms and combinations. The students will begin to explore the aspects of building a personal movement style.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>DANC 134 African Dance 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed for the beginning II level student. It is an introduction to the origins and techniques of African dance as performed in various African countries. Included are traditional music, footwork, body work, costumes, and customs.</p> <p>Semester Planned: Fall, Spring</p>
<p>DANC 115 Jazz Beginning II Summer 1</p> <p>Semester Prerequisite: DANC 103</p> <p>Emphasis is placed on beginning to develop a personal style of movement in preparation for performance. Course includes a continuation of alignment, warm-up, and isolations in addition to various rhythms and combinations.</p> <p>Semester Planned: Summer</p>	<p>DANC 161 Ballet Repertory 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course is designed for the student who has reached a minimum of the Beginning Ballet II level. The student participates in the process of auditions, rehearsals, and public performances in the ballet genre and concentrates on memorization, projection, and musicality.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>DANC 116 Tap Beginning II Summer 1</p> <p>Semester Prerequisite: DANC 104</p> <p>Emphasis is placed on increased complexity in rhythms and combinations. Course includes a continuation of tap vocabulary, steps, combinations, and rhythms.</p> <p>Semester Planned: Summer</p>	<p>DANC 162 Modern Dance Repertory 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course is designed for the student who has reached a minimum of Modern Beginning II to gain performance experience in a controlled setting. The student participates in the process of auditions, rehearsals, and public performances in the modern dance genre and concentrates on memorization, projection, and musicality.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>DANC 123 Choreography I 3</p> <p>Semester Prerequisite: DANC 124</p> <p>This course is designed to acquaint the student with basic choreographic techniques. Improvisation is utilized to explore ideas. Dance elements of time, space, and energy will be explored in addition to the mechanical and gestural aspects of movement. The concept of language and symbol system is studied.</p> <p>Semester Planned: Spring</p>	<p>DANC 163 Jazz Repertory 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course is designed for the student who has reached a minimum of Beginning Jazz II to gain performance experience in a controlled setting. The student participates in the process of auditions, rehearsals, and public performances in the jazz genre and concentrates on memorization, projection, and musicality.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>DANC 124 Improvisation 2</p> <p>Semester Prerequisite: DANC 101/DANC 102/DANC 103</p> <p>This course is designed for the major and non-major. It provides students with opportunities to discover the skills of critical and creative thinking, as well as convergent and divergent thinking through problem solving exercises. Spatial, kinesthetic, and emotional awareness are uncovered, as well as the discovery of movement qualities.</p> <p>Semester Planned: Fall</p>	<p>DANC 164 Tap Repertory 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course is designed for the student who has reached a minimum of Beginning Tap II to gain performance experience in a controlled setting. The student participates in the process of auditions, rehearsals, and public performances in the tap genre and concentrates on memorization, projection, and musicality.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>DANC 125 Jazz Beginning I 1</p> <p>Semester Prerequisite: DANC 103</p> <p>Emphasis is placed on beginning to develop a personal style of movement in preparation for performance. Course includes a continuation of alignment, warm-up, and isolations in addition to various rhythms and combinations.</p> <p>Semester Planned: Summer</p>	<p>DANC 165 Video Dance Repertory .5</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course is designed for the student who has reached the intermediate level or above. Students learn choreography, staging and performance, specifically designed for video production. A short-term rehearsal process culminates in a finished video performance. A maximum of one credit in video dance can be used for degree requirements.</p> <p>Semester Planned: Fall, Spring, Summer</p>

<p>DANC 171 Master Ballet .5 Semester Prerequisite: Departmental Approval This is a master ballet class for the level II or above ballet student. It is conducted by a professional dancer/instructor/choreographer in residence. Classes are scheduled in concentrated sessions. Semester Planned: Fall, Spring</p>	<p>DANC 205 Intermediate Jazz Summer 1.5 Semester Prerequisite: Departmental Approval Emphasis is placed on developing a personal style of movement. Course includes a continuation of alignments, warm-up and isolations in addition to more complex rhythms and combinations. Semester Planned: Summer</p>
<p>DANC 172 Master Modern .5 Semester Prerequisite: Departmental Approval This is a master modern dance class for the level II or above modern dance student. It is conducted by a professional dancer/instructor/choreographer in residence. Classes are scheduled in concentrated sessions. Semester Planned: Fall, Spring</p>	<p>DANC 206 Intermediate Tap Summer 1.5 Semester Prerequisite: Departmental Approval Emphasis is placed on increased complexity of rhythms and combinations in order to develop a personal style in preparation for performance. Semester Planned: Summer</p>
<p>DANC 173 Master Tap/Jazz .5 Semester Prerequisite: Departmental Approval This is a master tap/jazz class for the level II or above tap/jazz student. It is conducted by a professional dancer/instructor/choreographer in residence. Classes are scheduled in concentrated sessions. Semester Planned: Fall, Spring</p>	<p>DANC 211 Intermediate Ballet II 3 Semester Prerequisite: Departmental Approval This course includes a continuation of movement theory, alignment, increased training practices, vocabulary, and longer combinations. Emphasis is placed on dance dynamics and continued development of a personal movement style. Performance skills are sharpened and include projection, musicality, flow, articulation, clarity of intent, motivation, phrasing, and gesture. Pointe shoes optional. Semester Planned: Fall, Spring, Summer</p>
<p>DANC 191 Dance History 3 Semester Prerequisite: None This course is a dance history overview commencing with the origins of ballet to the present. Important developments and contributors in the field of American dance education will be interwoven with the important developments and contributors of Western dance forms. Semester Planned: Fall</p>	<p>DANC 212 Intermediate Modern Dance II 3 Semester Prerequisite: Departmental Approval This course includes a continuation of Intermediate Modern I. Emphasis is placed on center floor transitional techniques, dance dynamics, examination and practice of movement qualities, and continued development of personal movement style. Performance skills are sharpened and include projection, musicality, flow, articulation, clarity of intent, motivation, phrasing and gesture. Semester Planned: Fall, Spring, Summer</p>
<p>DANC 192 Dance Appreciation 2 Semester Prerequisite: None For the major and non-major, this course is designed to increase the awareness of dance as a form of nonverbal communication between self and other throughout time and culture. Overviews of historical development and cultural concepts in dance will be explored with particular emphasis on Western concert dance traditions. Semester Planned: Fall, Spring, Summer</p>	<p>DANC 221 Advanced Ballet I 3 Semester Prerequisite: Departmental Approval This course is a continuation of Intermediate Ballet II. Emphasis is placed on learning traditional styles and choreography, dance dynamics, and continued development of a personal movement style. Performance skills are sharpened and include projection, musicality, flow, articulation, clarity of intent, motivation, phrasing and gesture. Pointe shoes are highly recommended. Semester Planned: Fall, Spring, Summer</p>
<p>DANC 193 Dance Anatomy 3 Semester Prerequisite: DANC 101, DANC 102/DANC 103 This course is an introduction to basic anatomy as it applies to dance. Terminology, practical application, theory of movement, nutrition, and injury prevention and care will be incorporated. Emphasis will be placed on major muscles, muscle groups, and skeletal structure. Semester Planned: Spring</p>	<p>DANC 223 Advanced Jazz 3 Semester Prerequisite: Departmental Approval This course is a continuation of Intermediate Jazz. Emphasis is placed on learning jazz dance dynamics, center floor transitional techniques and development of a personal movement style. Performance skills are sharpened and include projection, musicality, flow, articulation, clarity of intent and motivation. Semester Planned: Fall, Spring</p>
<p>DANC 201 Intermediate Ballet I 3 Semester Prerequisite: Departmental Approval This course includes a continuation of movement theory, alignment, increased training practices, vocabulary, and longer combinations. Emphasis is placed on center floor transitional techniques, dance dynamics and development of a personal movement style in preparation for performance. Pointe shoes are optional. Semester Planned: Fall, Spring, Summer</p>	<p>DANC 224 Advanced Tap 3 Semester Prerequisite: Departmental Approval Emphasis is placed on learning a variety of tap styles suitable for different performance needs. Semester Planned: Fall, Spring, Summer</p>
<p>DANC 202 Intermediate Modern I 3 Semester Prerequisite: Departmental Approval This course includes a continuation of alignment training, spatial relationships, improvisation techniques, movement theory, increased training practices, movement symbols, vocabulary and longer combinations. Emphasis is placed on center floor transitional techniques, dance dynamics, examination and practice of movement qualities and development of a personal movement style in preparation for performance. Semester Planned: Fall, Spring, Summer</p>	<p>DANC 225 Advanced Jazz Summer 1.5 Semester Prerequisite: Departmental Approval Emphasis is placed on learning different styles of jazz dance appropriate to different performance needs. Course includes continuation of alignment, warm-up and isolations in addition to more complex rhythms and combinations. Semester Planned: Summer</p>
<p>DANC 203 Intermediate Jazz 3 Semester Prerequisite: Departmental Approval This course includes a continuation of alignment training, movement theory, increased training practices, isolations and longer combinations. Emphasis is placed on jazz dance dynamics, center floor transitional techniques and development of a personal movement style in preparation for performance. Semester Planned: Fall, Spring</p>	<p>DANC 231 Advanced Ballet II 3 Semester Prerequisite: Departmental Approval Emphasis is placed on learning traditional choreography. Course includes a continuation of vocabulary, steps and combinations, center floor transitional techniques, dance dynamics and continued development of personal style. Semester Planned: Fall, Spring, Summer</p>
<p>DANC 204 Intermediate Tap 3 Semester Prerequisite: Departmental Approval This course includes a continuation of tap vocabulary, steps, combinations and rhythms. Emphasis is placed on increased complexity in rhythms and combinations and development of a personal movement style in preparation for performance. Semester Planned: Fall, Spring</p>	<p>DANC 244 Pointe Technique Beginning 2 Semester Prerequisite: DANC 111/Higher Level Course This course is designed for the intermediate level and above ballet student. Pointe technique continues the development of strength, flexibility, coordination and balance. Emphasis is placed on elementary pointe technique exercises to strengthen ankles, calves, legs and lower back for pointe work. Semester Planned: Fall, Spring, Summer</p>

<p>DANC 245 Choreography II 3</p> <p>Semester Prerequisite: DANC 123 Emphasis is placed on group manipulation in addition to developing individual styles of choreography. Preparation of choreography for performance is emphasized. Semester Planned: Fall, Spring</p>	<p>DANC 295 Directed Studies I 1</p> <p>Semester Prerequisite: Departmental Approval Working under the guidance of an approved instructor, the student will pursue studies not otherwise available through scheduled course offerings. Semester Planned: Fall, Spring, Summer</p>
<p>DANC 248 Pointe Technique Intermediate 2</p> <p>Semester Prerequisite: DANC 244 This course is designed for the student who has successfully completed the Pointe Technique Beginning course. It includes a continuation of development of strength, flexibility, coordination and balance. Emphasis is placed on more difficult exercises, steps, and combinations to prepare for performance on pointe. Semester Planned: Fall, Spring, Summer</p>	<p>DANC 296 Directed Studies II 2</p> <p>Semester Prerequisite: Departmental Approval Working under the guidance of an approved instructor, the student will pursue studies not otherwise available through scheduled course offerings. Semester Planned: Fall, Spring, Summer</p>
<p>DANC 251 Independent Study I 1</p> <p>Semester Prerequisite: Departmental Approval This course is for dance majors who wish to devote time to research projects, choreography, assigned teaching projects, and other dance related topics not covered in existing classes. Student will meet with instructor periodically throughout the semester. Semester Planned: Fall, Spring, Summer</p>	<p>DANC 297 Directed Studies III 3</p> <p>Semester Prerequisite: Departmental Approval Working under the guidance of an approved instructor, the student will pursue studies not otherwise available through scheduled course offerings. Semester Planned: Fall, Spring, Summer</p>
<p>DANC 252 Independent Study II 2</p> <p>Semester Prerequisite: Departmental Approval This course is for dance majors who wish to devote time to research projects, choreography, assigned teaching projects, and other dance-related topics not covered in existing classes. Student will meet with instructor periodically throughout the semester. Semester Planned: Fall, Spring, Summer</p>	<p>DAST 110 Dental Instruments 2</p> <p>Semester Prerequisite: Admission to Program Lecture and practical experience will introduce the student to dental instruments and equipment for tray set-ups and the use and maintenance of these items for dental procedures. Semester Planned: Fall</p>
<p>DANC 253 Independent Study III 3</p> <p>Semester Prerequisite: Departmental Approval This course is for dance majors who wish to devote time to research projects, choreography, assigned teaching projects, and other dance-related topics not covered in existing classes. Student will meet with instructor periodically throughout the semester. Semester Planned: Fall, Spring, Summer</p>	<p>DAST 111 Preclinic Technics - DA 3</p> <p>Semester Prerequisite: DAST 110, DAST 114 Through lecture and simulated clinical experience the student will be introduced to dental procedures: four-handed chairside assisting, charting, management of clinical records, and taking and recording vital signs. Semester Planned: Fall</p>
<p>DANC 281 Dance Teaching Methods 3</p> <p>Semester Prerequisite: Departmental Approval This course is designed to acquaint the intermediate student with the various teaching styles. Goals, objectives, and strategies of class construction are discussed. Emphasis is placed on creativity, attitude, perception, and intuition in the classroom. Semester Planned: Fall</p>	<p>DAST 112 Dental Anatomy 5</p> <p>Semester Prerequisite: Admission to Program Study of nomenclature, morphologic characteristics and physiologic relationships of human primary and permanent teeth. Head and neck anatomy and the histologic and embryologic development is included with a review of basic oral pathology for the dental assistant. Laboratory activities develop observation and dexterity skills while studying this information. Semester Planned: Fall</p>
<p>DANC 282 Dance Teaching Assistantship 2</p> <p>Semester Prerequisite: Departmental Approval This course is designed for the beginning teacher. Under the guidance of a faculty member in the student's primary discipline, the student will learn to implement the use of goals, objectives, and strategies in class preparation by co-teaching a beginning level course. Semester Planned: Fall, Spring</p>	<p>DAST 114 Preventive Dentistry and Procedures 3</p> <p>Semester Prerequisite: Admission to Program An introduction to the dental operator, aseptic technics, oral hygiene and fluoride procedures for preventing dental diseases. CPR certification is earned and dental emergency prevention, protocol, care, and OSHA regulations are reviewed. Semester Planned: Fall</p>
<p>DANC 283 Dance Teaching Practicum 2</p> <p>Semester Prerequisite: Departmental Approval This course is designed to enable the student to teach a dance course at the beginning level in the student's primary discipline under the guidance of an instructor. Implementation of objectives and strategies will enable the student to prepare a fully articulated course. Semester Planned: Spring</p>	<p>DAST 116 Dental Materials 3</p> <p>Semester Prerequisite: Admission to Program Lecture and laboratory sessions address the properties, selection, manipulation, and evaluation of materials used in dentistry. Practice is provided in the preparation, manipulation, and delivery of the materials most often handled by the dental assistant. Semester Planned: Fall</p>
<p>DANC 284 Studio and Recital Management 3</p> <p>Semester Prerequisite: Departmental Approval This course is designed to introduce basic concepts of the development, growth, and maintenance of a dance studio. Operational and administrative procedures are emphasized for the dance studio as well as for recitals and other performance activities. Semester Planned: Spring</p>	<p>DAST 118 Dental Assisting Principles 1</p> <p>Semester Prerequisite: Admission to Program Various aspects of the dental profession are discussed to prepare the student dental assistant for entry to the health team. Subjects include dental law, ethics, liability, health profession organizations, employment, and current health-care issues. Semester Planned: Fall</p>
<p>DANC 285 Dance Performance Internship 2</p> <p>Semester Prerequisite: Departmental Approval This course is designed to enable the student to work in the community as a choreographer under the guidance of an instructor. Course projects may range in scope from choreographing a piece for a dance studio recital to choreographing a musical for a local community theatre. Semester Planned: Fall, Spring, Summer</p>	<p>DAST 120 Clinical Dental Assisting I 8</p> <p>Semester Prerequisite: Semester I Courses A study of the clinical practice of four-handed chairside dental assisting with emphasis on general restorative and dental specialty procedures. Sessions correlate clinical procedures and practice with private practice and field experience participation. Semester Planned: Spring</p>

DAST 126 Registered Dental Assistant Procedures for the Dental Assistant	4	DHYG 120 Clinical Dental Hygiene I	5
Semester Prerequisite: Semester I Courses A study of the intra-oral functions delegated to the licensed Registered Dental Assistant in the State of Michigan. Laboratory time is provided for the student to learn the technics and gain proficiency in those procedures that will be performed during clinic rotations. Semester Planned: Spring		Semester Prerequisite: Semester I Courses Initial clinical practice of basic dental hygiene services (recognition and recording of oral conditions, medical history, oral health education, prophylaxis, fluoride treatment, sterilization, radiography, and desk procedures). Semester Planned: Spring	
DAST 130 Clinical Dental Assisting II	3	DHYG 121 Dental Hygiene Practice	3
Semester Prerequisite: DAST 120, DAST 126, DADH 124 Lecture sessions teach basic communication, psychology, and effective dental office management skills for dental assistants. Students practice these skills during laboratory simulations. Field experience assignments provide on-site practice and integration of dental assisting chairside, specialty, RDA, and interpersonal skills. Semester Planned: Spring		Semester Prerequisite: Semester I Courses A continuation of didactic information and basic skills that will enhance performance of procedures in a clinical setting. Emphasis is on treatment planning, patient home care, periodontal examination, caries detection, instrument sharpening and clinical photography. Small groups lab instruction provides application of didactic information in a simulated clinical setting. Semester Planned: Spring	
DAST 131 Clinical Dental Assisting III	6	DHYG 122 Dental Pharmacology-Dental Hygiene	2
Semester Prerequisite: DAST 130 Basic communication, writing and psychology skills needed for effective patient management, dental office management, chairside assisting, and the employment process are emphasized. Computer application and field experience assignments provide preparation, practice and integration of these skills to the dental office setting. Semester Planned: Summer		Semester Prerequisite: Semester I Courses A study of the administration, use, action, and effects of drugs most commonly used by patients and their relationship to dental treatment and dental hygiene procedures. Semester Planned: Spring	
DHYG 110 Oral Health Practices	3	DHYG 126 Principles of Periodontics	2
Semester Prerequisite: Admission to Program Introduction to the dental operator, aseptic techniques, caries and periodontal disease processes and oral hygiene and fluoride procedures for preventing dental diseases. Small group laboratory instruction allows the student to learn through investigation, involvement and application. Each student will become successful in maintaining his/her own good oral health. Semester Planned: Fall		Semester Prerequisite: Semester I Courses Study of anatomy, physiology, and histology of the periodontal tissues as they relate to the identification, etiology, prevention and treatment of periodontal disease and occlusal disorders. Evaluation of disease status, diagnosis, patient management, and disease prevention is presented relative to the hygienist's role as co-therapist in private practice. Semester Planned: Spring	
DHYG 111 Preclinic Technics - DH	5	DHYG 128 Dental Materials and Methods	3
Semester Prerequisite: Admission to Program Introduction to selection and application of prophylaxis instruments, collection and assessment of patient data, and performing oral examinations. Small group clinic instruction includes implementation of procedures on student partners. Semester Planned: Fall		Semester Prerequisite: Semester I Courses Study of terminology, selection, manipulation, and evaluation of materials used in dentistry. Activities emphasize procedures and materials used by the dental hygienist and the knowledge needed to educate the patients regarding the benefit of certain restorative procedures. Semester Planned: Spring	
DHYG 112 Tooth Morphology	3	DHYG 210 Clinical Dental Hygiene II	8
Semester Prerequisite: Admission to Program Study of nomenclature, morphologic characteristics and physiologic relationships of human primary and permanent teeth. Laboratory activities develop observation and dexterity skills while studying tooth morphology and visible anatomic structures relative to dental hygiene clinical procedures. Semester Planned: Fall		Semester Prerequisite: Semester II Courses Continuation of clinic, perfecting comprehensive treatment planning and advanced prophylaxis technics (deep scaling, root planing, nutritional counseling, ultrasonic scaling, and use of chemotherapeutic agents). Course coordinates the periodontal case study, advanced patient care and management, and review of ethical case studies. Semester Planned: Fall	
DHYG 113 Head and Neck Anatomy	2	DHYG 212 Advanced Dental Hygiene Procedures	3
Semester Prerequisite: Admission to Program A descriptive anatomical study of the head and neck regions, including skeletal, nervous, circulatory, lymphatic, and muscular systems and their relationship to clinical procedures. Semester Planned: Fall		Semester Prerequisite: Semester II Courses Study of advanced clinical dental hygiene procedures with emphasis on the hygienist's role as co-therapist in performing root planing, ultrasonic instrumentation, periodontal charting, nutritional counseling, and applying chemotherapeutic agents. Semester Planned: Fall	
DHYG 114 Oral Histology, Embryology and Pathology	4	DHYG 214 Clinical Oral Pathology	1
Semester Prerequisite: Admission to Program Study of the embryology and microscopic anatomy of the oral cavity, with emphasis on the developmental growth process. Diseases affecting these tissues, including the principles of inflammation and repair, developmental disturbances, stains and accretions, diseases of the teeth and supporting structures, oral infections, injuries and neoplasms are included. Semester Planned: Fall		Semester Prerequisite: Semester II Courses Case histories are presented in which the student's objective is to formulate a differential diagnosis of an unknown oral lesion and propose a rational approach for evaluation and treatment of the patient. Lecture will include oral surgery practices and procedures. Semester Planned: Fall	
DHYG 116 Dental Emergency Procedures	2	DHYG 215 Special Patient Care	1
Semester Prerequisite: Admission to Program Students study dental emergencies (recognition, prevention, and effective care). Experience is provided in monitoring vital signs and handling emergency simulations. CPR certification is earned. Semester Planned: Fall		Semester Prerequisite: Semester II Courses Students develop a philosophy for the management and oral health care of the handicapped; people with physical, mental, social/emotional and selected medical conditions, as well as the elderly or medically compromised. Semester Planned: Fall	
DHYG 118 Dental Hygiene Principles	1	DHYG 216 Periodontal Therapies	2
Semester Prerequisite: Admission to Program The student receives an overview of dental history, basic dental law, the dental health team, professional organizations, professionalism, and a code of ethics. Semester Planned: Fall		Semester Prerequisite: Semester II Courses Principles of periodontics is applied to treatment modalities. The dental hygienist co-therapist role in the prevention, identification, and treatment of periodontal disease is applied. Students complete a periodontal case study to demonstrate appropriate implementation of their periodontal knowledge and therapy skills. Semester Planned: Fall	

<p>DHYG 218 Nutrition and Oral Health 2</p> <p>Semester Prerequisite: Semester II Courses Discussion of the identification, function, metabolism, and sources of specific nutrients required for normal growth, development, and repair of tissues. Application of principles to the individual's nutritional needs; providing nutritional counseling and diet information to special needs patients; and the relationship of nutrition to oral health is emphasized. Semester Planned: Fall</p>	<p>DNTS 010 Dental Business Assistant Office Methods 3</p> <p>Semester Prerequisite: DNTS 001, Typing An introduction to dental office management as it relates to appointment control, recall systems, collections, telephone technics, record keeping, inventory, and third-party payment plans (insurance). Each student completes 32 hours of on-site experience in a dental office. Semester Planned: Fall, Spring, Summer</p>
<p>DHYG 219 Dental Public Health and Education 2</p> <p>Semester Prerequisite: Semester II Courses Students will review scientific literature, dental epidemiology, principles of public health, and health-care delivery systems. Further study will include human behavior, teaching methodologies, interpersonal relations, and communication skills relating to patient education, motivation and acceptance of health care. Semester Planned: Fall</p>	<p>DNTS 020 Dental Claims Assistant Office Methods 2</p> <p>Semester Prerequisite: DNTS 001, Typing An introduction to dental office management as it relates to appointment control, recall systems, collections, telephone technics, record keeping, inventory, and third-party payment plans (insurance). Semester Planned: Fall, Spring, Summer</p>
<p>DHYG 220 Clinical Dental Hygiene III 8</p> <p>Semester Prerequisite: Semester III Courses Clinical practice is continued with emphasis on performing comprehensive dental hygiene care, making decisions, solving problems, and managing time as dental hygienists do in private practice. Semester Planned: Spring</p>	<p>DTDS 101 Drafting I 4</p> <p>Semester Prerequisite: TECH 090/DTDS 100/Placement Basic Skills Prerequisite: Reading Level 4; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule) This is an introductory course in drafting concepts. Instruction includes orthographic projection, auxiliary views, sections, dimensioning techniques, gears and cams, and welding of fabrication type drawings. Students will complete a series of drawings to demonstrate understanding of the concepts presented. Semester Planned: Fall, Spring, Summer</p>
<p>DHYG 222 Dental Specialties 2</p> <p>Semester Prerequisite: Semester III Courses Lectures and individualized instruction include 1) dental specialists, reviewing procedures and practices, and 2) the dental hygienist's role in recognizing specialty care needed while educating the patient regarding his/her need(s). Students observe specialty procedures in dental specialty offices. Semester Planned: Spring</p>	<p>DTDS 102 Drafting II 4</p> <p>Semester Prerequisite: DTDS 101 This course covers advanced drafting and design techniques needed to project successive auxiliary views from various orthographic views. Layout and design concepts will also be stressed. Students will complete practical design projects in problem solving and creativity applicable to the automotive, industrial, and/or aerospace industries. Semester Planned: Fall, Spring, Summer</p>
<p>DHYG 224 Ethics and Jurisprudence 2</p> <p>Semester Prerequisite: Semester III Courses An informational review and personal preparation for interviewing techniques, employment opportunities, insurance protection, continuing education, law, and professional ethics of dental hygiene and dentistry are presented. Semester Planned: Spring</p>	<p>DTDS 103 Geometric Tolerancing 2</p> <p>Semester Prerequisite: DTDS 101/Concurrently This course covers the principles and methods of dimensioning and tolerancing for specific design requirements on engineering drawings. Uniform practices for stating and interpreting these requirements will be stressed. Content includes use and understanding of the symbolic method of specification relating to tolerances being applied. Semester Planned: Fall, Spring</p>
<p>DHYG 225 Testing Styles and Inventory 2</p> <p>Semester Prerequisite: Departmental Approval An introduction to dental hygiene licensure exam testing techniques, test construction, and item analysis. Students inventory their current knowledge of dental hygiene and through self-evaluation and planning, establish study skills while recognizing their personal study needs for national boards and licensing exams. Semester Planned: Spring</p>	<p>DTDS 104 Descriptive Geometry 4</p> <p>Semester Prerequisite: DTDS 102/Concurrently This course covers the solution of space problems through the practice of advanced orthographic projection. Content includes points, lines and planes, parallelism, perpendicularity, developments, and intersections. Students will complete projects relating to architectural, civil, and industrial engineering situations. Semester Planned: Fall, Spring</p>
<p>DHYG 229 Community Oral Health 2</p> <p>Semester Prerequisite: Semester III Courses Students implement a program plan for a community project utilizing assessment, planning, implementation, and evaluation processes. Each student will participate in field experience assignments in a variety of community health settings. Semester Planned: Spring</p>	<p>DTDS 110 Industrial Blueprint Reading 4</p> <p>Semester Prerequisite: TECH 090/DTDS 100 This course covers basic concepts in orthographic projection, with emphasis on interpretation of engineering drawings. Semester Planned: Fall, Spring, Summer</p>
<p>DHYG 230 Registered Dental Assistant Procedures for the Dental Hygienist 2</p> <p>Semester Prerequisite: Departmental Approval A specially designed course for dental hygiene students wishing to learn ancillary dental hygiene procedures and those intraoral functions delegated only to the licensed Registered Dental Assistant in the State of Michigan. Instruction is emphasized in the laboratory setting to prepare the student for practical application of these procedures. Semester Planned: Spring</p>	<p>DTDS 111 Industrial Blueprint Reading Workshop 1.25</p> <p>Semester Prerequisite: None This course covers basic concepts in orthographic projection with emphasis on interpretation of engineering drawing. Semester Planned: Fall, Spring, Summer</p>
<p>DNTS 001 Dentistry and Dental Health 3</p> <p>Semester Prerequisite: Admission to Program Introduction to the soft and hard tissues of the oral cavity, dental specialties, and oral health practices. Laboratory sessions assist the student in identifying dental anatomy structures and learning procedures effective in promoting good oral hygiene. Semester Planned: Fall, Spring, Summer</p>	<p>DTDS 131 AutoCAD Basic 2-D 4</p> <p>Semester Prerequisite: DTDS 101, TECH 130/Concurrently This course gives an introduction to AutoCAD software. Creation of 2-D multiview mechanical drawings with dimensions and notes will be the main focus. Use of AutoCAD's layer, block, plot commands, and isometric views will also be covered in this course. Semester Planned: Fall, Spring, Summer</p>
<p>DNTS 002 General Dental Procedures 2</p> <p>Semester Prerequisite: DNTS 001 The study and laboratory practice of identifying basic dental instruments; sterilizing and disinfecting procedures; processing dental films and mounting radiographs; and mixing basic dental materials. Semester Planned: Fall, Spring, Summer</p>	<p>DTDS 132 AutoCAD Advanced 4</p> <p>Semester Prerequisite: DTDS 131 This course builds on the material covered in DTDS 131. More complex drawings will be assigned, in addition to learning how to use attributes, create slide presentations, new line types, and write new menus and macros to customize AutoCAD to the user's needs. Semester Planned: Fall, Spring, Summer</p>

DTDS 150 Introduction to IBM CAD Basic Concepts 3	DTDS 209 Industrial Drafting Lab 2
Semester Prerequisite: TECH 090/DTDS 100/Equivalent This course is an introduction to the basics of IBM CAD'S command structure and features. Included are creating 2-D and 3-D geometry, modifying geometry, images and raster conversion, calculator operation, macro creation, and data exchange. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: Instructor Approval Gives additional lab time to industrial drafting students to fulfill extra requirements. This lab must be taken in conjunction with a drafting class. Semester Planned: Fall, Spring, Summer
DTDS 160 Automotive Body Design and Drafting I 4	DTDS 233 AutoCAD 3-D 4
Semester Prerequisite: DTDS 104/Concurrently This course will expose students to drafting techniques and design procedures as they apply to automotive plastic and sheetmetal components. Emphasis will be placed on applications of descriptive geometry by exposing students to the opportunity to develop grids, work lines and section views. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: DTDS 131 Students will learn how to use the 3-D features of AutoCAD. Product design drawings will be used to develop skills. Students will learn how to construct a 3-D library of parts. Semester Planned: Fall, Spring, Summer
DTDS 161 Automotive Body Design and Drafting II 4	DTDS 234 AutoCAD Solids 4
Semester Prerequisite: DTDS 160 This course will expose students to more automotive body drafting and design. Students will learn to create smooth lines, proportion curves and develop the various types of surfaces used in automotive sheet metal and injection molded plastic designs. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: DTDS 233 Students will learn how to use the solid modeling features of AutoCAD software. Creating industrial parts will be the main focus of the course. Students will develop a solids library of common parts. Semester Planned: Fall, Spring, Summer
DTDS 162 Automotive Body Design and Drafting III 4	DTDS 251 CGS: Line and Surface 1 - Data Management and Data Organization 4
Semester Prerequisite: DTDS 161 The basic theory of surfaces applied to all types of shapes will be covered in this course. The course will include practice and problems in applying theory of planes, cylindrical, conical, dragged, and doubled curved surfaces of all types, also including intersection of surfaces and secondary surfaces. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: DTDS 160 This course will introduce students to the line and surface application of General Motors Corporate Graphics System. Students will use the data management, data organization and drawing view management operators to create a block structure, detail drawing with views, and both bulk and selective files. Semester Planned: Fall, Spring, Summer
DTDS 171 CADKEY: Industrial 3	DTDS 252 CGS: Line and Surface 2 - Inner Body Surface Development 4
Semester Prerequisite: TECH 090/DTDS 100 A computer graphics course designed to teach the software package called CAD-KEY. The student will draw a mechanical drawing complete with dimensions and notes. Emphasis will be placed on creating and editing mechanical drawings. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: DTDS 251 This course will expose students to operators within the line and surface application of General Motors Corporate Graphics System which are used to create wire-frame and surface geometry. Emphasis will be placed on inner body "black metal" and injection molded plastic components. Semester Planned: Fall, Spring, Summer
DTDS 180 Unigraphics I 4	DTDS 253 CGS: Line and Surface 3 - Outer Body Surface Development 4
Semester Prerequisite: DTDS 101/Concurrently/Equivalent Drafting Experience This is the first of a three-semester course sequence that covers the fundamentals of the Unigraphics System of interactive design. This class covers Comprehensive CAD concepts of 2-D and 3-D construction, as well as some of the concepts of drafting. Semester Planned: Fall, Spring	Semester Prerequisite: DTDS 252 This course will introduce students to operators within the line and surface application of General Motors Corporate Graphics System which are used to analyze and modify wireframe and surface geometry. Emphasis will be placed on the development of aesthetic automotive body panel surface geometry. Semester Planned: Fall, Spring, Summer
DTDS 181 Unigraphics II 4	DTDS 280 Drafting Project Lab 4
Semester Prerequisite: DTDS 180 This is the second course of a three-semester course sequence that covers the advanced concepts of the Unigraphics System of interactive design. This course covers design concepts in 3-D basic surface construction as well as the concepts of advanced surfaces. Semester Planned: Fall, Spring	Semester Prerequisite: Approval Required This course is intended to give the advanced drafting and design student an opportunity for more experience through mutual agreement between student and instructor. Students will complete advanced projects and research in a variety of design application situations. Semester Planned: Fall, Spring, Summer
DTDS 182 Unigraphics III 4	DTDS 285 CADD Project Lab 2
Semester Prerequisite: DTDS 181/Approval This is the third of a three-semester course sequence that covers modeling and organization concepts of the Unigraphics system of interactive design. This course covers solid modeling and assemblies and components. Semester Planned: Fall, Spring	Semester Prerequisite: Approval Required This course is intended to give advanced drafting and design students an opportunity, through mutual agreement between student and instructor, to complete project(s) on one of several available CAD systems. Semester Planned: Fall, Spring, Summer
DTDS 202 Die Design and Construction 4	DTDS 288 CADAM: Project NC 2
Semester Prerequisite: DTDS 101 This course will emphasize the proper steps to designing a die. Also covered will be the names of various die components and understanding how they work. Semester Planned: Fall, Spring	Semester Prerequisite: Approval Required This course is intended for the student who wishes to work with an instructor on an actual project using CADAM numerical control software to produce a machined part. Semester Planned: Fall, Spring, Summer
DTDS 204 Jigs and Fixture Design 4	ECON 120 Power, Authority and Exchange 4
Semester Prerequisite: DTDS 101 Detailing techniques and dimensioning will be emphasized through the development of working drawings. These drawings will be extracted from a design concept or assembly type drawing. Familiarization with standard components will also be stressed. Semester Planned: Fall, Spring	Semester Prerequisite: None A comparative study of primitive social economies and modern political systems. An emphasis will be placed on the evolution of economic organization in human society. Semester Planned: Fall, Spring, Summer

<p>ECON 130 Honors: Power, Authority and Exchange 4</p> <p>Semester Prerequisite: Departmental Approval</p> <p>A comparative study of primitive social economies and modern political systems. An emphasis will be placed on the evolution of economic organization in human society. This course is the same as ECON 120 except that it is taught as a seminar for honors students only.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>EDUC 220 Introduction to Education 3</p> <p>Semester Prerequisite: None</p> <p>An introduction to education as a teaching profession including an overview of the foundations, philosophy, history, current issues and trends, and organization of education as a human endeavor. Also included are the use of audio visual materials, school records, safety, discipline, dramatic play, and story telling.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ECON 140 Current Economic Issues 3</p> <p>Semester Prerequisite: None</p> <p>An introductory course focusing on economic problems and issues within the American economy. It provides an overview of economic analysis. Topic areas relate to an overall look at the economic system, government policy, prices and their application, money, income, and national income accounts of the United States.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ELCT 100 Schematic Drawing 1</p> <p>Semester Prerequisite: None</p> <p>A non-mathematical beginning course in electronics covering electronic component recognition, reading schematics, free hand and computer drawing of schematic diagrams, and relating schematic diagrams to electronic circuits. The students will etch and drill a printed circuit board of a circuit that will be assembled during the soldering class.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ECON 201 Principles of Economics - Micro 3</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Reading Level 4; Writing Level (See Class Schedule)</p> <p>This course is designed to develop objective consideration of economic issues and provides information and understanding of how resources are allocated by prices. Topics for study include price theory, consumer demand, cost and market structure, the role of government in the market, resource pricing, and international trade.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ELCT 101 Analog Problems 4</p> <p>Semester Prerequisite: High School Algebra</p> <p>Basic Skills Prerequisite: Reading Level 6; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule)</p> <p>This course provides circuit analysis problem practice for both DC and AC circuits. Topics include: algebraic manipulation and solution of electronic formulas and basic trigonometric solutions of AC circuits using complex notation. A scientific calculator is required for polar to rectangular conversion and binary, octal, and hexadecimal calculations.</p> <p>Semester Planned: Fall, Spring</p>
<p>ECON 202 Principles of Economics - Macro 3</p> <p>Semester Prerequisite: ECON 201/Departmental Approval</p> <p>This course addresses the theory of national income, employment and the price level, and government fiscal and monetary policies designed to influence aggregate economic activity. It also addresses exchange rates, international financial relationships, and economic growth.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ELCT 105 Solar Electrical Systems 5</p> <p>Semester Prerequisite: None</p> <p>An introductory course in producing and storing electricity generated by sunlight. Topics include photovoltaics, batteries, charge controllers, inverters, efficient electrical appliances, and system installations.</p> <p>Semester Planned: Summer</p>
<p>ECON 213 Economic/Business History of the U.S. 3</p> <p>Semester Prerequisite: None</p> <p>This course provides a survey of American economic and business history, change, and growth since the colonial period. Topics include an overview of business organization, the role of government and technological change, American industrial development, labor unions, and capitalization patterns.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ELCT 109 DC Circuits 3</p> <p>Semester Prerequisite: ELCT 101/Concurrently</p> <p>A beginning DC circuit analysis course that uses resistors, power supplies, and digital multimeters. Lecture and laboratory topics include: resistor color code, series, parallel, series-parallel circuits, Kirchoff network laws, superposition, and Thevenin theorems.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ECON 218 Money and Banking 3</p> <p>Semester Prerequisite: ECON 202</p> <p>This course covers the nature of money and the role of the federal reserve, commercial banks and other financial institutions in determining money supply. The course includes information about the money market, capital markets, determination of interest rates, and the relationship between monetary policy and economic activity.</p> <p>Semester Planned: Fall, Spring</p>	<p>ELCT 110 AC Circuits 3</p> <p>Semester Prerequisite: ELCT 101, ELCT 109/Concurrently/Approval</p> <p>An AC circuit analysis course using complex numbers and trigonometry to analyze series and parallel RCL circuits. RC filter networks and series and parallel resonant circuits are also covered. AC generators, oscilloscopes, and frequency counters are used in laboratory experiments.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ECON 221 International Economics 3</p> <p>Semester Prerequisite: ECON 202/Instructor Approval</p> <p>This course examines, from both historical and theoretical perspectives, the benefits of international trade; tariffs, quotas, and other restrictions on international trade; free trade areas and common markets; international capital movements, the balance of payments, alternative exchange rate systems, and exchange rate determination.</p> <p>Semester Planned: Spring</p>	<p>ELCT 112 Transistors 6</p> <p>Semester Prerequisite: ELCT 110/ELCT 111, ELCT 101/Approval</p> <p>A lecture and laboratory course dealing with diodes in power supply and regulator circuits, bipolar and field effect transistor biasing, and single and multi-stage amplifier circuits. Circuits are covered from the analysis, design, and troubleshooting standpoints.</p> <p>Semester Planned: Fall, Spring</p>
<p>ECON 224 Intermediate Microeconomic Theory 3</p> <p>Semester Prerequisite: ECON 201</p> <p>This course covers consumer behavior theory, production and cost relationships of individual firms, actions of firms in different market structures, the theory of resource markets, and general equilibrium theory. Discussion in each of these areas begins with a review of the principles covered in ECON 201.</p> <p>Semester Planned: Spring</p>	<p>ELCT 120 Programming Preparation 2</p> <p>Semester Prerequisite: None</p> <p>The student will learn software that provides preparation for machine or high level language programming. Software used is DOS, a text editor, and a flowcharting program. Emphasis is placed on developing flowcharts for electronics-related problems that can be programmed on a computer.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>EDUC 201 Education Practicum I 2</p> <p>Semester Prerequisite: None</p> <p>Beginning practical experience and training in the field for individual students. The student is placed with an educational institution.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ELCT 121 BASIC for Electronics 3</p> <p>Semester Prerequisite: ELCT 110/ELCT 111, ELCT 120</p> <p>The student will write and execute programs in the BASIC language for electronic circuit analysis. Program problems will range from simple series circuits to transistor amplifiers. A student-designed programming project is used as part of the lab evaluation.</p> <p>Semester Planned: Fall, Spring, Summer</p>

ELCT 130 Machine Language Programming	3	ELCT 206 Project Lab	1
Semester Prerequisite: ELCT 110/ELCT 111, ELCT 120 Covers the fundamentals of machine and assembly language programming for the MC6802MPU: computer math, instruction set, addressing modes, branching, stack operations, subroutines, interrupts, and programming of PIA. Laboratory work includes writing programs in machine and assembly language and using a simulator to debug programs. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: ELCT 112, Approval A guided independent study of a topic of interest within the area of electronics. The student will write a research paper or construct an electronic device that has the prior approval of a faculty member. Semester Planned: Fall, Spring, Summer	
ELCT 131 Digital Basics	3	ELCT 207 Project Lab	2
Semester Prerequisite: ELCT 110/ELCT 111, ELCT 120 Introduces digital electronics; basic gates, combinational logic, Boolean algebra, K-maps and functions of combinational logic such as multiplexers, demultiplexers, encoders, decoders and code converters. It also introduces sequential logic: latches, flip-flops, timers, counters and shift registers. Laboratory work includes the analysis, construction, and troubleshooting of digital circuits using TTLICs. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: ELCT 112, Approval A guided independent study of a topic of interest within the area of electronics. The student will write a research paper or construct an electronic device that has the prior approval of a faculty member. Semester Planned: Fall, Spring, Summer	
ELCT 151 Computer Troubleshooting I	3	ELCT 208 Project Lab	3
Semester Prerequisite: ELCT 171/Concurrently This is a troubleshooting and repair course intended for students in the Computer Repair Certificate program. Course topics include basic troubleshooting techniques, unit and board swap computer troubleshooting, disk drive maintenance, and computer preventive maintenance. Semester Planned: Spring		Semester Prerequisite: ELCT 112, Approval A guided independent study of a topic of interest within the area of electronics. The student will write a research paper or construct an electronic device that has the prior approval of a faculty member. Semester Planned: Fall, Spring, Summer	
ELCT 160 Logic Problems Analysis I	3	ELCT 211 Linear Circuits I	4
Semester Prerequisite: None A fundamental analysis course intended for students in the computer repair certificate program. Course topics include manipulation of formulas used in electronics, basic gate operation and truth tables, Boolean algebra, binary, octal and hexadecimal base number systems. Semester Planned: Fall		Semester Prerequisite: ELCT 112 Solid state devices such as the JFET, MOSFET and op-amps are studied. Applications of op-amps and comparators are examined using active filters, summing and differential amplifiers, window comparators and DC motor control circuits. Semester Planned: Fall	
ELCT 161 Soldering/Desoldering	1	ELCT 212 Linear Circuits II	4
Semester Prerequisite: None A basic soldering course. Course topics include soldering electronic components to printed circuit boards, cable construction, surface mount soldering. Desoldering components using solder wick, vacuum desoldering tools and equipment and printed circuit board repair. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: ELCT 211 Linear devices such as PLL, VCO, waveform generators and voltage regulator circuits are studied. A unit on printed circuit board design is included. The student will design a printed circuit layout and construct a bipolar power supply. Semester Planned: Spring	
ELCT 170 Computer Repair Electronics I	6	ELCT 230 Advanced Microprocessor	5
Semester Prerequisite: ELCT 180/Concurrently/Approval A basic electronics course intended for students in the computer repair program. This course begins with basic electricity concepts and continues with topics through transistor circuits and basic digital electronics. Semester Planned: Fall		Semester Prerequisite: ELCT 112, ELCT 121, ELCT 130 Covers advanced topics in microprocessor: 8086MPU instruction set, addressing modes, interrupt structure, memory map of PC under DOS, BIOS, MSDOS functions, parallel OI, keyboard, mouse and monitor driver routines. Lab work involves writing external and resident and interactive programs under DOS and interfacing to 8255, D/A and A/D converters. Semester Planned: Fall	
ELCT 171 Computer Repair Electronics II	6	ELCT 231 Advanced Digital Electronics	5
Semester Prerequisite: ELCT 170 A digital electronics and computer systems course intended for students in the Computer Repair Certificate program. Course topics include semiconductor and magnetic memory, computer system memory, microprocessors, peripheral adapters, and microcomputer systems. Semester Planned: Spring		Semester Prerequisite: ELCT 112, ELCT 121, ELCT 131 Course covers advanced topics in digital electronics: adders, comparators, code converters, ALUs, non-sequential and shift register counters, display systems, and solid-state memories. It also covers SIPO, PISO, SIGNATURE, D/A and A/D circuits. Laboratory work includes the analysis, design, construction and troubleshooting of digital circuits using SSI, MSI and LSI ICs. Semester Planned: Fall	
ELCT 180 Computer Test Equipment I	3	ELCT 232 Digital Project	3
Semester Prerequisite: ELCT 170/Concurrently/Approval A basic test equipment course intended for students in the Computer Repair Certificate program. This course introduces the student to the operation of electronics test equipment including VOM, DMM, oscilloscopes, storage oscilloscopes and basic digital test equipment. Semester Planned: Fall		Semester Prerequisite: ELCT 130, ELCT 231 This course deals with the design of a microcomputer-based programmable monitoring and control system designed around the MC68HC11 and the use of an emulator to verify the design. Laboratory work includes a microcomputer-based design project, preferably using the MC68HC11 with a keyboard, LED/LCD display, and sensors. Semester Planned: Spring	
ELCT 181 Computer Test Equipment II	2	ELCT 241 Analog Troubleshooting	1
Semester Prerequisite: ELCT 171, ELCT 180 Concurrently An advanced test-equipment course intended for students in the Computer Repair Certificate program. Course topics include software diagnostic routines, signature and data analysis, and computer troubleshooting equipment. Semester Planned: Spring		Semester Prerequisite: ELCT 112 Basic troubleshooting principles will be applied to diode, bipolar, and field effect transistor circuits. Laboratory work will be based on computer simulated troubleshooting exercises. Semester Planned: Fall	
ELCT 200 CET Exam Preparation	2	ELCT 242 Computer Interfacing and Peripherals	5
Semester Prerequisite: ELCT 112 This course is designed to prepare the student to take the Certified Electronic Technician, associate level, examination. Semester Planned: Summer		Semester Prerequisite: ELCT 230, ELCT 231 Covers 8086MPU pins functions, address decoding, interfacing of static memory, dynamic memory, and IO adapters. Principle of operation and interfacing of keyboard, display, printer, floppy disk, modem, LAN, and motor control hardware. Lab work involves constructing hardware and writing software for most of the peripherals discussed in the course. Semester Planned: Spring	

<p>ELCT 251 Digital Troubleshooting I 1</p> <p>Semester Prerequisite: ELCT 112, ELCT 131</p> <p>This is a half-semester lab course designed to give the student hands-on experience in troubleshooting digital circuits involving combinational logic, multiplexers, decoders, display and display drivers, flip-flops, counters, timing circuits, shift registers, and other digital circuitry. Class demonstrations and video tapes are used for instruction.</p> <p>Semester Planned: Fall</p>	<p>ELTE 110 Practical Electricity 3</p> <p>Semester Prerequisite: ELTE 100/Concurrently</p> <p>Basic Skills Prerequisite: Reading Level 2; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule)</p> <p>This course introduces the student to electricity on a practical level. The student will learn to use meters to measure electrical quantities, do basic circuit calculations, install basic household electrical wiring, investigate the behavior of motors and transformers. Reviews electrical codes and standards.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ELCT 252 Digital Troubleshooting II 3</p> <p>Semester Prerequisite: ELCT 230, ELCT 231, ELCT 251</p> <p>This course is a systematic approach to troubleshooting microprocessor based systems and using test equipment. The student gains hands-on experience by drawing timing diagrams, troubleshooting flowcharts, writing or using diagnostic programs, and using test equipment to locate faults on MPU, memory, video, I/O, and floppy disk controller boards.</p> <p>Semester Planned: Spring</p>	<p>ELTE 112 Basic Wiring Installation 2</p> <p>Semester Prerequisite: ELTE 110</p> <p>This course covers installation of a variety of wiring systems in wood frame and masonry construction. Students will practice installing non-metallic sheathed cable, flexible metal conduit, electrical metallic tubing, and rigid conduit.</p> <p>Semester Planned: Fall, Spring</p>
<p>ELCT 261 Consumer Product Systems 3</p> <p>Semester Prerequisite: ELCT 112</p> <p>Common electronic consumer product operation is explained through block diagrams and schematic diagrams. Systems include AM and FM stereo radio, black-and-white and color television, and videotape recorders. Lab work will involve measurements and alignments of normally operating systems.</p> <p>Semester Planned: Spring</p>	<p>ELTE 121 Analyzing Electric Circuits 5</p> <p>Semester Prerequisite: TECH 100/MATH 050, ELTE 110/Approval</p> <p>This course utilizes concepts in basic algebra, vector algebra, and trigonometry to solve DC and AC electric circuit problems. Topics will include units, Ohm's law, network analysis, series, parallel and combination DC and AC circuits, inductance and capacitance.</p> <p>Semester Planned: Fall, Spring</p>
<p>ELCT 271 Communications I 4</p> <p>Semester Prerequisite: ELCT 112/Approval</p> <p>This course covers a review of resonant circuits, LC filter networks, radio frequency amplifiers, oscillators, amplitude modulation transmitting and receiving circuits and systems.</p> <p>Semester Planned: Fall</p>	<p>ELTE 122 Industrial Control Electronics 5</p> <p>Semester Prerequisite: ELTE 110, ELTE 121, INAU 100/Approval</p> <p>This course introduces the student to solid-state circuitry used in industry. Students will study diodes, transistors, SCRs, triacs, optical isolators, transducers, power circuits, etc. Laboratory will include oscilloscope usage. The course also includes an introduction to Boolean algebra and digital circuits.</p> <p>Semester Planned: Spring</p>
<p>ELCT 272 Communications II 4</p> <p>Semester Prerequisite: ELCT 271/Approval</p> <p>The student will learn frequency modulation transmitting and receiving circuits and systems, transmission lines, antennas, and microwave devices.</p> <p>Semester Planned: Spring</p>	<p>ELTE 123 Motors and Transformers 4</p> <p>Semester Prerequisite: ELTE 121</p> <p>This course begins with three-phase circuits, including three-phase power measurement. Contains practical introduction to single- and three-phase transformers, motors, and alternators. Brief coverage of DC machines.</p> <p>Semester Planned: Fall</p>
<p>ELCT 281 Biomedical Instrumentation 4</p> <p>Semester Prerequisite: ELCT 112</p> <p>Preparation for the certified biomedical electronics technician examination begins here. The student will be introduced to biomedical safety standards and regulatory agencies as well as measurement of physiological signals with biomedical equipment. Lab exercises include safety testing and performance testing of biomedical equipment.</p> <p>Semester Planned: Fall</p>	<p>ELTE 131 Introduction to Machine Control 4</p> <p>Semester Prerequisite: ELTE 110</p> <p>Covers relay logic and controls using industrial standards. Use of correct symbols and standard construction of wiring and ladder diagrams is emphasized. Laboratory exercises include wiring three-phase motor control circuits utilizing two- and three-wire control and machine control circuits utilizing limit and proximity switches, timers, relays, etc.</p> <p>Semester Planned: Fall, Spring</p>
<p>ELCT 283 MET Exam Preparation 1</p> <p>Semester Prerequisite: ELCT 281/Approval</p> <p>A review of material covered on the American Association of Medical Instrumentation (AAMI) certification exam. This includes safety, anatomy, physiology, electronics, and biomedical instrumentation.</p> <p>Semester Planned: Summer</p>	<p>ELTE 141 National Electrical Code I 4</p> <p>Semester Prerequisite: ELTE 110/Equivalent</p> <p>An introductory course designed for individuals with little or no knowledge of the electrical code. Students will study the structure and scope of the National Electrical Code and learn how to locate often used code sections: Ohm's law, voltage drop, wire and conduit sizing, installation methods.</p> <p>Semester Planned: Fall, Spring</p>
<p>ELCT 290 Biomedical Internship 4</p> <p>Semester Prerequisite: ELCT 281/Approval</p> <p>This course will allow students to be placed in hospital biomed repair shops and earn credit for satisfactory work performance. The students' occupational interests are considered along with their background or related courses to determine placement.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ELTE 142 National Electrical Code II 4</p> <p>Semester Prerequisite: ELTE 141/ELTE 145/Approval</p> <p>This course is for individuals with field experience and basic electrical training who need a review for the State Journey examination. Students will review the Code with focus on locating and interpreting the National Electrical Code. In addition to the N.E.C., State of Michigan electrical rules will be reviewed.</p> <p>Semester Planned: Fall, Spring</p>
<p>ELTE 100 Electrical Safety Practices 1</p> <p>Semester Prerequisite: None</p> <p>This course covers basic electrical safety practices in the home, in the electrical laboratory, and in construction and industry. Included are state and federal standards and practices. This course is a prerequisite for, or to be taken concurrently with, all ELTE courses that have a lab.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ELTE 143 National Electrical Code III 4</p> <p>Semester Prerequisite: ELTE 142/Departmental Approval</p> <p>For individuals with a journey electrician's license who need to review for the State Master's exam. Students will cover the Code using the index method, discuss interpretation of the Code, study State of Michigan electrical and construction code rules, and discuss topics appropriate to the Electrical Contractors exam.</p> <p>Semester Planned: Fall</p>

ELTE 145 Electrical Prints for Buildings	4	EMSA 100 First Aid and CPR	2
Semester Prerequisite: ELTE 110/Approval		Semester Prerequisite: None	
Covers construction prints emphasizing standard and non-standard symbols and interpretation of prints. Uses the National Electrical Code to calculate branch circuit, feeder, motor circuit, and service sizes. Other topics include uninterruptible power supplies, signalling, and safety systems. Semester Planned: Spring		Designed to provide the knowledge and skills necessary to respond to and treat emergency situations until professional medical help is obtained. First Aid and CPR certificates issued upon successful completion. Semester Planned: Fall, Spring, Summer	
ELTE 147 National Electric Code Changes	1	EMSA 110 EMT Refresher	3
Semester Prerequisite: ELTE 141/Equivalent		Semester Prerequisite: Basic EMT	
Covers the changes to the National Electric Code and state codes in the most recent code cycle. Semester Planned: Fall, Spring, Summer		This course will provide the EMT with the opportunity to meet State of Michigan refresher requirements. Content includes CPR, oxygen therapy, airway management, patient assessment, medical and environmental emergencies, backboarding, bandaging, shock management, emergency childbirth, and pediatrics. Successful completion of this course requires passing written and practical exams. Semester Planned: Fall, Spring	
ELTE 150 Electric Motor Maintenance	2	EMSA 221 Cisd-Critical Incident Stress Debriefing	1
Semester Prerequisite: ELTE 110		Semester Prerequisite: EMS Personnel	
Students learn to diagnose and test electric motors. Students will learn to identify and repair common problems in motors using meters, test equipment, and appropriate tools. An introduction to rewinding and metal working procedures is also included. Semester Planned: Spring		This seminar provides the knowledge and skills required to function as a member of a Cisd team which assist peers with preventing, recognizing, mitigating, and recovering from stressful emergencies. It is required for emergency related personnel, mental health workers, and clergy interested in becoming a team member. Semester Planned: Fall, Spring, Summer	
ELTE 232 Industrial Control Design	3	EMSA 223 Pre-Hospital Care of the Injured Child	1
Semester Prerequisite: ELTE 131		Semester Prerequisite: EMS Personnel	
This course is a continuation of ELTE 131, covering more components and larger more complex machine control diagrams, including automation interlocking and automatic continuous cycling of machinery. Students will be taught to design the control circuits for more complex machines in conformance with industry standards. Semester Planned: Fall		A course based on the educational program developed by the Children's Hospital National Medical Center, Washington, D.C. The course focuses on the pre-hospital management of the acutely ill or injured child or infant. Advance study is required for successful completion of this course. Semester Planned: Fall, Spring, Summer	
ELTE 240 Electrical Estimating	3	EMSA 224 BTLs-Basic Trauma Life Support	1
Semester Prerequisite: ELTE 112, ELTE 145/Approval		Semester Prerequisite: EMS Personnel	
Basics of preparing accurate, competitive electrical estimates for the building trades. Topics include take-off procedure using electrical, mechanical and architectural prints, lighting design, labor and materials cost, evaluation techniques and specifications. Students should have wiring experience, practice in the use of NEC rules, and electrical prints before enrolling. Semester Planned: Fall		A course which provides instruction and intense evaluation of current theory and skills used in the pre-hospital management of the trauma victim. Advance study is required for successful completion of this course. Follows national BTLs curriculum. Semester Planned: Fall, Spring, Summer	
ELTE 260 Introduction to Programmable Logic Controllers	4	EMSA 225 Paramedic Continuing Education	3
Semester Prerequisite: ELTE 131		Semester Prerequisite: EMS Personnel	
This course covers Programmable logic controllers with focus on common operating principles. Topics include: the capabilities, similarities and differences among controllers, programming (examine on/off, timers, counters), and connecting external devices on Allen Bradley, Modicon and Texas Instruments programmable controllers. Prepares students for any of the advanced PLC courses (ELTE 261, 262, 263). Semester Planned: Fall, Spring		This course is a series of continuing education topics designed to meet all of the CE points required by the State of Michigan for relicensure of a paramedic. Basic EMTs and EMT Specialist may attend designated sessions. Semester Planned: Spring	
ELTE 261 Allen-Bradley PLC-5 Advanced	6	EMSB 101 CPR for Bystanders/Heartsaver	.25
Semester Prerequisite: ELTE 260		Semester Prerequisite: None	
This course covers programming and connections for Allen-Bradley PLC-5 controllers. Focus on math, subroutine, file, block transfer, sequencers, logic and bit manipulation instructions. Students will learn logic for machine control, programming and utilizing intelligent cards, ASCII, analog input/output, and system documentation. Stage programming concepts and methods will be addressed. Semester Planned: Spring		This seminar is designed for CPR instruction of the general public and adheres to American Heart Association guidelines. Content includes adult one-person CPR and foreign body airway obstruction. Also includes information about heart disease, risk factors, prudent heart living, and heart and lungs physiology. Semester Planned: Fall, Spring, Summer	
ELTE 262 Modicon 984 Advanced	6	EMSB 102 CPR for Health Care Professionals	.5
Semester Prerequisite: ELTE 260		Semester Prerequisite: Health Professional	
This course covers programming and connections for Modicon 984 programmable controllers. Focus on math, skip, subroutine, bit manipulation, data transfer move, and logic instructions. Students will learn logic for machine control, programming and utilizing intelligent cards, ASCII, analog input/output and system documentation. Stage programming concepts and methods will be addressed. Semester Planned: Spring		This seminar is designed for CPR instruction of health-care providers and adheres to American Heart Association guidelines. Content includes one- and two-rescuer CPR, child and pediatric CPR, adult, child, pediatric foreign body airway obstruction, information about heart disease, risk factors, and physiology of the heart and lungs. Semester Planned: Fall, Spring, Summer	
ELTE 263 Texas Instruments 405 Advanced	6	EMSB 103 CPR Recertification	.25
Semester Prerequisite: ELTE 260/Instructor Approval		Semester Prerequisite: Current Provider "C" Card	
Covers programming and connections for Texas Instruments 405 programmable controllers. Focus on math, Boolean, subroutine, BCD, bit manipulation, data table and logic instructions. Students will learn logic for machine control, programming and utilizing intelligent cards, ASCII, analog input/output and system documentation. Stage programming concepts and methods will be addressed. Semester Planned: Fall		This seminar is designed for CPR instruction for individuals who have previously obtained instruction in the basics of cardiopulmonary resuscitation and foreign body airway obstruction. The participants must have a current provider card for CPR. The curriculum and testing consists of recertification techniques for CPR. Semester Planned: Fall, Spring, Summer	
EMSB 104 CPR Instructor	.75		
Semester Prerequisite: Basic Cardiac Life Support, Admission to Program			
The CPR Instructor's seminar is to provide the opportunity and forum to acquire knowledge and skills to accurately instruct and test the Basic Life Support Provider's courses according to American Heart Association guidelines. Semester Planned: Fall, Spring, Summer			

<p>EMSB 106 Infant/Child CPR .25</p> <p>Semester Prerequisite: None</p> <p>This seminar provides instruction of CPR for special situations or groups. Infant and child CPR and foreign body airway obstruction for babysitters and parents would fall under this curriculum.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>EMTA 103 Basic EMT III 3</p> <p>Semester Prerequisite: EMTA 101, EMTA 102</p> <p>The third in a sequence of four courses to prepare the student as a Basic EMT. Emphasis is placed on didactic material including the recognition and management of environmental and medical emergencies; verbal, written and radio communications, triage, emergency childbirth, and pediatric emergencies.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>EMSB 110 First Aid and CPR Seminar .5</p> <p>Semester Prerequisite: None</p> <p>This seminar offers adult CPR including airway obstruction and four hours of Basic First Aid. Red Cross certification is given to those successfully completing both components.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>EMTA 104 Basic EMT IV 2</p> <p>Semester Prerequisite: EMTA 103/Concurrently</p> <p>The final course in a sequence of four to prepare the student as a Basic EMT. Emphasis is placed on the overall delivery of basic emergency care through simulated emergencies. Successful completion of the course and the clinical component enables the student to apply for licensing as a Basic EMT.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>EMSB 111 First Aid When Seconds Count .75</p> <p>Semester Prerequisite: None</p> <p>A seminar designed to instruct and prepare individuals to administer immediate first aid when sudden illness or injury occurs until professional help arrives. This seminar provides the necessary information needed to save lives and prevent further injury within the first few minutes.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>EMTA 105 Ambulance Driving 2</p> <p>Semester Prerequisite: EMT/EMT Student</p> <p>A course to provide the EMT with the knowledge and practical experience in the operation of an ambulance. The course will focus on safety, defensive driving techniques, and specialized driving maneuvers.</p> <p>Semester Planned: Fall, Spring</p>
<p>EMSB 121 EMS Continuing Education A .25</p> <p>Semester Prerequisite: EMS Personnel</p> <p>A series of continuing education seminars for the Basic EMT, EMT-Specialist or Paramedic designed to meet three or four continuing education credits for relicensure requirements of the State of Michigan. Students may elect to take as many seminars as needed to fulfill their relicensure requirements.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>EMTA 106 EMS Communications 2</p> <p>Semester Prerequisite: Admission to Program</p> <p>A course to provide the EMT with knowledge and skill in written and verbal communication, the operation of dispatching, and ambulance-to-hospital radio operation specific to pre-hospital emergency care.</p> <p>Semester Planned: Fall</p>
<p>EMSB 122 EMS Continuing Education B .5</p> <p>Semester Prerequisite: EMS Personnel</p> <p>A series of continuing education seminars for the Basic EMT, EMT-Specialist or Paramedic designed to meet five or six continuing education credits for relicensure requirements of the State of Michigan. Students may elect to take as many seminars as needed to fulfill their relicensure requirements.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>EMTA 107 Psychiatric Emergencies 2</p> <p>Semester Prerequisite: Admission to Program</p> <p>A course to provide the EMT with skill in the management and approach to psychological emergencies and crisis situations in the pre-hospital setting. Emphasis is placed on psychological theory and communications techniques.</p> <p>Semester Planned: Fall</p>
<p>EMSB 123 EMS Continuing Education C .75</p> <p>Semester Prerequisite: EMS Personnel</p> <p>A series of continuing education seminars for the Basic EMT, EMT-Specialist or paramedic designed to meet 10-12 continuing education credits for relicensure requirements of the State of Michigan. Students may elect to take as many seminars as needed to fulfill their relicensure requirements.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>EMTA 108 Legal Issues in Emergency Medical Services 2</p> <p>Semester Prerequisite: Admission to Program</p> <p>A course to assist the EMT in understanding the legal system and legal principles as they apply to emergency pre-hospital care. Emphasis is placed on the evaluation of legally sound report writing skills, deposition delivery and legal testimony.</p> <p>Semester Planned: Spring</p>
<p>EMTA 100 Medical First Responder 3</p> <p>Semester Prerequisite: None</p> <p>A course to provide the student with the knowledge and skills necessary to manage ill or injured victims at the scene of an emergency until the arrival of ambulance personnel. Successful completion enables the student to apply for state licensure as a Medical First Responder.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>EMTA 109 EMS Dangerous Situations 2</p> <p>Semester Prerequisite: Admission to Program</p> <p>A course to provide the EMT with enhanced awareness of specialized and dangerous situations faced in the pre-hospital setting. Emphasis is placed on confrontations, self protection, patient and scene management.</p> <p>Semester Planned: Spring</p>
<p>EMTA 101 Basic EMT I 3</p> <p>Semester Prerequisite: EMTA 102 Concurrently</p> <p>Basic Skills Prerequisite: Reading Level 5; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule)</p> <p>First in a sequence of four courses to prepare the student as a Basic EMT. Emphasis is placed on didactic material including airway management, patient assessment, CPR soft tissue injuries, head, chest, and abdominal injuries, and proper use of equipment in the delivery of basic emergency care.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>EMTA 110 Basic EMT Pharmacology 2</p> <p>Semester Prerequisite: EMT/Admission to Program</p> <p>This course is designed to familiarize the student with common medications encountered in the field. Special attention will be placed on emergency drugs used in emergency situations and medications frequently used by emergency patients.</p> <p>Semester Planned: Spring</p>
<p>EMTA 102 Basic EMT II 2</p> <p>Semester Prerequisite: EMTA 101/Concurrently</p> <p>Second in a sequence of four courses to prepare the student as a Basic EMT. Emphasis is placed on practical skills including patient assessment, bandaging, splinting, backboarding, oxygen delivery equipment, CPR, and airway management in the delivery of basic emergency care.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>EMTA 111 EMT Physical Assessment 2</p> <p>Semester Prerequisite: EMT/Admission to Program</p> <p>This course is designed to give the EMT and EMT-S tools to go beyond basic IPS (initial patient survey) in patient evaluation. It will enhance their history taking and interpretations of vital signs. It includes analysis by body system and interpretation of physical findings. Useful for field or hospital practice.</p> <p>Semester Planned: Spring</p>
<p>EMTA 112 Basic EMT Clinical 2</p> <p>Semester Prerequisite: Admission to Program</p> <p>This is the clinical/simulation component in the two semester Basic EMT program. Student will be assigned to hospital clinical sites with an instructor, in simulation on campus and EMS agencies with a licensed EMT or paramedic.</p> <p>Semester Planned: Spring</p>	

<p>EMTA 113 EMT Field Practicum 2</p> <p>Semester Prerequisite: Admission to Program</p> <p>This course offers the EMT student an opportunity to obtain field experience by doing an "internship" at a cooperating agency that provides pre-hospital emergency care. The agency will evaluate the student on attendance, punctuality, appearance, patient care and communication.</p> <p>Semester Planned: Summer</p>	<p>ENGL 211 World Literature I 4</p> <p>Semester Prerequisite: WRIT 121/Equivalent</p> <p>A selective survey of the literatures of major cultures in Africa, the Americas, Asia, and Europe to approximately the seventeenth century. Explores the ethnic, aesthetic, and thematic elements of their respective cultures through narrative prose fiction, poetry, and drama.</p> <p>Semester Planned: Fall</p>
<p>EMTA 114 Rescue and Extrication 2</p> <p>Semester Prerequisite: EMT/Rescue Personnel</p> <p>A course to provide EMS or rescue personnel with skills in light and heavy vehicle extrication, industrial rescue techniques, extrication from farm machinery, and other specialized rescue techniques. Emphasis is placed on patient and rescuer safety.</p> <p>Semester Planned: Fall, Spring</p>	<p>ENGL 212 World Literature II 4</p> <p>Semester Prerequisite: WRIT 121/Equivalent</p> <p>A survey of the literatures of major world cultures reflecting the diversity of the continents of Africa, the Americas, Asia, and Europe from approximately the seventeenth century through the present. Explores the historical, ethnic, aesthetic, political, economic, and thematic elements of their cultures through narrative prose fiction, poetry, and drama.</p> <p>Semester Planned: Spring</p>
<p>EMTA 200 EMT Specialist 5</p> <p>Semester Prerequisite: Basic EMT</p> <p>A course to provide the Basic EMT with knowledge and skills necessary for licensure as an EMT Specialist. Emphasis is placed on intravenous therapy, advanced airway skills, and patient assessment skills. Successful completion requires passing written and practical exams and the supervised clinical component.</p> <p>Semester Planned: Fall, Spring</p>	<p>ENGL 220 Science Fiction 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL 122 Recommended)</p> <p>This course acquaints students with popular modern literature of science fiction. History and definitions of science fiction are given, but the emphasis is on short stories, novels, and films—their questions and criticisms of society, the world, and human existence.</p> <p>Semester Planned: Summer</p>
<p>EMTA 222 EMS Instructor Coordinator 6</p> <p>Semester Prerequisite: Admission to Program</p> <p>A Michigan Department of Public Health approved course for EMS personnel interested in becoming an Instructor Coordinator. Includes teaching and testing methods, lesson plan development, writing performance objectives, course administration, MDPH application for course approval, and meeting state requirements. Student teaching required.</p> <p>Semester Planned: Fall</p>	<p>ENGL 240 The Film as Art 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL 122 Recommended)</p> <p>This course will introduce film as an art form capable of making perceptive comments on our civilization. Thematic analysis of twelve to fifteen motion pictures of recognized merit will emphasize the filmmaker's visual and aural techniques as well as conventions more commonly associated with literature.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ENGL 122 Writing about Literature and Ideas 4</p> <p>Semester Prerequisite: WRIT 121</p> <p>An alternative to WRIT 122, ENGL 122 introduces the students to various literary forms and develops analytical skills in reading, writing, and research techniques. Writing assignments begin with short essays and conclude with an extensive literary research paper.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ENGL 245 Popular Culture and Mass Media 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL 122 Recommended)</p> <p>A study of the popular culture distributed by mass media (newspapers, radio, film, television, magazines, and music videos) and how the media and popular culture reflect and shape our cultural beliefs. Extensive use of multi-media.</p> <p>Semester Planned: Fall</p>
<p>ENGL 132 Honors Writing about Literature and Ideas 4</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An alternative to WRIT 122. ENGL 132 is an introduction to various literary forms, in addition to the development of analytical reading and writing skills and research techniques leading to a literary research paper. (Same as ENGL 122 but taught on an advanced level.)</p> <p>Semester Planned: Spring</p>	<p>ENGL 250 Survey of American Literature 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL 122 Recommended)</p> <p>Provides a perspective on the evolution of traditional American literature from the eighteenth through the twentieth centuries, emphasizing selected works of the leading essayists, novelists, poets, and dramatists together with selected examples of works by women and ethnic minorities which have contributed profound changes to American thought.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ENGL 201 Introduction to Poetry 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL 122 Recommended)</p> <p>An introduction to the content, form, style, and technique of poetry; its structural types, metrical, blank, and free verse; its thematic types, lyric, narrative, and dramatic; and its effects or purposes. The course emphasizes poetry written in English but includes English translations of representative poetry from other languages and cultures.</p> <p>Semester Planned: Fall, Summer</p>	<p>ENGL 260 African American Literature 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL 122 Recommended)</p> <p>This course is an introduction to the African American literary tradition, which explores how black men and women have portrayed American life and their experiences in autobiography, essay, fiction, poetry, and drama. Students will read and discuss slave narratives, literature from the Harlem Renaissance, and several modern texts.</p> <p>Semester Planned: Spring</p>
<p>ENGL 202 Introduction to Drama 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL 122 Recommended)</p> <p>Introduces drama and its literary techniques and conventions. Attention is given to principles and theory, but understanding of the plays is emphasized. Representative plays from Greek, European, English, and American dramatists.</p> <p>Semester Planned: Fall</p>	<p>ENGL 265 Japanese Literature 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL 122 Recommended)</p> <p>Arranged chronologically, this course draws heavily on many different genres of Japanese literature. The basis for selection of works to be read rests on the insight that each work gives to the Japanese society which produced it, and upon its universal characteristics.</p> <p>Semester Planned: Fall</p>
<p>ENGL 203 Introduction to Prose 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL 122 Recommended)</p> <p>This course traces the development of prose fiction by introducing the students to the epic in prose translation, the romance, the novel, and the satire. It requires the student to use critical thinking in analyzing various examples of prose fiction and provides historical and cultural context for the works studied.</p> <p>Semester Planned: Spring</p>	<p>ENGL 266 British Literature I 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL 122 Recommended)</p> <p>British Literature I surveys the poetry, prose, and drama of the major British writers from Chaucer (fourteenth century) to Milton (seventeenth century). The works are selected to reflect the attitude and values of British culture and the perception of the world from a British point of view.</p> <p>Semester Planned: Fall</p>

<p>ENGL 267 British Literature II 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL 122 Recommended)</p> <p>British Literature II surveys the poetry, prose, and drama of the major British writers from eighteenth century to late twentieth century. The works are selected to reflect the attitudes and values of British culture and the perception of the world from a British point of view.</p> <p>Semester Planned: Spring</p>	<p>ENRI 103 Individualized English III 3</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Individualized instruction in one or several language areas: writing; editing; vocabulary development, including pronunciation; and reading. Editing instruction may include spelling, standard English grammar, organizational strategies, or punctuation. Students and instructors select instructional materials and design an individualized study program. (May repeat for credit three times.)</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ENGL 270 Literature by Women 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL 122 Recommended)</p> <p>A study of selected works by English and North American women writers. Designed to increase understanding of the themes, images, issues, and modes of expression of women writers.</p> <p>Semester Planned: Spring</p>	<p>ENRI 105 Life Learning Portfolio 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course provides the opportunity for students to create a portfolio that will document learning acquired through work, volunteer, and/or life experience. The finished portfolio can then be submitted to the LCC Registrar's Office to request college credit for knowledge and skill-learning outcomes that correspond to LCC courses.</p> <p>Semester Planned: Fall</p>
<p>ENGL 290 Shakespeare 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL 122 Recommended)</p> <p>Introductory course in the dramatic works of William Shakespeare. Students will read nine to twelve plays representative of the author's comedies, histories, and tragedies.</p> <p>Semester Planned: Spring</p>	<p>ENRI 109 Academic Preparation I 6</p> <p>Semester Prerequisite: READ/WRIT Placement Test</p> <p>Basic Skills Prerequisite: Reading Level 4; Writing Level (See Class Schedule)</p> <p>Offers a unified and collaborative approach to learning basic language skills. Emphasizes reading, writing, speaking, listening, and thinking skills. Students assist one another in exploring topics of their choice from various academic disciplines. First of two academic preparation courses. Requires enrollment in ENRI 005.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ENGL 295 Independent Study 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Special research projects and/or individual readings in English. Students will invest no less than 32 hours for each credit earned. Enrollment is usually restricted to honors students who have grade-point averages of at least 3.0 in courses offered by this department.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ENRI 110 Academic Preparation II: College Assignments 6</p> <p>Semester Prerequisite: ENRI 109/READ/WRIT Placement Test</p> <p>Basic Skills Prerequisite: Reading Level 6; Writing Level (See Class Schedule)</p> <p>Designed to introduce students to college assignments and resources in various academic disciplines. Promotes awareness of learning skills and strategies. Encourages the positive attitude and self-directed learning behavior characteristic of successful college students. Includes reading, writing, speaking, and listening activities in a workshop environment. Requires enrollment in ENRI 005.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ENGL 296 Independent Study 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Special research projects and/or individual readings in English. Students will invest no less than 32 hours for each credit earned. Enrollment is usually restricted to Honors students who have grade-point averages of at least 3.0 in courses offered by this department.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ENRI 152 Orientation Workshop: College Reading Survival Skills 1</p> <p>Semester Prerequisite: None</p> <p>Designed for beginning college students, whether recent high school graduates or returning adults. Develops college reading survival skills. Concentrates on reading speed and flexibility, study techniques, concentration and memory, note-taking, test-taking, and vocabulary expansion.</p> <p>Semester Planned: Summer</p>
<p>ENRI 005 Academic Preparation Laboratory 0</p> <p>Semester Prerequisite: None</p> <p>Arranges the days and times when students will attend enrichment lab. Students must register for both an enrichment lab course, such as ENRI 109, and a section of ENRI 005.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ENRI 162 Orientation Workshop: College Writing Skills 1</p> <p>Semester Prerequisite: None</p> <p>This course is designed for new and returning students, as well as others from the community. It helps students to develop their writing skills, including the study of writing for various disciplines, the writing process, and the basics of grammar, sentence style, and punctuation.</p> <p>Semester Planned: Summer</p>
<p>ENRI 098 Success Workshop .5</p> <p>Semester Prerequisite: None</p> <p>Mini-workshop intended to introduce and/or review reading-related techniques essential for academic survival and success. Sessions cover time management, establishing frame of reference, scientific skimming, main idea identification, organized study procedures, enhancing comprehension, note-taking through "mapping," and keys to improving objective test scores. Includes much practical, "hands-on" activity.</p> <p>Semester Planned: Fall, Spring</p>	<p>ESLA 106 English as a Second Language: Beginning 4</p> <p>Semester Prerequisite: Placement Test</p> <p>For advanced beginning ESL students who have been introduced to some basic English structures but have not yet mastered them. Class sessions focus on the spoken form and homework on the written form.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ENRI 101 Individualized English I 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Individualized instruction in one of several language areas: writing; editing; vocabulary development, including pronunciation; and reading. Editing instruction may include spelling, standard English grammar, organizational strategies, or punctuation. Students and instructors select instructional materials and design an individualized study program. (May repeat for credit three times.)</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ESLA 108 English as a Second Language: Intermediate 4</p> <p>Semester Prerequisite: ESLA 106/Placement Test</p> <p>For intermediate ESL students. Reinforces the instruction of ESLA 106 and introduces more advanced grammatical structures. Increased attention to reading and writing.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>ENRI 102 Individualized English II 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Individualized instruction in one of several language areas: writing; editing; vocabulary development, including pronunciation; and reading. Editing instruction may include spelling, standard English grammar, organizational strategies, or punctuation. Students and instructors select instructional materials and design an individualized study program. (May repeat for credit three times.)</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>ESLA 110 English as a Second Language: Advanced 4</p> <p>Semester Prerequisite: ESLA 108/Placement Test</p> <p>For advanced ESL students. Reinforces the instruction of ESLA 106 and 108 and emphasizes writing, reading, and oral communication for college-level work. Students write and revise essays, participate in a variety of speaking and listening activities, and practice college reading skills.</p> <p>Semester Planned: Fall, Spring, Summer</p>

ESLT 011 Grammar I	4	ESLT 032 Reading II	4
Semester Prerequisite: Departmental Approval This course is the first in a series for the Limited English Proficient students. Students are introduced to the basics of English grammar and practice simple sentences, commands, and requests related to vocational and technical training. Students focus on key structures and practice them through a variety of language exercises. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Departmental Approval This course is designed to help Limited English Proficient students develop their general reading skills and increase their vocabulary level. Students will learn to identify main ideas, understand English idioms and increase their reading speed while maintaining comprehension. Materials relate to vocational courses, everyday life and technical topics. Semester Planned: Fall, Spring, Summer	
ESLT 012 Grammar II	4	ESLT 033 Reading III	4
Semester Prerequisite: Departmental Approval This course is designed to provide the Limited English Proficient student with practice in the basics of English grammar through a variety of contextualized language exercises. Students will practice a wide range of grammatical forms, as well as, situationally appropriate language use in everyday life and the workplace. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Departmental Approval This course is designed to give Limited English Proficient students practice in reading scientific and technical texts. Assignments will focus on the development of technical vocabulary, identification of main ideas and important details and summarizing information from textbooks. Semester Planned: Fall, Spring, Summer	
ESLT 013 Grammar III	4	ESLT 034 Reading IV	4
Semester Prerequisite: Departmental Approval This course is designed to provide the Limited English Proficient student with a review of basic English grammar and practice with complex grammatical structures. Students will apply their knowledge of English grammar in a variety of assignments on work-related topics and vocational course work. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Departmental Approval This course is designed for Limited English Proficient students who need more practice in reading before they enter regular college courses. Course work will include reading college-level texts, vocabulary building, familiarization with idioms, practicing summaries and paraphrasing main ideas. Semester Planned: Fall, Spring, Summer	
ESLT 014 Grammar IV	4	ESLT 050 Language Lab	4
Semester Prerequisite: Departmental Approval This course is designed to provide advanced Limited English Proficient students with the opportunity to identify their weaknesses in using English grammar and mechanics and develop a systematic study plan for understanding those weaknesses and correcting them. Basic and complex structures will be reviewed in a context which develops the student's fluency and ability to self-edit. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Departmental Approval This course is designed to provide Limited English Proficient students with extensive, individualized programs of listening and pronunciation improvement. A student's laboratory work will be designed to reinforce his/her work in other ESLT classes and correlated to his/her English proficiency. Semester Planned: Fall, Spring, Summer	
ESLT 021 Speaking/Listening I	4	FIRE 101 Michigan F.F.T.C. Basic Fire Training Level I A and B	9
Semester Prerequisite: Departmental Approval This course is designed to teach American English pronunciation and conversational patterns to students with limited English proficiency. Materials relate to everyday life, technical related work and vocational courses. Students will practice interviewing and listening comprehension skills. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Admission to Program Level I is basic training required for all fire fighters in the State of Michigan. Training is certified by the Michigan Fire Fighters Training Council and includes the basics of fire suppression, apparatus operation, life safety and physical fitness. Semester Planned: Fall, Spring, Summer	
ESLT 022 Speaking/Listening II	4	FIRE 102 Michigan F.F.T.C. Basic Fire Training Level II C and D	4
Semester Prerequisite: Departmental Approval This course is designed to provide intensive practice in pronunciation and conversational English, as used in everyday life, the technical work place and vocational courses. Lessons are designed to reinforce English grammatical structures, increase students' intelligibility and listening comprehension, and develop fluency in spoken English. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: FIRE 101 Level II is basic training required for all career fire fighters in the State of Michigan. Training is certified by the Michigan Fire Fighter's Training Council and includes advanced fire suppression, aerial operation, life safety and physical fitness. Semester Planned: Fall, Spring, Summer	
ESLT 023 Speaking/Listening III	4	FIRE 110 Fire Prevention and Law	4
Semester Prerequisite: Departmental Approval This course is designed to give Limited English Proficient students intensive practice in conversation skills and listening comprehension. Students will review American English pronunciation, stress and intonation patterns, and practice a variety of oral communication skills, including interviewing, rehearsed oral presentations, and extemporaneous speech. Topics are vocationally related. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This course identifies applicable statutes of Michigan Law as they relate to the Fire Service. Covers selected portions of NFPA 101, the Life Safety Code, and appropriate portions of BOCA, and other building codes. Focuses on the importance of an aggressive fire prevention plan in communities. Semester Planned: Fall, Spring, Summer	
ESLT 024 Speaking/Listening IV	4	FIRE 115 Building Construction for the Fire Service	4
Semester Prerequisite: Departmental Approval This course is designed to provide advanced Limited English Proficient students with practice in spontaneous and formal conversation skills. Students will practice listening skills, interviewing, problem-solving and oral presentations. Topics will be vocationally related. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This course involves the essentials of building design and construction for the fire service with emphasis on life safety, evacuation, fire extension, and collapse. Semester Planned: Fall, Spring, Summer	
ESLT 031 Reading I	4	FIRE 120 Chemistry of Hazardous Materials	4
Semester Prerequisite: Departmental Approval This course is designed to teach basic reading skills to students with limited English proficiency. Classroom exercises focus on vocational readings, vocabulary development and the ability to discuss and report on the assigned readings. Readings concern everyday life and technical work related jobs. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None A college-level chemistry course focusing on hazardous materials encountered by fire fighters. Contains specific elements of NFPA 741, 742 and OSHA CFR 1041.120. Topics include atomic and molecular theory; bonding property of elements; oxidation and reduction reactions; kinetic-molecular theory; solutions and electrochemistry. Includes Michigan Haz-Mat First Responder Certification. Semester Planned: Fall, Spring	
		FIRE 125 Fire Protection Systems and Equipment	4
		Semester Prerequisite: None Identifies fixed systems typically encountered by fire fighters responding to industrial complexes or specialized environments. Emphasizes selected portions of detection and alarm (NFPA 72-85), sprinklers and standpipes (NFPA 13 and 1964), and special systems and design. Semester Planned: Fall, Spring	

<p>FIRE 130 Hydraulics and Pump Operations 4</p> <p>Semester Prerequisite: TECH 100/MATH 050 Describes the fundamentals of hydraulics, including water supply problems, standards and pump requirements, and practical application of knowledge to fire-fighting problems. Includes selected portions of NFPA 1901 and 1002. Semester Planned: Fall, Spring</p>	<p>FREN 202 Intermediate French II 4</p> <p>Semester Prerequisite: FREN 201/Equivalent/Approval Second course of a two-semester sequence. Course includes a review of more complex grammar topics, readings of cultural and literary texts, short stories and newspaper articles for a better understanding of the francophone world. Students will improve fluency through listening-comprehension, writing and discussions in the target language. Semester Planned: Spring</p>
<p>FIRE 150 Fire Command and Operations 4</p> <p>Semester Prerequisite: None This course centers on the initial fireground attack from a company officer's perspective. Deals separately with Engine and Truck Company Operations including initial assignments, use of resources, rescue, streams, and salvage. Covers selected portions of NFPA 1002, 1410, 1904, and 1961. Covers the National Fire Academy Incident Command System. Semester Planned: Fall, Spring</p>	<p>GEOG 120 Introduction to Geography 3</p> <p>Semester Prerequisite: None An introductory course designed to provide contemporary geographic ideas and techniques to study the interaction between people and their physical environment. Semester Planned: Fall</p>
<p>FIRE 210 Fire Investigation 4</p> <p>Semester Prerequisite: FIRE 101/Firefighter/Sworn Police Officer This course investigates fire behavior, importance of determining cause and origin, accidental, incendiary or arson type fires. Describes methods of recognizing and identifying motivation for arson and covers applicable laws and court procedures. Semester Planned: Fall, Spring, Summer</p>	<p>GEOG 121 Physical Geography 3</p> <p>Semester Prerequisite: None Emphasizes landforms, natural vegetation, weather and climatic elements, and soils. Offers an extensive study of these forces, noting their ecological principles and their effects on human life. Includes mapping techniques, land site analysis, and air-photo interpretation. Field trips will be an integral part of the course. Semester Planned: Fall, Spring, Summer</p>
<p>FIRE 220 Hazardous Materials in the Fire Service 4</p> <p>Semester Prerequisite: FIRE 120 Explores the concepts and methods of detection, control, and mitigation of hazardous materials incidents. Contains specific elements of NFPA 741, 742, and OSHA CFR 1041.120. Includes Michigan Haz-Mat Operations Level Certification. Semester Planned: Fall, Spring</p>	<p>GEOG 200 World Regional Geography 4</p> <p>Semester Prerequisite: None Basic Skills Prerequisite: Reading Level 1; Writing Level (See Class Schedule) This course describes and analyzes human relationships with the natural and cultural environment and examines the physical and cultural aspects of the major regions of the world. International interdependency is examined to promote global awareness. Semester Planned: Fall, Spring, Summer</p>
<p>FIRE 250 Fire Administration 4</p> <p>Semester Prerequisite: Fire Command/Departmental Approval This course provides the student with a better understanding of motivation and the proper reaction from management. Covers labor relations and collective bargaining, fiscal management, and political interaction. Presents modern approaches to the challenges which face today's fire executives. Semester Planned: Fall, Spring</p>	<p>GEOG 202 Geography of North America 3</p> <p>Semester Prerequisite: None A study of the human and physical aspects of North America. This course will identify some of the factors that influence the quality of life and give character to each of the various subregions. Semester Planned: Spring</p>
<p>FREN 101 Elementary French I 4</p> <p>Semester Prerequisite: None Introductory course open to students with little or no knowledge of French. Students are introduced to basic patterns and structures of French, enabling them to develop listening, speaking, reading, and writing skills. Emphasis is placed on contemporary vocabulary, essentials of grammar and pronunciation. Semester Planned: Fall, Spring, Summer</p>	<p>GEOG 203 Economic Geography 3</p> <p>Semester Prerequisite: None The study of the distribution of economic activities throughout the world. Emphasizes agriculture, resources, population, industry, urbanization, and trade. Semester Planned: Spring</p>
<p>FREN 102 Elementary French II 4</p> <p>Semester Prerequisite: FREN 101/Equivalent/Approval Second course of a two-semester sequence. Introduction to more complex structures and patterns, and more active use of spoken and written French. Semester Planned: Spring</p>	<p>GEOG 295 One Credit Independent Study in Geography 1</p> <p>Semester Prerequisite: Departmental Approval Independent project involving reading and research in geography. The project, chosen by the student, must be approved in advance by the Department Chair and be supervised by a faculty member. It must also meet specific academic goals. Semester Planned: Fall, Spring, Summer</p>
<p>FREN 115 Conversational French I 3</p> <p>Semester Prerequisite: None Students learn how to communicate orally in everyday life situations and in travel abroad. Emphasis is on the development of ability to communicate in French. French culture is explored. Semester Planned: Fall, Spring, Summer</p>	<p>GEOG 296 Two Credit Independent Study in Geography 2</p> <p>Semester Prerequisite: Departmental Approval Independent project involving reading and research in geography. The project, chosen by the student, must be approved in advance by the Department Chair and be supervised by a faculty member. It must also meet specific academic goals. Semester Planned: Fall, Spring, Summer</p>
<p>FREN 116 Conversational French II 3</p> <p>Semester Prerequisite: FREN 115/Equivalent Continuation of FREN 115. Designed for advanced beginners who wish to improve their speaking ability in the context of daily living. Emphasis is placed on contemporary vocabulary, essentials of grammar, and pronunciation through class discussions conducted in French. Students will continue to explore different aspects of life and culture in the francophone world. Semester Planned: Fall, Spring, Summer</p>	<p>GEOG 297 Three Credit Independent Study in Geography 3</p> <p>Semester Prerequisite: Departmental Approval Independent project involving reading and research in geography. The project, chosen by the student, must be approved in advance by the Department Chair and be supervised by a faculty member. It must also meet specific academic goals. Semester Planned: Fall, Spring, Summer</p>
<p>FREN 201 Intermediate French I 4</p> <p>Semester Prerequisite: FREN 102/Equivalent/Approval First course of a two semester sequence. Course provides grammar review, vocabulary building, listening comprehension, composition writing, group discussions, and readings of literary and cultural texts, short stories and news articles for a better understanding of the francophone world. Semester Planned: Fall</p>	<p>GEOL 200 Michigan Geology 3</p> <p>Semester Prerequisite: Science Inventory Passed Evidence from the rock and fossil record is used to reconstruct the sequence of events and changing environmental conditions of Michigan's past. Michigan's geologic resources (e.g., petroleum, natural gas, coal, iron, copper, salt, gypsum, surface groundwater, sand/gravel) and environmental issues (e.g., waste disposal, water pollution) are investigated. Semester Planned: Summer</p>

GEOL 202 Geology of Western National Parks	2	GERO 100 Introduction to Human Aging	3
Semester Prerequisite: None This course is a survey of the geological features, surface processes and history of the western national parks and monuments. The geology of these sites is presented within the context of geologically defined regions and their sequence of origin. Emphasis is placed on video and slide presentations accompanying lecture. Semester Planned: Summer		Semester Prerequisite: None This course provides a basic orientation to the field of gerontology, with emphasis on social aspects: demography, physiology, psychology, sociology, economics, environment, death and dying, and community and government programs. Semester Planned: Fall	
GEOL 210 Geology Field Studies	1	GERO 101 Programs and Services for the Aging	3
Semester Prerequisite: Departmental Approval Opportunities to gain geology field experience through application of skills learned in the classroom. One-day and extended overnight excursions are offered. (Destination examples: Michigan gypsum mines, Michigan Upper Peninsula iron and copper country, Cincinnati fossil beds, Grand Ledge quarries, Western U.S. regional geology, etc.) Semester Planned: Summer		Semester Prerequisite: GERO 100 Recommended This course provides a description of the organization and functions of the aging services network, its relationship to the broader human services system, and how the services worker can use or develop community resources for the benefit of older adults. Semester Planned: Spring	
GEOL 212 Geology Field Studies	2	GERO 110 Self-Renewal in Later Years	.5
Semester Prerequisite: Departmental Approval Opportunities to gain geology field experience through application of skills learned in the classroom. One-day and extended overnight excursions are offered. (Destination examples: Michigan gypsum mines, Michigan Upper Peninsula iron and copper country, Cincinnati fossil beds, Grand Ledge quarries, Western U.S. regional geology, etc.) Semester Planned: Summer		Semester Prerequisite: None In this course, mature adult students clarify personal values, identify accomplishments and interests, and develop communication skills. Topics include myths about aging; use of individual personal resources (emotional, physical, mental, and social); and exploration of meaningful roles for older adults. Content is designed for persons in middle and later years. Semester Planned: Fall, Spring	
GEOL 214 Geology Field Studies	3	GERO 112 Planning for Retirement	1.5
Semester Prerequisite: Departmental Approval Opportunities to gain geology field experience through application of skills learned in the classroom. One-day and extended overnight excursions are offered. (Destination examples: Michigan gypsum mines, Michigan Upper Peninsula iron and copper country, Cincinnati fossil beds, Grand Ledge quarries, Western U.S. regional geology, etc.) Semester Planned: Summer		Semester Prerequisite: None This course covers financial matters, legal affairs, physical and mental health, being alone, housing choices, employment and volunteer opportunities, community resources, and meaningful use of time. It includes discussion of planning and decision-making skills and development of a personalized plan for retirement. Semester Planned: Fall, Spring	
GEOL 216 Michigan Field Geology	1	GERO 113 Investments and Financial Management in Retirement	.25
Semester Prerequisite: Departmental Approval Field investigations explore the geologic agents and human-related activities that have shaped the surface of the central southern peninsula of Michigan. Examples: glacial landforms, stream valleys, shorelines, dunes, quarries, roadcuts. Each class period will consist of a visit to an area of geologic interest. Semester Planned: Summer		Semester Prerequisite: None This course provides an overview of money-management strategies and investments, especially as applied to fixed incomes in retirement. Topics include determining net worth, types of investments, yield, stocks, bonds, mutual funds and money-management tips and legalities. Semester Planned: Fall, Spring	
GEOL 221 Earth Materials and Processes: Physical Geology	4	GERO 114 Estate Planning for Retirement	.25
Semester Prerequisite: Science Inventory Passed/2.0 Minimum in ISCI 110/ NSCI 110, MATH 040/MATH 050 This course investigates the dynamic physical earth using a cause-effect theme, and emphasizes relationships of geologic cycles (tectonic/hydrologic) to modifications of earth's crust (e.g., volcanism, mountain building, rivers, glaciers) with introduction to environmental topics and earth resources. Laboratory includes mineral and rock identification, topographic and geologic map interpretation, plate tectonics exercises. Semester Planned: Fall		Semester Prerequisite: None This course provides practical information on estate planning and the alternatives available for a variety of family situations as people approach retirement. It includes techniques used to plan an estate, preserve and transfer property during lifetime and at death, avoid probate and minimize death taxes and legal expenses. Semester Planned: Fall, Spring	
GEOL 222 Earth and Life Through Time: Historical Geology	4	GERO 115 Memory Improvement Techniques for Older Adults	.25
Semester Prerequisite: Science Inventory Passed/2.0 Minimum in ISCI 110/ NSCI 110, MATH 040/MATH 050 Plate tectonics is used to integrate crustal and organic evolution in the dynamic global system. Includes methods of geologic inquiry and critical evaluation of evidence. Laboratory stresses interpretation of the rock and fossil records, reconstruction of past ecosystems, geologic maps, and plate tectonics' influence on the environment. Semester Planned: Spring		Semester Prerequisite: None This course is designed for older adults who seek to improve their ability to remember. It examines myths and facts about memory and aging, reviews factors which influence memory, and introduces specific techniques for improving recall. Semester Planned: Fall, Spring	
GEOL 230 Environmental Geology	4	GERO 119 The Aging Process: Facts, Myths, Changes, and Resources	.25
Semester Prerequisite: Science Inventory Passed/2.0 Minimum in ISCI 110/ NSCI 110, MATH 062 Concepts of physical geology are applied to human interaction with the environment. Geologic resources (e.g., minerals, energy, water) and hazards (e.g., earthquakes, landslides, flooding) are explored. Laboratory includes rock and mineral identification, map reading and interpretation, evaluation of land use alternatives, and problem-solving activities related to environmental issues. Semester Planned: Spring		Semester Prerequisite: None This course includes an overview of facts and myths associated with older adults, including normal physical changes and their implications; social/emotional aspects of aging, including communication issues; and federal, state, and local resources for the older adult. Semester Planned: Fall, Spring	
		GERO 120 Identifying Community Programs for Older Adults	.25
		Semester Prerequisite: None This course presents an overview of federal, state, and local health and human services programs for older adults, including information and referral, legal services, mental health services, geriatric assessment, and nursing home advocacy. Semester Planned: Fall, Spring	
		GERO 121 Senior Group Program Planning	.25
		Semester Prerequisite: None This course provides an overview for planning senior adult programs: basic principles of programs and leadership, ideas and resources for activities for older adults, motivating older adults to participate, and scheduling activities. Semester Planned: Fall, Spring	

<p>GERO 125 Volunteers: Recruiting, Retaining, Rewarding .25</p> <p>Semester Prerequisite: None This course describes the basic processes of volunteer management: techniques for assessing current and future volunteer utilization; and innovative methods for recruitment, retention and recognition of volunteers. It provides an applied focus to assist supervisors and managers as they recruit and work with volunteers. Semester Planned: Fall, Spring</p>	<p>GERO 161 Issues of Aging: Sexuality .25</p> <p>Semester Prerequisite: None This course presents an overview of issues relating to sexuality and older persons: societal attitudes, sexual behavior patterns, physiological changes, psychological responses, and special situations, such as institutional settings. Semester Planned: Fall, Spring</p>
<p>GERO 126 Volunteers: Interviewing and Placement .25</p> <p>Semester Prerequisite: None This course focuses on volunteer management processes of interviewing and placement, including conducting an effective interview, legal restrictions to the interview process, appropriate placement of volunteers, and termination or reassignment. Semester Planned: Fall, Spring</p>	<p>GERO 164 Medication and Alcohol Use Among Older Adults .5</p> <p>Semester Prerequisite: None This course examines medication and alcohol use among older adults including prescription and non-prescription medicines, side effects, drug interactions, and strategies for using medicines wisely. Students learn to identify a substance-abuse situation and how to make appropriate referrals. Semester Planned: Fall, Spring</p>
<p>GERO 128 Functional Assessment of the Older Adult .5</p> <p>Semester Prerequisite: None This course provides an overview of the multidimensional assessment of health status that is necessary to determine interrelationships between the physical and psychosocial well-being of the older adult. Semester Planned: Fall, Spring</p>	<p>GERO 165 Dementia: Concepts and Causes .5</p> <p>Semester Prerequisite: None This course is an introduction to current concepts of dementia (Alzheimer's disease and related disorders) in older persons. It provides an overview of social, physical, psychological, and environmental factors resulting in dementia. Relationships to depression, techniques for communicating with older persons with dementia, family dynamics, and community resources are discussed. Semester Planned: Fall, Spring</p>
<p>GERO 129 Maintaining Client/Volunteer Records .25</p> <p>Semester Prerequisite: None This course presents an overview of guidelines that can be used in maintaining client/volunteer records, including decisions regarding appropriate information to record, confidentiality, clients' rights of access, and applications to human services settings. It addresses needs of persons working in agencies in which they need to devise their own record-keeping forms. Semester Planned: Fall, Spring</p>	<p>GERO 166 Housing Options and Issues for Older Adults .25</p> <p>Semester Prerequisite: None This course presents an overview of housing issues and options for the older adult, including financial and legal implications. Semester Planned: Fall, Spring</p>
<p>GERO 131 Planning for Older Adults with Developmental Disabilities .5</p> <p>Semester Prerequisite: None This course presents an overview of the older adult with developmental disabilities including characteristics, demographics, public policy issues, and functional assessment. Michigan program initiatives are discussed; case studies are presented. Semester Planned: Fall, Spring</p>	<p>GERO 167 Nursing Home Issues: Choices, Realities, Alternatives .25</p> <p>Semester Prerequisite: None This course provides an overview of current nursing home issues, including the role of nursing homes in the continuum of care, issues and concerns relating to care, funding of care, review of residents' rights, guidelines for choosing a home, and guidelines for visiting nursing home residents. Semester Planned: Fall, Spring</p>
<p>GERO 132 Activities: Older Adults with Developmental Disabilities .5</p> <p>Semester Prerequisite: None This course provides an overview of planning principles and processes effective in designing meaningful activities for older adults with developmental disabilities. Practice opportunities are included. Semester Planned: Fall, Spring</p>	<p>GERO 169 Legal Rights of Older Adults: Disability and Consent .5</p> <p>Semester Prerequisite: None This course focuses upon issues such as guardianship, conservatorship, power of attorney, the living will, joint tenancy, nursing home residency, and civil commitment, including actual and perceived choices a person has as aging and illness occur. Semester Planned: Fall, Spring</p>
<p>GERO 141 Gerontological Practices: Case Assessment and Intervention .5</p> <p>Semester Prerequisite: None This course presents an overview of the case management pathway in providing direct services to individual older adult clients, from intake through service termination. It includes a focus on issues that have added impact on the older person and techniques that are effective in case management for that population. Semester Planned: Fall, Spring</p>	<p>GERO 170 Depression: Recognition and Treatment .5</p> <p>Semester Prerequisite: None This course provides an examination of depression in later life. Symptoms, causes, "masks," diagnosis, and assessment of depression are introduced, including information on distinctions between depression and dementia. Basic techniques and guidelines for working with depressed older persons are presented. Semester Planned: Fall, Spring</p>
<p>GERO 145 Working with Older Adults: Nutrition .25</p> <p>Semester Prerequisite: None This course focuses upon factors affecting older adults' nutritional status, including normal physical/physiological/psychosocial changes that occur with aging, caloric intake, and the effects of activity/exercise, and medications. Suggestions are for communicating dietary information to older adult clients and assisting those persons in identifying alternative food sources. Semester Planned: Fall, Spring</p>	<p>GERO 171 Techniques for Caring for Persons with Dementia .75</p> <p>Semester Prerequisite: None This course provides an introduction to techniques for working with older adults with Alzheimer's disease and related disorders. The psychosocial needs of individuals and their families are a primary focus. Communication techniques, programming approaches, handling problem behaviors, a task breakdown approach, environmental adaptations, and role of the family are discussed. Semester Planned: Fall, Spring</p>
<p>GERO 150 Information Sources for Gerontology .5</p> <p>Semester Prerequisite: None This course provides an overview of the literature in gerontology, especially general sources—handbooks, indexes, guides and government sources—and databases in print and electronic formats. Topics include special subject sources, resources available from national aging organizations, government agencies, newsletters in aging, search terms and designing an effective database search. Semester Planned: Fall, Spring</p>	<p>GERO 173 Activities: Older Adults with Alzheimer's/Related Disorders .5</p> <p>Semester Prerequisite: None This course provides an overview of planning principles and processes effective in designing meaningful activities for older adults with Alzheimer's disease and related disorders. Practice opportunities are included. Semester Planned: Fall, Spring</p>
<p>GERO 158 Long Term Care Options .5</p> <p>Semester Prerequisite: None This course presents an overview of long-term care options from home care and retirement centers to adult foster care and nursing homes. Appropriate placement, financial aspects, and quality care issues are discussed. Semester Planned: Fall, Spring</p>	<p>GERO 174 Working With Older Adults: Minority Aging .75</p> <p>Semester Prerequisite: None This course focuses on the special needs of Asian/Pacific American, African American, Native American, and Hispanic American elderly, including demographic aspects of minority aging, special conditions of physical health, psychological aspects, social problems, and federal policies. Semester Planned: Fall, Spring</p>

<p>GERO 176 Hearing Loss and Aging: Maintaining Communication .25</p> <p>Semester Prerequisite: None</p> <p>This course focuses on causes, effects, and practical methods of compensating for hearing loss in older adults, including the makeup and function of the ear, the effects of normal/abnormal changes on hearing ability, and implications for communicating with the hearing-impaired older adult.</p> <p>Semester Planned: Fall</p>	<p>GERO 202 Mental Health and Aging 2</p> <p>Semester Prerequisite: GERO 100 Recommended</p> <p>This course presents skills and adaptations for maintaining good mental health in late life. It explores family and social factors; personality; stress and loss; assessment, treatment, and care of older persons with mental disorders; and response of the mental health system and aging services network. It includes communication skills for interacting with older adults.</p> <p>Semester Planned: Spring</p>
<p>GERO 177 Vision Adaptation in Middle/Later Years .25</p> <p>Semester Prerequisite: None</p> <p>This course provides an overview of vision changes in middle/late years and ways to assist older persons experiencing these changes. Includes normal changes of aging, common diseases and conditions of the eye, treatment approaches, and adaptations to maintain independence. Community resources to assist those with visual adaptation needs are included.</p> <p>Semester Planned: Fall, Spring</p>	<p>GERO 204 Aging and Health 2</p> <p>Semester Prerequisite: GERO 100 Recommended</p> <p>This course examines aging and health from an applied perspective for the human services provider, including implications of normal/pathological changes in body systems and strategies used in working with health systems on behalf of older adults. Emphasis is on the assessment and maintenance of function, and benefits of lifelong health promotion.</p> <p>Semester Planned: Fall</p>
<p>GERO 178 Adapting Your Surroundings: Easier Living in Later Life .5</p> <p>Semester Prerequisite: None</p> <p>This course presents an overview of changes one can make in home surroundings to accommodate gradual or sudden physical or mental, normal or illness-related changes in later years. It includes special emphasis on room and cupboard arrangement, hearing and visual aids, building access through entrance/exit, and available community resources.</p> <p>Semester Planned: Fall, Spring</p>	<p>GERO 282 Gerontology Field Placement I 4</p> <p>Semester Prerequisite: Admission to Field Placement, Departmental Approval</p> <p>This course combines classroom training with field placement (eight hours per week) at a community agency or institution serving older persons. Students apply learning about structure, funding, and organization of aging services; explore community resources; demonstrate appropriate work habits; assess their attitudes and career skills in gerontology, and relate current aging research to practice.</p> <p>Semester Planned: Fall</p>
<p>GERO 179 Healthcare Insurance Programs and Supplemental Policies: Aged .25</p> <p>Semester Prerequisite: None</p> <p>This course provides overview of Medicare and Medicaid programs, including recent and proposed changes at the federal and state levels. Information on supplemental health and long-term care insurance coverage is included.</p> <p>Semester Planned: Fall, Spring</p>	<p>GERO 284 Gerontology Field Placement II 4</p> <p>Semester Prerequisite: GERO 282, Departmental Approval</p> <p>This course provides advanced field placement experience at a community agency or institution serving older persons (eight hours per week), combined with classroom training in practice concepts related to service delivery to older persons. Students learn resources and systems, develop networking skills, mobilize resources on behalf of older individuals or groups, and demonstrate their suitability for a career in gerontology.</p> <p>Semester Planned: Spring</p>
<p>GERO 184 Ethical Issues in Working with Older Adults .5</p> <p>Semester Prerequisite: None</p> <p>This course considers major ethical issues faced by caregivers of older adults, including determination of incompetency, use of advance directives and proxy decision makers, withdrawal of care from the debilitated and demented, claim of older adults to life-extending resources, responsibility of families to care for elderly members, and assisted suicide.</p> <p>Semester Planned: Fall, Spring</p>	<p>GRET 203 MicroStation Beginning 3</p> <p>Semester Prerequisite: LAND 282/Equivalent</p> <p>This entry-level, Computer-Aided-Design and Drafting course uses MicroStation software on an Intergraph workstation or PC. Students will create 2D drawings using basic graphic tools and procedures.</p> <p>Semester Planned: Fall, Spring</p>
<p>GERO 193 Elder Abuse .25</p> <p>Semester Prerequisite: None</p> <p>This course focuses upon recognition of causes and categories of elder abuse, with available resources for intervention.</p> <p>Semester Planned: Fall, Spring</p>	<p>GRET 204 MicroStation Graphic Environment 3</p> <p>Semester Prerequisite: GRET 203</p> <p>This course explores the MicroStation graphic environment using the Intergraph Workstation. The analysis package, MGA, will be utilized as well. The development of a prototype Geographic Information System will be a highlight of this course.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>GERO 197 Grief and Loss in Later Life .25</p> <p>Semester Prerequisite: None</p> <p>An overview of effective techniques for helping the grieving older adult. Topics include attitudes toward death and dying; stages and symptoms of grief; abnormal grief reactions; multiple losses of older persons; and community resources.</p> <p>Semester Planned: Fall, Spring</p>	<p>GRET 205 Introduction to Geographic Information Systems 3</p> <p>Semester Prerequisite: None</p> <p>This course describes the components of a basic GIS and how they are assembled. Requisition of data, maps and other information used to build a database will be highlighted. A basic pilot project will be demonstrated step-by-step through various applications in GIS.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>GERO 198 Advanced Grief/Loss Counseling: Strategies for Practitioners .25</p> <p>Semester Prerequisite: None</p> <p>This course provides an overview of specific counseling techniques used by practitioners in working with older adults, including the professional "helpers" and their attitudes on grief and loss, the effect of the practitioner's attitude on the process of helping the grieving person, specific counseling techniques, and identification of community resources.</p> <p>Semester Planned: Fall, Spring</p>	<p>GRET 208 Advanced Techniques in GIS 3</p> <p>Semester Prerequisite: GRET 204</p> <p>This course expands upon the techniques, methods, and processes involved in developing a full GIS program. Different GIS software packages will be explored, as well as related databases and completed projects.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>GERO 199 Working with Older Adults: Dying and Death .5</p> <p>Semester Prerequisite: None</p> <p>This course focuses on issues and skills critical to caregivers working with terminally ill older adults, including examining one's attitudes and feelings toward dying, death, and older adults; understanding the behavior of the dying person; techniques for communicating with the terminally ill; working through personal grief; and exploring alternatives to institutionalized death.</p> <p>Semester Planned: Fall, Spring</p>	<p>GRET 209 Applications in Geographic Information Systems 3</p> <p>Semester Prerequisite: GRET 205, GRET 208</p> <p>This course specifically deals with all of the possible application areas for GIS, both present and future. Applications such as toxic materials, traffic flow, mining, forestry, natural resource, energy, and communication will be highlighted. A semester-long application project of your choice will be developed on the computer.</p> <p>Semester Planned: Fall, Spring</p>

<p>GERO 125 Volunteers: Recruiting, Retaining, Rewarding .25</p> <p>Semester Prerequisite: None</p> <p>This course describes the basic processes of volunteer management: techniques for assessing current and future volunteer utilization; and innovative methods for recruitment, retention and recognition of volunteers. It provides an applied focus to assist supervisors and managers as they recruit and work with volunteers.</p> <p>Semester Planned: Fall, Spring</p>	<p>GERO 161 Issues of Aging: Sexuality .25</p> <p>Semester Prerequisite: None</p> <p>This course presents an overview of issues relating to sexuality and older persons: societal attitudes, sexual behavior patterns, physiological changes, psychological responses, and special situations, such as institutional settings.</p> <p>Semester Planned: Fall, Spring</p>
<p>GERO 126 Volunteers: Interviewing and Placement .25</p> <p>Semester Prerequisite: None</p> <p>This course focuses on volunteer management processes of interviewing and placement, including conducting an effective interview, legal restrictions to the interview process, appropriate placement of volunteers, and termination or reassignment.</p> <p>Semester Planned: Fall, Spring</p>	<p>GERO 164 Medication and Alcohol Use Among Older Adults .5</p> <p>Semester Prerequisite: None</p> <p>This course examines medication and alcohol use among older adults including prescription and non-prescription medicines, side effects, drug interactions, and strategies for using medicines wisely. Students learn to identify a substance-abuse situation and how to make appropriate referrals.</p> <p>Semester Planned: Fall, Spring</p>
<p>GERO 128 Functional Assessment of the Older Adult .5</p> <p>Semester Prerequisite: None</p> <p>This course provides an overview of the multidimensional assessment of health status that is necessary to determine interrelationships between the physical and psychosocial well-being of the older adult.</p> <p>Semester Planned: Fall, Spring</p>	<p>GERO 165 Dementia: Concepts and Causes .5</p> <p>Semester Prerequisite: None</p> <p>This course is an introduction to current concepts of dementia (Alzheimer's disease and related disorders) in older persons. It provides an overview of social, physical, psychological, and environmental factors resulting in dementia. Relationships to depression, techniques for communicating with older persons with dementia, family dynamics, and community resources are discussed.</p> <p>Semester Planned: Fall, Spring</p>
<p>GERO 129 Maintaining Client/Volunteer Records .25</p> <p>Semester Prerequisite: None</p> <p>This course presents an overview of guidelines that can be used in maintaining client/volunteer records, including decisions regarding appropriate information to record, confidentiality, clients' rights of access, and applications to human services settings. It addresses needs of persons working in agencies in which they need to devise their own record-keeping forms.</p> <p>Semester Planned: Fall, Spring</p>	<p>GERO 166 Housing Options and Issues for Older Adults .25</p> <p>Semester Prerequisite: None</p> <p>This course presents an overview of housing issues and options for the older adult, including financial and legal implications.</p> <p>Semester Planned: Fall, Spring</p>
<p>GERO 131 Planning for Older Adults with Developmental Disabilities .5</p> <p>Semester Prerequisite: None</p> <p>This course presents an overview of the older adult with developmental disabilities including characteristics, demographics, public policy issues, and functional assessment. Michigan program initiatives are discussed; case studies are presented.</p> <p>Semester Planned: Fall, Spring</p>	<p>GERO 167 Nursing Home Issues: Choices, Realities, Alternatives .25</p> <p>Semester Prerequisite: None</p> <p>This course provides an overview of current nursing home issues, including the role of nursing homes in the continuum of care, issues and concerns relating to care, funding of care, review of residents' rights, guidelines for choosing a home, and guidelines for visiting nursing home residents.</p> <p>Semester Planned: Fall, Spring</p>
<p>GERO 132 Activities: Older Adults with Developmental Disabilities .5</p> <p>Semester Prerequisite: None</p> <p>This course provides an overview of planning principles and processes effective in designing meaningful activities for older adults with developmental disabilities. Practice opportunities are included.</p> <p>Semester Planned: Fall, Spring</p>	<p>GERO 169 Legal Rights of Older Adults: Disability and Consent .5</p> <p>Semester Prerequisite: None</p> <p>This course focuses upon issues such as guardianship, conservatorship, power of attorney, the living will, joint tenancy, nursing home residency, and civil commitment, including actual and perceived choices a person has as aging and illness occur.</p> <p>Semester Planned: Fall, Spring</p>
<p>GERO 141 Gerontological Practices: Case Assessment and Intervention .5</p> <p>Semester Prerequisite: None</p> <p>This course presents an overview of the case management pathway in providing direct services to individual older adult clients, from intake through service termination. It includes a focus on issues that have added impact on the older person and techniques that are effective in case management for that population.</p> <p>Semester Planned: Fall, Spring</p>	<p>GERO 170 Depression: Recognition and Treatment .5</p> <p>Semester Prerequisite: None</p> <p>This course provides an examination of depression in later life. Symptoms, causes, "masks," diagnosis, and assessment of depression are introduced, including information on distinctions between depression and dementia. Basic techniques and guidelines for working with depressed older persons are presented.</p> <p>Semester Planned: Fall, Spring</p>
<p>GERO 145 Working with Older Adults: Nutrition .25</p> <p>Semester Prerequisite: None</p> <p>This course focuses upon factors affecting older adults' nutritional status, including normal physical/physiological/psychosocial changes that occur with aging, caloric intake, and the effects of activity/exercise, and medications. Suggestions are for communicating dietary information to older adult clients and assisting those persons in identifying alternative food sources.</p> <p>Semester Planned: Fall, Spring</p>	<p>GERO 171 Techniques for Caring for Persons with Dementia .75</p> <p>Semester Prerequisite: None</p> <p>This course provides an introduction to techniques for working with older adults with Alzheimer's disease and related disorders. The psychosocial needs of individuals and their families are a primary focus. Communication techniques, programming approaches, handling problem behaviors, a task breakdown approach, environmental adaptations, and role of the family are discussed.</p> <p>Semester Planned: Fall, Spring</p>
<p>GERO 150 Information Sources for Gerontology .5</p> <p>Semester Prerequisite: None</p> <p>This course provides an overview of the literature in gerontology, especially general sources—handbooks, indexes, guides and government sources—and databases in print and electronic formats. Topics include special subject sources, resources available from national aging organizations, government agencies, newsletters in aging, search terms and designing an effective database search.</p> <p>Semester Planned: Fall, Spring</p>	<p>GERO 173 Activities: Older Adults with Alzheimer's/Related Disorders .5</p> <p>Semester Prerequisite: None</p> <p>This course provides an overview of planning principles and processes effective in designing meaningful activities for older adults with Alzheimer's disease and related disorders. Practice opportunities are included.</p> <p>Semester Planned: Fall, Spring</p>
<p>GERO 158 Long Term Care Options .5</p> <p>Semester Prerequisite: None</p> <p>This course presents an overview of long-term care options from home care and retirement centers to adult foster care and nursing homes. Appropriate placement, financial aspects, and quality care issues are discussed.</p> <p>Semester Planned: Fall, Spring</p>	<p>GERO 174 Working With Older Adults: Minority Aging .75</p> <p>Semester Prerequisite: None</p> <p>This course focuses on the special needs of Asian/Pacific American, African American, Native American, and Hispanic American elderly, including demographic aspects of minority aging, special conditions of physical health, psychological aspects, social problems, and federal policies.</p> <p>Semester Planned: Fall, Spring</p>

<p>GERO 176 Hearing Loss and Aging: Maintaining Communication .25</p> <p>Semester Prerequisite: None</p> <p>This course focuses on causes, effects, and practical methods of compensating for hearing loss in older adults, including the makeup and function of the ear, the effects of normal/abnormal changes on hearing ability, and implications for communicating with the hearing-impaired older adult.</p> <p>Semester Planned: Fall</p>	<p>GERO 202 Mental Health and Aging 2</p> <p>Semester Prerequisite: GERO 100 Recommended</p> <p>This course presents skills and adaptations for maintaining good mental health in late life. It explores family and social factors; personality; stress and loss; assessment, treatment, and care of older persons with mental disorders; and response of the mental health system and aging services network. It includes communication skills for interacting with older adults.</p> <p>Semester Planned: Spring</p>
<p>GERO 177 Vision Adaptation in Middle/Later Years .25</p> <p>Semester Prerequisite: None</p> <p>This course provides an overview of vision changes in middle/late years and ways to assist older persons experiencing these changes. Includes normal changes of aging, common diseases and conditions of the eye, treatment approaches, and adaptations to maintain independence. Community resources to assist those with visual adaptation needs are included.</p> <p>Semester Planned: Fall, Spring</p>	<p>GERO 204 Aging and Health 2</p> <p>Semester Prerequisite: GERO 100 Recommended</p> <p>This course examines aging and health from an applied perspective for the human services provider, including implications of normal/pathological changes in body systems and strategies used in working with health systems on behalf of older adults. Emphasis is on the assessment and maintenance of function, and benefits of lifelong health promotion.</p> <p>Semester Planned: Fall</p>
<p>GERO 178 Adapting Your Surroundings: Easier Living in Later Life .5</p> <p>Semester Prerequisite: None</p> <p>This course presents an overview of changes one can make in home surroundings to accommodate gradual or sudden physical or mental, normal or illness-related changes in later years. It includes special emphasis on room and cupboard arrangement, hearing and visual aids, building access through entrance/exit, and available community resources.</p> <p>Semester Planned: Fall, Spring</p>	<p>GERO 282 Gerontology Field Placement I 4</p> <p>Semester Prerequisite: Admission to Field Placement, Departmental Approval</p> <p>This course combines classroom training with field placement (eight hours per week) at a community agency or institution serving older persons. Students apply learning about structure, funding, and organization of aging services; explore community resources; demonstrate appropriate work habits; assess their attitudes and career skills in gerontology, and relate current aging research to practice.</p> <p>Semester Planned: Fall</p>
<p>GERO 179 Healthcare Insurance Programs and Supplemental Policies: Aged .25</p> <p>Semester Prerequisite: None</p> <p>This course provides overview of Medicare and Medicaid programs, including recent and proposed changes at the federal and state levels. Information on supplemental health and long-term care insurance coverage is included.</p> <p>Semester Planned: Fall, Spring</p>	<p>GERO 284 Gerontology Field Placement II 4</p> <p>Semester Prerequisite: GERO 282, Departmental Approval</p> <p>This course provides advanced field placement experience at a community agency or institution serving older persons (eight hours per week), combined with classroom training in practice concepts related to service delivery to older persons. Students learn resources and systems, develop networking skills, mobilize resources on behalf of older individuals or groups, and demonstrate their suitability for a career in gerontology.</p> <p>Semester Planned: Spring</p>
<p>GERO 184 Ethical Issues in Working with Older Adults .5</p> <p>Semester Prerequisite: None</p> <p>This course considers major ethical issues faced by caregivers of older adults, including determination of incompetency, use of advance directives and proxy decision makers, withdrawal of care from the debilitated and demented, claim of older adults to life-extending resources, responsibility of families to care for elderly members, and assisted suicide.</p> <p>Semester Planned: Fall, Spring</p>	<p>GRET 203 MicroStation Beginning 3</p> <p>Semester Prerequisite: LAND 282/Equivalent</p> <p>This entry-level, Computer-Aided-Design and Drafting course uses MicroStation software on an Intergraph workstation or PC. Students will create 2D drawings using basic graphic tools and procedures.</p> <p>Semester Planned: Fall, Spring</p>
<p>GERO 193 Elder Abuse .25</p> <p>Semester Prerequisite: None</p> <p>This course focuses upon recognition of causes and categories of elder abuse, with available resources for intervention.</p> <p>Semester Planned: Fall, Spring</p>	<p>GRET 204 MicroStation Graphic Environment 3</p> <p>Semester Prerequisite: GRET 203</p> <p>This course explores the MicroStation graphic environment using the Intergraph Workstation. The analysis package, MGA, will be utilized as well. The development of a prototype Geographic Information System will be a highlight of this course.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>GERO 197 Grief and Loss in Later Life .25</p> <p>Semester Prerequisite: None</p> <p>An overview of effective techniques for helping the grieving older adult. Topics include attitudes toward death and dying; stages and symptoms of grief; abnormal grief reactions; multiple losses of older persons; and community resources.</p> <p>Semester Planned: Fall, Spring</p>	<p>GRET 205 Introduction to Geographic Information Systems 3</p> <p>Semester Prerequisite: None</p> <p>This course describes the components of a basic GIS and how they are assembled. Requisition of data, maps and other information used to build a database will be highlighted. A basic pilot project will be demonstrated step-by-step through various applications in GIS.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>GERO 198 Advanced Grief/Loss Counseling: Strategies for Practitioners .25</p> <p>Semester Prerequisite: None</p> <p>This course provides an overview of specific counseling techniques used by practitioners in working with older adults, including the professional "helpers" and their attitudes on grief and loss, the effect of the practitioner's attitude on the process of helping the grieving person, specific counseling techniques, and identification of community resources.</p> <p>Semester Planned: Fall, Spring</p>	<p>GRET 208 Advanced Techniques in GIS 3</p> <p>Semester Prerequisite: GRET 204</p> <p>This course expands upon the techniques, methods, and processes involved in developing a full GIS program. Different GIS software packages will be explored, as well as related databases and completed projects.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>GERO 199 Working with Older Adults: Dying and Death .5</p> <p>Semester Prerequisite: None</p> <p>This course focuses on issues and skills critical to caregivers working with terminally ill older adults, including examining one's attitudes and feelings toward dying, death, and older adults; understanding the behavior of the dying person; techniques for communicating with the terminally ill; working through personal grief; and exploring alternatives to institutionalized death.</p> <p>Semester Planned: Fall, Spring</p>	<p>GRET 209 Applications in Geographic Information Systems 3</p> <p>Semester Prerequisite: GRET 205, GRET 208</p> <p>This course specifically deals with all of the possible application areas for GIS, both present and future. Applications such as toxic materials, traffic flow, mining, forestry, natural resource, energy, and communication will be highlighted. A semester-long application project of your choice will be developed on the computer.</p> <p>Semester Planned: Fall, Spring</p>

<p>GRET 211 GIS Mapping Systems 3</p> <p>Semester Prerequisite: None</p> <p>This course will teach new users the skills needed to operate and maintain an Intergraph Unix Workstation on a daily basis. The student will learn the computer orientation necessary to begin development and utilization of the UNIX-based software packages for civil GIS and landscape planning purposes.</p> <p>Semester Planned: Fall, Spring</p>	<p>GRET 240 Basic Map Orientation and Construction 3</p> <p>Semester Prerequisite: None</p> <p>The basic principles, functions, and origins of maps will be discussed. The student will construct various types of maps. Computer-offered map planning and design along with how to read, print, and design maps will also be covered.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>GRET 213 Advanced MicroStation 3</p> <p>Semester Prerequisite: GRET 203</p> <p>This course is a continuation of the basic MicroStation course and deals with 3-D and other advanced aspects of this computer-aided drafting and design package.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>GRET 241 Air Photo Interpretation 3</p> <p>Semester Prerequisite: GRET 240/Departmental Approval</p> <p>This course will include the development of skills necessary for basic interpretation of aerial photography data, how it is collected, and the ability to analyze maps created from the data collected in this method. The current technology and GIS relationship will be highlighted.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>GRET 214 G.R.A.S.S. Beginning 3</p> <p>Semester Prerequisite: GRET 205</p> <p>This computer-based course will explore the Geographical Resource Analysis Support System (G.R.A.S.S.) software package developed by the U.S. Army Corp. of Engineers. The specific functions of the software will be explored as it relates to the world of Geographic Information Systems.</p> <p>Semester Planned: Fall, Summer</p>	<p>GRET 243 ORACLE Beginning 3</p> <p>Semester Prerequisite: None</p> <p>This course will explore the database software package ORACLE. The introduction to databases for the beginner followed by a step-by-step approach to ORACLE. This is a hands-on computer course.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>GRET 216 Introduction to MicroStation 2</p> <p>Semester Prerequisite: None</p> <p>This is a course to introduce the student to the basics of MicroStation. MicroStation supports a range of commands for placing and manipulating elements in the design file. A student can apply these commands for either a MicroStation personal computer setup or the INFOMIX-SQLnd Base II plus database packages. The course is designed for Intergraph Workstation lab use, as well as the MicroStation PC.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>GRET 244 Beginning UNIX: GIS Environment 3</p> <p>Semester Prerequisite: None</p> <p>This is a beginning course which acts as an introduction to the UNIX operating system. UNIX System V, the AT&T offered release, will be the version covered in this course. UNIX as it relates to operating systems in the GIS environment will be highlighted. This is a hands-on computer exercise course.</p> <p>Semester Planned: Fall, Spring</p>
<p>GRET 218 GIS Design Systems .5</p> <p>Semester Prerequisite: None</p> <p>Data base design entails identification of relevant data sources, applying cartographic standards, and managing a tabular data base scheme that will relate to cartographic layers in the GIS. Tools and techniques for data identification and composition are presented in the context of an example design for a municipal GIS, with emphasis on geodetic reference frame, base map, and cadastral overlay.</p> <p>Semester Planned: Fall, Spring</p>	<p>GRET 245 MDL Programming: Beginning 3</p> <p>Semester Prerequisite: GRET 213</p> <p>This course will begin with an introduction to the MicroStation Development Language (MDL). The student will learn to work with and implement a project using MDL. The structure and importance of using MDL on various projects will be highlighted.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>GRET 219 Data Sets for GIS .5</p> <p>Semester Prerequisite: None</p> <p>This course focuses on available commercial and public domain data sets for GIS. Three data sets are completely described and documented according to cartographic characteristics and attribution. GIS systems are provided to participants for their exploration of data sets. Applications developed using the data sets are demonstrated.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>GRET 246 MDL Programming: Advanced 3</p> <p>Semester Prerequisite: GRET 245/Departmental Approval</p> <p>This course will expand upon the techniques used in the beginning course using the MDL programming language. A class project will explain possible uses for this language.</p> <p>Semester Planned: Fall, Spring</p>
<p>GRET 220 Hydrological Systems 3</p> <p>Semester Prerequisite: None</p> <p>This course will cover the various aspects of water resources as they pertain to the geographic information system environments. Water systems, natural and man-made, will be emphasized. The evaluation, analysis, and environmental impacts of various water features as they pertain to environmental research and development will be highlighted.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>GRET 248 Graphic Analysis GIS 3</p> <p>Semester Prerequisite: GRET 204</p> <p>MicroStation Analyst (MGA) is an advanced software package dealing with GIS MGA, which generates topologically-structured files from design files for use in performing spatial analysis. It will also cover system query sets and answers to questions posed to topological files.</p> <p>Semester Planned: Fall, Spring</p>
<p>GRET 221 Landforms and Soil Systems in GIS 3</p> <p>Semester Prerequisite: None</p> <p>This course will discuss the important classifications of landform and soil systems. The relevance of these systems in the GIS environment will be highlighted. The importance of these systems in the information processing, land use, land planning, site design, and landscape form arenas will be emphasized.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>GRET 254 Orientation to ARC/INFO 1.5</p> <p>Semester Prerequisite: LAND 282/Equivalent Computer Course</p> <p>This course is an introduction to the use of the ARC/INFO software. ARC/INFO is a leading product used in the design of Geographic Information Systems. Basic product use and modeling will be demonstrated. There will be hands-on experience in the lab.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>GRET 223 Environmental Resource Management 3</p> <p>Semester Prerequisite: None</p> <p>This course will cover the broad spectrum of environmental resources such as forestry, agriculture, mining, soils, vegetation, and their impact and management in current computer information systems. Resources in the land planning disciplines will be highlighted as to their function in the present environmental processes, both public and private.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>GRET 255 Beginning ARC/INFO 3</p> <p>Semester Prerequisite: LAND 282/Equivalent Computer Course</p> <p>This course will be an introduction to the use of the ARC/INFO software. ARC/INFO is a leading product used in the design of Geographic Information Systems. Basic product use and modeling will be demonstrated. There will be hands-on experience in the lab.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>GRET 223 Environmental Resource Management 3</p> <p>Semester Prerequisite: None</p> <p>This course will cover the broad spectrum of environmental resources such as forestry, agriculture, mining, soils, vegetation, and their impact and management in current computer information systems. Resources in the land planning disciplines will be highlighted as to their function in the present environmental processes, both public and private.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>GRET 295 GRET Independent Study 3</p> <p>Semester Prerequisite: Instructor Approval</p> <p>The independent study is designed for students who wish to pursue a specialty area in GIS beyond that which is offered in our curriculum. Inquiry through research and design of landscapes is required.</p> <p>Semester Planned: Fall, Spring, Summer</p>

GRET 296 GRET Project Lab	4	HIST 210 Studies in American History	4
Semester Prerequisite: Instructor Approval This project lab is designed for students who wish to pursue a specialty area in GIS beyond that which is offered in our curriculum. Inquiry through research and design of landscapes is required. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Instructor Approval Covers problems of research, writing, and philosophy and interpretation of history, involving a detailed examination of a particular area of American history. Semester Planned: Spring	
GRET 297 GRET Project Lab	2	HIST 211 U.S. History to 1877	4
Semester Prerequisite: Instructor Approval This project lab is designed for students who wish to pursue a specialty area in GIS beyond that which is offered in our curriculum. Inquiry through research and design is required. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: WRIT 121/Equivalent Basic Skills Prerequisite: Reading Level 3; Writing Level (See Class Schedule) A history of the United States from colonial beginnings through reconstruction. Semester Planned: Fall, Spring, Summer	
GRMN 101 Elementary German I	4	HIST 212 U.S. History: 1877 to the Present	4
Semester Prerequisite: None First course of a two-semester sequence in elementary German. This course offers systematic practice in the four basic language skills: listening comprehension, speaking, reading, and writing. Communicative approach is combined with a solid grammar foundation, as well as familiarization with contemporary life and culture in Germany, Austria, and Switzerland. Semester Planned: Fall		Semester Prerequisite: WRIT 121/Equivalent A history of the United States from the end of reconstruction to the present. Semester Planned: Fall, Spring, Summer	
GRMN 102 Elementary German II	4	HIST 214 African History	4
Semester Prerequisite: GRMN 101/Equivalent/Approval Second course of a two-semester sequence in elementary German. This course offers more advanced practice in the four basic language skills: listening comprehension, speaking, reading, and writing. Communicative approach is combined with more complex structure as well as familiarization with contemporary life and culture in Germany, Austria, and Switzerland. Semester Planned: Spring		Semester Prerequisite: WRIT 121/Equivalent An introductory survey of African history; a study of: the prehistoric, the colonial, and the post-independence periods; the historical influences of myth, religion and tradition; coping with social, political and economic challenges rooted in the African past; and Africa's role in world affairs. Semester Planned: Spring	
GRMN 115 Conversational German I	3	HIST 220 Michigan History	4
Semester Prerequisite: None The first course in a two-semester sequence for persons with little or no knowledge of German. Emphasizes listening and speaking skills. Students learn correct pronunciation, essential language structures, and a practical vocabulary applied in conversational exchanges. Aspects of German culture are introduced through multi-media presentations. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: WRIT 121 (ENGL/WRIT 122 Recommended) A survey of the political, economic, and social development of Michigan from pre-colonial times to the present. Semester Planned: Fall	
GRMN 116 Conversational German II	3	HIST 230 British History	4
Semester Prerequisite: GRMN 115/Equivalent The second course in a two-semester sequence for persons with little or no knowledge of German. Emphasizes listening and speaking skills. Students learn correct pronunciation, essential language structures, and a practical vocabulary applied in conversational exchanges. Aspects of German culture are introduced through multi-media presentations. Semester Planned: Fall, Spring Summer		Semester Prerequisite: WRIT 121 (ENGL/WRIT 122 Recommended) A survey of the political, economic, legal, constitutional, and social forces which shaped British history and society from earliest times to the present with special emphasis on the interactions of British and American institutions, values, and ideas. Semester Planned: Spring	
GRMN 201 Intermediate German I	4	HIST 260 Conflict and Revolution in Southern Africa	4
Semester Prerequisite: GRMN 102/Equivalent/Approval First course of a two-semester sequence in intermediate German. Students receive intensive practice in the basic skills: speaking, listening comprehension, reading, and writing. Course includes a thorough review of German grammar, Twentieth century short-story readings, composition writing, and German culture. Class is taught mainly in German. Semester Planned: Fall		Semester Prerequisite: WRIT 121 (ENGL/WRIT 122 Recommended) Study of historical-cultural origins and contexts of conflicts in Zimbabwe and Southern Africa with emphasis on socioeconomic causes of conflicts; cultural differences and conflicts; problems of development as sources of conflicts; inter-African conflicts; settler-African conflicts; international dimensions of conflicts; and solutions to conflicts. Semester Planned: Fall	
GRMN 202 Intermediate German II	4	HIST 263 Seminar: Russia and the CIS	3
Semester Prerequisite: GRMN 201/Equivalent/Approval Second course of a two-semester sequence in intermediate German. Students receive advanced practice in the basic skills: speaking, listening comprehension, reading, and writing. Course includes a thorough review of advanced structures, short-story readings, a short novel, composition writing, and German culture. Class is taught mainly in German. Semester Planned: Spring		Semester Prerequisite: None A survey of Russia and its people from the Russian Revolution of 1917 to the present. Also examined will be the multinational character of the former USSR and the forces that shaped Soviet history, society, and politics, including U.S.-Soviet relations. Semester Planned: Summer	
HIST 150 African American History	4	HIST 264 Seminar: A Television History of the Vietnam War	3
Semester Prerequisite: None Traces the developments which led to the African slave trade, the slave systems in North and South America, the cultural heritage of the African American in the Americas, and the problems of race in North American culture. Semester Planned: Fall		Semester Prerequisite: None <i>Vietnam: A Television History</i> will examine, through the medium of television, the war in Vietnam from August 1945 to the fall of Saigon in April 1975. It will also assess the long-term effects of the war on both U.S. domestic and foreign policy. Semester Planned: Spring	
		HIST 265 Seminar: The American Legal Tradition	3
		Semester Prerequisite: None A historical survey of the origins, growth, and development of the American legal-constitutional process. The legal system is studied in the context of American culture by examining the leading cases, philosophies, scholars and institutions, and approaches to the study of law. Semester Planned: Spring	
		HIST 295 Independent Study	1
		Semester Prerequisite: Departmental Approval Special research projects and/or individual readings in history. Students will invest no less than 32 hours for each credit earned. Enrollment is usually restricted to honors students who have grade-point averages of at least 3.0 in courses offered by this department. Semester Planned: Fall, Spring, Summer	

HIST 296 Independent Study	2	HMFS 203 Hotel-Restaurant Law	3
Semester Prerequisite: Departmental Approval Special research projects and/or individual readings in history. Students will invest no less than 32 hours for each credit earned. Enrollment is usually restricted to honors students who have grade-point averages of at least 3.0 in courses offered by this department. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None To create an awareness of the responsibilities and rights which the law imposes upon and grants to the innkeeper; recognition of potential legal problems so as to minimize legal action against the property. Semester Planned: Fall, Spring	
HMFS 101 Introduction to Hospitality and Food Service Operations	3	HMFS 204 Human Relations/Supervisory Development	3
Semester Prerequisite: None Basic Skills Prerequisite: Reading Level 3; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule) Introduction to the hotel-motel-food service industry explaining the individual roles of the various departments in food service and lodging operations. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None A course covering the role of management in the hospitality industry; specific emphasis on the supervisor's role as a leader, recruiter, trainer, and personnel manager. Semester Planned: Fall, Spring	
HMFS 105 Hotel and Restaurant Human Resource Management	3	HMFS 205 Hotel-Restaurant Management	3
Semester Prerequisite: None This course is a survey of principles and practices for managing human resources in the hospitality industry. Includes such topics as staffing, discipline, hiring, termination, and their corresponding rules and regulations. Semester Planned: Fall, Spring		Semester Prerequisite: None A survey of management principles and practices in the hospitality industry. Includes topics such as theory of management, the management process, and management problems in key hospitality areas. Semester Planned: Fall, Spring, Summer	
HMFS 131 Food Production I	4	HMFS 206 Front Office Management	3
Semester Prerequisite: None The objective of this course is to enable the student to achieve a comprehensive educational foundation in food production management. This course will provide the student with academic theory through class discussions and lectures emphasizing food preparation, equipment operations, and managerial procedures. Laboratory preparation required. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Organization, control, and operation of the front office in the reservation and sale of rooms, and service. Keeping of accurate accounts and presenting bills and receipts of payment. Semester Planned: Fall, Spring	
HMFS 132 Food Production II	4	HMFS 207 Financial Control and Management I	4
Semester Prerequisite: HMFS 131 This course is designed to strengthen students' knowledge in food service management. Emphasis will be placed on the needs of potential managerial personnel as well as established hospitality industry employees in formulating the structure for sound business management in the hospitality field in addition to practical laboratory experience emphasizing food preparation. Semester Planned: Fall, Spring		Semester Prerequisite: None A systematic, integrated study of hotel-motel and food institutional activities. Principles, problems, and practices related to financial management will be presented. Financial statements, front office procedures, and the interpretation of accounts and statements unique to the hospitality industry will be included. Semester Planned: Fall, Spring, Summer	
HMFS 134 Nutrition	2	HMFS 208 Financial Control and Management II	2
Semester Prerequisite: None Discusses basic nutrition, RDAs, energy balance, weight control, variety of diets and dietary guidelines, food processing, natural and organic foods, fad and fast foods. Semester Planned: Fall, Spring		Semester Prerequisite: HMFS 207 A course designed to integrate the varied elements of the HMFS program into a cohesive package that demonstrates how a business is established and operated. A term project involving the hypothetical establishment of a business of the student's choice will be the primary learning tool. Semester Planned: Fall, Spring, Summer	
HMFS 135 Quantity Food Purchasing	3	HMFS 212 Hotel/Restaurant Liability and Loss Prevention	2
Semester Prerequisite: None This course is the study of standards in quality and quantity of food, beverages, china, glass, silver, linen, furnishings, and supplies. Also it will cover writing specifications and establishing procurement policies. This course describes how to develop and implement an effective purchasing program. It focuses on issues pertaining to supplier relations and selection, negotiation, and evaluation. It includes in-depth material regarding major categories of purchases. Semester Planned: Fall, Summer		Semester Prerequisite: None This course includes organization for a security program, protection of the physical facilities, guest protection, emergencies, and internal and departmental security measures. Semester Planned: Spring	
HMFS 137 Food Service Catering	3	HMFS 213 Energy Management and Control	2
Semester Prerequisite: None This course is designed to acquaint the student with social catering. The student will learn how to begin a catering business. He/she will learn how to purchase products, prepare menus, costing and pricing, equipment requirements, equipment maintenance, on/off premise functions, sanitation, and contractual agreements. The student will also be required to do a field project. Semester Planned: Spring, Summer		Semester Prerequisite: None Although some course material is geared toward types of energy sources and technical terms, it is presented as a management-oriented class. Management of our energy sources will be emphasized. Semester Planned: Fall, Spring	
HMFS 190 Internship and Seminar	3	HMFS 214 Supervisory Housekeeping	2
Semester Prerequisite: None An internship available to Hotel-Restaurant students who have completed or are approaching 400 hours of work experience in the Hospitality industry. A semester project is required. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Provides an overview of the fundamentals of housekeeping management. This course describes the management functions, tools, and practices required in today's lodging and institutional housekeeping departments. Semester Planned: Spring	
		HMFS 215 Hospitality Sales/Marketing	3
		Semester Prerequisite: None This course is designed to provide the student with a working knowledge and practical experience which will enable them to develop and implement strategic marketing plans for hospitality properties. Semester Planned: Fall, Spring, Summer	

HMFS 216 Facilities Management	2	HMFS 253 Wines of France	2
Semester Prerequisite: None		Semester Prerequisite: HMFS 251/HMFS 252	
To provide essential technical information in electronics, air conditioning, plumbing, heating, electricity, and acoustics, and to establish routine preventative maintenance.		An in-depth survey of the major wine growing regions of France. Particular emphasis will be given to the geographical and viticultural tradition which produce the distinctive wines that have given France its world famous reputation for fine table and sparkling wines.	
Semester Planned: Spring, Summer		Semester Planned: Spring	
HMFS 223 Club Management and Service	2	HMFS 254 Mixology	4
Semester Prerequisite: None		Semester Prerequisite: None	
This course is an application of decision-making techniques utilizing concepts of finance, marketing, labor relations, management, and law in management of public and private clubs.		This course provides the student with a mastery of over 150 mixed beverages. It teaches the combination of the arts of efficient mixology and hospitality with control that distinguishes the "mixologist" from the ordinary bartender. Mixology emphasizes incorporating speed and accuracy.	
Semester Planned: Fall, Spring		Semester Planned: Fall, Spring, Summer	
HMFS 229 Convention Management and Service	3	HMFS 260 Gourmet Basic Cookery	2
Semester Prerequisite: None		Semester Prerequisite: None	
Convention management is an integral part of today's hospitality industry. This course provides insight into convention marketing, salesmanship, detail, execution, communication, and management. A comprehensive study of methods and techniques for better service.		This course is designed to teach the beginner about the basics in menu planning, shopping, preparation, service and clean up involved in a meal. The student will become familiar with shopping lists, costs, recipes, measuring and weighing and nutritional information will be given as necessary. The student will be preparing foods for consumption.	
Semester Planned: Fall, Spring		Semester Planned: Fall, Spring, Summer	
HMFS 230 Math for Food Service Management	3	HMFS 261 Gourmet Italian Cookery	2
Semester Prerequisite: None		Semester Prerequisite: None	
A course designed to reinforce the student's understanding and use of the fundamentals of mathematics. Specifically oriented to food service management. The course will cover subjects such as addition, subtraction, multiplication, division, fractions, percents, recipe and measurement equivalents, and the basics of mathematics in food service operations.		This course is designed to explore regional and national foods from Italy. The instructor will develop specialty menus for each region. Students will learn to plan Italian meals, purchase and prepare foods from the meals served. Student preparation for consumption. This course covers basic cookery techniques within regional areas of Italy. Local talent and community Italian experts contribute to the culinary bill of fare.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring	
HMFS 231 Resort Management	2	HMFS 262 Gourmet Foreign Cookery	2
Semester Prerequisite: None		Semester Prerequisite: None	
This course offers various approaches to the operation of resort properties. Details are presented in planning, development, financial investment management, and marketing. This course also examines the future and the impact of the condominium concept, time sharing, technological changes, and the increased cost of energy and transportation.		This course covers basic cookery using foreign foods from around the world, prepared and tasted by the student. Wine and cheese samplings are also a part of this course. Student preparation.	
Semester Planned: Spring		Semester Planned: Fall, Spring	
HMFS 232 Food and Labor Cost Control	3	HMFS 263 Gourmet American Cookery	2
Semester Prerequisite: None		Semester Prerequisite: None	
This course covers the essential principles and procedures to control food, beverage, and labor cost. Sales, income, and resources within the food service industry are also analyzed.		This course is designed for the working person and explores four great cuisines: regional American, French, Italian, and German. The course will include planning, preparing, costing, serving, and eating gourmet meats. Special attention will be provided for budgeted low-cost preparation of restaurant gourmet entrees. Student preparation.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring	
HMFS 233 Food Service Sanitation	2	HMFS 264 Gourmet Barbecue Cookery	2
Semester Prerequisite: None		Semester Prerequisite: None	
This course is certified by the State of Michigan and the Educational Foundation of the National Restaurant Association (NRA). The class is designed to enlighten the food service employee and student in such areas as: foodborne illnesses, general food service sanitation, construction and maintenance of equipment and facilities, safe food handling procedures, food service establishment law, and other aspects of sanitary food operations.		This spring- and summer-oriented course explores innovative techniques of preparing food outside. Meat, vegetables, hors d'oeuvres, salads, and desserts are prepared throughout the term. Student preparation.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Spring, Summer	
HMFS 251 Wine Appreciation	2	HMFS 266 Gourmet Chinese Cookery	2
Semester Prerequisite: None		Semester Prerequisite: None	
The student will be familiarized with the five basic types of wine; a short history of wine and how wines are made; a mastery of the presentation and serving of wines; and judging for appearance, bouquet, and taste. The class will learn how to choose and store wines.		Chinese cooking is noted for its diversity of taste, texture and aroma. Chinese dishes to be prepared include: sweet and sour pork, chicken almond ding, and egg rolls, which will accentuate these characteristics through the use of sauteing and "red" cooking techniques. Student preparation.	
Semester Planned: Fall		Semester Planned: Fall, Spring, Summer	
HMFS 252 Wines of America	2	HMFS 267 Advanced Gourmet Chinese Cookery	2
Semester Prerequisite: None		Semester Prerequisite: HMFS 266	
A survey of wine growing areas of the United States with emphasis on the varietal selections of California, New York, Michigan, and Ohio. A study of wine making, comparative tasting, and field trips are used to acquaint the student with the wine industry in America.		Chinese cooking is noted for its diversity of taste, texture and aroma. As students progress through the basic culinary training, more elegant Chinese dishes are prepared in the class. Famous dishes to be prepared include: pearl balls, stir fried lover's shrimp, stir fried chicken in bird's nest, and homestyle spareribs.	
Semester Planned: Fall, Spring		Semester Planned: Fall, Spring, Summer	

<p>HMFS 269 Gourmet Mexican Cookery 2</p> <p>Semester Prerequisite: None</p> <p>Introduction to basic and exotic Mexican and Spanish cookery, including proper pronunciation of Mexican dishes and corresponding symbols. Student preparation.</p> <p>Semester Planned: Fall, Spring</p>	<p>HORT 102 Introduction to Ornamental Horticulture 2</p> <p>Semester Prerequisite: None</p> <p>An introductory course involving botanical and horticultural principles and practices. Basic plant structures and their functions as well as soil and plant nutrition are discussed. Job opportunities and the role of horticulture will also be covered. Field trips and laboratory experiments will highlight the course.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HMFS 273 Gourmet Cajun Cookery 2</p> <p>Semester Prerequisite: None</p> <p>Identification of various regional influences and cuisines which form the Cajun style, including Creole Cajun and Louisiana cookery. Identification of indigenous ingredients, seasonings, and basic cooking techniques used in Cajun cookery. Discussions in class will cover historical as well as contemporary perspectives on these original American Cuisines.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HORT 105 Pests and Problems of Ornamental Plants 2</p> <p>Semester Prerequisite: None</p> <p>This course is for the professional or homeowner interested in a knowledge of basic environmental and specific pest problems of trees and shrubs. Problems related to soil, light, water, planting, and fertilizer as well as insects, diseases, and vertebrates will be discussed. Integrated pest management, and total plant health concepts will form the basis for problem management.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HMFS 274 Lean Gourmet Cookery 2</p> <p>Semester Prerequisite: None</p> <p>Basic cookery using less fat and salt, fresh herbs, spices, and chicken broth instead of cream. The focus of this class is on the food we eat. The student will learn the composition of food and why some foods make better choices for our diets than other foods.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HORT 107 Beginning Floral Design 2</p> <p>Semester Prerequisite: None</p> <p>This is an introductory course for students interested in learning the principles of floral design. Tools and techniques as well as basic arrangement shapes are learned through "hands-on" experiences. Students will use fresh, silk, and dried flowers to create traditional and contemporary designs.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HMFS 275 Bakery Products 2</p> <p>Semester Prerequisite: None</p> <p>A course designed to expose the student to various bakery products including pastries and bread. Demonstrations as well as student preparation in the diverse areas of the fine art of baking highlight this course.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HORT 109 Contemporary Floral Design 2</p> <p>Semester Prerequisite: HORT 107/Departmental Approval</p> <p>Contemporary floral designs are taught as well as theme arrangements, tools, and techniques. The basic principles of design are reviewed with the student transferring techniques to stylized arrangements. This is a "hands-on" course with participants working with floral materials each week.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HMFS 276 Ice Carving Seminar .5</p> <p>Semester Prerequisite: None</p> <p>This course is designed to expose the student to the tools, techniques, and skills required to carve a block of ice. The student will be carving from a block of ice before the conclusion of the course. This is a hands-on course.</p> <p>Semester Planned: Fall, Spring</p>	<p>HORT 110 Wedding Floral Design 2</p> <p>Semester Prerequisite: HORT 107</p> <p>This course is designed for the advanced floral designer who has demonstrated the ability to apply the principles of design. Wedding designs covered include colonial, cascade, crescent, and arm bouquets. This is a "hands-on" class with students working with floral materials each week.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HMFS 280 Garde Manger 3</p> <p>Semester Prerequisite: None</p> <p>A basic course in the decoration and presentation of cold foods. This course will introduce the student to cold food specialization, vegetable carving, hors d'oeuvres, canapes, the use of spices, sauces, dressings, and complete buffet set-up. Garde Manger is the showcase for the artistic presentation of foods. Student preparation.</p> <p>Semester Planned: Fall, Spring</p>	<p>HORT 143 Cut Flower, Foliage and Potted Plant Identification 4</p> <p>Semester Prerequisite: None</p> <p>The functional aspects of plant material commonly found in the floriculture industry will be covered. The identification of cut flowers, cut foliage, potted and foliage plants will be required. A course that would benefit the floral designer, greenhouse grower, or landscape designer.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HMFS 281 Soups and Sauces 3</p> <p>Semester Prerequisite: None</p> <p>This course will help the student develop the necessary skills in the preparation of soups and sauces from scratch, as well as in the utilization of convenience food items such as food bases and commercial mixes. The student will learn through hands-on preparation of these items. Student preparation.</p> <p>Semester Planned: Fall, Spring</p>	<p>HORT 230 Plant Propagation and Nursery Operations 4</p> <p>Semester Prerequisite: HORT 102/Departmental Approval</p> <p>This course will cover the basics of plant propagation and nursery operations. It will focus on the process of set-up, planting, and follow-up maintenance. The tools and techniques of seed propagation, as well as cuttings, grafting, budding, and layering will be emphasized. Knowledge of plant selection, soils, pruning, harvesting, and marketing nursery products will be included.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HONR 151 Honors Colloquy I 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An interdisciplinary forum for students and faculty of the Honors Program. Consists of presentations by recognized experts in such fields as science, humanities, mathematics and computer science, communication, education, and the social sciences, followed by discussion and interchange of ideas. Requires follow-up written reports.</p> <p>Semester Planned: Fall</p>	<p>HORT 235 Greenhouse Structures and Environment 3</p> <p>Semester Prerequisite: None</p> <p>This course is an introduction to the construction and operation of a commercial greenhouse. Types of greenhouses, including construction materials, are discussed. Environmental control such as heating, cooling, and irrigation practices and procedures are presented. In addition, methods of planting, fertilizing, and insect and disease control are also included to provide a basis of knowledge for greenhouse crop production.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HONR 152 Honors Colloquy II 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An interdisciplinary forum for students and faculty of the Honors Program. Consists of presentations by recognized experts in such fields as science, humanities, mathematics and computer science, communication, education, and the social sciences. Requires research writing using methodologies of the Liberal Studies disciplines.</p> <p>Semester Planned: Fall</p>	<p>HORT 236 Greenhouse Ornamentals 3</p> <p>Semester Prerequisite: None</p> <p>This is an advanced course for the greenhouse grower. The course will cover the production techniques for cut flowers, holiday crops, and other greenhouse ornamentals. Topics of discussion will include scheduling and timing crops, spacing, production costs, and cultural practices.</p> <p>Semester Planned: Fall, Spring, Summer</p>

<p>HORT 237 Bedding Plant Production 3</p> <p>Semester Prerequisite: HORT 102</p> <p>An advanced course for the greenhouse grower to produce healthy bedding plants at a profit. Topics will include scheduling, spacing, and production costs as well as cultural practices. New varieties will also be presented.</p> <p>Semester Planned: Spring</p>	<p>HUMS 212 History of Art II 4</p> <p>Semester Prerequisite: WRIT 121/Equivalent</p> <p>Surveys the history of painting, sculpture, and architecture of world civilizations in Africa, the Americas, Asia, and Europe from the fifteenth to the twentieth century. Emphasizes analysis and comparison of artistic concepts, styles, and techniques and investigates how the arts reflect ideas, issues, and values of society and the individual.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HORT 238 Garden Center and Nursery Sales Management 3</p> <p>Semester Prerequisite: None</p> <p>This course provides business principles for retail sales managers. A thorough discussion of management topics is presented. Emphasis is placed on planning and organizing a garden center, nursery, greenhouse, or florist operation. Effective pricing and merchandising strategies as well as advertising and display techniques are discussed.</p> <p>Semester Planned: Fall, Spring</p>	<p>HUMS 213 World Civilizations I 4</p> <p>Semester Prerequisite: WRIT 121/Equivalent</p> <p>Basic Skills Prerequisite: Reading Level 3; Writing Level (See Class Schedule)</p> <p>Surveys the literature and art, science and technology, and the social and political systems of major civilizations in Africa, Asia, Europe, and the Americas to approximately the seventeenth century. Emphasizes the contributions of early civilizations to the creativity, richness, and diversity of the human condition.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HORT 295 Landscape Independent Study 3</p> <p>Semester Prerequisite: Instructor Approval</p> <p>This independent study is designed for students who wish to pursue a specialty area in horticulture beyond that which is offered in our curriculum. Inquiry through research is required.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HUMS 214 World Civilizations II 4</p> <p>Semester Prerequisite: WRIT 121/Equivalent</p> <p>Surveys the literature and art, science and technology, and the social and political systems of the major civilizations in Africa, Asia, Europe, and the Americas from approximately the seventeenth century to the present. Emphasizes the contributions of modern civilizations to the creativity, richness, and diversity of the human condition.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HORT 296 Horticulture Project Lab 2</p> <p>Semester Prerequisite: Instructor Approval</p> <p>This independent study is designed for students who wish to pursue a specialty area in horticulture beyond that which is offered in our curriculum. Inquiry through research is required.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HUMS 215 American Civilization 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL/WRIT 122 Recommended)</p> <p>This course will explore the cultural foundations of the United States from the period of exploration to the present. This is an interdisciplinary course which examines central themes of American culture and their representation in history, literature, art, philosophy, and religion.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HORT 297 Horticulture Project Lab 4</p> <p>Semester Prerequisite: Instructor Approval</p> <p>This independent study is designed for students who wish to pursue a specialty area in horticulture beyond that which is offered in our curriculum. Inquiry through research is required.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HUMS 220 Japanese Civilization 4</p> <p>Semester Prerequisite: None</p> <p>This course traces the development of Japan's cultural tradition with strong emphasis on history, religion, art, and literature. Further, this course demonstrates that modern Japan can best be understood in light of its distinctive cultural traditions.</p> <p>Semester Planned: Fall</p>
<p>HUMS 110 Seminar: Stratford Theater Trip .5</p> <p>Semester Prerequisite: Departmental Approval</p> <p>A "cultural practicum" providing students the opportunity to experience exemplary theatrical productions. Academic breadth and historical perspective are achieved by attending performances, lectures, and interacting with professionals. Skills of critical analysis are also exercised through exposure to fine classical writing and assessment of both oral interpretation and text.</p> <p>Semester Planned: Summer</p>	<p>HUMS 230 Seminar: Culture and History of Mexico/Guadalajara 2</p> <p>Semester Prerequisite: None</p> <p>Seminar designed for those who wish to learn fundamentals of Mexico's culture, history, geography, and society, emphasizing current developments in the city of Guadalajara and various characteristics of Hispanic cultures. Students will learn through readings, informal lectures, audio-visuals, and research/presentations developed by students. Class will be taught in English.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HUMS 120 Western Art and Music History 4</p> <p>Semester Prerequisite: None</p> <p>An introduction to the masterpieces of art and music from Pre-literate times to the twentieth century. Audio and visual material will be used to illustrate artistic and musical contributions of Europe and America to the development of Western culture.</p> <p>Semester Planned: Fall, Spring</p>	<p>HUMS 260 Seminar: Ancient Egypt 4</p> <p>Semester Prerequisite: None</p> <p>This course explores the achievements of one of the earliest and most successful of world civilizations. Developments in Egyptian art, architecture, and literature will be emphasized and the roles of religion, kingship, and geography will be studied. Great discoveries and discoverers of Egyptian archaeology will also be featured.</p> <p>Semester Planned: Fall, Summer</p>
<p>HUMS 160 Mythology 4</p> <p>Semester Prerequisite: None</p> <p>Classical Greek and Roman myths constitute the first half of the course with the remainder chosen from at least two of the following areas: African, American, Far Eastern, Medieval European, Near Eastern, or Norse. Reading and analysis of primary sources in translation and their cross-cultural comparison are emphasized.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HUMS 265 Seminar: Ethical Issues in Medicine 3</p> <p>Semester Prerequisite: None</p> <p>This course will present some of the ethical dilemmas which arise in relation to health care and develop a framework for ethical decision-making with which to deal with these and other related problems. It is designed for both health care professionals and others who are interested in these issues.</p> <p>Semester Planned: Fall, Summer</p>
<p>HUMS 211 History of Art I 4</p> <p>Semester Prerequisite: WRIT 121/Equivalent</p> <p>Basic Skills Prerequisite: Reading Level 3; Writing Level (See Class Schedule)</p> <p>Surveys the history of painting, sculpture, and architecture of world civilizations in Africa, the Americas, Asia and Europe from Pre-literate times to the fifteenth century. Emphasizes analysis and comparison of artistic concepts, styles, and techniques and investigates how the arts reflect ideas, issues, and values of society and the individual.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HUMS 295 Independent Study 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Special research projects and/or individual readings in Humanities. Students will invest no less than 32 hours for each credit earned. Enrollment is usually restricted to honors students who have grade-point averages of at least 3.0 in courses offered by this department.</p> <p>Semester Planned: Fall, Spring, Summer</p>

<p>HUMS 296 Independent Study 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Special research projects and/or individual readings in Humanities. Students will invest no less than 32 hours for each credit earned. Enrollment is usually restricted to honors students who have grade-point averages of at least 3.0 in courses offered by this department.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HUSE 240 Substance Abuse: Special Populations and Adolescent Addiction 3</p> <p>Semester Prerequisite: HUSE 112</p> <p>This course surveys substance abuse in various populations including adolescents, the elderly, women, the hearing impaired, as well as various ethnic groups including African-Americans, Native Americans, and Hispanics. Although many commonalities exist among the groups, each group is unique. Reasons for abuse and treatment consideration are explored within each special population.</p> <p>Semester Planned: Fall</p>
<p>HUSE 100 Introduction to Human Services: Resources and Interventions 4</p> <p>Semester Prerequisite: None</p> <p>This course presents an overview of the basic programs and social institutions which provide human services. It provides the student with methods and problem-solving skills used by human service workers in a variety of settings.</p> <p>Semester Planned: Fall, Spring</p>	<p>HUSE 241 Substance Abuse Prevention and Intervention 3</p> <p>Semester Prerequisite: HUSE 112</p> <p>This course provides a developmental framework for a better understanding of the factors contributing to substance-abuse prevention. It facilitates students' abilities to critique existing programs, identify current community needs, and address the growing demand for consultation and assistance in the field of substance abuse prevention.</p> <p>Semester Planned: Fall</p>
<p>HUSE 101 Personal Dimensions of Human Services 4</p> <p>Semester Prerequisite: None</p> <p>This course explores the nature and development of personal dimensions of human services, including knowledge, values, and skills needed by people who are preparing for careers in the helping professions.</p> <p>Semester Planned: Fall, Spring</p>	<p>HUSE 242 The Chemically Dependent Family 3</p> <p>Semester Prerequisite: HUSE 112</p> <p>This course provides a conceptual framework within which to understand, assess, and effectively intervene/interact in a counseling fashion with the chemically dependent family. Specific sub-groups and issues within or resulting from the chemically dependent family are explored.</p> <p>Semester Planned: Spring</p>
<p>HUSE 110 Introduction to Child Abuse and Neglect 3</p> <p>Semester Prerequisite: None</p> <p>This course reviews the history and scope of child abuse, including socioeconomic and psychological factors. This course explores the world of abnormal rearing; roles of community agencies and disciplines; approaches to treatment and prevention; coordination of cases and services; and legal aspects and the law.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HUSE 244 Substance Abuse Agencies, Treatment, Addiction Patterns 3</p> <p>Semester Prerequisite: HUSE 112</p> <p>This course covers the addiction cycle of alcoholics and drug abusers, personality and interactional patterns of addiction, and casework and group work techniques. It provides an analysis of current models of treatment within programs, including review of inpatient, outpatient, halfway houses, and occupational programs.</p> <p>Semester Planned: Spring</p>
<p>HUSE 111 Introduction to Mental Health: Prevention and Interventions 3</p> <p>Semester Prerequisite: None</p> <p>This course presents an overview of the field of mental health with an emphasis on an historical review; psycho-social stages of development; definition of mental illness, causes and treatment; prevention; current service delivery systems; and the role of the Mental Health Associate.</p> <p>Semester Planned: Fall</p>	<p>HUSE 270 Native American Leadership I: History and Tradition 3</p> <p>Semester Prerequisite: None</p> <p>This course provides an overview of leadership and community development issues in the Great Lakes Native American (Anishinaabe) community from 1600 to present day. It includes cross-cultural leadership theory, community development case studies, problem-solving and decision-making skills development, and utilizes historic Native American leaders as role models.</p> <p>Semester Planned: Fall</p>
<p>HUSE 112 Introduction to Substance Abuse 3</p> <p>Semester Prerequisite: None</p> <p>This course reviews substance abuse and use from a historical, sociological, and psychological perspective. It includes drug classifications, street terminology, causes of abuse, and also examines present and past legislation regarding substance abuse and use.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HUSE 271 Native American Leadership: Skills Development 3</p> <p>Semester Prerequisite: None</p> <p>This course presents community development issues facing Native American leaders, especially in Michigan. Focus is on developing analytical, decision-making, and leadership skills for community development. Approach utilizes theoretical and practical case study models and presentations by community leaders.</p> <p>Semester Planned: Spring</p>
<p>HUSE 120 Introduction to Domestic Violence 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed to provide an overview of the historical, socio-economic, cultural, and psychological factors associated with family violence. Child abuse, woman abuse, elder abuse and sibling violence will be discussed as well as the resources available, techniques for intervention and the role of law enforcement agencies, legislative bodies, social service agencies and others.</p> <p>Semester Planned: Fall</p>	<p>HUSE 281 Organizational Systems in the Human Services 2</p> <p>Semester Prerequisite: HUSE 282 Concurrently, Departmental Approval</p> <p>This course provides the student with knowledge of the community power structure, funding bases, and the internal workings of human services organizations. It explores opportunities in the labor force, certification requirements, and approaches to networking.</p> <p>Semester Planned: Fall</p>
<p>HUSE 182 Understanding AIDS .5</p> <p>Semester Prerequisite: None</p> <p>This course reviews the important issues surrounding Acquired Immune Deficiency Syndrome (AIDS). It presents opposing viewpoints and factual information, including an overview of the legal, medical, social, and moral aspects of the disease.</p> <p>Semester Planned: Fall</p>	<p>HUSE 282 Human Services Practicum I: Field Placement 2</p> <p>Semester Prerequisite: Field Placement Admission, Departmental Approval</p> <p>This course provides beginning practical experience and training in the field for individual students. The student is placed with a community-based agency. A concurrent seminar, HUSE 281, integrates field experience with theoretical concepts and principles of human services organizational systems.</p> <p>Semester Planned: Fall</p>
<p>HUSE 183 Advocacy Skills: Processes and Applications .5</p> <p>Semester Prerequisite: None</p> <p>This course describes the advocacy process, focusing upon working with individuals and groups of clients across the age continuum. Participants learn techniques they, as change agents in human services, can use in assessing client needs and in presenting those needs to appropriate agencies at the local, state, and federal levels.</p> <p>Semester Planned: Spring</p>	<p>HUSE 283 Service Delivery Skills 2</p> <p>Semester Prerequisite: HUSE 281, HUSE 284 Concurrently, Departmental Approval</p> <p>This course helps the human services student identify systems and resources to link the systems with the people and how to mobilize the systems and the people.</p> <p>Semester Planned: Spring</p>
<p>HUSE 211 Family Treatment of Child Abuse and Neglect 3</p> <p>Semester Prerequisite: HUSE 110</p> <p>This course addresses the special problems encountered working with abusive and neglective families, using individual groups and family intervention methods. Domestic violence and legal aspects are considered. A secondary focus is worker attrition in the field, its causes, and resolution strategies.</p> <p>Semester Planned: Spring</p>	

<p>HUSE 284 Human Services Practicum II: Field Placement 2</p> <p>Semester Prerequisite: HUSE 282, HUSE 283 Concurrently, Departmental Approval</p> <p>This course provides advanced practical experience and training in the field of human services. The student works in a community-based agency. A concurrent seminar, HUSE 283, integrates field experience with theoretical principles of human services delivery.</p> <p>Semester Planned: Spring</p>	<p>HVAC 130 Air Conditioning I 4</p> <p>Semester Prerequisite: HVAC 100, HVAC 110</p> <p>Fundamentals and principles of residential air conditioning systems. Students will learn soldering and brazing of tubing, wiring, component testing, evacuation procedures, charging and maintenance of both split systems, as well as small packaged units.</p> <p>Semester Planned: Fall, Spring</p>
<p>HUSE 297 Human Services Independent Study Project: 1 Credit 1</p> <p>Semester Prerequisite: Learning Contract, Departmental Approval</p> <p>This course includes special research, directed study, or service-learning projects in human services areas, such as child development, gerontology, social work, substance abuse, or related areas. It requires at least 32 hours of laboratory work or 64 hours of field work. A learning contract is required.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HVAC 181 Heating, Ventilating and Air Conditioning Seminar 1</p> <p>Semester Prerequisite: None</p> <p>Seminar may cover any or all of the following topics: cooling, heating, humidifying, filtering, servicing and/or ventilating, etc. For individuals already in the Heating, Ventilating, Air Conditioning and Refrigeration (HVACR) field or anyone interested in these areas.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HUSE 298 Human Services Independent Study Project: 2 Credit 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course includes special research, directed study, or service-learning projects in human service areas, such as child development, gerontology, social work, substance abuse, or related areas. It requires at least 64 hours of laboratory work or 128 hours of field work. A learning contract is required.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HVAC 182 Heating, Ventilating and Air Conditioning Seminar 2</p> <p>Semester Prerequisite: None</p> <p>Seminar may cover any or all of the following topics: cooling, heating, humidifying, filtering, servicing and/or ventilating, etc. For individuals already in the Heating, Ventilating, Air Conditioning and Refrigeration (HVACR) field or anyone interested in these areas.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HUSE 299 Human Services Independent Study Project: 3 Credit 3</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course includes special research, directed study, or service-learning projects in human service areas, such as child development, gerontology, social work, substance abuse, or related areas. It requires at least 96 hours of laboratory work or 192 hours of field work. A learning contract is required.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HVAC 201 Mechanical Code 4</p> <p>Semester Prerequisite: HVAC 120, HVAC 130/Approval</p> <p>A fundamental course designed to acquaint the student with the methods and techniques used in field inspection of mechanical systems. Both the Uniform Mechanical Code and the Building Officials and Code Administrators (BOCA) Code will be discussed.</p> <p>Semester Planned: Fall, Spring</p>
<p>HVAC 100 Fundamentals of Heating, Ventilating and Air Conditioning 3</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Reading Level 2; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule)</p> <p>This course is an introduction to the mechanical refrigeration cycle and its individual components. Compressors, evaporators, condensers, and metering devices as well as their functions are covered in detail. Also covered are exercises in psychrometrics and an introduction to system design.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HVAC 211 Schematics 3</p> <p>Semester Prerequisite: HVAC 120, HVAC 130</p> <p>An in-depth study into the cause and effect aspects of schematic diagrams. The student will learn to simplify complicated schematics to obtain the sequence of operation necessary for the proper troubleshooting of heating, ventilation and air conditioning equipment.</p> <p>Semester Planned: Fall, Spring</p>
<p>HVAC 105 Sheet Metal Fabrication and Installation 2</p> <p>Semester Prerequisite: None</p> <p>Designed to aid the installer in the skills and techniques for installation of residential heating and cooling systems. Covered will be sheet metal layout, identification of sheet metal fittings, various types of venting, fiberglass and insulated duct, and general furnace installation procedures.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HVAC 220 Heating II 4</p> <p>Semester Prerequisite: HVAC 120</p> <p>Fundamentals and principles of electronic ignition systems including troubleshooting and servicing. The major emphasis is placed on high efficiency and condensing furnaces to include: sequence of operation, troubleshooting, servicing, and proper installation.</p> <p>Semester Planned: Fall, Spring</p>
<p>HVAC 110 Applied Electricity I 2</p> <p>Semester Prerequisite: None</p> <p>An introduction to basic electricity (AC and DC) using both theory and applied study methods. Topics will include electrical components, symbols, basic schematic diagrams, Ohm's Law applied to series and parallel circuits, and motor types and usages. In conjunction with lab exercises, meters and their proper usage will be covered.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HVAC 221 Introduction to Hydronics 3</p> <p>Semester Prerequisite: HVAC 120</p> <p>Covers hot water and steam residential heating systems, piping and all accessories, safety controls, expansion tanks, zone valves, installation procedures, and codes. Students perform testing, troubleshooting, adjusting, and servicing of components to insure maximum efficiency.</p> <p>Semester Planned: Fall, Spring</p>
<p>HVAC 111 Applied Electricity II 2</p> <p>Semester Prerequisite: HVAC 130/Concurrently</p> <p>The study of motors with emphasis on theory, troubleshooting, and servicing. Motor controls, control circuits, protection devices, and discussion of energy conservation as related to motors will be covered in detail.</p> <p>Semester Planned: Fall, Spring</p>	<p>HVAC 230 Air Conditioning II 4</p> <p>Semester Prerequisite: HVAC 130</p> <p>Advanced air conditioning, light commercial equipment, water cooled units, cooling towers, and wiring both control and line voltage circuitry. The latest in test equipment and meters will aid the student in becoming proficient in servicing and maintenance of commercial equipment.</p> <p>Semester Planned: Fall, Spring</p>
<p>HVAC 120 Heating I 4</p> <p>Semester Prerequisite: HVAC 100, HVAC 110</p> <p>Basic construction and function of components in residential gas and oil fired furnaces with detail on theory, application, troubleshooting, and servicing standard heating systems. Installation procedures and codes are also covered. Additional equipment studied will include humidifiers, air cleaners, and vent dampers.</p> <p>Semester Planned: Fall, Spring</p>	<p>HVAC 231 Heat Pump 4</p> <p>Semester Prerequisite: HVAC 230</p> <p>This course deals entirely with heat pumps (air-to-air, water-to-air): installation, servicing, proper application of heat pump components and extensive wiring schematics.</p> <p>Semester Planned: Fall, Spring</p>
<p>HVAC 240 Refrigeration I 4</p> <p>Semester Prerequisite: HVAC 130</p> <p>The student will study domestic and light commercial refrigeration systems with an emphasis on controls operation and adjustment.</p> <p>Semester Planned: Fall, Spring</p>	

<p>HVAC 241 Refrigeration II 4</p> <p>Semester Prerequisite: HVAC 240</p> <p>The student will learn servicing of commercial units, heat load calculations for component selections, special valve applications, and piping procedures.</p> <p>Semester Planned: Fall, Spring</p>	<p>IDMS 280 Introduction to Clinical Experience I 8</p> <p>Semester Prerequisite: Admission to Program</p> <p>First course in a three-semester sequence of clinical application in diagnostic medical sonography. The course is programmed with specific performance activities. Credit is arranged for each individual semester with a ratio of one credit hour to three clinical clock hours.</p> <p>Semester Planned: Fall</p>
<p>HVAC 250 Pneumatic Control 2</p> <p>Semester Prerequisite: HVAC 230/Approval</p> <p>Basic concepts of pneumatic controls for HVAC equipment in commercial structures; adjustment and calibration of pneumatic equipment.</p> <p>Semester Planned: Fall, Spring</p>	<p>IDMS 281 Clinical Experience II 9</p> <p>Semester Prerequisite: IDMS 280</p> <p>Building on material presented in IDMS 280, this is the second course in a three-semester sequence in diagnostic medical sonography. The course is programmed with specific performance objectives. Credit is arranged for each individual semester with a ratio of one credit to three clinical clock hours.</p> <p>Semester Planned: Spring</p>
<p>IDMS 200 Sonographic Introduction 1</p> <p>Semester Prerequisite: Admission to Program</p> <p>Introduction to sonography including equipment history, criteria, limitations of ultrasound, and sonographer ethics. General information provided regarding patient preparation, history/clinical correlation, and basic nursing care specific to ultrasound. Strong emphasis on terminology and abbreviations most commonly used with ultrasound.</p> <p>Semester Planned: Fall</p>	<p>IDMS 282 Clinical Experience III 12</p> <p>Semester Prerequisite: IDMS 281</p> <p>Based on material presented in IDMS 281, this is the third course in a three-semester sequence of clinical application in diagnostic medical sonography. Course is programmed with specific performance objectives. Credit is arranged for each individual semester with a ratio of one credit hour to three clinical clock hours.</p> <p>Semester Planned: Summer</p>
<p>IDMS 201 General Sonography I 4</p> <p>Semester Prerequisite: Allied Health</p> <p>Provides the student with cross-sectional anatomy and pathology as it relates to sonographic scanning of the abdomen, vascular system, thyroid, prostate, scrotum, breast, and neurology of the neonate.</p> <p>Semester Planned: Fall</p>	<p>IMAG 101 Basic Photography for Non-Majors 2</p> <p>Semester Prerequisite: None</p> <p>Students will learn to use camera controls, exposure controls, photographic composition, and lighting to make better photographs. Color film and commercial processing will be used. Designed for students with little or no previous still photography experience who do not plan to major in Imaging Technology.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>IDMS 202 OB/GYN Sonography I 4</p> <p>Semester Prerequisite: Allied Health</p> <p>Provides the student with cross-sectional anatomy and pathology as it relates to gynecological and obstetrical sonography. Fetal cardiac anatomy and appearance will be presented.</p> <p>Semester Planned: Spring</p>	<p>IMAG 102 Advanced Photo for Non-Majors 2</p> <p>Semester Prerequisite: IMAG 101/Equivalent</p> <p>A continuation of IMAG 101. Students will learn to apply advanced design concepts, techniques, and accessories for problem solving and creative image making. Color film and commercial processing will be used. For students who do not plan to major in Imaging Technology.</p> <p>Semester Planned: Fall, Spring</p>
<p>IDMS 219 Sonographic Imaging 1</p> <p>Semester Prerequisite: Allied Health</p> <p>This course will provide the soon-to-graduate sonographer with an update of positioning, physics, instrumentation, and interpretation knowledge. In addition, the use of a comprehensive test will assess the student's level of knowledge in sonographic subjects.</p> <p>Semester Planned: Summer</p>	<p>IMAG 103 Basic Film Production for Non-Majors 2</p> <p>Semester Prerequisite: None</p> <p>Introduces storytelling using sound and picture. Students plan and produce short programs, developing basic skills in plot structure, staging scenes, camera, sound, and editing. For students with little or no previous film experience and who do not plan to major in Imaging Technology.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>IDMS 234 Sonographic Physics 2</p> <p>Semester Prerequisite: Allied Health</p> <p>The student will study the fundamental principles of acoustical physics; how sound is produced and manipulated; and how it reacts in various mediums.</p> <p>Semester Planned: Fall</p>	<p>IMAG 105 Color Printing for Non-Majors 3</p> <p>Semester Prerequisite: IMAG 102/Departmental Approval</p> <p>A basic color printing course designed for students who do not plan to major in Imaging Technology. Emphasis will be on exposure controls of negative color films and the production of quality color prints from both negatives and slides.</p> <p>Semester Planned: Summer</p>
<p>IDMS 245 Sonographic Instrumentation 2</p> <p>Semester Prerequisite: IDMS 234</p> <p>The student will be introduced to the mechanics of A-Mode, M-Mode, Doppler, and Real-time equipment. Accessory equipment such as the camera, transducer, and cathode ray tube will be presented. Methods of quality assurance will also be presented.</p> <p>Semester Planned: Spring</p>	<p>IMAG 111 Introduction to Photographic Technology I 4</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Reading Level 3; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule)</p> <p>Introduces students to photographic technology on both a theoretical and practical level. The student will learn camera types and related equipment, exposure controls, beginning and intermediate black-and-white film processing and printing, including contrast controls. This course is the first of a two-course sequence for Imaging Technology majors.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>IDMS 265 General Sonography II 4</p> <p>Semester Prerequisite: Allied Health</p> <p>The student will be presented with the identification of and interpretation of anatomy and pathology on sonographic exams as it relates to the abdomen, vascular system, and small parts.</p> <p>Semester Planned: Fall</p>	<p>IMAG 112 Design Fundamentals for Imaging Technologies 3</p> <p>Semester Prerequisite: IMAG 101/IMAG 111/Concurrently, Departmental Approval</p> <p>This course introduces students to design theory and its application to imaging technologies on both a practical and theoretical level. Students will learn and apply design elements and principles to their evolving work.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>IDMS 266 OB/GYN Sonography II 3</p> <p>Semester Prerequisite: Allied Health</p> <p>The student will be presented with the identification of and interpretation of anatomy and pathology on sonographic exams as it relates to the obstetric and gynecologic patient.</p> <p>Semester Planned: Spring</p>	

IMAG 113 Lighting Concepts and Applications	3	IMAG 203 Topics in Film Multi-Media	3
Semester Prerequisite: IMAG 101/IMAG 111/Concurrently, Departmental Approval		Semester Prerequisite: Departmental Approval (Approved Photo Credits)	
Introduces the student to fundamental lighting concepts encountered in the studio and on location. Students will learn to apply their knowledge by identifying and solving common photographic lighting problems. Students will use professional continuous and electronic flash equipment to produce acceptable images.		Provides students with basic photographic skills, an opportunity for intensive study in selected aspects of motion picture production, or multi-media production.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
IMAG 114 Introduction to Photographic Color Technology	3	IMAG 204 Topics in Imaging for Self-Expression	3
Semester Prerequisite: IMAG 112, IMAG 113, Departmental Approval		Semester Prerequisite: IMAG 117/IMAG 118, Departmental Approval (Approved Photo Credits)	
Introduces the student to the theories and applications of contemporary color photographic materials and processes. Students will learn to produce acceptable color images by applying the concepts of film selection, film testing, color temperature, lighting, and color image design to their evolving work.		An exploration of self-expression through various imaging technology-based tools, processes, and thought. Students will create process-based images and will research, discuss, critique, formulate opinions, and establish personal goals in order to better understand and practice personal style and expression.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
IMAG 117 Introduction to Photographic Technology II	4	IMAG 205 Topics in Hybrid Imaging	3
Semester Prerequisite: IMAG 111, Approval Required		Semester Prerequisite: IMAG 171, Departmental Approval (Approved Photo Credits)	
Continuation of IMAG 111. Students will learn intermediate and advanced black-and-white exposure, developing, and printing controls and techniques. Students will acquire knowledge and skills to solve technical, aesthetic, and communication problems. Successful completion required for continuation in the Imaging Technology Program (Still Track) at the 200 level.		Designed for intermediate and advanced students to enhance their competencies and explore the areas of emerging hybrid imaging tools and techniques.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
IMAG 118 Film Production I	4	IMAG 206 End Technologies	3
Semester Prerequisite: None		Semester Prerequisite: IMAG 117/IMAG 118, Departmental Approval	
Introduces story telling practices using sound and pictures. Students will learn to plan and produce short programs, developing basic skills in plot structure, staging scenes, photography, sound recording, editing, and audience evaluation.		Designed for intermediate and advanced students to enhance their competencies and knowledge in the area of currently available image output technologies.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
IMAG 120 Photographic Technology Lab	3	IMAG 207 Imaging Issues	3
Semester Prerequisite: IMAG 117/IMAG 118, Departmental Approval		Semester Prerequisite: IMAG 117/IMAG 118, Departmental Approval	
Designed for students whose lack of photographic competencies prevent their continuation in the Imaging Technology Program above the 100 level. Individualized learning objectives are formulated for each student. Successful completion of these objectives will allow the student to continue into the 200 level course sequence.		An exploration of historical, ethical and aesthetic issues relating to imaging technology. Intended to help students better understand, appreciate, and make aesthetic judgements about historical, contemporary, and future imaging technology issues.	
Semester Planned: Spring, Summer		Semester Planned: Fall, Spring, Summer	
IMAG 121 Imaging Technology I	2	IMAG 208 Input Processes	3
Semester Prerequisite: None		Semester Prerequisite: IMAG 117/IMAG 118, Departmental Approval	
A survey of the imaging technology field, including the role of the imaging professional, materials, processes, and new technology as related to advertising, communications, film/multi-media, illustration, portrait, and self-expression. Includes an overview of projected employment opportunities in imaging technology.		Designed for intermediate and advanced students to enhance their competencies and knowledge in the areas of currently available image input and creation technologies.	
Semester Planned: Fall		Semester Planned: Fall, Spring, Summer	
IMAG 122 Imaging Technology II	2	IMAG 220 Intermediate Still Imaging Technology	4
Semester Prerequisite: Departmental Approval		Semester Prerequisite: IMAG 114, IMAG 117, IMAG 121, IMAG 122, Departmental Approval	
A continuing study of the imaging technology field. Students will learn through demonstration, laboratory experiences, and other direct involvement in imaging technologies. Includes presentations, demonstrations and workshops that expose students to the current state of development in the areas of hybrid imaging and emerging technologies.		Introduces the still imaging student to large format and medium format imaging technologies and their diverse applications. Students will work in areas directly linked to the technical and expressive elements of these formats. Camera applications will include commercial illustration, fine art and portrait techniques.	
Semester Planned: Spring		Semester Planned: Fall, Spring	
IMAG 201 Topics in Commercial Photography	3	IMAG 221 Advanced Still Imaging Technology	4
Semester Prerequisite: Departmental Approval (Approved Photo Credits)		Semester Prerequisite: IMAG 220, Departmental Approval	
Exposes students to photography for commercial use. Students will explore various tools, techniques, methodologies, principles and opinions as applied to commercial photography. Designed to sharpen students' technical and aesthetic knowledge and skills in order to better compete in the commercial photographic market.		Introduces students to techniques and practices of photojournalism, documentary photography, and public relations photography. Historical and contemporary photographic styles that reflect the program's areas of emphasis will be examined. Students will apply critical thinking processes and imaging technologies to produce a portfolio of work illustrating their areas of special interest.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring	
IMAG 202 Topics in Photographic Communication	3	IMAG 222 Intermediate Color Applications and Technology	3
Semester Prerequisite: IMAG 114, IMAG 117, Departmental Approval (Approved Photo Credits)		Semester Prerequisite: IMAG 114, IMAG 117, IMAG 121, IMAG 122, Departmental Approval	
Designed for intermediate and advanced students to enhance their competencies and explore areas of interest using still photography in combination with words. Emphasis on communicating clear messages to mass media audiences through documentary photography, newspaper and magazine photojournalism, and public relations photography.		Introduces the student to the contemporary materials and processes of the negative to positive color photographic print process. Students will learn to produce professionally acceptable prints from a wide variety of color negatives by applying color balancing and printing controls, print finishing techniques, and lab efficiency skills to their work.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
IMAG 203 Topics in Film Multi-Media	3	IMAG 223 Advanced Color Applications and Technology	4
Semester Prerequisite: Departmental Approval (Approved Photo Credits)		Semester Prerequisite: IMAG 222, Departmental Approval	
Provides students with basic photographic skills, an opportunity for intensive study in selected aspects of motion picture production, or multi-media production.		A continuation of IMAG 222 that involves the advanced student with color as a critical communication tool. Students, individually and as team members, will learn to produce highly effective and professionally acceptable photographs with color transparency film. A high level of technical accomplishment and aesthetic development will be reached.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring	

<p>IMAG 224 Emerging Image Technologies I 2</p> <p>Semester Prerequisite: IMAG 117/IMAG 118, IMAG 121, IMAG 122, Departmental Approval</p> <p>An intermediate-level course designed to expose imaging technology majors to the latest technological innovations effecting the areas of photography, imaging and related fields. Course format will include lectures, discussion, demonstration, and hand-on experiences.</p> <p>Semester Planned: Fall</p>	<p>IMAG 233 The Business of Photography: Practices and Directions 3</p> <p>Semester Prerequisite: IMAG 221, IMAG 223, IMAG 225, IMAG 227, Departmental Approval</p> <p>Exposes the student to the general business practices and approaches used in the photographic marketplace. The student will learn to undertake market research, develop a marketing plan, understand and apply basic accounting and tax principles, prepare a business plan, and determine where their specialties and interests fit within the industry.</p> <p>Semester Planned: Fall, Spring</p>
<p>IMAG 225 Emerging Image Technologies II 2</p> <p>Semester Prerequisite: IMAG 224, Departmental Approval</p> <p>An advanced-level study that further explores the effects of new technologies and processes on the areas of photography and imaging. Students will attend a three-day program that includes lectures, demonstrations and workshops related to hybrid imaging and emerging technologies.</p> <p>Semester Planned: Spring</p>	<p>IMAG 234 Portfolio Assembly and Degree Completion Activities 3</p> <p>Semester Prerequisite: Portfolio Review, Departmental Approval</p> <p>Finalizes the student's portfolio and immediate career plans. Students edit and assemble their best work into a cohesive, visual résumé for the purpose of securing employment in their chosen major emphasis area or for gaining admission to another institution for continued studies. Students present final portfolios in a public program.</p> <p>Semester Planned: Spring</p>
<p>IMAG 226 Film Production II 4</p> <p>Semester Prerequisite: IMAG 118</p> <p>An intermediate-level course that exposes the student to advanced storytelling practices using sound and images. Hands-on production exercises help the student to develop skills in scriptwriting, storyboarding, production planning, photography, animation, editing, and sound track production.</p> <p>Semester Planned: Fall, Spring</p>	<p>IMAG 238 Project Lab For Independent Study 3</p> <p>Semester Prerequisite: IMAG 221/IMAG 227, Departmental Approval</p> <p>Allows advanced students to pursue study in areas not formally taught within the curriculum when these studies require the use of the Photography Center facility. Students will work in consultation with an instructor. Acceptable written proposal required prior to registration.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>IMAG 227 Film Production III 4</p> <p>Semester Prerequisite: IMAG 226</p> <p>A continuation of IMAG 226 for moving image majors. Hands-on production exercises help the student develop skills in scriptwriting, directing, working with dialogue shooting and editing sync sound. Students work individually and as group members and apply critical thinking and problem solving processes to produce creative, dramatic, and effective communications programs.</p> <p>Semester Planned: Fall, Spring</p>	<p>IMAG 240 Internship 3</p> <p>Semester Prerequisite: IMAG 221/IMAG 227, Departmental Approval</p> <p>Allows advanced students to work as interns developing competencies in the technical, business, creative, and communicative aspects of photography, filmmaking or electronic imaging. Acceptable written application and internship agreement required prior to registration.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>IMAG 228 Independent Study 3</p> <p>Semester Prerequisite: IMAG 221/IMAG 227, Departmental Approval</p> <p>Allows advanced students to pursue study in areas not formally taught within the curriculum. Students will work in consultation with an instructor. Acceptable written proposal required prior to registration.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>IMRI 200 Introduction to Magnetic Resonance Imaging 3</p> <p>Semester Prerequisite: Admission to Program</p> <p>This course is designed as an overview of basic patient care principles and to prepare the student to meet a variety of emergency situations encountered in the Magnetic Resonance Imaging Department.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>IMAG 229 Advanced Imaging Applications 1</p> <p>Semester Prerequisite: IMAG 221/IMAG 227, Departmental Approval</p> <p>Allows advanced students to work on improving skills or to enhance skills in an area of strength or interest. Students will work with an instructor in a directed learning experience. Acceptable written proposal required prior to registration.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>IMRI 202 MRI Applications I 2</p> <p>Semester Prerequisite: Admission to Program</p> <p>Using the IBM-PC in the lab, students are given a basic understanding of the computers and software applicable to imaging technology departments and facilities. DOS, database, word processing, and health software will be used.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>IMAG 230 Imaging Technology Major I 3</p> <p>Semester Prerequisite: IMAG 221, IMAG 223, IMAG 225, IMAG 227, Departmental Approval</p> <p>An advanced-level major concentration course, the first of a two-course sequence. Students will create images that are professionally acceptable visual solutions to problems typical of their chosen field. Emphasis is on critical thinking, problem-solving, and refining technical, aesthetic, and communication skills.</p> <p>Semester Planned: Fall</p>	<p>IMRI 203 MRI Applications II 2</p> <p>Semester Prerequisite: IMRI 202</p> <p>Utilizing the information presented in MRI Physics II, the student will be presented with more complex anatomy, pathology and physics. The use of MRI as a diagnostic tool will be implemented.</p> <p>Semester Planned: Spring</p>
<p>IMAG 231 Imaging Technology Major II 3</p> <p>Semester Prerequisite: IMAG 230, Departmental Approval</p> <p>A continuation of IMAG 230. Continued emphasis on problem-solving, critical thinking, and refining technical, aesthetic, and communication skills. Students will create professional quality images that may be included in the portfolio which is required for completion of the Imaging Technology Program.</p> <p>Semester Planned: Spring</p>	<p>IMRI 204 MRI Applications III 2</p> <p>Semester Prerequisite: IMRI 203</p> <p>Utilizing the information presented in MRI Physics III, the student will be presented with more complex anatomy, pathology and physics. The use of MRI as a diagnostic tool will be implemented.</p> <p>Semester Planned: Summer</p>
<p>IMAG 232 Internship 8</p> <p>Semester Prerequisite: IMAG 221/IMAG 227, Departmental Approval</p> <p>Allows advanced students to work as an intern developing competencies in the technical, business, creative, and communicative aspects of photography, filmmaking or electronic imaging. Acceptable written application and internship agreement required prior to registration.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>IMRI 208 Cross Sectional Anatomy 3</p> <p>Semester Prerequisite: Admission to Program</p> <p>Course is designed to present an in-depth overview of anatomy (anatomical structures) generally presented in radiography programs. The course presents gross anatomy with a cross-sectional anatomical application.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>IMAG 233 The Business of Photography: Practices and Directions 3</p> <p>Semester Prerequisite: IMAG 221, IMAG 223, IMAG 225, IMAG 227, Departmental Approval</p> <p>Exposes the student to the general business practices and approaches used in the photographic marketplace. The student will learn to undertake market research, develop a marketing plan, understand and apply basic accounting and tax principles, prepare a business plan, and determine where their specialties and interests fit within the industry.</p> <p>Semester Planned: Fall, Spring</p>	<p>IMRI 210 MRI Principles 3</p> <p>Semester Prerequisite: Semester I Courses</p> <p>This course covers the application of principles of physics to the generation of a magnetic resonance image. Integrates computer application to the magnetic resonance image formation.</p> <p>Semester Planned: Spring</p>

IMRI 223 Directed Readings/Research MRI	2	INAU 110 Principles of Industrial Automation	4
Semester Prerequisite: Admission to Program An independent study/research course in which students identify a specific interest area in MRI. Participants develop an understanding of MRI through directed readings and research projects; areas of exploration and development are presented throughout the term during scheduled sessions. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: INAU 100, TECH 101 Course provides basics of fluid power, motor drives, electronics, digital logic, computer architecture, position sensing, and servo control. Topics are accompanied by lab exercises to provide practical experience in the application of these basics. Semester Planned: Spring	
IMRI 230 MRI Physics I	4	INAU 135 Fiber-Optic Communications	5
Semester Prerequisite: Admission to Program This course covers the integration of anatomy-pathology-physics principles to MRI; application of basic anatomy to cross-sectional aspects of imaging and the use of MRI as a diagnostic tool. The student will be presented with complex anatomy and pathology, concurrent with MRI Applications I. Semester Planned: Fall		Semester Prerequisite: TECH 102 A course in the principles and application of fiber-optic communications. Topics covered are particle and wave theory, optics, fiber construction, coupling principles, light resources, and light sensors. Students will learn termination techniques, use of field test equipment, and troubleshooting methods. Semester Planned: Spring, Summer	
IMRI 233 Directed Readings/Research MRI II	2	INAU 150 Introduction to the OS/2 Operating System	3
Semester Prerequisite: IMRI 223 This course is an advanced independent study/research course in which students identify a specific interest area in MRI. Participants develop an understanding of MRI through directed readings and research projects; areas of exploration and development are presented throughout the semester during scheduled sessions. Semester Planned: Summer		Semester Prerequisite: None Course provides an introduction to the multitasking operating system OS/2. Students learn the basics of what multitasking is and what it can do, as well as system requirements, installation, configuration, and operation of standard utilities. Semester Planned: Fall, Spring, Summer	
IMRI 240 MRI Physics II	2	INAU 151 Pascal Programming for Manufacturing	4
Semester Prerequisite: IMRI 230 This course covers the integration of anatomy-pathology-physics principles in MRI; basic anatomy to cross-sectional aspects of imaging and use of MRI as a diagnostic tool. The student will be presented with more complex anatomy and pathology, concurrent with MRI Applications II. Semester Planned: Spring		Semester Prerequisite: None An introductory course in computer programming that provides students with experience and a programming library to meet the basic needs of the manufacturing environment. Subjects include program planning, basic Pascal structure, operator interface, disk files, post processors, printer codes, and RS 232C communications. Semester Planned: Fall, Summer	
IMRI 250 MRI Physics III	2	INAU 200 Applied Automation	4
Semester Prerequisite: IMRI 240/IMRI 212 This course covers the integration of anatomy-pathology-physics principles in MRI; basic anatomy to cross-sectional aspects of imaging and use of MRI as a diagnostic tool. The student will be presented with more complex anatomy and pathology, concurrent with MRI Applications. Semester Planned: Summer		Semester Prerequisite: INAU 110 Course provides experience in the operation, programming, and setup of automated industrial equipment, including robots, vision equipment, and industrial software. Semester Planned: Fall	
IMRI 281 MRI Clinical Experience I	8	INAU 210 Industrial System Integration	4
Semester Prerequisite: Semester I Courses First in a two-semester sequence of clinical application in MRI; designed to present the student with an environment of combining cognitive, psychomotor, and affective aspects of the profession. The course is programmed with specific performance activities. Credit is arranged for each semester with a ratio of one credit hour to each two clinical clock hours. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: INAU 200, INAU 151, TECH 102, ELTE 122 Course provides experience in both the physical interconnection and software integration of intelligent industrial equipment. Students work with a manufacturing work cell and integrate current components as well as future components. Semester Planned: Spring	
IMRI 282 MRI Clinical Experience II	7	INSU 121 Property and Liability Insurance Principles	3
Semester Prerequisite: IMRI 281 Second in a two-semester sequence of clinical application in MRI; designed to present the student with an environment of combining cognitive, psychomotor, and affective aspects of the profession. The course is programmed with specific performance activities. Credit is arranged for each semester with a ratio of one credit hour to each two clinical clock hours. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This course will cover the basic principles of insurance, an introduction to insurance contracts, and an overview of the nature and operation of the insurance business. Semester Planned: Fall	
INAU 100 Introduction to Industrial Automation	4	INSU 122 Personal Insurance	3
Semester Prerequisite: None This course provides a hands-on introduction to current manufacturing technology. Students will learn to use MS/PC DOS computer including word processor, spreadsheet, and operating system applications. Students will experience the use of industrial robots, programmable logic controllers, machine vision, computer-aided design, discrete electronic components, and statistical process control. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: INSU 121 This course will cover the basic personal loss exposures and how they can be met through insurance; Automobile, Homeowners, Life, Health, and other such insurances. It will also discuss governmental insurance for personal loss and how personal insurance affects society. Semester Planned: Fall, Spring	
INAU 101 Introduction to Industrial Computers	1	INSU 123 Commercial Insurance	3
Semester Prerequisite: Departmental Approval This course provides a hands-on introduction to current computer technology. Students will be introduced to the MS/PC DOS computer including word processor, spread sheets, and database managers. This course is restricted to apprentices only. Semester Planned: Fall, Spring		Semester Prerequisite: INSU 121 This course will cover all major forms of commercial liability and property insurance. In addition to covering standard property and casualty forms, the course will also include Boiler and Machinery, Farm, Ocean Marine, Surety and Excel and Surplus Lines coverages. Semester Planned: Fall, Spring	
		INSU 265 Principles of Risk and Insurance	3
		Semester Prerequisite: None At the completion of this course, the student will have a working knowledge of the theory of risk; insurance terminology; legal insurance contracts; and use of risk management. Semester Planned: Fall, Spring	

<p>INTR 106 Lettering For Designers 2</p> <p>Semester Prerequisite: None</p> <p>This course covers theory and application of graphics for designers, with an emphasis on architectural lettering. Drafting equipment, media, reproduction methods, lines, small scale free-hand pencil lettering, sketching, signage and an introduction to lettering with computers are also included.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>INTR 185 Introduction to Textiles 3</p> <p>Semester Prerequisite: INTR 170/Equivalent</p> <p>This course examines the basic fundamentals of textiles, their characteristics and identification. Fabric weaves and uses, basic fiber weaves, currently used complex weaves, natural fibers, and man-made fibers are discussed and studied.</p> <p>Semester Planned: Fall, Spring</p>
<p>INTR 110 Applied Design, Two Dimensional and Color 3</p> <p>Semester Prerequisite: None</p> <p>A studio course in basic design theory: includes basic principles and elements of: color theory and application, two-dimensional (2-D) and three-dimensional (3-D) design fundamentals as they relate to interior design.</p> <p>Semester Planned: Fall, Spring</p>	<p>INTR 190 Materials for Interiors 3</p> <p>Semester Prerequisite: INTR 170, INTR 140</p> <p>Study of non-structural interior finishes and materials, their methods of application, and installation. Emphasis will be on the knowledge of properties of wood, tiles, carpeting, etc.</p> <p>Semester Planned: Spring</p>
<p>INTR 111 Applied Arts, Three Dimensional Design 3</p> <p>Semester Prerequisite: None</p> <p>This course will be a studio introduction to the materials and creation of crafts used in interiors: textiles, clay, and metals.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>INTR 200 Introduction to Housing 2</p> <p>Semester Prerequisite: None</p> <p>This course will explore through lecture/discussion and sketching the planning and design of the American Housing Industry from past to present. The impact of government, finance, zoning ordinances, codes, aesthetics, construction technology, demographics, energy, and society will be studied. (Recommended for all majors.)</p> <p>Semester Planned: Fall, Spring</p>
<p>INTR 132 Presentation Techniques 3</p> <p>Semester Prerequisite: INTR 110/Equivalent</p> <p>This course is the study of visual and verbal presentation techniques. The emphasis will be on production sample boards.</p> <p>Semester Planned: Spring</p>	<p>INTR 204 Affordable Housing Workshop 1</p> <p>Semester Prerequisite: None</p> <p>This course is a comprehensive study of changes possible within the American economic system for more sustained production of low- and moderate-cost housing.</p> <p>Semester Planned: Fall, Spring</p>
<p>INTR 140 Interior Drafting and Detailing 3</p> <p>Semester Prerequisite: INTR 106/Equivalent</p> <p>Study of cabinetry and furniture detailing and construction. Emphasis on development of shop drawings and furniture manufacturing methods.</p> <p>Semester Planned: Spring</p>	<p>INTR 222 Computer-Aided Drafting for Interiors 3</p> <p>Semester Prerequisite: INTR 140/Equivalent, TECH 130 Recommended</p> <p>This course offers computer-aided planning and design using AutoCAD software. Emphasis on contract furniture systems and space planning.</p> <p>Semester Planned: Fall</p>
<p>INTR 151 Kitchen Planning Design 3</p> <p>Semester Prerequisite: INTR 140/Equivalent</p> <p>This course investigates basic kitchen and bath planning, designing, and remodeling through lecture, discussion, and recitation.</p> <p>Semester Planned: Fall, Spring</p>	<p>INTR 225 Computer-Aided Design for 3-D Interiors 3</p> <p>Semester Prerequisite: INTR 222, INTR 132/Equivalent</p> <p>This course is designed to further develop skills acquired in the preceeding CAD course. Students will learn AutoCAD commands, settings, 3-D modeling, standard AutoLISP routines and other CAD presentation applications.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>INTR 152 Kitchen Workshop .5</p> <p>Semester Prerequisite: None</p> <p>Basic awareness of kitchen and planning, designing, and remodeling developed through lecture, discussion, and recitation.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>INTR 230 World Decorative Arts 3</p> <p>Semester Prerequisite: INTR 110/INTR 132</p> <p>This course is a survey of the history of decorative art periods, including furniture, interior textiles, and accessories. Covers periods from ancient up to the 19th century industrial revolution.</p> <p>Semester Planned: Fall</p>
<p>INTR 154 Antiques and Collectibles 2</p> <p>Semester Prerequisite: None</p> <p>The student will learn to recognize, date, and evaluate antiques and collectibles from the basis of materials, methods of construction, styles, and periods.</p> <p>Semester Planned: Fall, Spring</p>	<p>INTR 231 Interior Design Period Research 3</p> <p>Semester Prerequisite: INTR 110/INTR 132</p> <p>This course is a study of the history of the decorative art periods including furniture, interior textiles, and accessories, covering periods for the 19th century industrial revolution to post-modern periods with an examination of preservation principles.</p> <p>Semester Planned: Spring</p>
<p>INTR 156 Interior Decorating for the Home 2</p> <p>Semester Prerequisite: None</p> <p>This course is a survey of interior decorations on a practical level. Emphasis is on residential furnishing and treatments. Field trips to local market resources for furniture, fixtures, furnishings, and finishes are included.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>INTR 232 Twentieth Century Design 3</p> <p>Semester Prerequisite: INTR 110/INTR 132</p> <p>This course is a survey of twentieth century design applying to styles of furniture, accessories, textiles, and products as originated by signature designers, artists, and architects.</p> <p>Semester Planned: Spring</p>
<p>INTR 170 Introduction to Interiors 4</p> <p>Semester Prerequisite: INTR 110/Equivalent</p> <p>Introduction to the profession of interior design and survey of design, elements, and theory. Principles and elements of design are used to communicate solutions to environmental interior problems. Design vocabulary, principles, and elements of design in a composition, such as planning of various space and wall elevations, will be included.</p> <p>Semester Planned: Fall, Spring</p>	<p>INTR 240 Color and Lighting 3</p> <p>Semester Prerequisite: INTR 132, INTR 140</p> <p>This course introduces color and light as a design element for residential and commercial applications. Emphasis is on color systems, value studies, and lighting overlays.</p> <p>Semester Planned: Fall</p>
<p>INTR 175 Space Planning and Design Process 3</p> <p>Semester Prerequisite: INTR 170/Concurrently</p> <p>This is a foundation course exploring the theory and applications of Interior Architecture/Design. Emphasis is on developing the creative problem-solving process through graphic written and verbal formats.</p> <p>Semester Planned: Fall</p>	<p>INTR 241 Service Learning 2</p> <p>Semester Prerequisite: 2nd Year Majors Only</p> <p>This course allows students to participate in community service/volunteer projects, which includes outdoor education and all forms of active learning, such as Habitat for Humanity.</p> <p>Semester Planned: Fall, Spring, Summer</p>

INTR 242 Home Furnishing Merchandising	3	INTR 263 Internship	3
Semester Prerequisite: INTR 110, INTR 170 This course examines specific home furnishings and products used in the current interiors industry. Emphasis is on furniture manufacturing and merchandising practices in department stores and showrooms. Semester Planned: Fall, Spring		Semester Prerequisite: Departmental Approval This course is a field study. Students will gain pre-career experience by working in a studio environment under the supervision of a professional architect or interior designer. Regular scheduled progress reports will be given and discussed with supervising faculty member. Semester Planned: Summer	
INTR 244 Visual Display	3	INTR 270 Design Portfolio	2
Semester Prerequisite: INTR 110, INTR 140, INTR 170 This course covers the development of display fundamentals in color, lighting, design, and materials for store windows, showrooms, and exhibits. Semester Planned: Spring		Semester Prerequisite: INTR 132/Equivalent The portfolio course is an opportunity for students to organize photographs, matte/frame and display their visual works. At the completion of the course, the students will have developed a format for a portfolio. Semester Planned: Fall, Spring, Summer	
INTR 246 Residential Interiors	3	IPFL 121 Japanese Language and Culture Summer Institute	6
Semester Prerequisite: INTR 132, INTR 140, INTR 175, INTR 240 This course examines the relationship of human needs to interior environmental design with emphasis on alternative housing design. Semester Planned: Spring		Semester Prerequisite: None This is an intensive Japanese course designed to provide students who have little or no knowledge of Japanese language basic information about Japanese language and culture. Listening comprehension and oral proficiency will be emphasized. Students will also learn hiragana, katakana, and some kanji (Chinese characters). Semester Planned: Summer	
INTR 248 Contract Interiors	4	IPFT 211 Study Tour: China	1
Semester Prerequisite: INTR 175, INTR 240 This course is a study of contract/commercial design. It includes designing all types of NON-RESIDENTIAL interiors; programming, problem solving, furniture, fixtures and equipment, lighting, building codes, and barrier-free space planning with the use of systems furniture and computer-aided planning programs. Semester Planned: Fall		Semester Prerequisite: None Designed to provide students with the opportunity to experience the Chinese culture. Through the course activities, lectures, and field trips, students will have a better understanding of Chinese culture and its civilization, and features of the contemporary daily life of the people. Cities of historical and current importance will be visited. Semester Planned: Fall	
INTR 252 Construction Documents and Specifications	2	IRAD 105 Introduction Radiation Therapy	3
Semester Prerequisite: INTR 248/Concurrently This course is the study of practices and procedures of working drawings, interior materials, cost estimating, installation methods for furniture, cabinets, floor coverings, wall coverings, and window treatments. Emphasis on commercial specifications. Semester Planned: Spring		Semester Prerequisite: Admission to Program Provides the student with an overview of radiation therapy and its role in medicine. Student responsibilities and benefits will be outlined. Students will be oriented to academic and administrative structure, key departments and personnel, and to the profession as a whole. Semester Planned: Fall	
INTR 254 Interior Design Certification Review	1	IRAD 106 Oncology Principles Patient Care	1
Semester Prerequisite: 2nd Year Majors Only This course is specifically intended to provide Interior Design students with appropriate information plus practicum exercises which will enable them to prepare for the National Council for Interior Design Qualification Examination. Semester Planned: Fall, Spring		Semester Prerequisite: Admission to Program Provides the student with the basic concepts of diagnostic process, pathophysiology, oncologic problems, oncologic emergencies, chemotherapy protocols, agents and side effects, bereavement, psychological aspects of disease, and specific case studies. Semester Planned: Spring	
INTR 256 Interior Practice Management	3	IRAD 204 Principles Oncology I	4
Semester Prerequisite: 2nd Year Majors Only This course is an in-depth study of the business and professional practices of interior designers. Emphasis on certification, contracts, marketing, ethics, and project management. Semester Planned: Spring		Semester Prerequisite: Admission to Program This course will provide the student with a review of anatomy and physiology, medical terminology related to oncology patients, and examination of attitudes toward dying, death, and cancer patients. Semester Planned: Fall	
INTR 258 Workroom Practices	3	IRAD 205 Principles Oncology II	4
Semester Prerequisite: INTR 190 In this course the students will study trade workroom materials, methods for commercial and residential window treatments, upholstery, bedspreads, etc., and the detailing used to enable the designer to communicate the design concepts to the workroom. Estimating included. Semester Planned: Fall, Spring		Semester Prerequisite: IRAD 204 Provides the student with the fundamentals of clinical radiation oncology. Malignant conditions, their etiology, and methods of treatment are discussed. Attention is given to patient prognosis, treatment results, and the effects of combined therapies. Semester Planned: Spring	
INTR 260 Interior Computer Project Laboratory	3	IRAD 219 Clinical Radiation Oncology I	2
Semester Prerequisite: INTR 222/Equivalent This course is the direct study of special projects not incorporated in regular course offerings through use of CAD applications. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Admission to Program The student will identify malignant conditions, epidemiology, treatment methods, radiobiological effects, and treatment considerations for general anatomical sites, such as head and neck, pelvic, etc. Semester Planned: Fall, Spring, Summer	
INTR 261 Design Project Laboratory	2	IRAD 220 Clinical Radiation Oncology II	2
Semester Prerequisite: Approval Required This course is a directed study of special projects not incorporated in regular course offerings. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: IRAD 219 The student will identify malignant conditions, epidemiology, treatment methods, radiobiological effects, as well as treatment planning for specific anatomical sites, such as ovary, breast, etc. Semester Planned: Fall, Spring, Summer	
INTR 262 Design Project Laboratory	4		
Semester Prerequisite: Instructor Approval This course is a directed study of special projects not incorporated in regular course offerings. Semester Planned: Fall, Spring, Summer			

<p>IRAD 231 Radiation Therapy Physics 3</p> <p>Semester Prerequisite: Admission to Program</p> <p>Provides the student with specifics of ionizing radiation and principles of radioactivity. Details of production, interactions, and types of radiation, as well as medical uses of radioactive material and technical considerations of application are discussed.</p> <p>Semester Planned: Fall</p>	<p>IRAD 290 Advanced Clinical Skills II 7</p> <p>Semester Prerequisite: IRAD 289/Admission to Program</p> <p>Second in a series of two courses designed to provide opportunity to explore advanced concepts in radiation therapy and oncology. Course includes competency-based education combined with cognitive, psychomotor, and affective aspects of the profession performed at the level of a Staff Radiation Therapist.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>IRAD 232 Advanced Therapy Physics 3</p> <p>Semester Prerequisite: IRAD 231</p> <p>Provides the student with the specifics of ionizing radiation and the principles of radioactivity. Details of production, interactions, and types of radiation, medical uses of radioactive material, and technical considerations, as well as the application to the treatment of patients are discussed.</p> <p>Semester Planned: Spring</p>	<p>IRXT 100 Introduction to Imaging 4</p> <p>Semester Prerequisite: Admission to Program</p> <p>Survey of the role of the radiographer in the health-care industry. Explores the historical development of x-ray, medical, and legal ethics, radiation protection, patient-staff relationships, and other imaging technologies. A clinical component allows the new radiography student to correlate this material in the practical setting.</p> <p>Semester Planned: Fall, Spring</p>
<p>IRAD 234 Quality Assurance in Radiation Therapy 2</p> <p>Semester Prerequisite: Admission to Program</p> <p>Upon completion of this course, the student will be able to discuss and identify the optimal parameters for a functioning radiation oncology department in line with the requirements of the J.C.A.H. standards in essential areas.</p> <p>Semester Planned: Fall</p>	<p>IRXT 111 Radiographic Positioning I 7</p> <p>Semester Prerequisite: Admission to Program</p> <p>Student radiographers are introduced to radiographic positioning of the upper and lower extremity, chest, abdomen, bony thorax, pelvis, and spine. Associated topographic, skeletal, chest, and abdominal anatomy is studied. A laboratory experience is provided to evaluate the student skills in performing each position/projection.</p> <p>Semester Planned: Fall, Spring</p>
<p>IRAD 235 Basic Dosimetry 3</p> <p>Semester Prerequisite: MATH 121/Placement Test</p> <p>Provides the student with the basic concepts of clinical dosimetry and treatment planning. Various external beam techniques, depth dose data, and summation of simple isodose curves are discussed. Fundamental procedures in dose measurement and verification are included.</p> <p>Semester Planned: Fall</p>	<p>IRXT 112 Radiographic Positioning II 7</p> <p>Semester Prerequisite: IRXT 100, IRXT 111, 2.5 Minimum in AHCC 104</p> <p>A continued study of routine radiographic positioning with the addition of fluoroscopic procedures. Included, are studies of the skull, G.I. tract, G.U. tract, myelography, and bronchography. In addition, various contrast media are studied. Laboratory experiences are provided to evaluate student skills in performing selected position/projections.</p> <p>Semester Planned: Fall, Spring</p>
<p>IRAD 270 Radiobiology 2</p> <p>Semester Prerequisite: Admission to Program</p> <p>Provides the student with the principles of cell response to radiation. Factors which influence the effects of radiation, tissue sensitivity, and environmental factors are discussed.</p> <p>Semester Planned: Spring</p>	<p>IRXT 113 Radiographic Positioning III 2</p> <p>Semester Prerequisite: 2.5 Minimum in IRXT 112</p> <p>Special radiologic procedures are studied and some related imaging modalities surveyed. Procedures include: neurologic, cardiovascular, arthrographic, mammographic, digital imaging, and tomographic studies. Special equipment/supplies used in these examinations are surveyed: needles, catheters, high pressure injectors, film changers, sterile trays, and contrast media.</p> <p>Semester Planned: Fall, Summer</p>
<p>IRAD 285 Clinical Experience I 3</p> <p>Semester Prerequisite: Admission to Program</p> <p>An introductory course to clinical aspects of radiation therapy and oncology. First in a sequence of clinical applications in radiation therapy technology theory. This course is designed to present the student with an environment combining cognitive, psychomotor, and affective aspects of the radiation therapy profession.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>IRXT 114 Cross-Sectional Anatomy 3</p> <p>Semester Prerequisite: IRXT 113/Departmental Approval</p> <p>Provides an overview of transverse, coronal, and sagittal cross-sectional anatomy of the human body. Special emphasis will be placed on the brain, thorax and abdominal area. Correlations between cross-sectional anatomy, radiographs, and three-dimensional drawings will be explored.</p> <p>Semester Planned: Fall, Spring</p>
<p>IRAD 286 Clinical Experience II 9</p> <p>Semester Prerequisite: IRAD 285</p> <p>Second course in a sequence of clinical applications in radiation therapy technology theory. This course covers all phases of radiation therapy technology and is designed to present the student with an environment combining cognitive, psychomotor, and affective aspects of the radiation therapy profession.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>IRXT 121 Radiographic Exposure I 3</p> <p>Semester Prerequisite: Admission to Program</p> <p>The formation of the radiographic image is the focus of IRXT 121. Photographic and geometric variables are related to radiographic factors and their various interactions compared and contrasted. Finally, a study of the history of radiology, basics of radiation formation, and anatomy of the x-ray tube is discussed.</p> <p>Semester Planned: Fall, Spring</p>
<p>IRAD 287 Clinical Experience III 7</p> <p>Semester Prerequisite: IRAD 286</p> <p>Third course in a sequence of clinical applications in radiation therapy technology theory. This course covers all phases of radiation therapy technology and is designed to present the student with an environment combining cognitive, psychomotor, and affective aspects of the radiation therapy profession.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>IRXT 122 Radiographic Exposure II 3</p> <p>Semester Prerequisite: 2.5 Minimum in IRXT 121</p> <p>Various beam modifying devices are presented and their relation to formation of a radiographic image studied. Includes a study of manual and automatic processing and the theory of image formation. Finally, darkroom procedures and quality control, both radiographic and photographic, are studied.</p> <p>Semester Planned: Fall, Spring</p>
<p>IRAD 288 Clinical Experience IV 6</p> <p>Semester Prerequisite: IRAD 287</p> <p>Fourth course in a sequence of clinical applications in radiation therapy technology theory. This course covers all phases of radiation therapy technology and is designed to present the student with an environment combining cognitive, psychomotor, and affective aspects of the radiation therapy profession.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>IRXT 131 Radiologic Physics 3</p> <p>Semester Prerequisite: MATH 112/Equivalent</p> <p>Basic physical principles are related to the radiologic process. A study of basic electricity and the operation of the x-ray circuit is presented. Finally, advanced topics regarding the formation of radiation, protection of the x-ray tube, and x-ray attenuation are studied.</p> <p>Semester Planned: Fall, Spring</p>

IRXT 132 Radiobiology and Protection	2	IRXT 232 Clinical Practice I-S	3
Semester Prerequisite: IRXT 131/Departmental Approval A focus on the reasons for good radiation hygiene and methods to implement protection of the patient and technologist. Current theories regarding the physiological effects of x-radiation are explored. Semester Planned: Spring, Summer		Semester Prerequisite: IRXT 111 First in a two-semester sequence of clinical application in radiography. The course is programmed with specific performance activities. Credit is arranged for each individual term with a ratio of one credit hour to three clinical clock hours. The ratio for lecture is consistent with the one-to-one ratio. Semester Planned: Summer	
IRXT 160 Radiologic Emergencies	1	IRXT 233 Clinical Practice II-S	3
Semester Prerequisite: Admission to Program This course is designed to prepare the student to meet a variety of emergency situations encountered in the radiology department. The theory provided will enable the student to recognize when an emergency exists, assess the situation, and develop a plan for immediate action. Semester Planned: Summer		Semester Prerequisite: IRXT 212/IRXT 232 Second course in a two-semester sequence of clinical applications in radiography. The course is programmed with specific performance activities. Credit is arranged for each individual term with a ratio of one credit hour to three clinical clock hours. The ratio for lecture is consistent with the one-to-one ratio. Semester Planned: Summer	
IRXT 200 Introduction to Radiologic Pathology	2	IRXT 235 Comprehensive Experience II-S	5
Semester Prerequisite: AHCC 106 Emphasizes how disease processes are diagnosed radiographically and the relationship of the radiographic appearance of the disease to its anatomic, physiologic, and pathologic characteristics. The etiology, treatment, and resolution of each disease discussed, with an attempt to relate more recent advances in these areas. Semester Planned: Fall, Spring		Semester Prerequisite: IRXT 214 Second in a three-semester sequence of clinical application in radiography. The course is programmed with specific performance activities. Credit is arranged for each individual term with a ratio of one credit hour to three clinical clock hours. The ratio for lecture is consistent with the one-to-one ratio. Semester Planned: Summer	
IRXT 210 Radiographic Department Management	1	IRXT 236 Comprehensive Experience III-S	5
Semester Prerequisite: Admission to Program Designed to acquaint the student with the organization, function, supervision, and financial arrangements relative to departments of radiology, basic x-ray equipment for performing preventive maintenance and detecting simple functioning difficulties. Semester Planned: Spring, Summer		Semester Prerequisite: IRXT 215/IRXT 235 Third in a three-semester sequence of clinical applications in radiography. The course is programmed with specific performance activities. Credit is arranged for each individual term with a ratio of one credit hour to three clinical clock hours. The ratio for lecture is consistent with the one-to-one ratio. Semester Planned: Summer	
IRXT 212 Clinical Practice I	6	ISCI 110 Science Discovery: A Process	4
Semester Prerequisite: IRXT 100, IRXT 111, IRXT 121, AHCC 104 First in a two-semester sequence of clinical application in radiography. The course is programmed with specific performance activities. Credit is arranged for each individual term with a ratio of one credit hour to three clinical clock hours. The ratio for lecture is consistent with the one-to-one ratio. Semester Planned: Spring, Summer		Semester Prerequisite: None Emphasizes reducing anxiety and improving reasoning skills necessary for participation in science courses. Methods to identify and reduce science anxiety associated with science topics are presented. Science reasoning skills will be inventoried, including: observation, experimental techniques, critical thinking, and communication. Semester Planned: Fall, Spring, Summer	
IRXT 213 Clinical Practice II	6	ISCI 121 Integrated Science for Education I	4
Semester Prerequisite: IRXT 212 Second course in a two-semester sequence of clinical applications in radiography. The course is programmed with specific performance activities. Credit is arranged for each individual term with a ratio of one credit hour to three clinical clock hours. The ratio for lecture is consistent with the one-to-one ratio. Semester Planned: Fall, Summer		Semester Prerequisite: MATH 050/MATH 040, Science Inventory Passed The first of two general science courses focusing on important scientific discoveries and revolutions in their cultural and historical environment. Science processes, methods, and reasoning skills are emphasized throughout. Recommended for education majors. Semester Planned: Fall, Spring, Summer	
IRXT 214 Comprehensive Experience I	9	ISCI 122 Integrated Science for Education II	4
Semester Prerequisite: IRXT 213 First in a three-semester sequence of clinical application in radiography. The course is programmed with specific performance activities. Credit is arranged for each individual term with a ratio of one credit hour to three clinical clock hours. The ratio for lecture is consistent with the one-to-one ratio. Semester Planned: Fall, Spring		Semester Prerequisite: ISCI 121/NSCI 121 The second of two general science courses focusing on important scientific discoveries and revolutions in their cultural and historical environment. Science processes, methods, and reasoning skills are emphasized throughout. Recommended for education majors. Semester Planned: Fall, Spring, Summer	
IRXT 215 Comprehensive Experience II	9	ISCI 131 Integrated Science-Physical: The Science of the Water Planet	4
Semester Prerequisite: IRXT 214 Second in a three-semester sequence of clinical application in radiography. The course is programmed with specific performance activities. Credit is arranged for each individual term with a ratio of one credit hour to three clinical clock hours. The ratio for lecture is consistent with the one-to-one ratio. Semester Planned: Spring, Summer		Semester Prerequisite: 2.0 Minimum in MATH 050/MATH 040, ISCI 110/NSCI 110/Placement Test Basic Skills Prerequisite: Reading Level 3; Writing Level (See Class Schedule) A general education course designed to provide students with a basic understanding of the methods and applications of science. Topics include basic chemistry, thermodynamics, the hydrologic cycle, climate, and weather. Critical thinking and problem-solving skills are applied to environmental issues. Laboratory activities illustrate and amplify lecture topics. Semester Planned: Fall, Spring, Summer	
IRXT 216 Comprehensive Experience III	9	ISCI 132 Integrated Science-Biological: Life on the Water Planet	4
Semester Prerequisite: IRXT 215 Third in a three-semester sequence of clinical applications in radiography. The course is programmed with specific performance activities. Credit is arranged for each individual term with a ratio of one credit hour to three clinical clock hours. The ratio for lecture is consistent with the one-to-one ratio. Semester Planned: Fall, Summer		Semester Prerequisite: 2.0 Minimum in ISCI 131/NSCI 131 This course builds upon ISCI 131. Topics include ecosystems, population dynamics, evolution and origins, plate tectonics, and human interactions with the earth as a sustainable system. Critical thinking and problem-solving skills are applied to environmental issues. Laboratory activities illustrate and amplify lecture topics. Semester Planned: Fall, Spring, Summer	
IRXT 219 Imaging Update	1		
Semester Prerequisite: Allied Health Professional This course will provide the advanced imaging student with an update of positioning, exposure, and physics. In addition, the use of a comprehensive test will assess the student's level of knowledge in the imaging technology. Semester Planned: Fall, Spring, Summer			

<p>JAPN 101 Elementary Japanese I 4</p> <p>Semester Prerequisite: None</p> <p>First course of a two-semester sequence in elementary Japanese. Designed to provide students with basic knowledge of Japanese for practical communication and skills in speaking, reading, writing, and listening comprehension. Provides information concerning everyday life and culture of Japan. Hiragana and Katakana syllabaries and 40 Kanji will be introduced.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>JRNL 255 Feature Writing 3</p> <p>Semester Prerequisite: JRNL 151/Departmental Approval</p> <p>A course in writing feature stories and articles. Students analyze content, structure, and style of feature stories. Students learn strategies for finding subjects, learn methods of interviewing and research, and practice writing and editing their stories.</p> <p>Semester Planned: Spring</p>
<p>JAPN 102 Elementary Japanese II 4</p> <p>Semester Prerequisite: JAPN 101/Equivalent/Approval</p> <p>Continuation of Japanese 101. Students receive more practice in Japanese for practical communication. Develops speaking, reading, writing, and listening skills. Previously acquired knowledge and skills are refined and ability to communicate in Japanese is increased. Additional 100 Kanji will be introduced. Class is taught mostly in Japanese.</p> <p>Semester Planned: Spring</p>	<p>JRNL 256 Newsletter Writing and Production 3</p> <p>Semester Prerequisite: None</p> <p>Offers a hands-on approach to newsletter writing, layout, and production for students and professionals. Emphasizes the study and practice of a variety of formats and styles applicable in desktop publishing and other approaches. Some word processing required.</p> <p>Semester Planned: Spring</p>
<p>JAPN 115 Conversational Japanese I 3</p> <p>Semester Prerequisite: None</p> <p>First course in conversational Japanese. Designed for people with little or no knowledge of Japanese who wish to acquire conversational skills. Students learn correct pronunciation, basic sentence structures, and practical vocabulary for everyday use and travelling. Selected features of Japanese culture and everyday life in Japan will be introduced.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LABR 200 Introduction to Labor Relations 3</p> <p>Semester Prerequisite: None</p> <p>This course surveys both historical and legal frameworks of the labor movement. Major labor laws, causes and goals of the labor movement and union structure and behavior will be discussed. Students will explore both labor and management approaches to solving employment disputes.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>JAPN 116 Conversational Japanese II 3</p> <p>Semester Prerequisite: JAPN 115/Equivalent</p> <p>Second course in conversational Japanese. Designed for people with some prior knowledge of Japanese who wish to improve their conversational skills. Students learn practical vocabulary and essential grammar to converse in Japanese. Selected features of Japanese culture and everyday life in Japan will be introduced.</p> <p>Semester Planned: Fall, Spring</p>	<p>LABR 201 Collective Bargaining 3</p> <p>Semester Prerequisite: LABR 200/Departmental Approval</p> <p>This course studies the collective bargaining process, the administration of collective bargaining agreements and wage/benefit issues of employment.</p> <p>Semester Planned: Fall, Spring</p>
<p>JAPN 201 Intermediate Japanese I 4</p> <p>Semester Prerequisite: JAPN 102/Equivalent/Approval</p> <p>First course of a two-semester sequence in intermediate Japanese. Includes introduction of more advanced grammar, vocabulary building, composition, group discussions, and more information on Japanese culture and everyday life. Additional 150 Kanji will be introduced.</p> <p>Semester Planned: Fall</p>	<p>LABR 202 Grievances and Arbitration 3</p> <p>Semester Prerequisite: LABR 200/Departmental Approval</p> <p>Grievance procedure, including employee discharge and discipline, is examined in-depth with a review of pertinent legislation. This "how to" course introduces the basic knowledge and skills necessary for grievance handling and understanding the fundamentals of contract language.</p> <p>Semester Planned: Fall</p>
<p>JAPN 202 Intermediate Japanese II 4</p> <p>Semester Prerequisite: JAPN 201/Equivalent/Approval</p> <p>Continuation of Japanese 201. Includes more advanced grammar, intensive vocabulary building, writing composition, reading contemporary materials, discussions, and student presentations of Japanese language or culture. Additional 150 Kanji will be introduced. Natural and practical communication will be emphasized. Class is taught in Japanese.</p> <p>Semester Planned: Spring</p>	<p>LABR 203 Labor Law 3</p> <p>Semester Prerequisite: LABR 200/Departmental Approval</p> <p>An in-depth study of traditional labor law including NLRB law, court decisions, and historical origins which impact union organizing, representation elections, unfair labor practices, bargaining, strikes, and enforcement of labor contracts.</p> <p>Semester Planned: Spring</p>
<p>JRNL 151 Newswriting and Reporting 3</p> <p>Semester Prerequisite: None</p> <p>Introduction to, and practice in, writing news stories. Students learn news terminology, style, objectivity, attribution, accuracy, and copy-editing skills. Basic news-gathering and reporting tactics are presented and practiced.</p> <p>Semester Planned: Fall</p>	<p>LABR 204 Employment Law for Managers 3</p> <p>Semester Prerequisite: None</p> <p>This course is designed to provide an introduction and overview to the principles and application of laws affecting the workplace, not including traditional labor relations law. Areas of law covered include discrimination, wage-hour, unemployment benefits, personnel records, and common law issues relating to discharge and other matters.</p> <p>Semester Planned: Fall, Spring</p>
<p>JRNL 152 Advanced Newswriting and Reporting 3</p> <p>Semester Prerequisite: JRNL 151/Departmental Approval</p> <p>Continued practice in writing news stories, with special attention to developing reporting skills. Areas of emphasis include interviewing techniques, public affairs reporting and survey research.</p> <p>Semester Planned: Spring</p>	<p>LABR 208 Labor Relations in Government 3</p> <p>Semester Prerequisite: None</p> <p>This course presents labor relations as practiced in the public sector. Problems and practices of special interest to government employees will be presented.</p> <p>Semester Planned: Fall</p>
<p>JRNL 254 Editorial Writing 3</p> <p>Semester Prerequisite: JRNL 151/Departmental Approval</p> <p>A course in how to write effective editorials. Students analyze content, structure and style of editorial models, learn methods of finding subjects, learn methods of research, and write editorials and articles on important issues.</p> <p>Semester Planned: Fall</p>	<p>LAND 100 Introduction to Landscape Drafting 2</p> <p>Semester Prerequisite: None</p> <p>This course covers the use of drafting equipment with an emphasis on lettering, line convention, and title blocks. The students will develop a basic format for design construction drawings. The course provides essential skills for beginning the Landscape Program.</p> <p>Semester Planned: Fall, Spring, Summer</p>
	<p>LAND 104 Landscape Lecture Series .25</p> <p>Semester Prerequisite: None</p> <p>This course is the study of the many facets in the fields of landscape architecture and horticulture.</p> <p>Semester Planned: Fall, Spring</p>

<p>LAND 120 Principles of Landscape Contracting 3</p> <p>Semester Prerequisite: None</p> <p>This course will explore the field of landscape contracting and its relationships to landscape architecture and management. Landscape contractors and their role in plan evaluation, landscape material selection and their installation and construction features will be fully analyzed. The role of the individual in the design/build industry will be highlighted.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LAND 152 Landscape Graphics Communications-Beginning 3</p> <p>Semester Prerequisite: LAND 150/Concurrently</p> <p>This course explores basic illustration techniques relative to the field of landscape architecture. Both the formal and informal applications of mechanical and free-hand drafting communication are emphasized to include reproduction printing methods.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>LAND 130 Interior Landscaping 3</p> <p>Semester Prerequisite: None</p> <p>This course includes the identification, culture, placement, and use of foliage and flowering plants in the office, mall, restaurant or home. Basic principles of landscaping are covered to include soil media, watering, light requirements, fertilizer, and insect, and disease control. Management in relation to the plant's placement and use within the interior landscape is also discussed.</p> <p>Semester Planned: Fall, Spring</p>	<p>LAND 153 Landscape Graphics Communications-Advanced 3</p> <p>Semester Prerequisite: LAND 152</p> <p>This course explores the student with visual presentation techniques used in landscape architecture. Plan, section, and three-dimensional graphics are explored using a range of media. The students will develop sketching and mechanical-drafting techniques for the preparation of professional graphic presentations.</p> <p>Semester Planned: Fall, Spring</p>
<p>LAND 132 Residential Landscaping 2</p> <p>Semester Prerequisite: None</p> <p>This course highlights a basic design process approach for developing a home landscape. The development of a basic design focusing on your own home including placement of plant material, decks, patios, water features, and other landscape elements will be demonstrated. A course for the new homeowner, homeowner renovating his landscape, residential landscaper or nursery person.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LAND 160 Planting Design I 3</p> <p>Semester Prerequisite: LAND 140/LAND 141, LAND 150</p> <p>This course provides an overview of the planting design principles from site analysis to construction documents. Planting design principles are emphasized as well as practical aspects of plant selection and design implementation in a range of design situations. Contemporary issues concerning today's design and construction industries are also discussed.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>LAND 133 Residential Landscape Maintenance 3</p> <p>Semester Prerequisite: None</p> <p>This course will provide a basic understanding of landscape maintenance problems and solutions. Students will develop records and schedules for pest control as well as tree, shrub, lawn, and flower maintenance. Plant selection, installation, pruning, and fertilization will be covered.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LAND 161 Planting Design II 3</p> <p>Semester Prerequisite: LAND 140, LAND 141, LAND 160</p> <p>This course applies the planting design skills gained in LAND 160 to a broad range of sites and issues typically encountered in today's landscape design and construction industries. Topics covered include functional uses of plants, native plant material, and planting design in the urban environment.</p> <p>Semester Planned: Fall, Spring</p>
<p>LAND 140 Evergreen and Deciduous Trees 3</p> <p>Semester Prerequisite: None</p> <p>This course emphasizes identification of both common and uncommon deciduous trees, shrubs, evergreens, vines, and ground covers used in the landscape trade. Weekly lab walks facilitate development of field identification skills based on form, foliage, bark, bud, flower, and fruit characteristics. Landscape use and basic culture of individual plants are also covered.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LAND 163 Designing Ornamental Garden 3</p> <p>Semester Prerequisite: LAND 100, LAND 140, LAND 142</p> <p>This course is a practical approach to designing the herbaceous garden. Annuals, perennials, herbs, and ornamental grasses are analyzed to create a design that will be in harmony with its environment. Color, height, texture, form, and fragrance are some of the plant's characteristics which will be discussed.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>LAND 141 Flowering Trees, Shrubs Ground Covers 3</p> <p>Semester Prerequisite: None</p> <p>This course explores spring flowering trees, shrubs, broadleaf evergreens, and ground covers. Identification in the field is emphasized during weekly lab walks. Design characteristics of individual plants including size, habit, flowers, fruit, bark, foliage, and buds are discussed as well as basic cultural requirements.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LAND 164 Site Design I 3</p> <p>Semester Prerequisite: LAND 150, LAND 152</p> <p>This course emphasizes use of the design process to solve a variety of urban and non-urban site planning problems. Project design solutions require graphic delineation stressing plan view presentations. A variety of drawing scales, graphic materials, and techniques will be explored.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>LAND 142 Perennial and Annual Flowering Plants 3</p> <p>Semester Prerequisite: None</p> <p>This course covers the identification and basic culture of approximately 170 perennial and annual flowering and budding plants. Specific features of each plant will be discussed in relation to their proper landscape use. Herbs, grasses, rock and water garden plants will also be highlighted.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LAND 165 Site Design II 3</p> <p>Semester Prerequisite: LAND 164</p> <p>This course focuses on advanced analysis and planning techniques for business, housing and recreational sites. Environmental impact considerations and land use conflicts are examined and applied in creating alternative design solutions.</p> <p>Semester Planned: Fall, Spring</p>
<p>LAND 145 Orientation to Landscape Architecture and Planning 3</p> <p>Semester Prerequisite: None</p> <p>This course will introduce the student to various aspects of the landscape architecture profession. Different aspects of the profession will be presented through discussion, videos, slides, field trips, and guest speakers. Topics will include urban planning, zoo design, ecological planning, landscape construction, recreation and park design.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LAND 170 Site Grading I 3</p> <p>Semester Prerequisite: LAND 150</p> <p>This course covers basic through advanced principles, methods and procedures for grading a site. Use of contour lines, land form interpretation, and earthwork computation are studied and applied to problem-solving for both typical and special requirement sites.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>LAND 150 Principles of Landscape Architecture 3</p> <p>Semester Prerequisite: None</p> <p>Students will explore the broad scale philosophical, historical, and technical aspects of landscape architecture. Basic problem solving techniques and design theory are introduced along with implementation of the design process.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LAND 171 Site Grading II 3</p> <p>Semester Prerequisite: LAND 170</p> <p>This is an advanced site-grading course that builds on the skills gained in LAND 170. This Michigan Soil Erosion Control Act is emphasized with respect to the requirements related to circulation systems and recreational and utility facilities.</p> <p>Semester Planned: Fall, Spring</p>
	<p>LAND 172 Site Layout 3</p> <p>Semester Prerequisite: LAND 171</p> <p>This course covers plan dimensioning and layout techniques for vehicle and pedestrian circulation systems, building locations, utilities, and sporting and recreational facilities. Professional graphic techniques are emphasized.</p> <p>Semester Planned: Fall, Spring</p>

<p>LAND 180 Landscape Ecology 3</p> <p>Semester Prerequisite: None</p> <p>This course is for the professional as well as the interested individual covering the relatively new field of landscape environments. Develop a basic understanding of landscape communities, how they developed and how they function. Plant communities, native species, natural design, and environmental impact are some of the topics covered.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LAND 232 Professional Residential Landscape Design 3</p> <p>Semester Prerequisite: LAND 100/Equivalent</p> <p>This course is designed for the individual interested in residential and small commercial design projects on a professional scale. Several design problems will be presented and detailed projects will be developed.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>LAND 181 Landscape Restoration and Management 3</p> <p>Semester Prerequisite: None</p> <p>This course will cover the detailed steps necessary to complete a total restoration of a damaged ecosystem. Specific system designs dealing with wetlands and prairies in particular will be highlighted. Specific native plants, animals, and insects will be discussed. Field experiences and native plant identification are a critical part of this course.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LAND 233 Grounds Management 3</p> <p>Semester Prerequisite: LAND 232</p> <p>The student will evaluate a landscape design and/or specific site plan with total management of the site in mind. Seasonal management such as pruning, transplanting, pesticide applications and fertilization as well as cost evaluations will be based on commercial and office sites. This course is for the professional grounds manager.</p> <p>Semester Planned: Fall, Spring</p>
<p>LAND 182 Wetland Delineation and Evaluation 2</p> <p>Semester Prerequisite: None</p> <p>This course will explore the basic elements of wetland identification. Wetland indicator vegetation, hydric soils and wetland hydrology will be covered. The U.S. Army Corps. of Engineers Wetland Delineation Manual will be used as the guideline for this class. Certification credits can be secured by taking this course.</p> <p>Semester Planned: Fall, Spring</p>	<p>LAND 242 Ecological Land Planning 3</p> <p>Semester Prerequisite: None</p> <p>This course will introduce the student to the land planning process. The ecological method of land planning will be emphasized with projects demonstrated. Field trips to planning meetings and project sites will be an intricate part of this course.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>LAND 183 Planned Wetlands Evaluation and Restoration 2</p> <p>Semester Prerequisite: None</p> <p>This course will discuss goals which are desirable for designing planned wetlands, constructed, restored or enhanced with specific targeted functions in mind. The class will focus on assessment of wetland functions during the design process and tools available to accomplish this. Wetland design restoration, evaluation and management will also be discussed.</p> <p>Semester Planned: Fall, Spring</p>	<p>LAND 250 Landscape Construction Methods 3</p> <p>Semester Prerequisite: TECH 100/MATH 050, LAND 150</p> <p>This course examines the properties and uses of concrete, asphalt, masonry, wood, and other landscape construction materials. Basic design and installation methods of landscape structures are emphasized in addition to the introduction of professional construction drafting techniques.</p> <p>Semester Planned: Fall, Spring</p>
<p>LAND 185 Arboriculture (Urban/Forestry) 3</p> <p>Semester Prerequisite: None</p> <p>The care of trees and shrubs in the urban environment is thoroughly discussed. The course emphasizes tree physiology as it relates to plant selection, installation, decay prevention, pruning, and fertilizing. Field demonstrations of arboricultural practices such as pruning, bracing, and fertilizing will be offered.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LAND 252 Landscape Construction Details 3</p> <p>Semester Prerequisite: LAND 250</p> <p>Focuses on graphic techniques for drawing construction details and coordination of details with site plan layout. Studies detailing utilities, irrigation systems, circulation systems, recreational facilities, and various light construction features. Design-build procedures are stressed, including material tabulation and cost estimating.</p> <p>Semester Planned: Fall, Spring</p>
<p>LAND 195 Irrigation Design and Management 3</p> <p>Semester Prerequisite: None</p> <p>This course is for the professional or beginner interested in irrigation system design, installation, maintenance and troubleshooting. Lectures will cover a range of systems including residential, commercial, drip, and golf course.</p> <p>Semester Planned: Fall, Spring</p>	<p>LAND 276 Landscape Documents and Specifications 2</p> <p>Semester Prerequisite: LAND 250</p> <p>This course explores the relationship and principles between specifications and working drawings. The cost of projects as well as bid proportions will be highlighted. The student will prepare bids, write specifications and participate in a class bid opening.</p> <p>Semester Planned: Fall, Spring</p>
<p>LAND 220 Wetland Restoration .5</p> <p>Semester Prerequisite: None</p> <p>This course will present current information available from the MDNR, EPA and Army Corp of Engineers as it relates to wetland regulations and policy. Wetland delineation, mitigation, design, construction, and planting will be highlighted. Restoration enhancement and creation of wetlands will be outlined and developed.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LAND 277 Landscape Office Practice 3</p> <p>Semester Prerequisite: None</p> <p>Introduces the elements of office business practice and organization, recordkeeping, on-the-job inspection, close out, initial proposal writing and contract formulation.</p> <p>Semester Planned: Fall, Spring</p>
<p>LAND 222 Landscape Construction Techniques Beginning 3</p> <p>Semester Prerequisite: LAND 120/Equivalent</p> <p>This course will deal with the basic concepts needed to operate as a landscape contractor in the design/build industry. The fundamentals of landscape design evaluation, development of materials lists and cost take offs will be demonstrated. Basic site analysis, site survey, drainage and grading techniques will be demonstrated.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LAND 282 Microcomputers in Landscape Planning 3</p> <p>Semester Prerequisite: None</p> <p>This course assumes no previous computer exposure or experience. It is a beginning class for the individual interested in computers and what they can do for you in landscape design, maintenance, construction, plant selection, land survey and inventory, cost estimating, and many other related areas.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>LAND 225 Landscape Cost Estimation 3</p> <p>Semester Prerequisite: LAND 150/Equivalent</p> <p>This course is an introduction to the study of landscape contracting and the cost-estimating process. The class covers the project management process and the costing factors associated with it. The areas of material costs, equipment cost, labor costs, and related management charges will be evaluated. The preparation of bids and the bidding process will be highlighted.</p> <p>Semester Planned: Fall, Spring</p>	<p>LAND 283 Beginning LandCADD 3</p> <p>Semester Prerequisite: LAND 282/Equivalent</p> <p>This course is for the individual with basic AutoCAD/LandCADD exposure interested in learning more about computer-aided design using the LandCADD software package. The LandCADD site planning module will be fully explored as well as additional modules including irrigation design, plant data base, E-Z estimate, and quadrangles. Advanced 3-D design options will also be covered.</p> <p>Semester Planned: Fall, Spring, Summer</p>
	<p>LAND 284 LandCADD Advanced 3</p> <p>Semester Prerequisite: LAND 283</p> <p>This course is a continuation of Beginning LandCADD. Advanced options will be explored including 3-D.</p> <p>Semester Planned: Fall, Spring</p>

<p>LAND 285 Microcomputer Animation 3</p> <p>Semester Prerequisite: LAND 282/Departmental Approval</p> <p>This course will familiarize the student with the video animation aspects of computer design and presentation. The student will learn to produce an animation project using the latest computer technology. Students will also become familiar with the integration of video and animation in various design and management-related projects.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LEGL 115 Legal Assistant Career and Ethics 3</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Basic Skills Prerequisite: Reading Level 7; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule)</p> <p>Introduction to the legal assistant's role in the legal system, including essential skills used in the litigation process and law practice. Introduces student to legal terminology, legal analysis, procedural and substantive law. Surveys paralegal employment and regulation. 2.0 minimum required to continue program.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>LAND 286 LandCADD: Videoscapes 3</p> <p>Semester Prerequisite: LAND 282</p> <p>This computer course will cover how to use video-imagery and animation in a landscape design situation by way of lecture, video and computer usage. Computer paint as well as imaging will be demonstrated. LandCADD's software as well as others will be utilized.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LEGL 120 Legal Research I 3</p> <p>Semester Prerequisite: 2.0 Minimum in LEGL 115, LEGL 215</p> <p>Introduces research procedures and resources for finding federal and Michigan law, in using digests, encyclopedias, reporters, statutes, court rules, treatises, administrative publications, citators, etc. Students are given research assignments utilizing the publications, and the assignments must be completed using the Michigan Uniform System of Citation. Some classes may be held at off-campus libraries.</p> <p>Semester Planned: Fall, Spring</p>
<p>LAND 289 Landscape Architecture Computer Design Studio 3</p> <p>Semester Prerequisite: LAND 282/Equivalent</p> <p>This course involves the use of computer presentation software in the three-dimensional arena. The presentation software, 3-D Studio, will be utilized to create graphic animation for various computer presentations.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LEGL 121 Legal Writing I 3</p> <p>Semester Prerequisite: WRIT 122</p> <p>Students will learn to analyze court opinions and apply them to particular fact situations. This skill will then be used to write summaries of court opinions, legal memoranda, appellate briefs and other legal documents. Learning methods include reading assignments, class discussion, lecture and writing assignments of increasing difficulty.</p> <p>Semester Planned: Fall, Spring</p>
<p>LAND 290 Exploring the World of Computers 1</p> <p>Semester Prerequisite: None</p> <p>This course will familiarize the green industry professional with an overview of available hardware and software systems and the configurations for a landscape or nursery operation. There will be experimentation with different software packages such as LandCADD, CAPS, LAND Design Ware and JACKSCOM as well as related landscape design, site planning, management scheduling and cost estimating areas.</p> <p>Semester Planned: Fall, Spring</p>	<p>LEGL 130 Michigan Laws and Courts 2</p> <p>Semester Prerequisite: None</p> <p>Students will learn the various Michigan courts, the federal court system, alternatives to litigation, and how to identify and properly cite various sources of law. Areas of law studied will include criminal, domestic, probate, employment, and property. Note: Course is designed for court and conference reporting, curriculum code 415.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>LAND 295 Landscape Independent Study 4</p> <p>Semester Prerequisite: Instructor Approval</p> <p>The independent study is designed for students who wish to pursue a specialty area in landscape architecture beyond that which is offered in our curriculum. Inquiry through research and design of landscapes is required.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LEGL 160 Critical Thinking in Law 3</p> <p>Semester Prerequisite: None</p> <p>This course strongly emphasizes the "learn by doing" approach, specifically by utilizing group dynamics. The panorama of thinking skills, particularly those relevant in law and criminal justice, will be examined and practiced. Innovative evaluation skills, both personal and group, are a regular part of each session.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>LAND 296 Landscape Project Lab 2</p> <p>Semester Prerequisite: Instructor Approval</p> <p>The independent study is designed for students who wish to pursue a specialty area in landscape architecture beyond that which is offered in our curriculum. Inquiry through research and design of landscapes is required.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LEGL 210 Litigation Procedures 4</p> <p>Semester Prerequisite: 2.0 Minimum in LEGL 115, LEGL 215</p> <p>Provides in-depth study of pre-trial, trial and post-trial practice and procedure. Emphasizes Michigan and federal rules of court. Detailed study of drafting pleadings, discovery procedures and case preparation for trial and appeal. Course also covers evidentiary rules as they relate to trial practice and preparation.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>LAND 297 Landscape Project Lab 3</p> <p>Semester Prerequisite: Instructor Approval</p> <p>The independent study is designed for students who wish to pursue a specialty area in landscape architecture beyond that which is offered in our curriculum. Inquiry through research and design of landscapes is required.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LEGL 211 Tort Law 2</p> <p>Semester Prerequisite: 2.0 Minimum in LEGL 115, LEGL 215</p> <p>Covers principles of negligence, intentional torts, and strict liability. Emphasizes the role of the legal assistant in dealing with these areas of law in actual practice situations.</p> <p>Semester Planned: Fall, Spring</p>
<p>LAND 298 Pesticide Applicator Certification 2</p> <p>Semester Prerequisite: None</p> <p>The purpose of this course is to prepare the student for certification as a commercial applicator of pesticides for turfgrass and ornamental plants. Under the Michigan Pesticide Control Act, individuals applying pesticides for hire must be certified or be supervised by a certified applicator. Course topics include IPM techniques, turfgrass and ornamental pest identification, and proper pesticide handling and application.</p> <p>Semester Planned: Fall, Spring</p>	<p>LEGL 215 Business Law I, Basic Principles 3</p> <p>Semester Prerequisite: None</p> <p>Introduction to the legal system, its purpose, and the fundamental principles of various areas of the law. Course content includes sources of law, court procedures, contracts, torts, crimes, constitutional rights, no-fault auto insurance, landlord-tenant law, and bailments. Taught in traditional classroom style or via Computer Managed Learning (C.M.L.).</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>LAND 299 LandCADD Training 2</p> <p>Semester Prerequisite: Approval Required</p> <p>A program for the individual with basic computer and AutoCAD exposure interested in learning more about computer-aided design using the LandCADD software package. The LandCADD site planning package will be explained fully along with some additional modules like E-Z estimate (cost estimating) package, plant materials data base and simulated plant growth as well as quadrangles (land form).</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>LEGL 216 Business Law II, Commercial Law 3</p> <p>Semester Prerequisite: LEGL 215</p> <p>An in-depth analysis of the Uniform Commercial Code allows students to explore the law of sales, commercial paper, secured transactions, banking, insurance, and debtor-creditor rights. Taught in traditional classroom style or via Computer Managed Learning (C.M.L.).</p> <p>Semester Planned: Fall, Spring, Summer</p>

<p>LEGL 217 Business Law III, Business Organizations 3</p> <p>Semester Prerequisite: LEGL 215</p> <p>Introduces basic business organizations, including agency law, partnerships, sole proprietorships, and corporations. Additionally, the course will delve into government regulation of business, real estate, wills, trusts, and estates. Taught in traditional classroom style or via Computer Managed Learning (C.M.L.). Semester Planned: Fall, Spring, Summer</p>	<p>LEGL 226 Legal Interviewing and Investigation 3</p> <p>Semester Prerequisite: LEGL 115, LEGL 215</p> <p>Interviewing and investigation methods including information gathering, analysis, and effective communication. Emphasis will be placed on the role of the legal assistant with numerous practical exercises. Semester Planned: Spring</p>
<p>LEGL 218 Litigation Specialties 3</p> <p>Semester Prerequisite: LEGL 211</p> <p>Covers several specialty areas of law, including personal injury, professional malpractice, products liability, workers' compensation, no-fault auto insurance. Emphasizes role of legal assistant in these practice areas, including drafting of pleadings and other legal instruments. Semester Planned: Fall, Spring, Summer</p>	<p>LEGL 227 Bankruptcy and Collections 3</p> <p>Semester Prerequisite: LEGL 115, LEGL 215</p> <p>Explores federal bankruptcy law and procedure with emphasis on the legal assistant's role in collecting information, interviewing clients, and preparing documents. Topics include a comparison of selected chapters within the bankruptcy code, exemptions, preferences, petitions, schedules, and the part played by the bankruptcy trustee. Semester Planned: Summer</p>
<p>LEGL 219 Advanced Business Law for Accounting Majors 4</p> <p>Semester Prerequisite: LEGL 215</p> <p>This self-paced course is intended for students majoring in accounting and have a goal of becoming a CPA. This course covers the law of sales; commercial paper; security devices; debtor-creditor relations; bankruptcy; insurance; agency; partnership; corporations; wills, trusts and estates; employment regulation; real property; and accountant's liability. This course is taught via Computer Manager Learning (C.M.L.). Semester Planned: Fall, Spring, Summer</p>	<p>LEGL 280 Legal Assistant Internship 3</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Student will experience the paralegal career by working as a legal assistant in a supervised capacity. Placements include private law firms, governmental law offices, courts, corporations, and other law-related settings. Requirements include at least 160 hours in the workplace, weekly reports, periodic meetings and performance evaluations by on-site supervisor. Semester Planned: Fall, Spring, Summer</p>
<p>LEGL 220 International Business Law 3</p> <p>Semester Prerequisite: LEGL 215</p> <p>Introduction to international business transactions by focusing on foreign and U.S. law which impacts them. Students will explore a basic international transaction, including sales contracts, letters of credit, imports, exports, commercial terms, and insurance. Conflicts of law will also be discussed, as will a comparison of dispute resolution mechanisms. Semester Planned: Spring</p>	<p>LING 230 Introduction to Linguistics 3</p> <p>Semester Prerequisite: None</p> <p>Examines human language from the perspective of contemporary American linguistics: generative syntax, phonology, and morphology. Special attention to the structure of English. Considers regional and social variation, and implications for teachers of language skills. Semester Planned: Fall, Spring</p>
<p>LEGL 221 Real Estate Transaction 3</p> <p>Semester Prerequisite: LEGL 115, LEGL 215</p> <p>Covers fundamental principles of real estate property law and introduces the student to common types of real estate transactions encountered by a legal assistant in a typical real estate practice. Subject matter includes deeds, land contracts, mortgages, title insurance, environmental issues, forfeitures and foreclosures, and landlord-tenant relationships. Semester Planned: Fall</p>	<p>MACH 100 Manufacturing Processes 4</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Reading Level 4; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule)</p> <p>This course provides students with a comprehensive study of the materials, concepts, and processes used in modern manufacturing, which is augmented by field trips to local manufacturing plants. This course is designed for those who are pursuing careers in manufacturing design, engineering, and supervision. Semester Planned: Fall, Spring, Summer</p>
<p>LEGL 222 Probate Law and Procedure 3</p> <p>Semester Prerequisite: LEGL 115, LEGL 215</p> <p>Probate process will be addressed in detail, from commencement of proceedings through closing the estate of a decedent. Other topics will include wills, trusts, guardianships, conservatorships, adoptions, and other probate court procedures. Emphasis is on the part played by the legal assistant in preparation of documents and other probate practice tasks. Semester Planned: Spring</p>	<p>MACH 105 Machine Tool Survey 3</p> <p>Semester Prerequisite: TECH 100/MATH 050</p> <p>Informs students of the machine tool principles and practices used in industry. Safety, terminology, measurement, and procedures are used to complete required projects. A working knowledge of hand and machine tools is achieved through a series of lectures, demonstrations, and hands-on projects. Semester Planned: Fall, Spring, Summer</p>
<p>LEGL 223 Domestic Relations 3</p> <p>Semester Prerequisite: LEGL 115, LEGL 215</p> <p>In-depth study of marriage, divorce, separation, annulment, paternity proceedings, custody, support, property division and other areas of domestic relations law. Emphasis will be on the legal assistant's role in dealing with clients and applying appropriate statutes, case law, and court rules as part of a domestic law practice. Semester Planned: Fall, Spring</p>	<p>MACH 106 Machine Tool Survey Workshop 2.5</p> <p>Semester Prerequisite: None</p> <p>Informs students of the machine tool principles and practices used in industry. Safety, terminology, measurement, and procedures are used to complete required projects. A working knowledge of hand and machine tools is achieved through a series of lectures, demonstrations and hands-on projects. Semester Planned: Fall, Spring, Summer</p>
<p>LEGL 224 Administrative Law 3</p> <p>Semester Prerequisite: LEGL 115, LEGL 215</p> <p>The relationship of governmental administrative agencies to private citizens is explored by studying how law is created and enforced by such agencies at the state and federal levels. Legal assistant students will focus on topics including rulemaking procedures, regulations, adjudication, licensing, and informal action. Semester Planned: Fall, Spring</p>	<p>MACH 110 Machine Tool Technology I 4</p> <p>Semester Prerequisite: TECH 100/MATH 050, MACH 105</p> <p>Informs students of shop safety, shop terminology, hand tools, machine tools, measurement and layout practices. To complete the course, a series of lectures, demonstrations, and projects are used to guide the students. The competency required to successfully complete this course is at the apprentice level. Semester Planned: Fall, Spring</p>
<p>LEGL 225 Legal Research and Writing II 3</p> <p>Semester Prerequisite: LEGL 120, LEGL 121</p> <p>Reviews principles of legal research, analysis, and writing. Student will draft legal memoranda, opinion letters, and an appellate brief based on extensive research assignments in federal and Michigan publications. Some classes may be at off-campus libraries. Semester Planned: Fall, Spring, Summer</p>	<p>MACH 111 Machine Tool Technology II 4</p> <p>Semester Prerequisite: MACH 110</p> <p>This course is structured to apply hands-on applications to metal working saws, mills, drills, and surface grinders. Bench work and layout procedures with technical terminology and mathematical applications are developed to the technical level of an apprentice. Semester Planned: Fall, Spring</p>

MACH 112 Machine Tool Technology III	4	MASG 271 Massage Therapy - Intermediate	2
Semester Prerequisite: MACH 111		Semester Prerequisite: HFWE 270/MASG 270	
This course will use indexing, precision grinding, close tolerance milling, lathe work, and broaching to complete the required projects. The student will accomplish these goals by using modern machine shop technology, applied math skills, planning, and precision measuring instruments.		Following a review of HFWE 270/MASG 270 the student is introduced to specialized massage techniques. The student will learn contraindicated techniques, business aspects, and exploration of Swedish acupressure.	
Semester Planned: Fall, Spring		Semester Planned: Fall, Spring, Summer	
MACH 120 Effective Use of Machinery's Handbook	4	MASG 272 Independent Study Massage Practicum	2
Semester Prerequisite: TECH 101		Semester Prerequisite: HFWE 271/MASG 271	
<i>Machinery's Handbook</i> has been recognized as the "bible" for all phases of the metal working industry. This course will familiarize each student with the effective utilization of information contained in <i>Machinery's Handbook</i> .		This course introduces the student to an individualized study of massage techniques. The student will perfect basic body massage technique during a prescribed 100 hours. All requirements of this course must be completed within one (1) year from the date of enrollment.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
MACH 130 Die Construction	4	MASG 273 Human Structural Dynamics for Massage Therapy	2
Semester Prerequisite: TECH 090/DTDS 100, TECH 100/MATH 050		Semester Prerequisite: Anatomy/Physiology Required	
This course will provide each student with a basic understanding of the essential principles of cutting and forming operations, die components such as punches, punch plates, die blocks and strippers, and an in-depth knowledge of how to repair and maintain the equipment common to the die industry.		This course will provide the massage therapy student with an in-depth view of the areas of anatomy which are particular to massage, primarily within the musculoskeletal and nervous systems.	
Semester Planned: Fall, Spring		Semester Planned: Fall, Spring	
MACH 135 Metallurgy and Heat Treat	4	MASG 275 Touch for Health I	1
Semester Prerequisite: None		Semester Prerequisite: None	
Course is designed to give students a working knowledge of the properties, uses and heat treat processes of commonly used metals and alloys. The basic principles of metallurgy presented apply to the design, selection, processing, and testing of metal products.		This course introduces the student to the combination of ancient Oriental disciplines with the modern practice of applied kinesiology. The student will learn basic muscle techniques to improve postural balance, which can affect the mental, emotional and physical state.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring	
MACH 140 Tooling Theory and Practices	4	MASG 276 Touch for Health II	1
Semester Prerequisite: MACH 110		Semester Prerequisite: HFWE 275/MASG 275	
This course examines tooling used in mechanical material removal. Tooling materials from high-speed steel to diamond will be discussed and demonstrated. Tooling geometry, resharpening methods, speeds and feeds, failure mechanisms, and problem diagnosis will be addressed. Students will analyze tooling performance and write up technical reports.		This course introduces the student to additional techniques and applications of applied kinesiology. The student will learn additional and reactive muscles and balancing techniques.	
Semester Planned: Fall, Spring		Semester Planned: Fall, Spring	
MACH 150 Introduction to Plastics	3	MASG 277 Polarity Therapy I	2
Semester Prerequisite: None		Semester Prerequisite: None	
This course provides each student with a comprehensive understanding of plastics, which includes the properties, design factors and manufacturing processes.		This course introduces the student to polarity therapy as a form of massage that balances the life energy of the physical body. Hands-on application of balancing techniques, basic theory and philosophy are taught to enhance relaxation and awareness of energy flow in the body.	
Semester Planned: Fall, Spring		Semester Planned: Fall, Spring	
MACH 182 Machine Shop Seminar	2	MASG 278 Polarity Therapy II	2
Semester Prerequisite: None		Semester Prerequisite: HFWE 277/MASG 277	
This course may cover a variety of topics in the machine trades or related fields. For individuals already employed in the industrial environment seeking to upgrade their skills or anyone looking to be employed in a particular trade.		This course will deepen the student's understanding of Polarity Therapy. Advanced hands-on techniques and sequences will be taught to balance the various energy patterns of the physical body. Lectures will be on the philosophical, energetic, and spiritual principles that sustain and vitalize the physical form.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring	
MACH 194 Machine Tool Technology Project Lab	4	MASG 279 Business Applications for Massage Therapists	2
Semester Prerequisite: MACH 120/Departmental Approval		Semester Prerequisite: HFWE 270/MASG 270	
Advanced course for students wishing to do in-depth work in the machine shop area or to develop trade-entry skills. Students select projects compatible with their individual fields of work. (Approval may be given to take this course twice for a maximum of eight credits.)		This course introduces students to aspects of business and marketing in the field of massage and bodywork. Emphasis is placed on development of a professional and personal business sense and philosophy using planning and persistence, client-practitioner relationships and ethics, research, marketing strategy, goal-setting, motivation and professional legalities.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring	
MACH 210 Principles of Electric Discharge Machining (EDM)	4	MASG 280 Clinical Approaches to Massage Therapy	3
Semester Prerequisite: CNCP 110		Semester Prerequisite: HFWE 271/MASG 271, MASG 273	
This course introduces the student to the fundamentals of Electrical Discharge Machining (EDM). Safety, principles of operation, programming, and operation of both Ram and Wire EDM are explored. Lectures, demonstrations and projects are used. Projects assigned will require set-up, programming, and operation of EDM machines.		The student will learn various therapeutic massage techniques and related therapies that will help relieve tension and pain in the musculature. Course includes contraindications, client-therapist relationship, health evaluations, draping procedures, anatomy/physiology review pertinent to therapeutic massage.	
Semester Planned: Fall, Spring		Semester Planned: Fall, Spring	
MASG 270 Massage Therapy - Beginning	2	MASG 281 Sports Massage	2
Semester Prerequisite: None		Semester Prerequisite: MASG 280	
This course introduces the student to Swedish massage. The student will learn the history, theory, terminology, physiology and techniques of Swedish massage.		The student will learn various massage techniques and related therapies that are specifically beneficial to the athlete. Application to pre-, inter-, and post-athletic event and athletic training massage will be emphasized.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring	

<p>MATH 001 Math Minus Anxiety Workshop .5</p> <p>Semester Prerequisite: None</p> <p>A workshop for students who feel insecure about doing math and need help and encouragement to succeed in the math required for their goals. Materials and exercises are aimed at reducing math anxiety, improving math study skills, and practicing problem-solving techniques. Students at any level of math may enroll.</p> <p>Semester Planned: Fall, Spring</p>	<p>MATH 121 College Algebra I 4</p> <p>Semester Prerequisite: 2.0 Minimum in MATH 112/Placement Test</p> <p>Basic Skills Prerequisite: Reading Level 3; Writing Level (See Class Schedule)</p> <p>First in two-course sequence. Graphing calculator required. Topics include functions, mathematical models, symmetry, absolute value, distance, solving equations algebraically and graphically, solving inequalities, linear functions, quadratic functions, geometric transformations, real and complex zeros, and rational, radical, exponential, and logarithmic functions. Degree credit may not be earned in both MATH 121-122 and MATH 126.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MATH 005 Mathematics Laboratory 0</p> <p>Semester Prerequisite: None</p> <p>When registering for a Math Lab course, students must register for both a specific course and a MATH 005 section. The MATH 005 section determines the time and place of attendance in a Mathematics Laboratory. This time is used for studying, instructional help, and testing.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MATH 122 College Algebra II and Trigonometry 3</p> <p>Semester Prerequisite: 2.0 Minimum in MATH 121/Placement Test</p> <p>Second in a two-course sequence. Graphing calculator required. Topics include right triangle trigonometry, reference angles, graphing, identities, inverse trig functions, law of sines and cosines, binomial theorem, systems of linear equations, vectors, sequences, mathematical induction, series, permutations, and combinations. Degree credit may not be earned in both MATH 121-122 and MATH 126.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MATH 020 Arithmetic Skills 3</p> <p>Semester Prerequisite: Placement Test</p> <p>The course focuses on arithmetic skills and practical applications with whole numbers, decimals, fractions, percents and proportions. Work is done both with and without a calculator. Confidence building and study skills for success in mathematics are emphasized.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MATH 126 College Algebra and Trigonometry 5</p> <p>Semester Prerequisite: 3.5 Minimum in MATH 112/Placement Test</p> <p>This is a very intensive course which covers the same material as that in MATH 121 and 122. Topics include functions, absolute value, solving equations and inequalities, graphing, linear and quadratic functions, zeros, rational, radical, exponential, logarithmic and trigonometric functions, right triangle trigonometry, law of sines and cosines, DeMoivre's Theorem, binomial theorem, vectors, sequences, mathematical induction, and series. Degree credit may not be earned in both MATH 126 and MATH 121-122.</p> <p>Semester Planned: Fall, Spring</p>
<p>MATH 050 Mathematics - Principles and Practices 4</p> <p>Semester Prerequisite: MATH 020/Placement Test</p> <p>This course reviews mathematical operations involving fractions and decimals. Topics include percents, ratios, proportions, US and metric measurements, integers, statistical graphs, Pythagorean Theorem, formulas, and geometry involving perimeter, area and volume. It also introduces algebraic concepts using simple expressions and equations. Problem solving, estimation, and reasoning skills are taught using applications.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MATH 130 Finite Mathematics 3</p> <p>Semester Prerequisite: 2.0 Minimum in MATH 121/Placement Test.</p> <p>This is an alternate course to MATH 122 for students whose programs do not require trigonometry. Topics studied include matrices, linear programming, permutations, combinations, probability, random variables, and the binomial theorem.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MATH 060 Beginning Algebra: Part A 2</p> <p>Semester Prerequisite: 2.0 Minimum in MATH 040/MATH 050/Placement Test</p> <p>This is the first half of MATH 062, for those who wish to cover Beginning Algebra in two semesters. The topics include the real number system, basic algebraic properties, simplifying expressions, solving linear equations and inequalities, properties of positive and negative exponents, and operations with polynomials. Applications are included throughout the course.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MATH 141 Calculus with Applications 3</p> <p>Semester Prerequisite: 2.0 Minimum in MATH 121/MATH 126/Placement Test</p> <p>This course is for students in business, economics, social science, life sciences, and other areas not requiring a rigorous study of calculus. Topics studied include limits, derivatives, and integrals with an emphasis on applications to the above-mentioned disciplines.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MATH 061 Beginning Algebra: Part B 2</p> <p>Semester Prerequisite: 2.0 Minimum in MATH 060</p> <p>This is the second half of MATH 062, for those who wish to cover Beginning Algebra in two semesters. The topics include factoring polynomials, operations with algebraic fractions, graphing linear equations in two variables, solving systems of linear equations, square roots, and solving quadratic equations. Applications are included throughout the course.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MATH 151 Calculus I 4</p> <p>Semester Prerequisite: 2.0 Minimum in MATH 122/MATH 126/Placement Test</p> <p>The first of a three-semester sequence in differential and integral calculus. Topics include limits, continuity, differentiation of rational and trigonometric functions, applications of derivatives, curve sketching, elementary indefinite integration, the Fundamental Theorems of Calculus, and applications of the definite integral.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MATH 062 Beginning Algebra 4</p> <p>Semester Prerequisite: 2.0 Minimum in MATH 040/MATH 050/Placement Test</p> <p>Topics include the real number system, basic properties, simplifying expressions, solving linear equations and inequalities, properties of integer exponents, operations with polynomials, factoring, operations with algebraic fractions, graphing linear equations in two variables, solving systems of linear equations, square roots, and solving quadratic equations. Applications are included throughout the course.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MATH 152 Calculus II 4</p> <p>Semester Prerequisite: 2.0 Minimum in MATH 151</p> <p>Techniques of integration are emphasized along with the topics of sequences and infinite series. Also studied are exponential, trigonometric, inverse trigonometric, and logarithmic functions; improper integrals; L'Hôpital's rule; conic sections; polar coordinates; and vectors in multi-dimensional space.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MATH 112 Intermediate Algebra 4</p> <p>Semester Prerequisite: 2.0 Minimum in MATH 061/MATH 062/Placement Test</p> <p>Graphing calculator required. This is an extension of Beginning Algebra, using the graphing calculator, with emphasis on graphing and applications, including linear, quadratic, rational, and other functions. Also emphasized are polynomials, rational expressions, radicals, rational exponents, equations, inequalities, systems of equations, with an introduction to complex numbers, logarithms and matrices.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MATH 201 Math for Liberal Arts I 3</p> <p>Semester Prerequisite: MATH 112 Proficiency</p> <p>Basic Skills Prerequisite: Reading Level 5; Writing Level (See Class Schedule)</p> <p>Topics studied provide an understanding of what mathematics is. Topics include analysis and interpretation of data, application of functions, the real numbers, bases other than 10, n-gons, golden figures and tiling. A strong historical theme is present throughout. The student is involved in concept development as well as in finding answers.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MATH 117 Math for Business 4</p> <p>Semester Prerequisite: MATH 062/Placement Test</p> <p>This course teaches basic business theory of management, marketing, finance, banking, insurance, real estate, accounting, and office administration. Applications of business theory requiring mathematical solutions are emphasized. The course is offered in a classroom or as arranged in a laboratory format.</p> <p>Semester Planned: Fall, Spring, Summer</p>	

MATH 202 Math for Liberal Arts II	3	MDCS 200 Dynamics of Relationships	.5
Semester Prerequisite: MATH 201 Topics studied provide an understanding of what mathematics is. Topics include number theory, logic, calculus, mathematical games, graph theory, trigonometry, and algorithmic reasoning. A strong historical theme is present throughout. The student is involved in concept development as well as in finding answers. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This workshop will train participants to develop positive, productive relationships. Participants will develop a variety of skills to deal with specific kinds of problems. Semester Planned: Fall, Spring, Summer	
MATH 253 Calculus III	4	MDCS 201 Listening and Facilitation Skills	.5
Semester Prerequisite: 2.0 Minimum in MATH 152 Integration and differentiation of multivariable functions are studied along with their applications. Topics include lines and surfaces in 3-space, vector-valued functions, partial differentiation, and multiple integration. Also studied are line integrals and path independence, Green's Theorem, the Divergence Theorem, and Stokes' Theorem. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This seminar aims to enhance the skills of all personnel in individual listening and in facilitation of groups and teams. If participants are able to use these skills, they are more likely to function more effectively as they seek to implement organizational goals and objectives. Semester Planned: Fall, Spring, Summer	
MATH 254 Introduction to Differential Equations	3	MDCS 202 Effectively Dealing With Customers, Co-Workers, and Vendors	.5
Semester Prerequisite: 2.0 Minimum in MATH 253 An introduction to the basic methods for solving ordinary differential equations, including the methods of undetermined coefficients, variation of parameters, series, Laplace transforms, and numerical methods. Applications are emphasized. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None In this program participants will cover planning and preparing for successful interactions with customers, co-workers, and vendors. It will focus on strategies for conducting successful interactions and negotiating skills between customers, co-workers, and vendors. Semester Planned: Fall, Spring, Summer	
MATH 260 Linear Algebra	3	MDCS 203 Increasing Human Effectiveness	1.5
Semester Prerequisite: 2.0 Minimum in MATH 253 This introduction to linear algebra includes the study of systems of linear equations, matrix algebra, vector spaces, linear transformations, eigenvalues and eigenvectors, with applications. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Effective communication skills are essential for any relationship. The ability to establish and maintain productive relationships is vital in a professional as well as personal life. Increasing Human Effectiveness explores factors affecting interpersonal relationships and the processes used to give and gather information. Semester Planned: Fall, Spring, Summer	
MATH 281 Honors Math Seminar I	1	MDCS 205 Sexual Harassment	.25
Semester Prerequisite: MATH 151, Departmental Approval Students solve a set of challenging mathematics problems which are not normally encountered in other classes. Creative and independent thinking is encouraged and developed. Semester Planned: Spring		Semester Prerequisite: None This seminar will increase participants' understanding of what is and what is not sexual harassment and how to handle a situation that involves sexual harassment whether subtle or blatant, whether against male or female. Semester Planned: Fall, Spring, Summer	
MATH 282 Honors Math Seminar II	1	MDCS 206 Valuing Cultural Diversity	.5
Semester Prerequisite: MATH 151, Departmental Approval Students may take this course after taking MATH 281. Students solve a set of challenging mathematics problems, different from those in MATH 281, which are not normally encountered in other classes. Creative and independent thinking is encouraged and developed. Semester Planned: Spring		Semester Prerequisite: None Participants acquire diversity-related information applicable to such situations as communication with conflict potential, self awareness, and work-group effectiveness. Participants define diversity, its impact on the workplace, analyze awareness of the sensitivity to diversity issues, identify difficulties of cross-cultural communications, and apply content to workplace situations. Semester Planned: Fall, Spring, Summer	
MATH 295 Independent Study in Mathematics	1	MDCS 210 Solving Time Management Frustrations	.5
Semester Prerequisite: Departmental Approval An independent study in some area of mathematics not covered by an existing course. Student works independently under the supervision of a faculty member. Students devote three or more hours per week to this study in addition to their work with the assigned instructor. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Time management problems originate from numerous sources. Participants will identify and analyze these sources to provide a firm basis for solving frustrating time problems. This seminar will teach how to establish goals, schedule, and utilize time management skills. Semester Planned: Fall, Spring, Summer	
MATH 296 Independent Study in Mathematics	2	MDCS 211 How to Get Things Done	.5
Semester Prerequisite: Departmental Approval An independent study in some area of mathematics not covered by an existing course. Student works independently under the supervision of a faculty member. Students devote six or more hours per week to this study in addition to their work with the assigned instructor. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This seminar is designed for first-level supervisors, office managers, and administrative assistants. It will sharpen communication skills and time management capabilities as well as encourage an action plan. Semester Planned: Fall, Spring, Summer	
MATH 297 Independent Study in Mathematics	3	MDCS 214 Stress Management	.5
Semester Prerequisite: Departmental Approval An independent study in some area of mathematics not covered by an existing course. Student works independently under the supervision of a faculty member. Students devote nine or more hours per week to this study in addition to their work with the assigned instructor. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This seminar will help participants prepare an individual stress management plan that can be applied to personal or work situations. Topics include uncovering stressors, assessing their impact, and utilizing coping techniques. Semester Planned: Fall, Spring, Summer	
MATH 298 Independent Study in Mathematics	4	MDCS 220 Managing Your Career	.5
Semester Prerequisite: Departmental Approval An independent study in some area of mathematics not covered by an existing course. Student works independently under the supervision of a faculty member. Students devote 12 or more hours per week to this study in addition to their work with the assigned instructor. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None An intensive one-day seminar designed to acquaint the participants with personal career-planning techniques. The program emphasizes self-direction and responsibility for career growth. Primary emphasis is upon becoming successful in one's current position first and then building long-term career goals based upon this success. Semester Planned: Fall, Spring, Summer	

<p>MDCS 221 You and Your Boss: A Successful Team .5</p> <p>Semester Prerequisite: None</p> <p>There's skill involved in complementing the strengths of your boss and together forming a productive work team. This is a specific "how to" course that trains participants to assess their strengths and those of their boss and to build on strengths to develop successful working relationships.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 239 Train-the-Trainer 1.5</p> <p>Semester Prerequisite: None</p> <p>The new and the seasoned trainer can use this seminar to re-think training strategies and to sharpen skills in developing and facilitating training activities. The emphasis in this seminar is on the practical strategies of organizing and conducting instructional or training activities. There will be an opportunity to practice these skills.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MDCS 225 Problem Solving/Decision Making .5</p> <p>Semester Prerequisite: None</p> <p>Problems occur in all areas of life. This seminar acquaints participants with practical strategies and workable skills for handling problems, and it offers practice activities for solving problems as a group or an individual.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 240 Telemarketing .5</p> <p>Semester Prerequisite: None</p> <p>This seminar is designed to make people more productive over the telephone. It teaches telephone selling skills to help participants make better use of time and increase sales. It will also show how to put information power to work.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MDCS 226 Team Work Skills 1.5</p> <p>Semester Prerequisite: None</p> <p>Effective organizations make extensive use of teams, resulting in increased productivity, quality, and customer satisfaction. This 27-hour program is designed to give participants the skills necessary to build competent teams in their individual organizations.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 245 Customer Service 1</p> <p>Semester Prerequisite: None</p> <p>All employees have the potential for creating good customer relations and improving the image of the organization. The critical factors include increased motivation through a positive mental attitude, effective communication with different types of customer personalities, sensitive handling of customer complaints, and successful strategies for meeting needs to satisfy customers.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MDCS 229 Effective Presentation Skills 1</p> <p>Semester Prerequisite: None</p> <p>This two-day seminar covers the techniques of an effective presentation: planning, preparing, and presenting. This seminar culminates with participants giving a 10-minute presentation. Emphasis will be given to practicing and critiquing presentation skills.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 250 Management Skills I 1</p> <p>Semester Prerequisite: None</p> <p>This two-day seminar is designed to help supervisors analyze their present strengths and skills affecting their management of groups of employees. Participants will explore and practice techniques to aid them in becoming more effective managers.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MDCS 230 Developing Instructional Materials 1.5</p> <p>Semester Prerequisite: None</p> <p>Learn how to write goals and objectives, sequence instruction, identify strategies, develop assessment tools, and evaluate your instruction materials. During the seminar, you will develop materials for your own training programs.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 251 Management Skills II 1</p> <p>Semester Prerequisite: None</p> <p>This seminar is designed to help supervisors analyze their present strengths and skills affecting their management of group employees. Participants will explore and practice techniques to aid them in becoming more effective managers.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MDCS 231 Guiding the Training Process 1.5</p> <p>Semester Prerequisite: None</p> <p>Learn the necessary skills for facilitating a training program. Includes asking and answering questions, administering and debriefing exercises, giving constructive feedback, guiding small group discussion, demonstrating and prompting learners.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 252 Supervisory Skills Training 2</p> <p>Semester Prerequisite: None</p> <p>Participants are trained in the essential processes of supervision: leading with a participative style, giving instructions, enhancing the natural motivation of employees, communicating effectively, "active listening," improving employee performance, conducting performance appraisals, problem solving, managing time, and building team cohesiveness.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MDCS 232 Applying the Principles of Adult Learning .5</p> <p>Semester Prerequisite: None</p> <p>This seminar considers four fundamental principles of adult learning. Topics include motivating resistant learners, creating a positive climate for learning, participative training techniques, and learning contracts.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 254 Advanced Supervisory Skills 2.5</p> <p>Semester Prerequisite: None</p> <p>Based on an extensive needs analysis conducted among organizations who are members of the Howell Network, this 40-hour program was designed to improve the skills (e.g. Leadership, Coaching, Conducting Meetings, Performance Appraisal, etc.) of supervisory level managers.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MDCS 233 Instructional Media for Trainers 1</p> <p>Semester Prerequisite: None</p> <p>This seminar introduces trainers to media available to make instruction more effective. Transparencies, charts, slides, videotapes, audiotapes, and other media will be discussed. Participants will analyze their own instructional programs and identify the appropriate media to use.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 255 Power and Risk Management 1</p> <p>Semester Prerequisite: None</p> <p>This workshop is designed to give some basic power concepts, and to help develop an understanding of how the organization in which we work affects one's ability to have and to use power effectively. This workshop looks at the organizations and how they affect people's power strategies.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MDCS 234 Teaching Through Demonstration 1</p> <p>Semester Prerequisite: None</p> <p>This seminar presents several specific strategies for teaching skills in one-on-one training situations. Each strategy is presented and participants are given an opportunity to apply it in simulated activities. Participants also learn how to overcome anxiety and learning barriers.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 259 Managing Problem Employees .5</p> <p>Semester Prerequisite: None</p> <p>Participants will learn why some employees perform their jobs unacceptably and are "problems" to supervisors and what they can do about them.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MDCS 235 Using Audiovisual Equipment 1</p> <p>Semester Prerequisite: None</p> <p>In this basic level seminar, participants will learn to set up, operate, troubleshoot, and disassemble the following equipment: 16mm film projector, overhead projector, slide projector, audiotape player, video recorder, flip chart.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 260 Leading Diverse Work Groups 1.25</p> <p>Semester Prerequisite: None</p> <p>Participants in this seminar will learn to apply knowledge about work force diversity to work situations relative to human resource management, communication, potential conflict, and work group effectiveness.</p> <p>Semester Planned: Fall, Spring, Summer</p>

<p>MDCS 261 Managing Diverse Workforce—'90s 1.5</p> <p>Semester Prerequisite: None</p> <p>Participants in this seminar will learn to apply knowledge about work force diversity to work situations relative to human resource management, communication, potential conflict, and work group effectiveness. Participants will be better able to do their job, and be better equipped to promote improved working relations within the organization.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 280 Improving Interpersonal Relationships .5</p> <p>Semester Prerequisite: None</p> <p>Good interpersonal skills are essential for productive working relationships and for maintaining an efficient working environment. This seminar provides training to managers on techniques for strengthening interpersonal skills for improved working relationships.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MDCS 264 Leading Effective Meetings .5</p> <p>Semester Prerequisite: None</p> <p>The purpose of this workshop is to help participants develop the skills necessary for leading effective meetings. Those skills include the many facets of planning and preparing for a meeting, conducting a meeting, and following up on a meeting.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 281 Working With Difficult People .5</p> <p>Semester Prerequisite: None</p> <p>Difficult people create problems! In this practical seminar, participants will observe and practice effective strategies for handling difficult people. Participants will be able to reduce the problems difficult people create.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MDCS 266 Managing Organizational Change .5</p> <p>Semester Prerequisite: None</p> <p>This workshop will enable participants to manage the change process in their current work environment. Participants will identify the positive and negative effects of change on the organization, subgroups within the organization and the individual; will develop alternatives for implementing change; and will identify support systems in internal and external environment.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 282 Solving Performance Problems .5</p> <p>Semester Prerequisite: None</p> <p>A primary element for solving performance problems is creating and sustaining a supportive work environment. This seminar provides training to supervisors and managers that will help identify and solve work problems and encourage peak employee activity.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MDCS 268 Project Management 1</p> <p>Semester Prerequisite: None</p> <p>This training will prepare state personnel to understand and effectively administer a project. All aspects of analyzing project intent, planning, budgeting, use of funds, program evaluation, staff administration, information management, report writing, crises elimination, and trouble avoidance, will be covered.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 290 Selection and Evaluation Interviewing 1</p> <p>Semester Prerequisite: None</p> <p>This seminar covers the three stages of the hiring process. Activities include developing interview questions from civil service job descriptions, discussing Equal Employment Opportunity and Affirmative Action concerns, practicing interview techniques, interpreting interview information, and describing critical orientation procedures for new employees.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MDCS 275 Dynamic Leadership .5</p> <p>Semester Prerequisite: None</p> <p>Dynamic leaders create visions and translate those visions into reality within their organizations. This seminar describes the essential features and functions of dynamic leadership in the context of the present world market. Participants will be inspired to develop their abilities as dynamic leaders.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 295 Job Description and Performance Standards .5</p> <p>Semester Prerequisite: None</p> <p>This program is designed for any person whose job responsibilities include analyzing job performance, either as the primary decision-maker or as a contributing/advisory decision helper. This includes small business owners and managers, personnel representatives and supervisors.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MDCS 276 Team Building .5</p> <p>Semester Prerequisite: None</p> <p>Dynamic leaders develop dynamic teams. They need followers, but followers who can function independently and cooperatively in the organizational endeavor. This seminar instructs participants in practical strategies for creating dynamic teams.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 296 Employee Selection Interviewing .5</p> <p>Semester Prerequisite: None</p> <p>Learn a three-stage model for interviewing (planning, conducting the interview, deciding), the characteristics of an effective interview, and legal and illegal pre-employment inquires. Practices skills for conducting the interview.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MDCS 277 Leading Group Decision-Making .5</p> <p>Semester Prerequisite: None</p> <p>In order for groups to work together well, leaders must be skilled in people functions and task functions. They must be able to lead a group through a process of decision-making, while maintaining positive relationships and high-quality decisions. This seminar will train participants in the skills of leading and the processes of decision-making.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 297 Coaching Work Performance .5</p> <p>Semester Prerequisite: None</p> <p>Learn to address performance problems so that employees know what is wrong and how to correct it. Learn how to reinforce expected performance, communicate expectations, and utilize effective feedback methods and goal setting.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MDCS 278 Strategic Planning .5</p> <p>Semester Prerequisite: None</p> <p>Effective strategic planning is essential for long-term success in the work market. It focuses on doing the right thing, on being effective. This seminar teaches a team approach to strategic planning.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 298 Employee Performance Appraisal .5</p> <p>Semester Prerequisite: None</p> <p>The primary reason for implementing a performance appraisal system is to effectively communicate with employees about job performance. In this seminar participants will learn how to set standards, evaluate performance, and conduct performance appraisal meetings.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MDCS 279 Communicating Thoughts Effectively .5</p> <p>Semester Prerequisite: None</p> <p>Collecting one's thoughts and speaking extemporaneously to present one's reaction, viewpoint, or pertinent information is a vital ability for leaders. This workshop will instruct participants in the strategies for gathering one's thoughts and presenting them clearly and logically.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MDCS 299 Managing Discipline .5</p> <p>Semester Prerequisite: None</p> <p>Learn the difference between prevention and corrective discipline, how to utilize documentation, and the critical steps of due process to ensure the rights of all individuals.</p> <p>Semester Planned: Fall, Spring, Summer</p>
	<p>MEDA 100 MA Administrative/Communication Skills 3</p> <p>Semester Prerequisite: Admission to Program</p> <p>Introduction to role of medical assistant administrative/clerical functions: professionalism, written communication, telephone communication, scheduling, referrals, filing, medical records management, processing incoming and outgoing mail, pegboard system, and basic banking functions. Also provides students with an understanding of interpersonal skills.</p> <p>Semester Planned: Fall</p>

<p>MEDA 114 Legal Ethical Concepts 1</p> <p>Semester Prerequisite: Admission to Program Designed to familiarize the student with the basic concepts relating to medical ethics, legal medicine, and professional liability. Semester Planned: Fall</p>	<p>MFGM 110 Machine Maintenance I 4</p> <p>Semester Prerequisite: TECH 100/MATH 050/Equivalent Theory and industrial application of machine repair, preventive maintenance, safe practices, and troubleshooting, with actual dismantling and rebuilding of tool room machines. Semester Planned: Fall, Spring</p>
<p>MEDA 131 Clinical Skills I 4</p> <p>Semester Prerequisite: AHCC 108/ANAT 145, Admission to Program Designed to provide knowledge in clinical skills relating to the following topics: physical measurements; health history and physical examination; infection control; instrument sanitation, disinfection and sterilization; problem-oriented medical records; physical therapy; and universal precautions. Semester Planned: Fall</p>	<p>MFGM 111 Machine Maintenance II 4</p> <p>Semester Prerequisite: MFGM 110 Advanced theory and practice of machine tool repair including preventive maintenance. Also, the theory and repair of pumps and pneumatic tools will be covered. Semester Planned: Fall, Spring</p>
<p>MEDA 132 Clinical Skills II 4</p> <p>Semester Prerequisite: MEDA 131 Designed to cover both in theory and campus lab the more advanced technical skills necessary to perform in the clinical setting. Skills and procedures covered will include surgical asepsis, minor surgery assisting, electrocardiography, medication administration, radiography, and collection of specimens. Semester Planned: Spring</p>	<p>MFGM 120 Industrial Presses 4</p> <p>Semester Prerequisite: None Covers uses and strengths of mechanical presses, terminology, purposes, and functions in industry. Includes movies and slides of mechanical action, maintenance systems, and safety, supplemented by visits to plants using presses and press repairs. For mechanical trades apprentices, press repair and maintenance people, stamping plant employees, press operators, die setup employees. Semester Planned: Fall, Spring</p>
<p>MEDA 141 Basic Medical Laboratory Procedures 2</p> <p>Semester Prerequisite: Admission to Program This course introduces the student to the clinical laboratory. Laboratory organization and safety will be discussed. Quality assurance issues will be emphasized. Basic principles and procedures for laboratory tests will be presented including: collection and preparation of specimens, venipuncture, capillary puncture, urinalysis, and hematological testing. Semester Planned: Fall</p>	<p>MFGM 125 Rigging 2</p> <p>Semester Prerequisite: TECH 100/MATH 050/Equivalent Covers uses and strengths of ropes, chains, block and tackles, and the construction and erection of gin poles, with a study of rope knots used in rigging. Also, safe working strength of slings, hooks, sheaves, ropes and chains, and the use of personal safety equipment will be covered. Semester Planned: Fall, Spring</p>
<p>MEDA 142 Advanced Medical Laboratory Procedures 2</p> <p>Semester Prerequisite: MEDA 141 This course enables the student to understand and perform some of the more complex laboratory tests performed in medical offices. Basic pathophysiology will be discussed. Tests from the following areas will be covered: clinical chemistry, immunology, microbiology and hematology. Collection and preparation of specimens, etc. Semester Planned: Spring</p>	<p>MFGM 170 Fork Lift Truck Driver Training .5</p> <p>Semester Prerequisite: None This course will teach the safe operation of industrial lifting and touring trucks. All instruction leads toward a Department of Labor fork truck driving permit. Semester Planned: Fall, Spring, Summer</p>
<p>MEDA 181 Administrative Externship 2</p> <p>Semester Prerequisite: MEDA 132, MEDA 142, AHCC 110 Administrative externship is designed to provide application of administrative theory. This course is programmed with specific performance objectives and activities. Semester Planned: Summer</p>	<p>MGMT 200 Creativity in Business 3</p> <p>Semester Prerequisite: Any BUSN/MGMT Course/Departmental Approval This course is designed to encourage business students to develop basic and higher-order thinking skills. This includes applications of both critical and creative thinking used in management decision making and problem solving. Semester Planned: Fall, Spring, Summer</p>
<p>MEDA 182 Clinical Externship 2</p> <p>Semester Prerequisite: MEDA 132, MEDA 142, AHCC 110 Clinical externship is designed to provide application of theory and practice relevant to the clinical skills required of a medical assistant. The course is designed with specific performance objectives and activities. Semester Planned: Summer</p>	<p>MGMT 223 Supervision 3</p> <p>Semester Prerequisite: None This course presents supervisory principles and practices for first-line supervisors. Managerial functions of planning, organizing, staffing, directing, and controlling are discussed, along with policies, decision-making, and the responsibilities of supervisors for overall work performance and employee development and evaluation. Semester Planned: Fall, Spring, Summer</p>
<p>METR 220 Introduction to Meteorology 4</p> <p>Semester Prerequisite: 2.0 Minimum in ISCI 110/NSCI 110/ Science Inventory Passed, MATH 062 This course includes a study of the interrelationships of the elements (temperature, moisture, pressure, wind) that create weather. Human-atmospheric interactions (e.g., pollution, severe weather, greenhouse effect), world climate, and climatic change are also discussed. Laboratory includes making weather observations and measurements, and learning how to draw and interpret weather maps. Semester Planned: Fall</p>	<p>MGMT 224 Human Resource Management 3</p> <p>Semester Prerequisite: None Principles, problems, and practices of modern business, government, and other organizations involved in the handling of employees from recruiting through post-retirement. Semester Planned: Fall, Spring</p>
<p>MFGM 101 Industrial Hydraulics 4</p> <p>Semester Prerequisite: TECH 100/MATH 050 Industrial Hydraulics introduces the theory of fluid power and circuits covering pumps, pressure valves, flow valves, cylinders, filters and motors, etc., as they are used in industry today. This will be done with lectures and labs related to each of the respective components. Semester Planned: Fall, Spring, Summer</p>	<p>MGMT 225 Principles of Management 3</p> <p>Semester Prerequisite: None Management principles for middle- and upper-level managers: management relationships, communications, morale, motivation, history of management, theoretical framework, practical applications, qualifications of executives, business ethics, and managerial functions. Semester Planned: Fall, Spring, Summer</p>
<p>MFGM 102 Industrial Pneumatics 3</p> <p>Semester Prerequisite: TECH 100/MATH 050 Introduces the students to the theory of industrial pneumatic systems. The theory of gas laws, pumps, filters, valves, etc., will be discussed as they are applied to the industrial pneumatics systems. The use of lecture and labs will give the students a hands-on approach to the use of pneumatics. Semester Planned: Fall, Spring</p>	<p>MGMT 227 Training and Development for Business 2</p> <p>Semester Prerequisite: None Training and development for business is a course designed to cover all aspects of training in the business environment. The course will focus on assessing training needs, identifying training barriers, curriculum design, instructional techniques, evaluation, and adult learning theory. Semester Planned: Spring</p>

<p>MGMT 228 Organizational Behavior 3</p> <p>Semester Prerequisite: None</p> <p>Examines the dynamics of relationships at work. Integrates and applies behavioral and social science knowledge, using a systems approach, and focusing on the nature of both people and organizations. Students will study individual and group behavior and will have opportunities to work on skills necessary for successful interaction in organizations.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MGMT 244 Supervisory Management 2</p> <p>Semester Prerequisite: None</p> <p>Designed to help managers at all levels to develop, enhance and update their skills. Major areas of emphasis include planning, operating, controlling, personnel functions, decision-making, job design, job analysis, and quality control within the department.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MGMT 231 Team Development 3</p> <p>Semester Prerequisite: Any BUSN/MGMT Course/Departmental Approval</p> <p>This course will define and provide an understanding of team building, team leadership and self-managed teams in the context of today's work place. Students develop skills in writing team mission and vision statements, and team goals and action assignments. Students will develop skills in chartering, problem solving, decision making, conducting effective meetings and work sessions, negotiating, and presenting.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MGMT 245 Leadership Skills for Managers 1</p> <p>Semester Prerequisite: None</p> <p>In this course, the student will discover the secrets of great leadership and learn about the four basic leadership styles. You will master the art of goal setting, find your most effective leadership style, and know when to use the right style at the right time.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MGMT 234 Diversity in the Workplace—A Domestic and Global Perspective 3</p> <p>Semester Prerequisite: MGMT 223/Departmental Approval</p> <p>This course explores cultural, gender/sexual, physical, and other minority experiences in the work place and in the world. The management of human resources will be examined from a global perspective. Emphasis is on helping the majority and the minority become aware of the other's opinions, feelings, and perspective. Instruction takes an experiential, awareness training approach.</p> <p>Semester Planned: Fall, Spring</p>	<p>MGMT 246 Fundamentals of Modern Personnel Management 1</p> <p>Semester Prerequisite: None</p> <p>This course is a comprehensive source of personnel ideas and techniques to help managers in an organization contribute to a human resources program that will increase productivity and profits.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MGMT 237 Introduction to Total Quality Management 3</p> <p>Semester Prerequisite: None</p> <p>Provides an introduction to concepts of total quality management applied to non-manufacturing organizations. Covers the history of TQM including key thinkers/leaders. Explores new ways of thinking and leading, methods for continual improvement teams, empowerment, and "learning organizations."</p> <p>Semester Planned: Fall, Spring</p>	<p>MGMT 247 How to be a Successful Project Manager 1</p> <p>Semester Prerequisite: None</p> <p>This course provides a comprehensive understanding of the techniques and methodology needed to plan and control any project, large or small, in any industry. Both basic and more sophisticated tools are covered. Students will also learn how to use these tools as decision aides during the tracking and controlling phase of the project.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MGMT 239 Time and Stress Management 3</p> <p>Semester Prerequisite: None</p> <p>Explores relationship between time and stress management: stress is the causal factor for many of our physical and psychological problems. Suggests methods for harnessing its energy positively. Techniques and strategies for wise utilization of time and energy. Emphasis on creating action plan and initiating corrective actions.</p> <p>Semester Planned: Fall</p>	<p>MGMT 248 Team Building 1</p> <p>Semester Prerequisite: None</p> <p>This course presents positive, practical methods for building and managing effective teams, including how to build trust, confidence, and group work skills; and balancing and fine-tuning the team process. Focus is on the how-to keys of team building, from recruiting the right team members to truly empowering them with authority and responsibility for their decisions and performance.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MGMT 240 How Managers Make Things Happen 2</p> <p>Semester Prerequisite: None</p> <p>A practical skills-building course that concentrates on the functions that most often determine success in management. It shows you how to improve your performance in each key area by analyzing your job, breaking it down into functional components, spotting weaknesses, and taking concrete action to turn them around.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MGMT 249 Dealing With Difficult People 1</p> <p>Semester Prerequisite: None</p> <p>This course covers the specific communication, motivational and conflict resolution approaches that seasoned managers have found effective. Students will also learn how to avoid difficult behaviors by instituting positive work strategies, structures, and values before problems develop.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MGMT 241 How Successful Women Manage 1</p> <p>Semester Prerequisite: None</p> <p>This course is an overview of the various functions and processes involved in management. Students will explore possible explanations for women's slow rate of progress in attaining managerial positions. It is enlightening and an absolute "must" for any woman who is considering entering or is now a part of management.</p> <p>Semester Planned: Spring, Summer</p>	<p>MGMT 250 Fundamentals of Finance and Accounting/Non-Financial Managers 2</p> <p>Semester Prerequisite: None</p> <p>Provides the manager with an understanding of finance. Will help students learn to read and interpret financial statements, annual reports, and balance sheets. This course will help students use financial and accounting data more effectively.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MGMT 242 Manager's Guide to Working With People 1</p> <p>Semester Prerequisite: None</p> <p>Designed for managers who want to work effectively with people, both on and off the job. Students will acquire an understanding of human needs and motivation, leadership styles, problem-solving techniques, and effective self-assertive methods. Students will also learn how to deal with difficult behavior by instituting positive work strategies.</p> <p>Semester Planned: Spring, Summer</p>	<p>MGMT 251 Communication Skills for Managers 1</p> <p>Semester Prerequisite: None</p> <p>This course will help the busy manager learn to use more effectively the tools he/she has to get a message across. Includes areas of practical application such as effective writing of letters, memos and reports, running meetings, and interviewing and listening. A video supplement is included.</p> <p>Semester Planned: Spring, Summer</p>
<p>MGMT 243 How to Delegate Effectively 1</p> <p>Semester Prerequisite: None</p> <p>This course will show participants how to increase their productivity by doing less while managing more. It is designed to increase comfort with the delegation process which will help improve job performance.</p> <p>Semester Planned: Spring, Summer</p>	<p>MGMT 252 How to Deliver a Winning Presentation 1</p> <p>Semester Prerequisite: None</p> <p>This course will provide the student with a basic awareness of the steps necessary for making an effective oral presentation. It is designed for anyone who wants to reduce the fear of public speaking by learning how to deliver presentations.</p> <p>Semester Planned: Spring, Summer</p>
	<p>MGMT 253 How to Write Winning Reports 1</p> <p>Semester Prerequisite: None</p> <p>This course helps students develop a more concise straightforward writing style. It will help you express your ideas more clearly in memos, letters and reports.</p> <p>Semester Planned: Fall, Spring, Summer</p>

<p>MGMT 254 How to Write a Business Plan 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed for managers who want to give their company's business plan real meaning and power. Participants will learn how to develop realistic action programs and responsibility plans for allocating scarce resources, installing workable monitoring and control systems, and creating supportive policies and procedures.</p> <p>Semester Planned: Spring, Summer</p>	<p>MGMT 270 Time and Stress Management 1</p> <p>Semester Prerequisite: None</p> <p>This course covers principles of time management, as applied to both personal and professional situations. Students will also become aware of positive and negative stress, relaxation techniques, and ways to reduce stress through changes in lifestyle.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MGMT 256 Strategic Planning for Entrepreneurial Business 1</p> <p>Semester Prerequisite: None</p> <p>Owners and managers of new and growing businesses, or of companies that operate within an entrepreneurial environment, will learn how to prepare a strategic plan. Students will learn about organizational charts, goal-setting matrices, diagnostic summary sheets, and checklists—all designed to help them create a plan that works.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MGMT 271 Managing and Resolving Conflict 1</p> <p>Semester Prerequisite: None</p> <p>In this course, you will learn about the practical knowledge, proven techniques and psychological insights needed to resolve conflicts successfully. By using case studies, critical incidents, and realistic examples of conflict resolution, you will learn these crucial skills.</p> <p>Semester Planned: Spring, Summer</p>
<p>MGMT 257 Using Math as a Business Tool 1</p> <p>Semester Prerequisite: None</p> <p>This course is designed to increase familiarity with formulas and calculations most frequently used in business. Participants will learn to apply various ratios to test a company's strength, use statistical tools to read results more accurately, forecast more reliably, and assess the viability of a project through break-even analysis.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MGMT 272 Success Through Assertiveness 1</p> <p>Semester Prerequisite: None</p> <p>This course will help to put participants in command of their career in order to respond to difficult situations according to individual desires, interests, and feelings. Participants will learn how being properly assertive at the right times and in the right place can help them achieve their goals.</p> <p>Semester Planned: Spring, Summer</p>
<p>MGMT 260 How to Analyze the Competition 2</p> <p>Semester Prerequisite: None</p> <p>This course will enable students to pinpoint competitors' strengths and weaknesses so students can identify and act upon competitive challenges before they occur. The course assists students in the design, implementation, and management of a competitor "intelligence" system.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MGMT 273 Understanding and Assessing Personal Interaction Skills 1</p> <p>Semester Prerequisite: None</p> <p>This course is designed to increase awareness of personal styles and preferences for interacting with others. It is also designed to heighten awareness of styles and preferences of people with whom the student interacts daily.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MGMT 261 Psychology of Selling and Winning 1</p> <p>Semester Prerequisite: None</p> <p>This course helps students realize their full potential for total success. It goes beyond positive thinking or other motivational programs to offer the key that unlocks inner power. It teaches participants what to do to become top professional salespeople and why they should do it in order to sell successfully.</p> <p>Semester Planned: Spring, Summer</p>	<p>MGMT 274 Personal Financial Planning 2</p> <p>Semester Prerequisite: None</p> <p>This course will show students how to start building financial security. It emphasizes spending strategies and capital-building techniques rather than housekeeping methods. Included is a computer template disk to accompany Lotus 1-2-3 for student use during the course.</p> <p>Semester Planned: Spring, Summer</p>
<p>MGMT 262 How to Keep Satisfied Customers 1</p> <p>Semester Prerequisite: None</p> <p>This course is designed to make the task of keeping customers satisfied an easier one. The ultimate goal of this course is to help improve students' abilities to communicate effectively with customers.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MGMT 275 How to Build Memory Skills 1</p> <p>Semester Prerequisite: None</p> <p>This course uses audiotapes and a textbook to help apply the skills that increase ability to obtain and utilize information. The result of using improved listening and memory skills will help realize leadership potential.</p> <p>Semester Planned: Spring, Summer</p>
<p>MGMT 263 Successful Marketing for Service Organizations 1</p> <p>Semester Prerequisite: None</p> <p>This course will help students learn to create services for markets rather than markets for services. It is designed for service company managers and others who need to sharpen their competitive edge by using marketing concepts long associated with manufactured goods.</p> <p>Semester Planned: Spring, Summer</p>	<p>MGMT 276 How to Improve Writing Skills 1</p> <p>Semester Prerequisite: None</p> <p>This course helps students strengthen their ability to write and speak effectively. Students will understand the proper use of words and phrases associated with business. Workbook practice and review exercises are provided.</p> <p>Semester Planned: Spring, Summer</p>
<p>MGMT 264 How to Write a Marketing Plan 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed for small business owners, marketing managers, product managers, and others responsible for the creation of a marketing plan. The course instructs students how to fuse all the vital elements to create a marketing plan that is right for their product line, department, or company.</p> <p>Semester Planned: Spring, Summer</p>	<p>MGMT 277 Speed Learning 1</p> <p>Semester Prerequisite: None</p> <p>This course offers an entirely different way to read that reduces reading time while increasing comprehension. It teaches how to organize thinking systematically so the reader can learn quickly and efficiently in all reading situations. Uses audiocassettes.</p> <p>Semester Planned: Spring, Summer</p>
<p>MGMT 265 Using Microcomputers in Marketing 1</p> <p>Semester Prerequisite: None</p> <p>This course is a practical, hands-on course that helps make the job of choosing and using the software you need, easy and efficient. It is designed for marketing managers who want to use microcomputers to solve tough marketing problems. The course does not use interactive computer activity.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MGMT 280 Management Internship 3</p> <p>Semester Prerequisite: Coordinator Approval</p> <p>Internships provide students with actual job training and experience by working with business owners and/or managers in organizing and/or operating a business. Minimum of 160 hours of work required.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MGMT 270 Time and Stress Management 1</p> <p>Semester Prerequisite: None</p> <p>This course covers principles of time management, as applied to both personal and professional situations. Students will also become aware of positive and negative stress, relaxation techniques, and ways to reduce stress through changes in lifestyle.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MGMT 300 Introduction to Management 3</p> <p>Semester Prerequisite: MGMT 223/Departmental Approval</p> <p>Explores the roles and functions of middle to upper level managers. Presents an overview and analysis of processes by which managers help organizations obtain their stated goals. Students apply managerial theories and skills to help them develop abilities in the areas of planning, communication, decision-making, change management, and ethics.</p> <p>Semester Planned: Fall, Spring, Summer</p>

<p>MGMT 301 Strategic Management and Policy 3</p> <p>Semester Prerequisite: MGMT 300/MGMT 225</p> <p>The course pulls together learning from the areas of management and marketing to consider an overall organizational perspective—strategic plan formulation and implementation for the whole organization. The process involves pursuing organizational mission while managing the relationship of the organization to its environment.</p> <p>Semester Planned: Fall, Spring</p>	<p>MICR 203 Microbiology 3</p> <p>Semester Prerequisite: BIOL, CHEM Recommended</p> <p>An introduction to bacteria, viruses, and other microorganisms as they relate to human health. Emphasis on bacterial and viral structure and life cycles; antimicrobial therapy; immunology and host defenses; and the epidemiology, treatment, and prevention of selected infectious human diseases.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MGMT 304 Organizational Development 3</p> <p>Semester Prerequisite: MGMT 225/MGMT 300/Departmental Approval</p> <p>Based on the assumption that all managers must recognize, plan for, and manage organizational change, this course examines the process of improving organization effectiveness by means of a systematic change program. Students practice identifying problems, selecting appropriate interventions, building action plans, and developing facilitator skills.</p> <p>Semester Planned: Fall, Spring</p>	<p>MICR 204 Microbiology Laboratory 1</p> <p>Semester Prerequisite: MICR 203/Concurrently</p> <p>Basic laboratory principles of microbiology for allied health students. Emphasis on microscopy, aseptic cultivation of microorganisms, differential staining, assays of antimicrobial agents, and diagnostic laboratory techniques. Students will identify unknown bacterial species and examine medically important parasites.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MGMT 329 Advanced Management Communication Skills 3</p> <p>Semester Prerequisite: MGMT 225/MGMT 300/Departmental Approval</p> <p>This is an advanced course in interpersonal communication skills for business. It includes components of: listening, interpersonal communication, oral presentations, interviewing techniques, meeting management, business report writing, and persuasive speaking. This class is both informational and experiential.</p> <p>Semester Planned: Fall, Spring</p>	<p>MILS 101 The Military Profession 1</p> <p>Semester Prerequisite: None</p> <p>This course analyzes the military profession and organization of the U.S. Army from several academic perspectives and explores the technical, ethical, and personal ramifications of service as an officer in the U.S. Army. This course provides an introduction to military leadership which draws upon examples from military history.</p> <p>Semester Planned: Fall, Spring</p>
<p>MGMT 332 Managerial Ethics 3</p> <p>Semester Prerequisite: MGMT 225/MGMT 300/Departmental Approval</p> <p>Designed to sensitize participants to the impact of ethics on decision-making, both personal and organizational. Participants will examine the basis for the behavior of managers, their own behavior, various means of controlling organizational behavior, and the bases for ethical standards.</p> <p>Semester Planned: Fall, Spring</p>	<p>MILS 102 Land Navigation 1</p> <p>Semester Prerequisite: None</p> <p>This course includes an overview and practical exercise in the use of military topographic maps. This course will cover methods of reading and interpreting map symbols; determining elevation and relief; measuring distance; and using the techniques of intersection, resection, modified resection, and polar coordinates to determine location. Lab includes land navigation exercises using a lensatic compass in a field environment.</p> <p>Semester Planned: Spring</p>
<p>MGMT 335 Managerial Statistics 3</p> <p>Semester Prerequisite: MATH 062/Equivalent</p> <p>Application of statistical tools and techniques to improve decision-making processes and reduce managerial decision difficulty from less-than-perfect data. Includes sampling, description of sample data, methods of averaging, standard deviation, probability theory, estimation, and hypothesis testing.</p> <p>Semester Planned: Fall, Spring</p>	<p>MILS 201 Leadership Assessment Program: The Military Leader 1</p> <p>Semester Prerequisite: None</p> <p>This course examines individual leadership development using standardized assessment technology to evaluate potential to command and lead. Communications, administrative, personal relations and decision-making skills training, ethical career assessment, and sources of professional obligation will be reviewed. Lab includes rappelling and smallbore rifle marksmanship.</p> <p>Semester Planned: Fall, Spring</p>
<p>MGMT 337 Human Resource Management Skills 3</p> <p>Semester Prerequisite: MGMT 225/MGMT 300/Departmental Approval</p> <p>Skill areas involved in the management of our human resources are developed. Techniques for setting objectives with employees, conducting performance appraisals and working with employee problems are practiced. Students plan techniques for managing teams and for leading and motivating employees.</p> <p>Semester Planned: Spring</p>	<p>MILS 202 Military First Aid, Leadership Assessment, Fitness Training 1</p> <p>Semester Prerequisite: None</p> <p>This course provides instruction in emergency first aid techniques including casualty evaluation, life saving measures, CPR, and environmental injury prevention. It reviews the Army's Physical Fitness Program, and individual and group fitness programs are introduced. Rappelling, individual/squad tactics, and field training exercises are provided. Lab includes leadership training.</p> <p>Semester Planned: Spring</p>
<p>MGMT 338 Current Topics in Management 3</p> <p>Semester Prerequisite: MGMT 225/MGMT 300/Departmental Approval</p> <p>Study of specific topics and issues in today's society that affect managerial decisions. Students explore internal and external constraints on actions. External factors considered are legal, social, educational, and political. Special emphasis is given to international events impacting domestic management practices. Internal factors considered are shareholders, employees, and customers.</p> <p>Semester Planned: Fall, Summer</p>	<p>MKTG 100 Current Issues in Business 3</p> <p>Semester Prerequisite: None</p> <p>This is an introductory course designed to enhance a student's occupational preparedness and competence by promoting a better understanding of the competitive enterprise system. Classroom instruction will be combined with relevant marketing projects and professional community involvement to give students a solid foundation of marketing knowledge and managerial "know-how".</p> <p>Semester Planned: Fall, Spring</p>
<p>MGMT 339 Management Styles and Corporation Strategies 3</p> <p>Semester Prerequisite: None</p> <p>Numerous current materials relating to management styles and corporation strategies in Japan will acquaint the student with management as practiced in Japan. Japanese management practices are presented as an alternative managerial style for the United States to explore. (This course is offered only as part of the Japan Adventure Program.)</p> <p>Semester Planned: Spring, Summer</p>	<p>MKTG 119 Marketing and Managing Your Professional Image 3</p> <p>Semester Prerequisite: None</p> <p>This course is a complete guide for everything people and their companies need to know to do the right thing at the right time in every business situation. Students will understand the importance of a professional image as it relates to business success and will develop a personal image development plan.</p> <p>Semester Planned: Fall, Spring</p>
<p>MGMT 346 Managerial Finance 3</p> <p>Semester Prerequisite: ACCG 210</p> <p>This course is designed to provide necessary and practical skills to deal with financial matters and communicate with people who specialize in finance. Topics covered include basic financial analysis, short-term and long-term financing, financial planning, and managing the finance function.</p> <p>Semester Planned: Fall, Spring</p>	<p>MKTG 120 Sales 3</p> <p>Semester Prerequisite: None</p> <p>This course presents the fundamentals of sales and highlights its role in the marketing mix. Students will develop basic skills needed to enter the field. Topics include customer buying habits, the sales process, product demonstration techniques, and the analysis of human relations aspects of sales.</p> <p>Semester Planned: Fall, Spring, Summer</p>

<p>MKTG 121 Advanced Sales 2</p> <p>Semester Prerequisite: MKTG 120/Departmental Approval An analysis of the sales interview. Student presentations are videotaped to assess individual skill levels, evaluate sales style and provide direction for improvement. Semester Planned: Fall, Spring</p>	<p>MKTG 204 Marketing Research 3</p> <p>Semester Prerequisite: MKTG 200 Types of data, sampling, data collection, analysis, interpretation, and applications of marketing research. A practical managerial approach—not a statistical or mathematical orientation. Students will design and execute a marketing research project. Semester Planned: Fall, Spring</p>
<p>MKTG 122 Field Sales Internship 3</p> <p>Semester Prerequisite: MKTG 120/Departmental Approval Practical field sales experience working in consumer or industrial sales. Opportunity to develop advanced selling techniques and refine selling skills. Minimum of 160 hours of work required. Semester Planned: Fall, Spring, Summer</p>	<p>MKTG 220 Sales Management 2</p> <p>Semester Prerequisite: MKTG 120/Equivalent Explores strategies used in managing salespeople. Training, recruiting, motivation, evaluation, planning, and organizing are all emphasized. The case method of learning is utilized, along with role-playing. Semester Planned: Spring</p>
<p>MKTG 123 Computer Field Sales Internship 3</p> <p>Semester Prerequisite: MKTG 120/Departmental Approval Practical computer field sales experience working in consumer or industrial sales. Opportunity to develop advanced selling techniques and refine selling skills. Minimum of 160 hours of work required. Semester Planned: Fall, Spring, Summer</p>	<p>MKTG 221 Consumer Behavior 2</p> <p>Semester Prerequisite: None Covers the basic perspectives involved in consumer motivation and decision-making. Students will investigate relevant variables that shape consumer actions and concepts that integrate the study of consumer behavior with the practice of marketing. Semester Planned: Spring</p>
<p>MKTG 124 Practical Selling 3</p> <p>Semester Prerequisite: Working in Sales This course is hands-on training helping students improve their sales technique and ultimately their earnings. Semester Planned: Spring</p>	<p>MKTG 231 Independent Study in Marketing 1</p> <p>Semester Prerequisite: Coordinator Approval Advanced marketing students design, implement, and draw conclusions relevant to a marketing project in a specific area of interest in marketing. Minimum of 16 hours work is required. Semester Planned: Fall, Spring, Summer</p>
<p>MKTG 130 Retailing 3</p> <p>Semester Prerequisite: None Students will gain understanding of activities and strategies used in selling goods to ultimate consumers. The course develops an awareness of problems facing retailers and explores feasible solutions. Career opportunities in retailing are examined. Semester Planned: Fall, Spring, Summer</p>	<p>MKTG 232 Independent Study in Marketing 2</p> <p>Semester Prerequisite: Coordinator Approval Advanced marketing students design, implement, and draw conclusions relevant to a marketing project in a specific area of interest in marketing. Minimum of 32 hours work is required. Semester Planned: Fall, Spring, Summer</p>
<p>MKTG 131 Fashion Merchandising 2</p> <p>Semester Prerequisite: None Functions and policies: what, when, where, how much, how to, and from whom to buy. Introduction to fashion history, textile construction, design, color, figure types, and fashion trends. Career opportunities are explored. Semester Planned: Fall</p>	<p>MKTG 233 Independent Study in Marketing 3</p> <p>Semester Prerequisite: Coordinator Approval Advanced marketing students design, implement, and draw conclusions relevant to a marketing project in a specific area of interest in marketing. Minimum of 48 hours work is required. Semester Planned: Fall, Spring, Summer</p>
<p>MKTG 135 Telemarketing 2</p> <p>Semester Prerequisite: None This course is designed to make people more productive over the telephone. The course teaches skills to help increase productivity and sales by mastering the art of telephone selling. The course will demonstrate practical methods and alternatives that work to increase efficiency and closing percentages. Semester Planned: Spring</p>	<p>MKTG 235 Marketing Internship 3</p> <p>Semester Prerequisite: BUSN 118, MKTG 200, Coordinator Approval Practical work experience in an approved business setting. Minimum of 160 hours work required. Semester Planned: Fall, Spring, Summer</p>
<p>MKTG 140 Introduction to Advertising 3</p> <p>Semester Prerequisite: None Methods and techniques used in modern advertising. Information on the entire advertising function. Preparation of an advertising campaign will be required to facilitate hands-on understanding of the component parts which include marketing review, marketing plan, creative strategy, and media selection. Semester Planned: Fall, Spring, Summer</p>	<p>MTEC 101 Basic Home Video 2</p> <p>Semester Prerequisite: None An introductory course for non-majors designed to instruct the amateur camcorder user and semi-professional video camera operator in the techniques of producing effective video presentations. Students will learn how to incorporate professional video techniques into both home and business video programs. Semester Planned: Fall, Spring</p>
<p>MKTG 200 Principles of Marketing 3</p> <p>Semester Prerequisite: BUSN 118/Approval Designed to define marketing, develop an understanding of the marketing concept and functions, and generally investigate the field of marketing. Will cover the marketing environment, identifying consumer needs, examining product, price, promotion, and distribution strategies within our society. Provides a basic marketing understanding with practical applications. Semester Planned: Fall, Spring, Summer</p>	<p>MTEC 102 Old Time Radio .5</p> <p>Semester Prerequisite: None This course will look at the sights and sounds of radio programming of the past. A non-technical view of broadcasting exploring many aspects of the history of radio: beginnings; development; and network and station programming, including comedy, variety, mystery, and drama. Semester Planned: Fall, Summer</p>
<p>MKTG 202 Managerial Marketing 3</p> <p>Semester Prerequisite: MKTG 200 The course focuses on the solution of marketing problems through case analysis. It relates marketing to the total enterprise by analyzing problems, and suggesting approaches to business decision-making. Particular attention is paid to the elements of the marketing mix and how marketing management deals with these variables. Semester Planned: Fall, Spring</p>	<p>MTEC 110 An Introduction to the Broadcast and Electronic Media 4</p> <p>Semester Prerequisite: None A survey of the history, technology, regulation, economics, programming, and societal effects of the electronic media. Semester Planned: Fall, Spring, Summer</p>

MTEC 120 Audio Production I	4	MTEC 227 Audio Recording III	3
Semester Prerequisite: None		Semester Prerequisite: MTEC 221	
A beginning course which covers the basics of audio theory and production techniques. Included are topics in tape editing, tape recorders, and audio mixing. This class provides the foundational theory for the other classes in the audio series.		A third course in audio recording that addresses topics in digital audio, MIDI control of synthesizers and applications involving SMPTE. Students work with computers and synthesizers to produce multi-track recordings.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall	
MTEC 121 Audio Recording I	4	MTEC 230 Radio Production II	4
Semester Prerequisite: MTEC 120, MTEC 220 Recommended		Semester Prerequisite: MTEC 130	
A beginning course in audio recording which covers the basic principles of multi-track recording, mixing console theory and operation, studio microphone techniques, and audio remote recording.		Presentation of advanced studio and remote-production techniques. Emphasis on writing, producing, and performing for commercials, news, and sports programs.	
Semester Planned: Fall, Spring		Semester Planned: Fall, Spring	
MTEC 122 Sound Reinforcement	4	MTEC 231 Radio Programming and Promotions	3
Semester Prerequisite: MTEC 120		Semester Prerequisite: MTEC 130	
A beginning course in sound reinforcement which covers the theory and practice of sound systems and components used for concert sound and other live reinforcement operations. Includes equipment specifications, system design, troubleshooting, and operation of live systems.		A survey of diverse radio formats. Consideration is given to the role of the program director and the tools used in format decision-making. Techniques used in creating and promoting station image and the effects of ratings are analyzed.	
Semester Planned: Spring		Semester Planned: Spring	
MTEC 130 Radio Production I	4	MTEC 232 Radio Workshop	2
Semester Prerequisite: None		Semester Prerequisite: Departmental Approval	
Survey of the radio broadcast industry. Careers, qualifications, responsibilities, station operation. Introduces basic studio production and on-air presentations.		An opportunity for practical experience through access to the campus radio facility. Students work in a variety of station staff positions.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
MTEC 150 Visual Media Design	4	MTEC 240 Script and Copywriting for the Media	3
Semester Prerequisite: None		Semester Prerequisite: MTEC 110	
This course places special emphasis on the components of effective visual communication. The development of pre-production processes related to visual composition, scriptwriting, storyboarding, lighting, and floor plot designs are emphasized. An introduction to studio and field production formats is included in classroom activities. Class sessions contain instructional and performance exercises.		Basic writing techniques and formats used in preparing program scripts for television, radio, and multi-media productions. Emphasis on practical copywriting techniques for commercial, promotion, public affairs, documentary, and entertainment programs.	
Semester Planned: Fall, Spring		Semester Planned: Fall	
MTEC 151 Electronic Field Production I	4	MTEC 241 Reporting for Radio and Television	3
Semester Prerequisite: MTEC 150/IMAG 118		Semester Prerequisite: MTEC 130, MTEC 150	
This course provides the student with an introduction to the process of single camera, remote video production. In addition, the course helps the student in developing an aesthetic reference for critiquing contemporary video programming. In-class assignments are evaluated using technical and artistic guidelines.		Survey of the broadcast radio and television news industry. This course includes several practical exercises in preparing news stories through writing, production, and presentation.	
Semester Planned: Fall, Spring		Semester Planned: Spring	
MTEC 220 Audio Production II	4	MTEC 242 Media Sales and Marketing	3
Semester Prerequisite: MTEC 120		Semester Prerequisite: MTEC 110	
A second course in audio production providing advanced audio theory and production practice. Included are topics in tape editing of musical material, use of audio effects in production, additional production mixing, and an introduction to digital editing.		A presentation of the concepts and skills used in creating advertising campaigns and selling air time for cable and commercial television and radio operations.	
Semester Planned: Fall, Spring		Semester Planned: Spring	
MTEC 221 Audio Recording II	4	MTEC 243 The Ethics and Social Impact of the Media	3
Semester Prerequisite: MTEC 121		Semester Prerequisite: None	
A second course in audio recording that covers advanced techniques used in multi-track studio recording for music, film and video. Emphasis is on use of the multi-track studio and signal processing equipment for multi-track mixdown. Topics in acoustics, equipment alignment, and engineering skills are also included.		An exploration of the effects upon society of electronic media programming. Issues such as the impact of television violence on children and the negative media portrayal of specific individuals and groups are considered.	
Semester Planned: Spring		Semester Planned: Fall, Spring, Summer	
MTEC 223 Sound Reinforcement Practicum	2	MTEC 245 The Media Producer/Director	3
Semester Prerequisite: MTEC 122		Semester Prerequisite: MTEC 130, MTEC 150	
A practical sound reinforcement activity combining specific theories related to the larger project with the opportunity to design, assemble, load, transport, erect, operate, and strike a large outdoor reinforcement system. Students operate the system to provide reinforcement for the bands that play in Riverfront Park on the Fourth of July.		An in-depth examination of the roles the Producer and Director play in the creation of radio, television, video, and film programming. Special emphasis on the development of a program treatment, budget, and script. An overview of the programming and financial strategies a producer can use to obtain program funding.	
Semester Planned: Summer		Semester Planned: Fall	
MTEC 224 Audio Production III	3	MTEC 250 Television Studio Production	4
Semester Prerequisite: MTEC 220		Semester Prerequisite: MTEC 150	
An advanced production course emphasizing the use of digital audio editing techniques to produce or sweeten audio elements for video and other media. Projects will be produced at digital audio workstations. A course for Media Technology majors.		An advanced production course focusing on the development of the technical and creative skills necessary to direct the work of a studio production team. Production assignments are modeled after activities found in broadcast production environments. Additional academic exercises include interpretation and translation of script ideas into effective video programming.	
Semester Planned: Fall		Semester Planned: Fall	

<p>MTEC 251 Electronic Field Production II 4</p> <p>Semester Prerequisite: MTEC 151</p> <p>An advanced production course designed to provide the student with high-level instruction in videography and electronic editing techniques. Class sessions contain instructional and critical analysis exercises of contemporary video programming. All production exercises are conducted outside of classroom sessions. Course assignments are evaluated on technical and artistic guidelines.</p> <p>Semester Planned: Spring</p>	<p>MUSC 124 Music Performance Workshop 2</p> <p>Semester Prerequisite: Audition Approval</p> <p>A summer program for talented high school students to develop basic music skills in music theory, keyboard, and vocal skills. This course culminates in performance of a final recital. Students are required to attend live performances. Acceptance is by audition and interview only.</p> <p>Semester Planned: Summer</p>
<p>MTEC 252 Lighting for Television and Video 3</p> <p>Semester Prerequisite: MTEC 150</p> <p>An advanced instructional seminar on lighting techniques for video and television production. Special emphasis is placed on developing creative and technical lighting approaches applicable to a broad range of program subjects. In-class examples and assignments are used for developing individual lighting techniques.</p> <p>Semester Planned: Fall, Even Years</p>	<p>MUSC 127 Orientation to Music Performance 1</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is for high school students accepted into the dance or theater summer program. A survey of the basic skills used in music including elements of theory, use of keyboard, and use of voice. Students are required to attend live performances.</p> <p>Semester Planned: Summer</p>
<p>MTEC 254 Electronic Presentational Graphics 3</p> <p>Semester Prerequisite: MTEC 150</p> <p>An introduction to the production of electronically-generated visuals for use with video presentations. Computer and video hardware will be used to create desktop graphics and special effects as elements of television programs.</p> <p>Semester Planned: Spring</p>	<p>MUSC 133 Jazz Theory 2</p> <p>Semester Prerequisite: Instructor Approval</p> <p>This course is designed to acquaint students with basic jazz theoretical principles. Students will gain an understanding of chord symbols, scales and modes, chord-scale relationships, chord substitutions, and harmonization techniques. Students are required to attend live performances.</p> <p>Semester Planned: Fall</p>
<p>MTEC 290 Guided Independent Study 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An opportunity for self-directed learners to explore topics of particular interest more thoroughly. Students will meet intermittently throughout the semester with an assigned faculty member for guidance and evaluation of progress. A proposal detailing the area of independent investigation must be submitted by the student prior to registration.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 138 Class Piano Major I 2</p> <p>Semester Prerequisite: Audition Approval</p> <p>The first in a series of two, this course is designed to develop the practical keyboard skills used in a music career. Students will gain keyboard facility, skill in sight-reading, and the ability to transpose. This series does not teach classical piano performance. MUSC 138 will cover all Major scales. Students are required to attend live performances.</p> <p>Semester Planned: Fall</p>
<p>MTEC 295 Media Practicum 4</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An opportunity to gain practical production experience in the media. Students are assigned to work on various audio, video, radio, and television projects within the Media Department. Faculty guidance and evaluation are an integral part of the experience. Practicum is intended only for advanced media technology students.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 139 Class Piano Major II 2</p> <p>Semester Prerequisite: MUSC 138</p> <p>Last in a series, this course will increase technical facility through playing more advanced scale patterns and minor scales in all forms. Students will gain skill in accompanying a melody using a variety of patterns. Students will learn to read open score and lead sheets using letter and numeral notation.</p> <p>Semester Planned: Spring</p>
<p>MTEC 296 Media Internship 4</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An opportunity for students to work in external media settings under professional supervision. Students work closely with faculty in arranging and evaluating the workplace experience. Interview results determine intern placement. The internship is intended only for media technology majors who have completed at least 75% of their academic programs.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 143 Beginning Piano I - Summer .5</p> <p>Semester Prerequisite: None</p> <p>Course assumes no prior music experience or knowledge. Students are introduced to the rudiments of playing piano. Concepts such as staff notation, rhythmic notation, correct fingering/hand positions, Major scales, and primary chords will be the focus for this course. May be taken up to three semesters for credit.</p> <p>Semester Planned: Summer</p>
<p>MTEC 299 Special Projects 4</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An opportunity for students to work closely with faculty in the design and development of media-based programs to be used by departments or divisions within the College.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 144 Beginning Piano I 1</p> <p>Semester Prerequisite: None</p> <p>Course assumes no prior music experience or knowledge. Students are introduced to the rudiments of playing piano. Concepts such as staff notation, rhythmic notation, correct fingering/hand positions, Major scales, and primary chords will be the focus for this course. May be taken up to three semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 100 Women's Chorus - Summer .5</p> <p>Semester Prerequisite: None</p> <p>An ensemble of women vocalists composed of students and community members, which develops general musicianship and provides training in choral singing. This group performs two to four concerts throughout the year. Students are required to attend live performances. May be taken up to six semesters for credit.</p> <p>Semester Planned: Summer</p>	<p>MUSC 145 Beginning Piano II 1</p> <p>Semester Prerequisite: MUSC 144</p> <p>This course is designed to take the student up to an intermediate level of playing. Rhythmic subdivisions, more complex fingering, and new major and minor keys are introduced. Students are required to attend live performances. May be taken up to three semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 113 Musical Performance 1</p> <p>Semester Prerequisite: Audition Approval</p> <p>An ensemble/company of performers composed of students and community members, providing musical theatre experience culminating in a live performance. Members are selected for their acting as well as singing ability and past performance experience. Students are required to attend live performances. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 146 Intermediate Piano I 1</p> <p>Semester Prerequisite: MUSC 145</p> <p>The focus of this course is to develop an individualized method of learning. Concepts such as phrasing and expression will be stressed for the intermediate player. Students will develop technical skills through the playing of scales and arpeggios. Students are required to attend live musical performances. May be taken up to three semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>

MUSC 147 Intermediate Piano II	1	MUSC 180 Class Voice Major II	1
Semester Prerequisite: MUSC 146/Departmental Approval This class will culminate in performing (from a required list) a piece of music from memory. Students are required to attend live performances. May be taken up to three semesters for credit. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: MUSC 179 This course continues to train singers in the use of the International Phonetic Alphabet. Focus is on the German and French languages, with a historical and performance emphasis. These language skills will be utilized in performing the literature of the major composers of German lieder and French chanson. Students are required to attend live performances. Semester Planned: Spring	
MUSC 154 Class Voice Commercial I - Summer	1	MUSC 181 Class Voice I—Summer	.5
Semester Prerequisite: None Beginning course designed to introduce students to vocal techniques and performance skills required in singing/performing commercial music. Breathing, posture, diction, tone production, interpretive skills, and microphone techniques are presented and developed. Students are required to attend live performances. May be taken up to three semesters for credit. Semester Planned: Summer		Semester Prerequisite: None The first in a series of two courses for group and individual work on varied song literature. Emphasis is placed on vocal techniques such as breathing, posture, diction, tone production and stage presence. Students are required to attend live performances. May be taken up to three semesters for credit. Semester Planned: Summer	
MUSC 155 Class Voice Commercial I	2	MUSC 182 Class Voice I	1
Semester Prerequisite: None Beginning course designed to introduce students to vocal techniques and performance skills required in singing/performing commercial music. Breathing, posture, diction, tone production, interpretive skills, and microphone techniques are presented and developed. Students are required to attend live performances. May be taken up to three semesters for credit. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None The first in a series of two courses for group and individual work on varied song literature. Emphasis is placed on vocal techniques such as breathing, posture, diction, tone production and stage presence. Students are required to attend live performances. May be taken up to three semesters for credit. Semester Planned: Fall, Spring, Summer	
MUSC 156 Class Voice Commercial II	2	MUSC 183 Class Voice II	1
Semester Prerequisite: MUSC 155 The advanced course in a series of two, this course will refine techniques introduced in MUSC 155. Students will prepare a final public performance. Students are required to attend live performances. May be taken up to three semesters for credit. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: MUSC 182 The advanced course in a series of two. This course will refine techniques, such as breathing, posture, diction, tone production, and stage presence, introduced in MUSC 182. Students are required to attend live performances. May be taken up to three semesters for credit. Semester Planned: Fall, Spring, Summer	
MUSC 168 Introduction to Musicianship I	2	MUSC 185 Music Reading I	2
Semester Prerequisite: None This course is for beginning musicians to gain an understanding of notating and reading pitch, rhythm, and music terminology and theory. Students are introduced to musical scales, key signatures, intervals, and chords. Students are required to attend live performances. Semester Planned: Fall		Semester Prerequisite: None This course is for students with no previous music experience in ear-training to develop music reading skills through singing with solfege. Students are introduced to the fundamental principles of sight-reading, melodic and rhythmic dictation. Students are required to attend live performances. Semester Planned: Fall	
MUSC 169 Introduction to Musicianship II	2	MUSC 186 Music Reading II	2
Semester Prerequisite: MUSC 168 This course is the second in a pair of courses for novice musicians to further their understanding of music notation and theory fundamentals. MUSC 169 builds on material covered in MUSC 168. Students will learn to construct melodies, create phrases and to harmonize a given or original melody. Students are required to attend live performances. Semester Planned: Spring		Semester Prerequisite: MUSC 185 Second course for students with no music experience. Course builds on MUSC 185 material. Topics include solfege, musical thinking, and fundamentals of harmonic, melodic, and rhythmic dictation. Course will further develop skills in sight reading, ear training, minor mode, and harmonic progressions. Students must attend live performances. Semester Planned: Spring	
MUSC 173 Basic Musicianship I	4	MUSC 187 Guitar I - Summer	.5
Semester Prerequisite: MUSC 168/Departmental Approval This course allows students to gain an understanding of theoretical music principles of notation, melodic and rhythmic organization and diatonic harmony. Aural skills are developed through intervallic, melodic and rhythmic dictation and sightsinging. This course is the first in a sequence of two courses in music theory and ear-training as a freshman requirement for a four-year college music degree. Students are required to attend live performances. Semester Planned: Fall		Semester Prerequisite: None The first in a sequence of two courses for beginners. Note reading and basic music theory are taught through single-note melodies played using basic plectrum technique. Folk, blues and classical traditions for the guitar are presented. Harmony and primary chords are introduced. Students must provide their own guitar. Students are required to attend live performances. Semester Planned: Summer	
MUSC 174 Basic Musicianship II	4	MUSC 188 Guitar I	1
Semester Prerequisite: MUSC 173 This course allows students to gain an understanding of the theoretical principles of music including diatonic and chromatic harmony, advanced four-part writing, counterpoint, simple musical forms, and analysis. Aural skills are developed through intervallic, melodic, rhythmic, harmonic, simple, two-part dictation and sightsinging. This course is the last in a sequence of two courses in music theory and ear-training as a freshman requirement for a four-year college music degree. Students are required to attend live performances. Semester Planned: Spring		Semester Prerequisite: None The first in a sequence of two courses for beginners. Note reading and basic music theory are taught through single-note melodies played using basic plectrum technique. Folk, blues and classical traditions of the guitar are presented. Harmony and primary chords are introduced. Students must provide their own guitar. Students are required to attend live performances. Semester Planned: Fall, Spring, Summer	
MUSC 179 Class Voice Major I	1	MUSC 189 Guitar II	1
Semester Prerequisite: Departmental Approval This course is designed to train singers in the International Phonetic Alphabet, assisting them in the pronunciation of English and foreign languages. This course focuses on English and Italian IPA skills, using the literature of major composers from the United States, Great Britain, and Italy with historical and performance emphasis. Students are required to attend live performances. Semester Planned: Fall		Semester Prerequisite: MUSC 188 The last in a sequence of two courses for beginners. Note reading, music theory, single-note melody lead, and chord accompaniment are taught. Folk, blues, and classical traditions of the guitar are presented. This course builds on the cumulative material covered in MUSC 188. Student must provide own guitar. Students are required to attend live performances. Semester Planned: Fall, Spring, Summer	

<p>MUSC 199 Music Appreciation 2</p> <p>Semester Prerequisite: None</p> <p>Designed for non-music majors, this course develops well-informed, focused listening. Students are acquainted with representative composers, compositions, and musical characteristics of a variety of style periods from early music through twentieth century music. Students are required to attend live performances.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 209 Private Keyboard Major 1</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is a private lesson, 40 minutes per week, for music majors. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. Students are required to attend live performances. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 200 Music Fundamentals for Elementary Classroom Teachers 3</p> <p>Semester Prerequisite: None</p> <p>A mandatory course for elementary, special education, and early childhood majors, this course assumes little, if any, prior musical experience. The basic fundamentals of music are covered, in addition to a sampling of successful teaching methods for singing and focused listening. Performance skills are taught through the piano and recorder.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 210 Private Keyboard Major 2</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is a private lesson, 60 minutes per week, for music majors. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. Students are required to attend live performances. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 201 Private Voice Major 1</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is a private lesson, 40 minutes per week, for music majors. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 211 Private Guitar Major 1</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is a private lesson, 40 minutes per week, for music majors. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. Students are required to attend live performances. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 202 Private Voice Major 2</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is a private lesson, 60 minutes per week, for music majors. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. Students are required to attend live performances. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 212 Private Guitar Major 2</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is a private lesson, 60 minutes per week, for music majors. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. Students are required to attend live performances. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 203 Private Woodwind Major 1</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is a private lesson, 40 minutes per week, for music majors. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 213 Private Voice Non-Major 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course is a private lesson, 40 minutes per week, for non-majors. Only music, dance, or theatre majors or dual-enrolled and special admissions high school students are eligible to enroll. Students are required to attend live performances.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 204 Private Woodwind Major 2</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is a private lesson, 60 minutes per week, for music majors. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 214 Private Voice Non-Major 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course is a private lesson, 60 minutes per week, for non-majors. Only music, dance, or theatre majors or dual enrolled and special admissions high school students are eligible to enroll. Students are required to attend live performances.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 205 Private Percussion Major 1</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is a private lesson, 40 minutes per week, for music majors. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. Students are required to attend live performances. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 215 Private Strings Major 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course is a private lesson, 40 minutes per week, for music majors. Enrollment is by audition only. Audition held the Friday prior to fall semester or as requested during fall and spring semester juries. May be taken up to six times for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 206 Private Percussion Major 2</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is a private lesson, 40 minutes per week, for music majors. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. Students are required to attend live performances. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 216 Private Strings Major 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course is a private lesson, 60 minutes per week, for music majors. Enrollment is by audition only. Auditions will be held the Friday prior to fall semester or as requested during fall and spring semester juries. May be taken up to six times for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 207 Private Brass Major 1</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is a private lesson, 40 minutes per week, for music majors. Enrollment is by audition only. Audition held the Friday prior to fall semester or as requested during fall and spring semester juries. May be taken up to six times for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 217 Private Instrument Non-Major 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course is a private lesson, 40 minutes per week, for non-majors. Only music, dance, or theatre majors or dual-enrolled and special admissions high school students are eligible to enroll. Students are required to attend live performances.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 208 Private Brass Major 2</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is a private lesson, 60 minutes per week, for music majors. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. Students are required to attend live performances. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 218 Private Instrument Non-Major 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course is a private lesson, 60 minutes per week, for non-majors. Only music, dance, or theatre majors, or dual-enrolled and special admissions high school students are eligible to enroll. Students are required to attend live performances.</p> <p>Semester Planned: Fall, Spring, Summer</p>

MUSC 220 Private Keyboard Non-Major	1	MUSC 235 Harmonica I	1
Semester Prerequisite: Departmental Approval This course is a private lesson, 40 minutes per week, for non-majors. Only music, dance, or theatre majors, or dual-enrolled and special admissions high school students are eligible to enroll. Students are required to attend live performances. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This is an introductory course that demonstrates the sound techniques employed in the mastery of the harmonica in the key of C. Emphasis is on blues style of play. The student must provide his/her own harmonica. Students are not required to read or learn to read music. Students are required to attend live performances. Semester Planned: Fall, Spring, Summer	
MUSC 221 Private Keyboard Non-Major	2	MUSC 236 Harmonica II	1
Semester Prerequisite: Departmental Approval This course is a private lesson, 60 minutes per week, for non-majors. Only music, dance, or theatre majors, or dual-enrolled and special admissions high school students are eligible to enroll. Students are required to attend live performances. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: MUSC 235 As a sequel to MUSC 235, this course introduces blues changes. The student will perform five Blues songs and develop the ability to improvise over standard blues changes. The student must provide his/hèr own harmonicas in the keys of C, A, and D. Students are not required to read music or learn to read music. Semester Planned: Fall, Spring; Summer	
MUSC 223 Private Guitar Non-Major	1	MUSC 240 Music History I	3
Semester Prerequisite: Departmental Approval This course is a private lesson, 40 minutes per week, for non-majors. Only music, dance, or theatre majors, or dual-enrolled and special admissions high school students are eligible to enroll. Students are required to attend live performances. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Departmental Approval Students will be exposed to composers and musical characteristics of specific style periods starting with Greek and Romanesque and continuing through the Renaissance. A research project will be started, with completion during the second semester. Students are required to attend live performances. Semester Planned: Fall	
MUSC 224 Private Guitar Non-Major	2	MUSC 241 Music History II	3
Semester Prerequisite: Departmental Approval This course is a private lesson, 60 minutes per week, for non-majors. Only music, dance, or theatre majors, or dual-enrolled and special admissions high school students are eligible to enroll. Students are required to attend live performances. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: MUSC 240 Students will be exposed to composers and musical characteristics from the Baroque style period through the twentieth century. Research project (assigned in MUSC 240) will be due during the second semester. Students are required to attend live performances. Semester Planned: Spring	
MUSC 227 Independent Study	1	MUSC 244 Studio Production Commercial	2
Semester Prerequisite: Departmental Approval Advanced study in areas related to, but not taught in, the curriculum with minimal faculty supervision. Students must submit written application detailing their projects for department approval. Students are required to attend live performances. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Departmental Approval This course, as an introduction to multi-channel recording techniques, covers equipment functions, separation techniques, basic tracks, overdubs, and the roles of musicians, producers, and engineers in the commercial recording field. The second half of the course consists of recording session observation in an off-campus recording studio. Students are required to attend live performances. Semester Planned: Fall, Spring, Summer	
MUSC 228 Independent Study	2	MUSC 245 Jazz History	2
Semester Prerequisite: Departmental Approval Advanced study in areas related to, but not taught in, the curriculum with minimal faculty supervision. Students must submit written application detailing their projects for department approval. Students are required to attend live performances. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Students will be introduced to the origins and traditions of the music loosely categorized as "jazz." Musical styles influential in the development of jazz, such as stride, ragtime, New Orleans, swing, bebop, "Free" or Avant-garde, and others, will be studied. Students are required to attend live performances. Semester Planned: Fall	
MUSC 230 Directed Independent Study	1	MUSC 248 Rock History I - Blues to the British Invasion	2
Semester Prerequisite: Departmental Approval Advanced study in areas relating to, but not taught in, the curriculum. Student will meet with an assigned faculty member once per week. Students must submit written application detailing their projects for department approval. Students are required to attend live performances. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This course provides an overview to the elements of rock and roll, and its origins. The student will be introduced to the major figures of rhythm and blues/early rock and roll via recordings of their music. Students are required to attend live performances. Semester Planned: Fall	
MUSC 231 Directed Independent Study	2	MUSC 249 Rock History II - From 1963 to Present	2
Semester Prerequisite: Departmental Approval Advanced study in areas relating to, but not taught in, the curriculum. Student will meet with an assigned faculty member once per week. Students must submit written application detailing their projects for department approval. Students are required to attend live performances. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Students will be introduced to the changes in pop music that have occurred since the early sixties. Developments in styles will be covered via examination of a variety of recordings from the early sixties to the present. Students are required to attend live performances. Semester Planned: Spring	
MUSC 232 Music Seminar	1	MUSC 251 Blues History	2
Semester Prerequisite: Departmental Approval Student will be given the opportunity to attend master classes on various related topics or perform in a production on the main stage or comparable space. Limited to individuals who have been selected as cast members or approved for master class. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None An introductory overview of the African-American musical form known as the blues. Using recordings of musicians as a primary source, supplemented with reading, the student will become familiar with the stylistic variations of both regional styles and individual performers. This course will show how the music changed as performers dealt with the factors of urbanization, electricity, social/cultural elements and more. Students are required to attend live performances. Semester Planned: Spring	
MUSC 233 Music Seminar	2		
Semester Prerequisite: Departmental Approval Student will be given the opportunity to attend master classes on various related topics or perform in a production on the main stage or comparable space. Limited to individuals who have been selected as cast members or approved for master class. Semester Planned: Fall, Spring, Summer			

<p>MUSC 253 Business of Music 3</p> <p>Semester Prerequisite: None</p> <p>An introduction to the business aspects of the music industry. Areas covered include copyrights, contracts, trademarks, publishing, recording and record company operations, personal managers, booking agents, concert promotions, and unions. Students are required to attend live performances.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 279 Advanced Rock Percussion 1</p> <p>Semester Prerequisite: MUSC 278/Approval</p> <p>This course allows students to further their understanding of drum set percussion techniques, rock rhythms, and concepts learned in MUSC 278. Students will experience a wide range of percussion instruments and their applications to rock, pop, and jazz. Students are required to attend live performances.</p> <p>Semester Planned: Spring</p>
<p>MUSC 254 Band Management 2</p> <p>Semester Prerequisite: MUSC 253/Approval</p> <p>This course is designed to assist the professional musician or manager in creating or improving a performing band. All major aspects of band management are covered, including intra-band arrangements, contracts, negotiations, format and material choice, equipment, finances, promotion and sales, road management, and basic organizational information. Students are required to attend live performances.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 280 Private Songwriting 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Private coaching for music majors, 40 minutes per week, in writing and copy-righting music compositions, giving attention and suggestion in harmony, chord substitution, and formal design. Students are required to attend live performances. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 269 Recording Band 1</p> <p>Semester Prerequisite: Audition Required</p> <p>Students will be introduced to the musician's role in the recording process. Students will be assigned to a combo (performing group). Students will select, arrange and rehearse material to be recorded during the first half of the semester. Students will record the material in a studio during the second half of the semester.</p> <p>Semester Planned: Spring</p>	<p>MUSC 281 Private Songwriting 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Private coaching for music majors, 60 minutes per week, in writing and copy-righting music compositions, giving attention and suggestion in harmony, chord substitution, and formal design. Students are required to attend live performances. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 270 Rock Guitar I 1</p> <p>Semester Prerequisite: None</p> <p>A presentation on fundamental rhythm and lead guitar techniques and music theory concepts applicable to rock music from its rhythm and blues origin to the present, as well as other related popular styles. Student must provide own guitar. Students are required to attend live performances.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 282 Private Voice Commercial 1</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is a private lesson, 40 minutes per week, for commercial music majors emphasizing techniques and style specifically related to commercial music. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 271 Rock Guitar II 1</p> <p>Semester Prerequisite: MUSC 270</p> <p>This course emphasizes application, review, and further assimilation of the guitar techniques and music theory concepts covered in MUSC 270. Progressively more advanced chord and scale forms will be covered. Students are encouraged to begin developing improvisational skills essential to most rock and popular music styles. Student must provide guitar.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 283 Private Voice Commercial 2</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is a private lesson, 60 minutes per week, for commercial music majors emphasizing techniques and style specifically related to commercial music. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 273 Advanced Musicianship I 4</p> <p>Semester Prerequisite: MUSC 174</p> <p>This course is a continuation of the first year of training in the elements of music theory acquired in MUSC 173 and 174. The student will learn such advanced elements of harmony as modulation, Phrygian II chords, augmented sixth chords, and chromatic voice leading techniques. The basic principles of musical form will be introduced and the student will continue with more advanced training in sightsinging and ear training. Students are required to attend live performances.</p> <p>Semester Planned: Fall</p>	<p>MUSC 284 Private Instrument Commercial 1</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is a private lesson, 40 minutes per week, for commercial music majors emphasizing techniques and style specifically related to commercial music. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 274 Advanced Musicianship II 4</p> <p>Semester Prerequisite: MUSC 273</p> <p>After the study of classical harmony is completed and the study of basic musical form begun in MUSC 273, MUSC 274 takes up with the study of the major classical forms including variation, sonata, rondo and concerto forms. Counterpoint and nineteenth century harmony as well as jazz, set theory and twelve-tone theory will be studied. Advanced training in ear training and sightsinging will continue. This course is the second in a two-course music theory and ear training sequence as a sophomore requirement for a four-year college music degree. Students are required to attend live performances.</p> <p>Semester Planned: Spring</p>	<p>MUSC 285 Private Instrument Commercial 2</p> <p>Semester Prerequisite: Audition Approval</p> <p>This course is a private lesson, 60 minutes per week, for commercial music majors emphasizing techniques and style specifically related to commercial music. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 276 Lyric Writing 2</p> <p>Semester Prerequisite: None</p> <p>This course introduces students to the craft of writing song lyrics. The work of professional songwriters as well as the students' work will be examined and discussed. Students are required to attend live performances.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>MUSC 286 Private Keyboard Commercial 1</p> <p>Semester Prerequisite: Audition Approval</p> <p>Private lesson, 40 minutes per week, for commercial music majors emphasizing techniques and style specifically related to commercial music. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 278 Rock Percussion 1</p> <p>Semester Prerequisite: None</p> <p>This course allows students to gain an understanding of rock music rhythms and concepts of notation and rudiments through an emphasis on progressive work in percussion techniques. Rock Percussion will demonstrate prevailing performance practice on a drum set. Students are required to attend live performances.</p> <p>Semester Planned: Fall</p>	<p>MUSC 287 Private Keyboard Commercial 2</p> <p>Semester Prerequisite: Audition Approval</p> <p>Private lesson, 60 minutes per week, for commercial music majors emphasizing techniques and style specifically related to commercial music. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>

MUSC 288 Private Guitar Commercial	1	NURS 210 LPN-RN Transition	2
Semester Prerequisite: Audition Approval Private lesson, 40 minutes per week, for commercial music majors emphasizing techniques and style specifically related to commercial music. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. May be taken up to six semesters for credit. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Departmental Approval Introduces the returning Licensed Practical Nurse (LPN) to the nursing process, patient records, role transition, and curriculum concepts. Assessment and evaluation of nursing skills will be done. Semester Planned: Fall, Spring	
MUSC 289 Private Guitar Commercial	2	NURS 260 Nursing Process IV: Family Health II	5
Semester Prerequisite: Audition Approval Private lesson, 60 minutes per week, for commercial music majors emphasizing techniques and style specifically related to commercial music. Enrollment is by audition only. Auditions held the Friday prior to fall semester or as requested during fall and spring semester juries. May be taken up to six semesters for credit. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: NURS 160, NURS 165, Admission to Program The student is expected to use the nursing process in caring for clients adapting to psychosocial health problems including the high risk mother and infant. Emphasis is placed on therapeutic communication skills. Clinicals are in psychiatric and maternal units of acute care hospitals and day treatment facilities and community sites. Semester Planned: Fall, Spring	
MUSC 297 Synthesizers and Computer Music I	2	NURS 265 Nursing Process V: Family Health III	5
Semester Prerequisite: Instructor Approval This course introduces students to the role of computers in the music discipline. Topics include historical overview, sound synthesis techniques, synthesis hardware and signal processing, computer-assisted analysis, and instruction on DEC, VAX 11/780, IBM personal computers, and a digital synthesizer. Students are required to attend live performances. Semester Planned: Fall		Semester Prerequisite: NURS 160, NURS 165, Admission to Program Concepts of illness in children are discussed utilizing a systems perspective. Students are expected to integrate the nursing process and course concepts into their care of children in hospital acute care maternity units, pediatric units and other selected health care settings. Semester Planned: Fall, Spring	
MUSC 298 Synthesizers and Computer Music II	2	NURS 280 Nursing Process VI: Chronic Health Problems	4
Semester Prerequisite: MUSC 297 This course allows students to further their understanding of sound synthesis techniques using a personal computer and a digital synthesizer. This course is an extension of MUSC 297 with emphasis on advanced synthesis technique, performance, and composition. Students are required to attend live performances. Semester Planned: Spring		Semester Prerequisite: NURS 260, NURS 265, MICR 203, MICR 204 The student will use the nursing process in caring for adult clients adapting to chronic health problems. Client adaptation to chronic illness, selected neurological and immune system problems, cancer, AIDS, and care of the dying client is discussed. Clinical experiences in nursing homes, home health care agencies, and selected community facilities. Semester Planned: Fall, Spring	
NURS 150 Nursing Process I: Introduction to Nursing	9	NURS 285 Nursing Process VII: Acute/Critical Health Problems	4
Semester Prerequisite: Admission to Program The nursing process is presented as a critical thinking/problem-solving technique to provide health care. Assessment skills and therapeutic communication skills presented. The scope of nursing practice is defined, specifically legal, ethical, and professional considerations. Aging and grieving processes emphasized. Clinicals in nursing homes, extended care facilities, and hospitals. Semester Planned: Fall, Spring		Semester Prerequisite: NURS 260, NURS 265, MICR 203, MICR 204 The student will use the nursing process in caring for adult clients adapting to critical health problems. Homeostatic changes in the neurological, cardiovascular, and respiratory systems is discussed, as well as fluid-electrolyte and acid-base imbalance. Clinical experiences are in acute care hospitals. Semester Planned: Fall, Spring	
NURS 160 Nursing Process II: Common Acute Health Problems	6	NURS 290 Nursing Process VIII: ADN as Provider and Manager of Care	3
Semester Prerequisite: PHGY 202, NURS 150, NURS 200 Students are assisted in using the nursing process in the care of adults adapting to common acute health problems. Pathophysiology and nursing interventions affecting the cardiovascular, respiratory, endocrine, gastrointestinal, neurological, and musculoskeletal body systems is presented. Clinical in acute care hospital systems. Semester Planned: Fall, Spring		Semester Prerequisite: NURS 280, NURS 285 Concurrently The role of the nurse as manager of care and the role of the associate degree nurse within the discipline of nursing are presented. Students are expected to use the nursing process with various management systems within a health care system. Clinicals in acute care hospitals and nursing homes. Semester Planned: Fall, Spring	
NURS 165 Nursing Process III: Family Health I	5	OADM 102 Proofreading	1
Semester Prerequisite: NURS 150, PSYC 205, Admission to Program The concepts of parenting, therapeutic communication, cultural diversity, and human sexuality are discussed. Assessment and care of the childbearing family is presented. Basic needs and developmental tasks of early childhood through adolescence are discussed along with effects of change in family systems. Clinicals are in maternal-child units of acute care hospital systems and the community. Semester Planned: Fall, Spring		Semester Prerequisite: None This course teaches office personnel applied editing skills for business documents and emphasizes locating and correcting errors in typing, word division, format, numbers, word usage, capitalization, and punctuation. Grammar rules will be reviewed as needed. Classroom activities may require completion of some exercises in one of the computer labs. Semester Planned: Fall, Spring, Summer	
NURS 180 Practical Nursing Role	1	OADM 104 College Gregg Shorthand I	4
Semester Prerequisite: NURS 160, NURS 165/Concurrently Examines the role of the practical nurse, ethical and legal dimensions of practice, professional organizations, differentiated practice, nursing issues, role transition, and preparation for employment. Required to be eligible for NCLEX-PN (National Council Licensing Examination-Practical Nurse). Semester Planned: Fall, Spring		Semester Prerequisite: CABS 101/CPOA 103/Placement Test This course teaches principles of Gregg shorthand and basic business vocabulary and is offered for students who have had no previous Gregg shorthand experience. A minimum performance level of 60 wpm for two minutes at 96 percent accuracy is required before advancing to Shorthand II. Semester Planned: Fall	
NURS 200 Pharmacology	3	OADM 105 College Gregg Shorthand II	4
Semester Prerequisite: PHGY 202 Recommended, Admission to Program This course is recommended for students who wish to transfer to a BSN program. Drug categories are discussed in depth as well as nursing responsibilities associated with medication administration. Students are expected to calculate drug dosages. Semester Planned: Fall, Spring		Semester Prerequisite: OADM 104/Equivalent This course emphasizes skills developed in Shorthand I in addition to developing greater ability in taking and transcribing dictation. Minimum level is 80 wpm for two minutes at 98 percent accuracy. Semester Planned: Spring	

<p>OADM 107 Business Calculating Machines 1</p> <p>Semester Prerequisite: OADM 117/MATH 117/Previous Math</p> <p>This course utilizes the 10-key adding machine, calculator, and electronic printing calculators; operations of addition, subtraction, multiplication, and division; plus business-type problems dealing in percentages, interest, etc.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>OADM 206 Legal Vocabulary and Forms Preparation 3</p> <p>Semester Prerequisite: None</p> <p>This course utilizes basic legal terminology in general and specialized areas of law. It defines legal terms and their use in legal context and stresses forms preparation.</p> <p>Semester Planned: Fall, Spring</p>
<p>OADM 110 Machine Transcription 3</p> <p>Semester Prerequisite: CABS 105/OADM 100, WRIT 114/OADM 125</p> <p>This course consists of three sessions: (1) basic word processing; (2) principles of effective letter writing; and (3) records management, including creation, protection, storage, and disposition of business records.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>OADM 207 Medical Transcription 3</p> <p>Semester Prerequisite: OADM 197/CHSE 121, OADM 102, Computer Experience</p> <p>This course is designed to develop skill in defining and transcribing medical reports with the use of transcriber and microcomputer. Emphasis is on development of accuracy and knowledge of medical terminology for the transcription of medical reports.</p> <p>Semester Planned: Fall, Spring</p>
<p>OADM 114 College Speedwriting 4</p> <p>Semester Prerequisite: CABS 101/CPOA 103/Equivalent</p> <p>Students will learn an alphabetic shorthand. The minimum performance level for dictation and transcription is 70 wpm for three minutes at 96 percent accuracy.</p> <p>Semester Planned: Fall, Spring</p>	<p>OADM 215 Records and Information Management I 3</p> <p>Semester Prerequisite: None</p> <p>This course includes managing the creation, protection, storage, and disposition of business records; alphabetic indexing; the foundation of other storage methods; selection of proper equipment; and procedures for the operation and control of filing methods and systems.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>OADM 150 Certified Professional Secretaries (CPS) Review I 3</p> <p>Semester Prerequisite: None</p> <p>Discussion of the secretary's proficiency in office administration and communication. Executive travel, office management, records management and reprographics, written business communications, editing, abstracting, and preparing communications in the final format.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>OADM 216 Records and Information Management II 4</p> <p>Semester Prerequisite: OADM 215</p> <p>This course familiarizes students with the aspects of micrographics and the study of planning, organizing, and controlling records and information management systems. Management of both paper- and electronic-based forms and documents will include design, analysis, usage, retention, and disposal procedures for manual and electronic systems.</p> <p>Semester Planned: Fall, Spring</p>
<p>OADM 155 Certified Professional Secretaries (CPS) Review II 3</p> <p>Semester Prerequisite: None</p> <p>This course covers the basics of office technology and behavioral science. Topics include automated office systems, telecommunication and problem solving.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>OADM 220 Administrative Office Management 4</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Reading Level 2; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule)</p> <p>This course emphasizes the principles of office management and the role of an office as a service center. Office functions, structure and design, workflow, procedures, job analysis, and issues relating to human resources are covered.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>OADM 195 Human Behavior in the Work Place 3</p> <p>Semester Prerequisite: None</p> <p>This course emphasizes the importance of the skill of human relations in the workplace. Through a combination of case studies, self-analysis exercises, and discussion, students become more aware of the impact of positive interactions at work. Proficiency in enhancing good human relations and in handling difficult situations is stressed.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>OADM 222 Advanced Medical Transcription 4</p> <p>Semester Prerequisite: 3.0 Minimum in OADM 207/CPOA 207</p> <p>This course is designed to equip students with entry-level medical transcription skills. This course incorporates advanced medical terminology and actual physician dictation from a wide variety of medical specialties.</p> <p>Semester Planned: Spring</p>
<p>OADM 197 Medical Vocabulary 3</p> <p>Semester Prerequisite: None</p> <p>This course provides instruction in spelling, definition structure, and concepts of medical terminology using a body-systems approach. Requires good study skills.</p> <p>Semester Planned: Fall, Spring</p>	<p>OADM 230 Seminar: Special Subjects .5</p> <p>Semester Prerequisite: None</p> <p>Classroom instruction is given on special topics of current interest to office personnel. Topics for each seminar vary.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>OADM 198 Medical Record Management 3</p> <p>Semester Prerequisite: OADM 197</p> <p>This course is a concentrated study of the health-care providers, control reimbursement, legal, and quality assurance systems which affect the maintenance of the medical record in various health-care delivery settings.</p> <p>Semester Planned: Fall, Spring</p>	<p>OADM 231 Seminar: Special Subjects .75</p> <p>Semester Prerequisite: None</p> <p>Classroom instruction is given on special topics of current interest to office personnel. Topics for each seminar vary.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>OADM 200 Critical Thinking 3</p> <p>Semester Prerequisite: None</p> <p>Critical thinking is designed to provide basic and higher-order thinking skills including reasoning, creative thinking, decision making, and problem solving. Emphasis is placed on gaining proficiency in critical awareness to enable students to confidently appraise and discriminate information, problems, issues, etc., whether in a societal, educational, or organizational setting.</p> <p>Semester Planned: Fall, Spring</p>	<p>OADM 232 Seminar: Special Subjects 1</p> <p>Semester Prerequisite: None</p> <p>Classroom instruction is given on special topics of current interest to office personnel. Topics for each seminar may vary.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>OADM 203 Professional Office Procedures 1</p> <p>Semester Prerequisite: None</p> <p>The topics of this course include ergonomics, telephone techniques, handling incoming and outgoing mail, writing certain office documents such as minutes and reports, planning meetings and travel arrangements, and managing office finances. Computer usage may be emphasized.</p> <p>Semester Planned: Spring</p>	<p>OADM 240 Office Internship 3</p> <p>Semester Prerequisite: Coordinator Approval</p> <p>This course is designed to provide on-the-job training relating to an office administration major. Placement is made in an approved training station to earn credits for satisfactory work performance and to earn wages for work performed. Volunteer work may be substituted for earning wages. Minimum of 160 hours work is required.</p> <p>Semester Planned: Fall, Spring, Summer</p>

OADM 275 Cultural Differences in Business	3	PARA 252 Skills II	3
Semester Prerequisite: None This course is designed to help students become familiar with, understand, and appreciate people from different cultures to promote a more effective basis for working together in the business world. Emphasis and application is placed upon business etiquette and business practices as they differ in various cultures. Semester Planned: Fall, Spring		Semester Prerequisite: PARA 251 This course is a continuation of Skills I with similar demonstration/practice format. Several new competencies will be introduced. Measurement criteria for Skills I competencies become more stringent. Although geared to field setting, some skills necessary for hospital practice included. ACLS certification will be completed. Semester Planned: Spring, Summer	
OCNL 225 Basic Oceanology	4	PARA 261 Clinical I	5
Semester Prerequisite: 2.0 Minimum in MATH 062/Placement Test An introduction to the modern ocean science describing the basic geological, chemical, physical and biological marine processes necessary to the comprehensive understanding of the ocean environment. Complementary laboratory exercises and a field trip are included to provide students with hands-on experience. Semester Planned: Fall		Semester Prerequisite: Admission to Program This course provides clinical time for paramedic students in the first semester. Time will be spent in nursing homes, hospitals including ED, CCU, ICU, Burn Unit, and OB. Time will also be spent in simulations on campus and designated EMS agencies under licensed paramedics. Semester Planned: Fall, Spring	
PARA 221 Medical Trauma I	4	PARA 262 Clinical II	5
Semester Prerequisite: Admission to Program This course builds on previous knowledge acquired as Basic EMT. Provides theoretical background material for management of prehospital emergencies. Course includes roles and responsibilities, anatomy/physiology, airway maintenance, par-entheral therapy, assessment and management of respiratory, maternal, neonatal, and pediatric emergencies. Semester Planned: Fall, Spring		Semester Prerequisite: PARA 261 This course provides clinical time for paramedic students in the second semester. Time will be spent in hospitals, including ED, CCU, ICU, Burn Unit, OB, Peds, Psych Unit, OR, and Morgue. Time will also be spent in simulations on campus and designated EMS agencies under licensed paramedics. Semester Planned: Spring, Summer	
PARA 222 Medical Trauma II	4	PARA 263 Advanced Life Support	2
Semester Prerequisite: PARA 221 PARA 222 incorporates previous knowledge of Basic EMT and PARA 221. Provides theoretical background material for management of prehospital emergencies including assessment and management of neurological, behavioral, abdominal, metabolic, geriatric, and multiple trauma patients. The principles of triage, management of mass casualty incidents, and telecommunications are also included. Semester Planned: Spring, Summer		Semester Prerequisite: Semester I Courses This course provides field internship with paramedic agency and testing for certification in Advanced Cardiac Life Support. Semester Planned: Fall, Spring	
PARA 231 Cardiology I	2	PFAQ 100 Swimming: Primary Skills	1
Semester Prerequisite: Admission to Program This is a course to enable paramedic students to read EKG rhythm strips. It will give them background and understanding of the anatomy, physiology, electro-physiology, and pathophysiology of the heart and cardiovascular system. Much emphasis will be placed on arrhythmia interpretation, treatment modalities, and patient management. Semester Planned: Fall, Spring		Semester Prerequisite: None This course focuses on the development of basic swimming strokes, rhythmic breathing, survival swimming, and beginning diving skills. Semester Planned: Fall, Spring, Summer	
PARA 232 Cardiology II	2	PFAQ 101 Swimming: Stroke Development	1
Semester Prerequisite: PARA 231 This course utilizes information learned in PARA 231 as a basis for more advanced arrhythmia interpretation. Management of cardiac arrest including medications, cardioversion, and defibrillation will be a major emphasis. Pacemakers, other advanced procedures, and arrhythmia will be presented. Application of information, judgement and decision-making are evaluated. Semester Planned: Spring, Summer		Semester Prerequisite: PFAF 100/PFAQ 100 This course stresses development of skills in front crawl and backstroke. Students will be introduced to the elementary backstroke and breaststroke. Semester Planned: Fall, Spring, Summer	
PARA 241 Pharmacology I	2	PFAQ 102 Swimming: Stroke Refinement	1
Semester Prerequisite: Admission to Program This is the first course in a two-course sequence. It is designed to give the student background information necessary for the preparation and administration of drugs used in the field. ACLS drugs will be covered in depth. Semester Planned: Fall, Spring		Semester Prerequisite: PFAF 101/PFAQ 101 This course builds upon the stroke development level skills. Skill development is placed on front crawl and rhythmic breathing, breaststroke, diving, and survival swimming skills. Emphasis is placed on polishing strokes and increasing swim- ming distances. Semester Planned: Fall, Spring, Summer	
PARA 242 Pharmacology II	2	PFAQ 104 Swimming/Training	1
Semester Prerequisite: PARA 241 This is the second course in a two-course sequence. In-depth information on ACLS drugs will be covered. Common drugs that paramedics administer in the field will also be covered. Drug classification, action, use, and side effects are included. Semester Planned: Spring, Summer		Semester Prerequisite: None This course is designed for persons interested in skill development in all compet- itive swimming strokes as well as in a fitness program design. The student should be able to swim 500 yards in ten minutes. Semester Planned: Fall, Spring, Summer	
PARA 251 Skills I	3	PFAQ 105 Advanced Swimming/Training	2
Semester Prerequisite: Admission to Program Skills I will introduce and evaluate competency of most manual skills required in a paramedic curriculum. These skills will be demonstrated and supervised during practice. It is necessary that the student have adequate basic EMT skills upon entry, as these will be updated and tested. Semester Planned: Fall, Spring		Semester Prerequisite: None This course is designed for the competitive swimmer seeking a high level of swimming. Advanced swimming/training incorporates some dry land training and waterpolo. Semester Planned: Fall, Spring, Summer	
		PFAQ 106 Water Walking/Toning	1
		Semester Prerequisite: None This course utilizes a variety of walking moves in shallow water to enhance cardio-vascular fitness. Toning exercises for arms, abdominal and thighs are used exten- sively. Semester Planned: Fall, Spring, Summer	
		PFAQ 107 Water Exercise I	1
		Semester Prerequisite: None This course utilizes stationary water exercises and water games to improve cardiovascular fitness and flexibility. Semester Planned: Fall, Spring, Summer	

<p>PFAQ 108 Water Exercise II 1</p> <p>Semester Prerequisite: None</p> <p>This course uses stationary water exercise and an introduction to swimming techniques to improve cardiovascular fitness. Wall exercises and water jugs are used to increase strength and flexibility.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFAQ 118 Arthritis Aquatics 1</p> <p>Semester Prerequisite: Physician Referral</p> <p>This course will give the student exercises for range of motion in comfortable water temperatures and will improve and help maintain flexibility and well being.</p> <p>Semester Planned: Fall, Spring</p>
<p>PFAQ 109 Water Exercise-Plus 2</p> <p>Semester Prerequisite: None</p> <p>This course is an intensive water fitness exercise program designed to increase cardiovascular output and muscle strength. Students use water movements to increase flexibility and strength.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFAQ 119 Scuba Certification Class 1</p> <p>Semester Prerequisite: PFAQ 112/PEAF 112/Equivalent</p> <p>This course is designed to allow students who have completed scuba PFAQ 112/PEAF 112 or equivalent to complete their open water scuba certification training. Upon successful completion of the class, the student will receive Scuba Schools International's open water certification.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFAQ 110 Hydro-Fit Exercise I 1</p> <p>Semester Prerequisite: None</p> <p>This course is designed to give the student an overall water fitness workout with little impact to joints or back. The class is held in deep water while exercising with Hydro-Fit weights. Participants must be comfortable in deep water.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFCW 100 Fencing: Beginning 1</p> <p>Semester Prerequisite: None</p> <p>This course is designed to introduce the student to basic skills and theories in foil fencing. Course emphasis is placed on twelve basic skills: advance, retreat, lunge, disengage, coupé, one-two doublé, reposte, counter parry and reposte, and advance-lunge.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFAQ 111 Hydro-Fit Exercise II 2</p> <p>Semester Prerequisite: PFAQ 110/PEAF 110</p> <p>This course is a water fitness program using water resistance to tone, strengthen, develop coordination and increase flexibility by using Hydro-Fit exercise equipment. Emphasis is placed on increasing abdominal, shoulder/arm, and lower body strength.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFCW 101 Fencing: Intermediate 1</p> <p>Semester Prerequisite: PFCW 100/PEAG 100</p> <p>This course builds upon the twelve basic fencing skills and introduces rules and complex fencing movements. Students will use acquired skills in fencing bouts.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFAQ 112 Scuba 2</p> <p>Semester Prerequisite: None</p> <p>This course is a basic course in scuba diving. The course includes both classroom and pool training instruction. Upon successful completion of class, the student is eligible for scuba certification following open water training.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFCW 102 Fencing: Advanced 1</p> <p>Semester Prerequisite: PFCW 101/PEAG 101</p> <p>This course reviews the basic skills of fencing and its rules. Students will be introduced to a sequence of fencing movements in foil fencing as well as limited use of Sabre and Epee.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFAQ 113 Scuba: Advanced 2</p> <p>Semester Prerequisite: PFAQ 112/PEAF 112</p> <p>This course is designed for certified divers who wish to further their scuba diving skills and knowledge. Topics covered will include diving equipment, underwater navigation, stress and rescue, limited visibility and night diving, dry suit diving, and underwater photography. Certification as an advanced and/or specialty diver is available with optional open water training.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFCW 103 Judo: Beginning 1</p> <p>Semester Prerequisite: None</p> <p>This course is designed to familiarize students with basic Judo techniques of falling, throwing and grappling.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFAQ 114 Parent/Infant Water Adjustment .5</p> <p>Semester Prerequisite: None</p> <p>This course places emphasis on parent/infant water adjustment, safety and fun. Emphasis is placed on development of water experience and improvement of motor skills and coordination. (Infant ages between 6 months–2 years.)</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFCW 104 Judo: Intermediate 1</p> <p>Semester Prerequisite: PFCW 103/PEAG 103</p> <p>This course works toward a series of sequential Judo movements with continued emphasis on throwing and grappling.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFAQ 115 Parent/Toddler Water Adjustment .5</p> <p>Semester Prerequisite: PFAQ 114/PEAD 113</p> <p>This course places emphasis on parent/toddler water adjustment, skill development, safety and fun. Emphasis is on development of water experiences, improvement of motor development, coordination, and social skills. Toddlers should be 2–5 years old, depending upon skill development and/or instructor approval.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFCW 105 Karate: Beginning 1</p> <p>Semester Prerequisite: None</p> <p>This course introduces the basic skills of karate: kicking with the feet and knees and punching with the fist and hands.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFAQ 116 Parent/Child Swim .5</p> <p>Semester Prerequisite: PFAQ 115/PEAD 114</p> <p>This course focuses on parent/child water skill development, socialization skills and safety. Individualized instruction is given for advancement of motor skills and coordination in the aquatic environment. Children should be 4–5 years old and/or instructor's approval.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFCW 106 Karate: Intermediate 1</p> <p>Semester Prerequisite: None</p> <p>This course further develops karate skills in punching with the fists and hands, kicking with feet and knees and essential body movement in combative activities with an emphasis on free sparring.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFAQ 117 Waterpolo 1</p> <p>Semester Prerequisite: None</p> <p>This course is an introduction to the basic skills of waterpolo. Students will work on passing, shooting, and dribbling skills which will then be integrated into a team concept.</p> <p>Semester Planned: Fall, Spring</p>	<p>PFCW 107 Karate: Advanced 1</p> <p>Semester Prerequisite: PFCW 106/PEAG 106</p> <p>This course places primary emphasis on the development of sparring techniques as they relate to punching and kicking. Students spar and move toward the competitive aspect of Karate as a martial art.</p> <p>Semester Planned: Fall, Spring, Summer</p>
	<p>PFCW 108 Weight Training: Beginning 2</p> <p>Semester Prerequisite: None</p> <p>This course is designed to promote physical fitness through weight training. Instruction will include different principles, methods and techniques for progressive resistance training. Students will design a program of their choice with emphasis on weight reduction, muscle strengthening and body building with an aerobic component.</p> <p>Semester Planned: Fall, Spring, Summer</p>

PFCW 109 Body Building: Introduction	1	PFDA 153 Cha Cha/Mambo Workshop	.5
Semester Prerequisite: None This course is designed to introduce weight training and proper lifting techniques. Introduction to safety rules, proper use of machinery and concepts of lifting will be emphasized. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Introductory course in the Latin ballroom dances Cha Cha and Mambo covering basic components of partnership dancing and basic patterns of movement, footwork, technique, and style. Semester Planned: Fall, Spring, Summer	
PFCW 110 Body Building: Beginning	2	PFDA 154 Tango/Samba Workshop	.5
Semester Prerequisite: None This course acquaints students with the beginning aspects of body structuring through the application of weights. Emphasis on weight reduction or increase in muscle size through an individualized training program is stressed. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Introductory course in the Latin ballroom dances Tango and Samba, covering basic components of partnership dancing and basic patterns of movement, footwork, technique, and style. Semester Planned: Fall, Spring, Summer	
PFCW 111 Body Building: Intermediate	2	PFDA 155 Ballroom Hustle Workshop	1
Semester Prerequisite: PEAG 109/PFCW 109 This course expands the student's ability to use machines and free weights to increase variations and methods of lifting techniques. Students will also monitor food intake to provide information to assist with proper diet and nutritional needs. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Designed to introduce students to hustle dance steps and styling. Emphasis is on effective partnering, mastering basic patterns, and adapting dance to varieties of music. Class usually includes field trips to local dance venues. Semester Planned: Fall, Spring, Summer	
PFDA 141 Ballroom Topics	1	PFDA 156 Ballroom II	1
Semester Prerequisite: None This course will focus on one or two dances for in-depth study. Introduction to partnership technique, dance posture, basic patterns, and music appropriate for the dance(s) selected. Dances will be selected that reflect student interest, new partnership dance forms, or current popular trends. Enrollment with a partner is strongly encouraged. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: DANC 142/PFDA 142/Departmental Approval This course is designed to build on the skills and techniques introduced in Ballroom I, Latin Ballroom I, Ballroom Swing I or Special Topics. Emphasis will be placed on the following dance styles: Waltz, Fox Trot, Cha Cha, Rumba and Swing. Enrollment with a partner is strongly recommended. Semester Planned: Fall, Spring, Summer	
PFDA 142 Ballroom Swing I	1	PFDA 157 Ballroom III	1
Semester Prerequisite: None Introduction to the study of Ballroom Swing including partnership technique, dance posture, basic patterns, music and style of the Swing dances. Includes introduction to dances using different styles and speeds of music such as East Coast Swing, West Coast Swing, Jitterbug and Jive. Enrollment with a partner is strongly recommended. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: DANC 152/PFDA 152/DANC 156/PFDA 156 This is an advanced course in traditional ballroom designed to build on the techniques introduced in Ballroom II, Bronze or Latin Ballroom II. Emphasis will be placed on the following dance styles: Waltz, Fox Trot, Cha Cha, Rumba and Swing. Enrollment with a partner is strongly recommended. Semester Planned: Fall, Spring, Summer	
PFDA 143 Ballroom Western Swing	1	PFFT 100 Total Fitness A	2
Semester Prerequisite: None Techniques, patterns, movements, and styles of Western swing dancing. Includes evaluations of the differences in movement, rhythms, and techniques of various styles. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This course is a comprehensive fitness course with a view toward the whole person. Students will be given a fitness assessment, including aerobic capacity, body composition, flexibility, and strength. Students will receive a computer-generated exercise plan tailored to individual needs. Semester Planned: Fall, Spring, Summer	
PFDA 145 Ballroom Swing II	1	PFFT 101 Total Fitness B	2
Semester Prerequisite: DANC 141/PFDA 141/DANC 142/PFDA 142/Departmental Approval Course designed to build on the techniques introduced in Ballroom Swing I. Includes dances using different styles and speeds of music such as East Coast Swing, West Coast Swing, Jitterbug and Jive. New steps and syncopated rhythms will be introduced. Enrollment with a partner is strongly recommended. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This course views the whole person's fitness needs. Students will be given a fitness assessment, including aerobic capacity, body composition, flexibility, and strength. Students will receive a computer-generated exercise plan tailored to individual needs. Nutritional aspects of health will be discussed. Semester Planned: Fall, Spring, Summer	
PFDA 147 Latin Ballroom I	1	PFFT 102 Total Fitness C	2
Semester Prerequisite: None This course includes an introduction to partnership technique, dance posture, basic patterns and music for Latin partnership dancing. Dances will be selected from the following: Cha Cha, Rumba, Mambo, Merengue, Salsa, Samba and Tango. Enrollment with a partner is strongly recommended. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This course is a comprehensive fitness course with a view of the whole person. Students will be given a fitness assessment, including aerobic capacity, body composition, circuit-training, and strength. Students will receive a computer-generated exercise plan tailored to individual needs. Nutritional aspects of health will be discussed as well as stress reduction techniques. Semester Planned: Fall, Spring, Summer	
PFDA 151 Ballroom Bronze I Workshop	1	PFFT 103 Total Fitness D	2
Semester Prerequisite: None Introduction to the study of ballroom including partnership technique, dance posture, basic patterns, and music for traditional ballroom dances including Waltz, Fox Trot, Cha Cha, Rumba and Swing. Enrollment with a partner is strongly suggested. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This course involves students in planning a fitness regimen. Students will be given a fitness assessment, including aerobic capacity, body composition, flexibility, and strength. Students will receive a computer-generated exercise plan tailored to individual needs. Nutritional aspects of health and stress reduction techniques will be discussed as part of daily lifestyles. Semester Planned: Fall, Spring, Summer	
PFDA 152 Latin Ballroom II	1	PFFT 104 Air Ball Exercises	1
Semester Prerequisite: DANC 141/PFDA 141/DANC 142/PFDA 142/DANC 147/PFDA 147 This course is designed to build on the techniques introduced in Latin Ballroom I, Ballroom I, Ballroom Swing I or Ballroom Topics. Emphasis will be placed on the following dance styles: Cha Cha, Rumba, Mambo, Samba, Salsa, Merengue and Tango. Enrollment with a partner is strongly recommended. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This course will help the student to improve spinal stabilization strength and spinal mobility, muscular strength and flexibility, balance and coordination, and generally tone and strengthen the body. Semester Planned: Fall, Spring, Summer	

<p>PFFT 105 Aerobic Walking 2</p> <p>Semester Prerequisite: None</p> <p>This course centers on improving one's fitness level through outdoor walking at an individually determined speed. Students will also develop a personalized healthy lifestyle plan which integrates exercise, diet, and stress management.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFHW 100 Health and Wellness Seminar 5</p> <p>Semester Prerequisite: None</p> <p>This course introduces the student to eight hours of various topics related to health awareness, wellness and/or prevention.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFFT 107 Jogging: Beginning 1</p> <p>Semester Prerequisite: None</p> <p>This course introduces jogging as a fitness modality and covers how to care for feet, proper equipment choices, clothing, and safety.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFHW 101 Health and Wellness Seminar 1</p> <p>Semester Prerequisite: None</p> <p>This course introduces the student to health and wellness issues. This information encompasses areas of awareness for changing attitudes/lifestyles, issues of prevention, techniques for management of health, and more.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFFT 110 Fitness Maintenance 2</p> <p>Semester Prerequisite: None</p> <p>This course is for students with prior experience and knowledge in physical fitness-related activities and a desire to continue fitness maintenance.</p> <p>Semester Planned: Fall, Spring</p>	<p>PFHW 108 Emergency Services Health Awareness 1</p> <p>Semester Prerequisite: None</p> <p>Emergency services health awareness introduces the future emergency service student to health and wellness issues. This information includes changing attitudes/lifestyles, issues of prevention, techniques for management of health and more.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFFT 112 Body Flexibility 1</p> <p>Semester Prerequisite: None</p> <p>This course is designed to increase body flexibility by learning proper stretching techniques and applying these techniques to increase muscle and joint flexibility.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFHW 109 Emergency Services Fitness I 1</p> <p>Semester Prerequisite: Emergency Services Student</p> <p>This course provides emergency service students with techniques and practice to maintain and improve the high degree of physical fitness necessary to meet the demands of their profession.</p> <p>Semester Planned: Fall, Spring</p>
<p>PFFT 113 Tone and Stretch 1</p> <p>Semester Prerequisite: None</p> <p>This course combines calisthenics and stretching. Students will use floor exercises to tone muscles and increase flexibility. Proper stretching techniques as well as which muscle groups are being worked will be examined.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFHW 110 Emergency Services Fitness II 1</p> <p>Semester Prerequisite: Emergency Services Student</p> <p>A continuation of PFHW/PEAK 109. This course provides emergency service students with techniques and practice to maintain and improve the high degree of physical fitness necessary to meet the demands of their profession.</p> <p>Semester Planned: Fall, Spring</p>
<p>PFFT 120 Aerobic Exercise 2</p> <p>Semester Prerequisite: None</p> <p>This course helps students to improve cardiovascular function and oxygen efficiency to enhance muscle structure and function through toning exercises, aerobic dancing, and stretching.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFHW 111 Emergency Services Fitness III 1</p> <p>Semester Prerequisite: Emergency Services Student</p> <p>A continuation of PFHW/PEAK 110. This course provides emergency service students with techniques and practice to maintain and improve the high degree of physical fitness necessary to meet the demands of their profession.</p> <p>Semester Planned: Fall, Spring</p>
<p>PFFT 121 Aerobic Maintenance 2</p> <p>Semester Prerequisite: PEAB 120/PFFT 120</p> <p>This course is designed to increase aerobic capacity through progressive levels of time and intensity using low, moderate or high impact movement. All movements may be modified to the intensity level of the individual student.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFHW 112 Emergency Services Fitness IV 1</p> <p>Semester Prerequisite: Emergency Services Student</p> <p>A continuation of PFHW/PEAK 111. This course provides emergency service students with techniques and practice to maintain and improve the high degree of physical fitness necessary to meet the demands of their profession.</p> <p>Semester Planned: Fall, Spring</p>
<p>PFFT 135 T'ai Chi 2</p> <p>Semester Prerequisite: None</p> <p>Introduction to Zazen meditation and basic principles of T'ai Chi. Course covers first sixty-four movements in the Yang school of T'ai Chi Chuan.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFHW 123 Human Nutrition 3</p> <p>Semester Prerequisite: Biology Recommended</p> <p>An introductory course in human nutrition. Topics include the role of nutrients; digestion, absorption and metabolism of nutrients; role of vitamins and minerals; and the introduction of current and controversial topics when relevant. Such topics can include fad diets, obesity, nutrition of athletes, food labels, alcohol, sugar, and food additives.</p> <p>Semester Planned: Fall, Spring</p>
<p>PFFT 136 Dance Exercise 1</p> <p>Semester Prerequisite: None</p> <p>This course includes warm-ups and exercises from various dance genres including ballet, modern, and jazz designed to develop flexibility, strength and coordination. Emphasis is placed on toning and stretching.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFHW 131 Osteoporosis Prevention I 2</p> <p>Semester Prerequisite: None</p> <p>This course introduces the student to principles that can aid in the prevention of osteoporosis. The student will learn risk factors, nutritional information, and progressive strength and flexibility exercises related to osteoporosis prevention.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFHC 150 Cardiac Education .5</p> <p>Semester Prerequisite: None</p> <p>This course introduces the student to information about the cardiac disease process, rehabilitation, and prevention techniques. The student will learn the role exercise, diet and stress plays in heart disease.</p> <p>Semester Planned: Fall, Spring</p>	<p>PFHW 132 Osteoporosis Prevention II 1</p> <p>Semester Prerequisite: HFWE 131/PFHW 131</p> <p>This course continues the focus on osteoporosis prevention. The student will continue progressive strength and flexibility exercises, current research, and nutrition information.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFHC 151 Cardiac Rehabilitation Exercise 3</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This continuing course includes medically monitored exercise and education, which emphasizes reducing the risk factors known to contribute to heart disease. Methods and level of exercise are determined by the participant's physician and the program medical director. Monitored by professional staff.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFHW 145 Nutrition: Critical Issues 2</p> <p>Semester Prerequisite: None</p> <p>This course introduces the student to nutrition and its role in promoting better health. The student will learn concepts and controversies in nutrition including vitamin supplements, natural foods, and other related topics.</p> <p>Semester Planned: Fall, Spring, Summer</p>

<p>PFHW 146 Choice for Change Weight Control Program 1</p> <p>Semester Prerequisite: None</p> <p>This course introduces the student to a weight management program that follows the American Dietetic guidelines. The student will learn the principles of nutritionally sound low-fat eating and the necessity of regular exercise for permanent weight loss.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFHW 182 Stress Management for Parents 1</p> <p>Semester Prerequisite: None</p> <p>This course introduces the student to effects of stress in child-rearing, for child-care providers and parents. The student will gain an understanding of how stress influences family relationships and learn techniques to apply to daily life.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFHW 148 Staying on Track: Lifelong Weight Management 1</p> <p>Semester Prerequisite: None</p> <p>A continuation of the principles of Choice for Change Weight Control Program. The student will focus on the behavioral aspects of eating, better techniques for weight management, and changing behavior through awareness.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFHW 261 Adult Lifestyles Exercise 2</p> <p>Semester Prerequisite: Fitness Evaluation, Departmental Approval</p> <p>An opportunity for students to maintain and/or improve their fitness level through supervised aerobic exercise sessions and health education. Emphasis is on regular, safe exercise and healthy lifestyles.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFHW 149 Cholesterol Management .5</p> <p>Semester Prerequisite: None</p> <p>This course introduces the student to a dietary program that can assist in lowering cholesterol levels. The student will learn ways to identify high cholesterol and saturated fat foods substituting them with a practical, nutritionally sound food plan.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFIS 100 Bowling: Beginning 1</p> <p>Semester Prerequisite: None</p> <p>This course is a basic introduction to bowling. Primary emphasis is placed on spot bowling, release, and approach. Students become familiar with bowling etiquette and scoring.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFHW 161 Self Awareness: Key to Wellness 2</p> <p>Semester Prerequisite: None</p> <p>This course introduces the student to aspects of self-awareness that can lead to greater vitality in all aspects of life. The student will learn ways in which he/she is influenced by family and cultural beliefs. Tools for changing behavior will be presented.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFIS 101 Bowling: Intermediate 1</p> <p>Semester Prerequisite: None</p> <p>This course develops further strategies in spot bowling, consistent ball release, and scoring strategies.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFHW 163 Healthy Lifestyles 2</p> <p>Semester Prerequisite: None</p> <p>This course introduces the student to lifestyle skills that lead to better health. The student will learn healthy nutritional habits, basic fitness concepts, positive stress reduction, and development of a personalized healthy lifestyle plan. Assessment skills and wellness concepts will be put into practice.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFIS 102 Bowling: Advanced 1</p> <p>Semester Prerequisite: PEAC 101/PFIS 101</p> <p>This course is an extensive review of skills introduced at the beginning and intermediate levels. Students develop strategies in lane reading.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFHW 167 The Consumer and Health Issues 2</p> <p>Semester Prerequisite: None</p> <p>This course introduces the student to the study of health from a holistic perspective—seeing life as a total system. The student will learn awareness and tools for the “Triangle of Health” including the physical, mental, and spiritual. Alternatives in health care will be examined.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFIS 103 Golf: Beginning 1</p> <p>Semester Prerequisite: None</p> <p>This course is an introduction to the basics of golf which include equipment, grip, stance and posture, club swing, and the rules and etiquette of golf.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFHW 168 Un-smoking for Life 1</p> <p>Semester Prerequisite: None</p> <p>This course introduces the student to the habit, patterns, and health effects of smoking. The student will learn ways to permanently stop smoking and will gain information to make healthy lifestyle choices.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFIS 104 Golf: Advanced/Beginning 1</p> <p>Semester Prerequisite: None</p> <p>This course will provide continuation of the development of grip, stance, and club swing. Visualization and imagery will be introduced in relation to the golf swing.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFHW 169 Fit for Life Exercise 1</p> <p>Semester Prerequisite: None</p> <p>This course introduces the older student to the benefits and importance of a regular exercise program to combat the debilitating effects which inactivity has upon aging. The student will learn the benefits of cardiovascular exercise as well as flexibility, mobility, and range of motion.</p> <p>Semester Planned: Fall, Spring</p>	<p>PFIS 105 Golf: Intermediate 1</p> <p>Semester Prerequisite: None</p> <p>This course will review the basics of golf: equipment, grip, stance and posture, and club swing. Students will be given drills to foster and improve proper swing mechanics for course play.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFHW 180 Positive Approaches to Stress 1</p> <p>Semester Prerequisite: None</p> <p>This course introduces the student to the role stress has in our lives: physically, emotionally, and mentally. The student will learn to identify his/her own stress styles and become aware of options with coping techniques.</p> <p>Semester Planned: Fall, Spring</p>	<p>PFIS 108 Pool: Beginning 1</p> <p>Semester Prerequisite: None</p> <p>This course introduces students to the fundamentals of pool (pocket billiards). Primary course emphasis is on stance, grip, bridge, aim, and stroke. Cue ball position shots such as stop, follow, draw, and center are covered.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFHW 181 Stress Management 1</p> <p>Semester Prerequisite: None</p> <p>This course introduces the student to the nature of stress, how it affects us, and techniques to handle it. The student will learn to develop individualized strategies to deal with his/her stress and increase overall health.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PFIS 109 Pool: Intermediate 1</p> <p>Semester Prerequisite: PEAC 108/PFIS 108</p> <p>This course reviews the fundamentals of stance, grip, bridge, aim, and stroke. Skill improvement and concentration techniques are stressed.</p> <p>Semester Planned: Fall, Spring, Summer</p>
	<p>PFIS 111 Table Tennis: Beginning 1</p> <p>Semester Prerequisite: None</p> <p>This course is an introduction to table tennis as played by tournament players. Strokes covered include forehand and backhand topspin drives, pushes and blocks, and defensive strokes. Discussions will include the rules of table tennis tournaments.</p> <p>Semester Planned: Fall, Spring, Summer</p>

<p>PFIS 112 Table Tennis: Intermediate 1</p> <p>Semester Prerequisite: None This course is an extension of the beginning course and provides more training in the basic strokes. More advanced strokes such as the loop and the lob are covered. Semester Planned: Fall, Spring, Summer</p>	<p>PFIS 124 Yoga: Beginning 1</p> <p>Semester Prerequisite: None This course is an introduction to yogic breathing and gentle yogic stretching exercises with emphasis in guided relaxation and meditation. Psycho-acoustic music is used to reduce stress and tension. Semester Planned: Fall, Spring, Summer</p>
<p>PFIS 113 Competitive Table Tennis 1</p> <p>Semester Prerequisite: PEAC 112/PFIS 112 This course is offered for students who are considering participation in United States Table Tennis Association-sanctioned tournaments. Match play is stressed. Rules are discussed in detail and observed during practice. Footwork and service practice are strongly encouraged. Semester Planned: Fall, Spring, Summer</p>	<p>PFIS 125 Yoga: Continuing 1</p> <p>Semester Prerequisite: None This course promotes psycho-physical integration of body and mind through yogic breathing, stretching, and relaxation. Guided breathing and visualization are used to enhance depth and quality of relaxation and meditation. Semester Planned: Fall, Spring, Summer</p>
<p>PFIS 115 Tennis: Beginning 1</p> <p>Semester Prerequisite: None This course will introduce the student to the lob, half volley and a number of different serves. The student should be able to demonstrate and execute the fundamentals of tennis: ground strokes, net volley, serve, and the knowledge of scoring the game. Semester Planned: Fall, Spring, Summer</p>	<p>PFIS 126 Yoga: Special 1</p> <p>Semester Prerequisite: None This course teaches modified and adaptive yogic breathing and stretching exercises to enhance the body's mobility of the movement-handicapped person. Feldenkeis audio and video instructional tapes are used to extend range of movement. Self-massage, guided relaxation, and meditation are used to reduce stress and tension as well as to enhance well-being. Semester Planned: Fall, Spring, Summer</p>
<p>PFIS 116 Tennis: Intermediate 1</p> <p>Semester Prerequisite: None This course will introduce the student to the lob, half volley and a number of different serves. The student should be able to demonstrate and execute the fundamentals of tennis: ground strokes, net volley, serve, and the knowledge of scoring the game. Semester Planned: Fall, Spring, Summer</p>	<p>PFIS 127 Parent/Child Gymnastic Tumbling I .5</p> <p>Semester Prerequisite: None This course introduces basic tumbling skills to work toward greater motor skill development through tumbling, stretching, balancing skills, and controlled movement. Semester Planned: Fall, Spring</p>
<p>PFIS 117 Tennis: Advanced 1</p> <p>Semester Prerequisite: None This course deals with developing good ball control, court position, topspin shots, and serve/slice shots. Students should be able to execute and demonstrate the following tennis skills: solid ground strokes, net volleys, lobs, and good control of the serve. Semester Planned: Fall, Spring, Summer</p>	<p>PFIS 128 Parent/Child Gymnastics Tumbling II .5</p> <p>Semester Prerequisite: PEAD 116/PFIS 127 This course introduces children to elementary combinations of movements to enhance flexibility, strength, and coordination. Children learn balancing techniques and sequential movements on a low balance beam. Semester Planned: Fall, Spring</p>
<p>PFIS 118 Bicycling/Touring 1</p> <p>Semester Prerequisite: None This course deals with emergency repairs, proper fit of bicycle, good cycling techniques, and safe use of roads. Students are shown a variety of routes suitable for bicycling in the Lansing area. Semester Planned: Fall, Spring, Summer</p>	<p>PFIS 129 Ice Skating 1</p> <p>Semester Prerequisite: None This course acquaints students with ice skating as a leisure time activity. Points of emphasis in the course are proper fit and care of figure skating boots and blades, basic skating terminology and technique, and proper posture, and control on ice. Semester Planned: Fall, Spring</p>
<p>PFIS 119 Bicycling Camping/Touring 1</p> <p>Semester Prerequisite: None This course is a two-day, self-contained bicycle trip in a scenic area of Michigan. Participants carry on their bicycles all gear and items needed for the entire trip. Students will cycle 45–50 miles each day. Semester Planned: Fall, Spring, Summer</p>	<p>PFIS 130 Racewalk Technique 1</p> <p>Semester Prerequisite: None This course is designed to build one's basic walking skills into a race-walking stride for fitness or racing. Semester Planned: Fall, Spring, Summer</p>
<p>PFIS 120 Tai Chi I 1</p> <p>Semester Prerequisite: None This course introduces the first 30 forms of the Yang-style Tai Chi. Students develop techniques to focus on relaxation and inner calmness. Slow movements train the mind to be in better control of the body. Semester Planned: Fall, Spring, Summer</p>	<p>PFIS 131 Seminar: Special Subjects 1</p> <p>Semester Prerequisite: None Seminars are designed to meet specific community needs. Semester Planned: Fall, Spring, Summer</p>
<p>PFIS 121 Tai Chi II 1</p> <p>Semester Prerequisite: PEAD 104/PFIS 120 This course covers more difficult forms in Tai Chi. Yang-style Tai Chi stresses the health and well-being of the whole person. Yang-style movements allow students to move in slow, smooth, steady, and continuous movement. Semester Planned: Fall, Spring, Summer</p>	<p>PFIS 132 Seminar: Special Subjects 2</p> <p>Semester Prerequisite: None Seminars are designed to meet specific community needs. Semester Planned: Fall, Spring, Summer</p>
<p>PFIS 122 Aikido 1</p> <p>Semester Prerequisite: None This course is an introduction to the philosophy of Aikido. Basic movements of Aikido as a martial art are introduced. Semester Planned: Fall, Spring, Summer</p>	<p>PFIS 133 Seminar: Special Subjects 3</p> <p>Semester Prerequisite: None Seminars are designed to meet specific community needs. Semester Planned: Fall, Spring, Summer</p>
<p>PFIS 123 Aikido Continuing 1</p> <p>Semester Prerequisite: PEAD 107/PFIS 122 This course presents the 6th KYU forms through the 3rd KYU techniques. This course examines the philosophical underpinnings of Aikido. Semester Planned: Fall, Spring, Summer</p>	<p>PFIS 134 Theory and Practice of Yoga 2</p> <p>Semester Prerequisite: PEAD 110/PFIS 124/Departmental Approval This class explores the theoretical foundations of yoga and its historical framework. Lecture, discussion and in-class practice will give participants an opportunity to deepen their understanding of yoga theory and how it pertains to their daily practice. Students will explore how yoga exercises and relaxation practices promote health and fitness through stress reduction. Semester Planned: Fall, Spring, Summer</p>

<p>PFIS 201 Independent Study 1</p> <p>Semester Prerequisite: None This course is a directed research project in the area of physical education, recreation or athletics. Semester Planned: Fall, Spring, Summer</p>	<p>PFOA 118 Windsurfing 1</p> <p>Semester Prerequisite: Ability to Swim This is an entry-level class designed to provide the student with enough knowledge and experience to safely sail a windsurfer alone in protected waters during moderate weather conditions. Windsurfers and life-jackets are provided. Classes are conducted at the MSU Sailing Club on Lake Lansing. Semester Planned: Fall, Spring, Summer</p>
<p>PFIS 202 Independent Study 2</p> <p>Semester Prerequisite: None This course is a directed research project in the area of physical education, recreation or athletics. Semester Planned: Fall, Spring, Summer</p>	<p>PFPR 103 Athletic Training I 2</p> <p>Semester Prerequisite: None This course is an overview of injury prevention and care techniques, first-aid principles, and equipment and facilities. Other course topics covered are taping procedures and the legal implications for the athletic trainer. Semester Planned: Fall, Spring</p>
<p>PFIS 203 Independent Study 3</p> <p>Semester Prerequisite: None This course is a directed research project in the area of physical education, recreation or athletics. Semester Planned: Fall, Spring, Summer</p>	<p>PFPR 104 Athletic Training II 2</p> <p>Semester Prerequisite: PEAA 103/PFPR 103 This course will complement the skills and knowledge acquired in Athletic Training I. Course emphasis will be placed on injury assessment, injury treatments, and further rehabilitation skills as they relate to athletic injury. Semester Planned: Spring</p>
<p>PFIS 204 Independent Study 4</p> <p>Semester Prerequisite: None This course is a directed research project in the area of physical education, recreation or athletics. Semester Planned: Fall, Spring, Summer</p>	<p>PFPR 107 Officiating Basketball 2</p> <p>Semester Prerequisite: None This course is an officiating mechanics class for students wishing to officiate basketball at the high school and college level. Proper court positioning, arm signals, and whistle use are topics covered. Semester Planned: Fall, Spring</p>
<p>PFOA 105 Angling: Beginning 1</p> <p>Semester Prerequisite: None This course is an introduction to the sport of angling with demonstrations of basic angling tackle and techniques. Information is provided on Michigan sport fish and their habitat. The class will take fishing trips for steelhead, walleye, salmon, trout, bass and other game fish. Semester Planned: Fall, Spring, Summer</p>	<p>PFPR 110 Coaching Basketball 2</p> <p>Semester Prerequisite: None This course is designed to prepare the student for coaching the technical aspects of basketball as well as to enhance the student's knowledge of the duties, roles, and responsibilities of the coach. Material will apply to all levels of competition with emphasis placed on high school and college levels. Semester Planned: Fall, Spring</p>
<p>PFOA 107 Angling: Advanced 1</p> <p>Semester Prerequisite: PEAJ 105/PFOA 105 This course is designed to improve the angler's skills and knowledge of fish habitat. Many sophisticated angling techniques will be discussed. Weekly fishing trips for Michigan's premier gamefish are scheduled. Semester Planned: Fall, Spring, Summer</p>	<p>PFPR 111 Coaching Volleyball 2</p> <p>Semester Prerequisite: None This course is designed to develop coaching skills in the areas of basic through advanced individual volleyball skills as well as team strategies. Teaching skill progressions and practice planning will be covered. Semester Planned: Fall, Spring, Summer</p>
<p>PFOA 110 Seminar: Wilderness Survival Techniques 3</p> <p>Semester Prerequisite: None This course provides basic outdoor survival skills and techniques to campers, outdoor enthusiasts, and group leaders. Among the topics are shelter, fire, water, signals, orienteering, food procurement, hot/cold stress management, toxic bites, edible plants of the world, and survival at sea. Optional three-day field trip exercise. Semester Planned: Fall, Spring, Summer</p>	<p>PFPR 112 Coaching Soccer 2</p> <p>Semester Prerequisite: None This course places emphasis on teaching the proper execution of the fundamental skills and components of soccer. Individual and team skills will be taught as well as skill progression. Semester Planned: Fall</p>
<p>PFOA 111 Seminar: Wild Food Plants 3</p> <p>Semester Prerequisite: None This course introduces 77 kinds of edible wild plants and their toxic look-a-likes from Michigan and adjoining states. The students learn to distinguish these plants on the basis of observed plant characteristics. The material is illustrated in slides and handouts. Several outdoor experiences are provided. Conservation stressed. Semester Planned: Fall, Spring, Summer</p>	<p>PFPR 113 Rules of Golf 2</p> <p>Semester Prerequisite: None This course examines the rules of golf through the interpretations of the United States Golf Association's decisions. Semester Planned: Fall, Spring</p>
<p>PFOA 115 Sailing: Beginning 1</p> <p>Semester Prerequisite: None This course is an introduction to basic sailing on Lake Michigan. Students will become familiar with the parts and functions of a sailing vessel. Students will be taught rigging procedures, use of wind and other basic sailing functions. Semester Planned: Fall, Summer</p>	<p>PFPR 114 Basic Lifeguarding 1</p> <p>Semester Prerequisite: None This course is designed to provide the necessary minimum skills of training to qualify as an entry level lifeguard. Semester Planned: Fall, Spring</p>
<p>PFOA 116 Basic Sailing/Cruising 2</p> <p>Semester Prerequisite: None This course will help students gain first-hand experience in the art of sailing and seamanship. Students will attain confidence necessary to handle a cruising sailing vessel under various conditions which present themselves in the Great Lakes. Semester Planned: Spring, Summer</p>	<p>PFPR 115 Lifeguard Training 2</p> <p>Semester Prerequisite: None This course is designed to provide the necessary minimum skills training for a person to qualify as a non-surf lifeguard. Semester Planned: Fall, Spring</p>
<p>PFOA 117 Advanced Sailing 2</p> <p>Semester Prerequisite: None This course is designed to give the student an opportunity to experience a major voyage on the Great Lakes applying the terms and course objectives covered in the introductory cruising class. Major emphasis will be placed on advanced piloting and helmsmanship. Semester Planned: Spring, Summer</p>	<p>PFPR 116 Water Safety Instruction 2</p> <p>Semester Prerequisite: None This course is designed to assist in teaching basic aquatic skills for instructors. Teaching modalities and how different students learn is covered. Semester Planned: Fall, Spring</p>

<p>PFTS 100 Basketball: Beginning 1</p> <p>Semester Prerequisite: None</p> <p>This course introduces the student to the fundamental skills of basketball. Course emphasis is placed on ball handling, passing, shooting, and rules.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PHIL 153 Knowledge and Reality 4</p> <p>Semester Prerequisite: None</p> <p>Select issues from classical and contemporary philosophy provide an introduction to differences between knowledge and opinion, ways of supporting knowledge claims, and the relationship between the knower and what exists.</p> <p>Semester Planned: Fall</p>
<p>PFTS 102 Basketball: Advanced 1</p> <p>Semester Prerequisite: None</p> <p>This course is designed for the student who has a sound understanding of basketball skills. Drills will be used to enhance passing and shooting skill development. Emphasis is placed on team play as well as individual skill improvement.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PHIL 211 World Philosophies I 4</p> <p>Semester Prerequisite: WRIT 121/Equivalent</p> <p>Surveys major developments in theories of knowledge, reality, ethics, and society, and their historical role in shaping cultures and human identity. Covers Chinese, Indian, Greek, Roman, Christian, Islamic, and European thought from mythic beginnings to the period of early scientific reasoning.</p> <p>Semester Planned: Fall</p>
<p>PFTS 103 Volleyball: Beginning 1</p> <p>Semester Prerequisite: None</p> <p>This course introduces the student to the fundamental skills of volleyball. Course emphasis is on proper serving, setting, forearm passing, spiking, positioning, rules, and game strategy.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PHIL 212 World Philosophies II 4</p> <p>Semester Prerequisite: WRIT 121/Equivalent</p> <p>Surveys major developments in theories of knowledge, reality, ethics, and society, and their historical role in shaping cultures and human identity. Covers European, Asian, African, Native American, and American pragmatic thought from the scientific revolution to contemporary global concerns.</p> <p>Semester Planned: Spring</p>
<p>PFTS 104 Volleyball: Intermediate 1</p> <p>Semester Prerequisite: PEAE 103/PFTS 103</p> <p>This course focuses on the development of proper serving, setting, forearm passing, and spiking skills. Game strategies and player positioning are taught in more detail.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PHIL 260 Contemporary Ethical Problems 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL/WRIT 122 Recommended)</p> <p>This is an advanced course designed to examine contemporary moral issues which arise through technological and social developments. It will explore the limits of traditional ethical theories and/or their possible adaptation to a changing world. Where appropriate, course includes issues of cross-cultural importance which involve multinational concerns.</p> <p>Semester Planned: Spring</p>
<p>PFTS 106 Competitive Volleyball 1</p> <p>Semester Prerequisite: PEAE 104/PFTS 104</p> <p>This course provides the student with a conceptual framework for advanced offensive and defensive systems of play. Individuals work on skill drills and intra-class competition.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PHIL 295 Independent Study 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Special research projects and/or individual readings in Philosophy. Students will invest no less than 32 hours for each credit earned. Enrollment is usually restricted to honors students who have grade-point averages of at least 3.0 in courses offered by this department.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFTS 107 Indoor Soccer 1</p> <p>Semester Prerequisite: None</p> <p>This course is designed to introduce students to the basics of indoor soccer and to improve the level of understanding the game through instructions and discussions. Passing and shooting drills are emphasized along with team play concept. Modifications to soccer rules are used to accommodate indoor soccer rules and safety.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PHIL 296 Independent Study 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Special research projects and/or individual readings in Philosophy. Students will invest no less than 32 hours for each credit earned. Enrollment is usually restricted to Honors students who have grade-point averages of at least 3.0 in courses offered by this department.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PFTS 110 Softball: Beginning 1</p> <p>Semester Prerequisite: None</p> <p>This course introduces the student to the fundamental skills of softball. Course emphasis is on proper throwing, catching, fielding, and hitting procedures.</p> <p>Semester Planned: Spring, Summer</p>	<p>PHON 108 Introduction to Phonics 4</p> <p>Semester Prerequisite: Placement Test</p> <p>Basic Skills Prerequisite: Reading Level 2</p> <p>Explores relationship of English language sounds to their corresponding printed alphabetical letters and letter combinations. Examines rules governing variations in these sounds, the process of syllabication, accent, the dictionary pronunciation system, structural analysis of words, and the relationship of phonics to reading and spelling.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PHGY 202 Human Physiology 4</p> <p>Semester Prerequisite: 2.0 Minimum in ANAT 201, BIOL, CHEM Recommended</p> <p>The physiology, regulation and biochemistry of the various organ systems in the human body is presented along with the integration of body function. Emphasis is on normal function, but clinical aspects may be discussed when appropriate. Laboratory topics complement the lecture.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PHYS 191 Introduction to Biophysics 3</p> <p>Semester Prerequisite: 2.0 Minimum in MATH 112/Equivalent</p> <p>A one-semester introduction to physics with an emphasis on applications to biological systems. Topics include force and motion, energy, collisions, biomechanics, fluid pressure and flow, bioelectricity and magnetism, sound, light, radioactivity, and nuclear medicine. Laboratory activities illustrate and amplify lecture topics.</p> <p>Semester Planned: Fall</p>
<p>PHIL 151 Introduction to Logic and Critical Thinking 4</p> <p>Semester Prerequisite: None</p> <p>Introduction to modern logic and elements of reasoning, with special attention given to the roles of language in reasoning, distinguishing deductive from inductive arguments, recognizing levels of meaning and differing world views (Weltanschauungen), analyzing truth-functional relations, avoiding fallacious reasoning or misleading language, and using logical skills in everyday life.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PHYS 200 Applied Physics 4</p> <p>Semester Prerequisite: TECH 101</p> <p>This course includes basic principles of construction, electronics, electrical, civil, hydraulics, metal working, heating and air conditioning technologies as they relate to the physical sciences. Provides basic training in fundamental physical phenomena and simple machines with emphasis put on their application to practical shop and field problems.</p> <p>Semester Planned: Fall, Spring</p>
<p>PHIL 152 Introduction to Ethics 4</p> <p>Semester Prerequisite: None</p> <p>Designed to explore essential requirements for moral reasoning and to call attention to both the factual foundation as well as the traditional criteria utilized for value judgments. Major ethical theories will be discussed, along with their applications to everyday situations. The course will include cross-cultural references, when appropriate.</p> <p>Semester Planned: Spring</p>	

<p>PHYS 201 Introductory Physics I 4</p> <p>Semester Prerequisite: 2.0 Minimum in MATH 126, PHYS 225/Concurrently</p> <p>First in a two-semester sequence of algebra-based physics courses designed to present the fundamental principles of physics, emphasizing applications to other fields. Topics include mechanics, solids and fluids, heat, and alternative energy sources and technologies. Demonstrations and hands-on activities complement the lecture topics.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>POLS 130 Honors: American Political System 4</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An analysis of the American political system. Emphasis is given to the federal system, with special attention to American government at the national level. This course is the same as POLS 120 except that it is taught as a seminar for honor students only.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PHYS 202 Introductory Physics II 4</p> <p>Semester Prerequisite: 2.0 Minimum in PHYS 201, PHYS 226/Concurrently</p> <p>Continuation of PHYS 201. Topics include electricity and magnetism, vibrations and waves, sound, light and optics, nuclear physics, quantum physics, elementary particles, relativity, and cosmology. Demonstrations and hands-on activities and projects complement the lecture topics.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>POLS 200 Political Behavior 3</p> <p>Semester Prerequisite: None</p> <p>This introductory course examines the theories and concepts of political science and the methodology used by political scientists to analyze and understand American politics. Special emphasis is placed on political institutions and the relationships of those involved in the political process.</p> <p>Semester Planned: Spring</p>
<p>PHYS 215 Physics I: Mechanics 5</p> <p>Semester Prerequisite: 2.0 Minimum in MATH 151, PHYS 225/Concurrently</p> <p>First in a three-semester sequence of calculus-based physics courses for science and engineering students. Topics include force and motion, momentum, work and energy, the conservation laws of energy and momentum, rotational motion, static equilibrium, gravitation, and oscillations. Integrated special topics may include relativity, nuclear physics, and thermodynamics.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>POLS 205 Government Internship 3</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course offers the student a chance to observe the actual workings of the political process by participating in it. Participation will provide students an exposure to public policy making. The program covers all levels of government, from city and township through the federal level.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PHYS 216 Physics II: Electromagnetism, Waves, and Optics 5</p> <p>Semester Prerequisite: 2.0 Minimum in PHYS 215, MATH 152, PHYS 226/Concurrently</p> <p>Second in a three-semester sequence of calculus-based physics courses for science and engineering students. Topics include electric and magnetic forces and fields, electromagnetic energy, currents and circuits, electromagnetic oscillations and waves, mechanical waves and sound, light waves, and physical and geometrical optics.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>POLS 206 Advanced Government Internship 3</p> <p>Semester Prerequisite: Departmental Approval</p> <p>This course offers the student a chance to observe the actual workings of the political process by participating in it. Participation will provide students an exposure to public policy making. The program covers all levels of government, from city and township through the federal level.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PHYS 217 Physics III: Thermodynamics and Modern Physics 4</p> <p>Semester Prerequisite: 2.0 Minimum in PHYS 215/Equivalent, MATH 152</p> <p>Third in a three-semester sequence of calculus-based physics courses for science and engineering students. Topics include thermodynamics, quantum physics, nuclear physics and radioactivity, condensed matter physics, special relativity, elementary particles, and cosmology.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>POLS 230 Sex Roles and Political Change in a Post-Industrial Society 3</p> <p>Semester Prerequisite: None</p> <p>An exploration of change in sex-roles and family structure in response to changing economic, social, and political forces. Topics to be covered include sex-role socialization, divorce and remarriage, and social changes in the economy, politics, and the military. The course blends a variety of perspectives within the social sciences.</p> <p>Semester Planned: Spring</p>
<p>PHYS 225 Physics I Laboratory 1</p> <p>Semester Prerequisite: PHYS 201/PHYS 215 Concurrently/Equivalent</p> <p>Laboratory course which complements Physics I. Experiments include investigations in mechanics and heat. The lab is intended to increase students' knowledge of natural and technological phenomena as they learn effective laboratory techniques for gathering and interpreting data, communicating their results, and designing and implementing individual and team projects.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>POLS 250 American Political Parties and Interest Groups 3</p> <p>Semester Prerequisite: None</p> <p>Emphasizes the origins, structure, and functions of political parties, examines the American political system in terms of citizens' concerns about community and government, and serves as a guide to political action by the citizenry. Included is the role and function of interest groups in American politics.</p> <p>Semester Planned: Fall</p>
<p>PHYS 226 Physics II Laboratory 1</p> <p>Semester Prerequisite: PHYS 202/PHYS 216 Concurrently/Equivalent</p> <p>Laboratory course which complements Physics II. Experiments include investigations in electromagnetism, sound, and optics. The lab is intended to increase students' knowledge of natural and technological phenomena as they learn effective laboratory techniques for gathering and interpreting data, communicating their results, and designing and implementing individual and team projects.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>POLS 260 Comparative Political Systems 3</p> <p>Semester Prerequisite: None</p> <p>An introduction to the institutions, processes, and policies of political systems throughout the world. The course will compare political cultures and behavior in the United States, the industrial nations of Europe and Asia, and the developing nations, with special emphasis on the themes of democracy, participation, and political change.</p> <p>Semester Planned: Fall</p>
<p>POLS 120 American Political System 4</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Reading Level 5; Writing Level (See Class Schedule)</p> <p>An analysis of the American political system. Emphasis is given to the federal system, with special attention to American government at the national level.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>POLS 270 International Relations 3</p> <p>Semester Prerequisite: None</p> <p>A course in contemporary international relations, with emphasis on politics. Concepts, theories, and rudimentary methods are surveyed. The relationship between international politics and U.S. foreign and domestic policy is explored.</p> <p>Semester Planned: Spring</p>
<p>POLS 121 State and Local Government 4</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Reading Level 5; Writing Level (See Class Schedule)</p> <p>A study of state and local governmental activities, their structures, functions, and methods of organizing resources and making policy. Consideration is given to the relationships between governmental units and the problems they confront, including relations between federal, state, and local government.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>POLS 290 Supreme Court and Landmark Decisions 3</p> <p>Semester Prerequisite: None</p> <p>An analysis of the United States Supreme Court. Particular emphasis will be devoted to Supreme Court decision-making. A number of landmark Supreme Court decisions will be reviewed from historical, political, public policy, institutional, and behavioral perspectives.</p> <p>Semester Planned: Fall</p>

<p>POLS 295 One Credit Independent Study in Political Science 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Independent project involving research, reading, and experience in political science. The project, chosen by the student, must be approved in advance by the department chair, must be supervised by a member of the faculty, and must meet specific academic goals.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PSYC 205 Human Growth and Development 3</p> <p>Semester Prerequisite: PSYC 200</p> <p>A study of the human life cycle from conception to death. Designed to investigate, describe, and explain changes in the physical, social, emotional, and cognitive areas that are a result of the continuous interaction of maturation and experience.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>POLS 296 Two Credit Independent Study in Political Science 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Independent project involving research, reading, and experience in political science. The project, chosen by the student, must be approved in advance by the department chair, must be supervised by a member of the faculty, and must meet specific academic goals.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PSYC 209 Cognitive Psychology 3</p> <p>Semester Prerequisite: PSYC 200</p> <p>Cognitive psychology is the study of the human mind; its domain includes questions concerning how people perceive the world, remember information, use knowledge, understand language, learn, reason, and solve problems.</p> <p>Semester Planned: Spring</p>
<p>POLS 297 Three Credit Independent Study in Political Science 3</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Independent project involving research, reading, and experience in political science. The project, chosen by the student, must be approved in advance by the department chair, must be supervised by a member of the faculty, and must meet specific academic goals.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PSYC 210 Biological Psychology 3</p> <p>Semester Prerequisite: PSYC 200, Science Course</p> <p>Biological psychology is an integration of physiology, psychology, and several other related disciplines. The course provides an in-depth exploration of the brain and the relation between it and behavior. Specific topics include: sensory processing, learning and memory, sleep and disorders, and disorders of depression and schizophrenia.</p> <p>Semester Planned: Spring</p>
<p>PSYC 175 Psychology of Death: A Preparation for Living 3</p> <p>Semester Prerequisite: None</p> <p>Examines psychological theories, concepts, and research that pertain to the study of death and personal death awareness. Topics include the dying process, suicide, death anxiety, children's concept of death, care of the dying, ethical decisions, social issues and considerations, near death experiences, and the grieving process.</p> <p>Semester Planned: Spring</p>	<p>PSYC 221 Child Psychology 3</p> <p>Semester Prerequisite: PSYC 200</p> <p>Explores theories and principles of child development from conception to puberty. The course covers psychological, sociological, and biological aspects of maturation and development.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PSYC 185 Children and Death: Grief and Loss 2</p> <p>Semester Prerequisite: None</p> <p>This course will provide a theoretical base and concrete tools to work with children in the grieving process. Students will explore their personal awareness of death as well as children's developmental issues as survivors and terminal patients.</p> <p>Semester Planned: Fall, Spring</p>	<p>PSYC 222 Adolescent Psychology 3</p> <p>Semester Prerequisite: PSYC 200</p> <p>Examines theoretical and empirical literature related to adolescence, emphasizing biological, psychological, and sociological aspects of maturation and development from puberty to young adulthood.</p> <p>Semester Planned: Spring</p>
<p>PSYC 195 Biofeedback 3</p> <p>Semester Prerequisite: None</p> <p>An understanding of the link between stress and illness with application of biofeedback instruments to achieve stress reduction. Also covered are: quieting response, meditation, breathing techniques, progressive relaxation, nutrition, guided imagery, visualization, and burn-out prevention. Students will use instruments in the lab for personal stress reduction.</p> <p>Semester Planned: Spring</p>	<p>PSYC 240 Psychology of Human Sexuality 3</p> <p>Semester Prerequisite: PSYC 200</p> <p>An exploration of psychological aspects of human sexuality, including research methods, response, identity, development, attraction and intimacy, communication, orientation, attitudes, diseases and disorders.</p> <p>Semester Planned: Spring</p>
<p>PSYC 200 Introduction to Psychology 4</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Reading Level 4; Writing Level (See Class Schedule)</p> <p>The basic orientation to the field of psychology, designed as a general survey and as preparation for advanced courses in the field. Topics include methods, nervous systems, sensation, perception, development, learning, motivation, emotion, cognition, personality, abnormality, therapy, and social behavior.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PSYC 250 Abnormal Psychology 3</p> <p>Semester Prerequisite: PSYC 200</p> <p>A survey of the nature, development, diagnosis, and treatment of psychopathology viewed from a general-systems perspective (psychological, sociological, and biological). Major theories of causes, scientific research, diagnostic and therapeutic techniques are studied with respect to various psychological disorders.</p> <p>Semester Planned: Fall, Spring</p>
<p>PSYC 202 Psychology of Personality 3</p> <p>Semester Prerequisite: PSYC 200</p> <p>Discussion of concepts of adjustment, conflict, mental processes, and behavior modification. Survey of leading theories of personality, emphasizing their implications for assessing and modifying normal personality.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PSYC 295 One Credit Independent Study in Psychology 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An independent project involving research, reading, and experience in psychology. The project, chosen by the student, must be approved in advance by the department chair, must be supervised by a member of the faculty, and must meet specific academic goals.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PSYC 203 Social Psychology 3</p> <p>Semester Prerequisite: PSYC 200</p> <p>A theoretical and empirical approach to understanding individual social and group behavior. Examines the person and the social environment with a focus on attitudes, interpersonal behavior, and group processes.</p> <p>Semester Planned: Fall</p>	<p>PSYC 296 Two Credit Independent Study in Psychology 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An independent project involving research, reading, and experience in psychology. The project, chosen by the student, must be approved in advance by the department chairperson, must be supervised by a member of the faculty, and must meet specific academic goals.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>PSYC 204 Educational Psychology 3</p> <p>Semester Prerequisite: PSYC 200</p> <p>An investigation of the contribution of psychology to education. Emphasis will be placed upon aspects of child growth and development, motivation, learning, measurement, and group dynamics that affect the achievement of pupils in the classroom.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>PSYC 297 Three Credit Independent Study in Psychology 3</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An independent project involving research, reading, and experience in psychology. The project, chosen by the student, must be approved in advance by the department chair, must be supervised by a member of the faculty, and must meet specified academic goals.</p> <p>Semester Planned: Fall, Spring, Summer</p>

PVAA 281 Property Valuation and Assessment Administration I	3	QUAL 118 Metrology II	3
Semester Prerequisite: None An introductory course presenting the Michigan property tax system, basic property valuation concepts, property descriptions, eminent domain, land economics, tax mapping, and aerial photograph interpretation. Semester Planned: Fall		Semester Prerequisite: QUAL 115 Introduces the student to advanced instrumentation and its applications. The student will learn to utilize the optical comparator, laser micrometer, surface tester, and the coordinate measurement machine to accomplish evaluation of lab projects. Semester Planned: Spring	
PVAA 282 Property Valuation and Assessment Administration II	3	QUAL 121 Introduction to Statistical Process Control	3
Semester Prerequisite: PVAA 281/Departmental Approval Presents concepts of residential and agricultural appraisals and soil survey. Semester Planned: Spring		Semester Prerequisite: None This course provides an introduction to statistical process control (SPC) philosophy and techniques. SPC is a means of controlling and improving processes through the use of data. Students will be introduced to the history of SPC, the Deming philosophy, process variation, techniques including control charts, and process improvement. Semester Planned: Fall, Spring, Summer	
PVAA 283 Property Valuation and Assessment Administration III	3	QUAL 124 Quality Assurance in Service Organizations	3
Semester Prerequisite: PVAA 282/Departmental Approval Commercial and industrial appraisals are presented. Valuation and auditing procedures relevant to personal property are also explained. Semester Planned: Fall		Semester Prerequisite: None This course introduces students to service quality principles that apply to profit and non-profit, for wage and volunteer organizations. Topics include: quality concepts, terms and techniques as a basis for a sound quality program, quality fallacies connected to quality of service, nature and prevention of human error, and customer-focused quality improvement programs. Semester Planned: Spring	
PVAA 284 Property Valuation and Assessment Administration IV	3	QUAL 200 Quality Improvement Teams	4
Semester Prerequisite: PVAA 283/Departmental Approval Topics covered include Michigan property tax law, local government financing, assessment/equalization cycle, allocation, and millage rollback computations. Semester Planned: Spring		Semester Prerequisite: None Covers problem-solving models and techniques for quality/productivity improvement, and the human factor related to quality. Emphasis includes interpersonal and communication skills related to quality assurance. Students use problem-solving methods and techniques, learn team member roles, effective communication skills, and prepare and present projects to the class. Semester Planned: Fall	
PVAA 286 Applied Appraisal Concepts I	1	QUAL 203 Quality Planning and Systems Management	4
Semester Prerequisite: PVAA 281/PVAA 282/Departmental Approval Field inspection and appraisal of residential, commercial and industrial properties. Emphasis is on potential appraisal problems utilizing the cost approach to value. Semester Planned: Summer		Semester Prerequisite: None This course focuses on developing, managing, and implementing quality assurance systems. Course material and assignments are designed to develop student skills in intracompany, vendor, and customer quality relationships including quality planning, quality manual and procedure development, communication, training for quality certification programs, and continuous improvement. Semester Planned: Spring	
PVAA 287 Applied Appraisal Concepts II	1	QUAL 205 Cost of Quality	3
Semester Prerequisite: PVAA 282/Departmental Approval Field inspection and appraisal of commercial and industrial properties which emphasize potential appraisal problems using the cost approach to value. Semester Planned: Summer		Semester Prerequisite: QUAL 100 Introduces the student to definitions and philosophy of quality costs through the interactions of typical accounting methods and the alignment of quality cost practices. Topics include: basic financial concepts, trend analysis, problem areas, reducing costs and planning. Semester Planned: Spring	
PVAA 288 Income Approach to Value I	2	QUAL 206 Statistical Sampling	2
Semester Prerequisite: PVAA 282/REAL 279 This course introduces the advanced student to the appraisal concepts used in the appraisal of income-producing properties. Semester Planned: Fall, Spring		Semester Prerequisite: QUAL 103 This course introduces the student to the basic techniques of sampling and the usage of standardized sampling plans. Basic probability will be reviewed and operating characteristic curves discussed as a foundation for determining sampling plans. The following three specific sampling systems will be introduced: Dodge-Romig, MIL-STD-105, and MIL-STD-414. Semester Planned: Fall	
PVAA 289 Income Approach to Value II	2	QUAL 207 Control Charts and Problem Solving II	4
Semester Prerequisite: PVAA 288 Advanced study of the appraisal concepts utilized in the appraisal of income-producing properties. Semester Planned: Fall, Spring		Semester Prerequisite: QUAL 105 This course covers advanced problem solving techniques for chronic process variation. Also covered will be advanced control chart concepts including the following charts: X, S, median, modified limits, group, tool-wear, and pre-control. Semester Planned: Fall	
QUAL 100 Introduction to Quality Assurance	3	QUAL 209 Reliability	3
Semester Prerequisite: None This course explores the historical evolution of total quality management and introduces the concepts of continuous improvement and process systems. Current quality control theories from both service and manufacturing environments are examined. Semester Planned: Fall, Spring		Semester Prerequisite: QUAL 103 This course introduces the student to definitions and characteristics of reliability. Topics covered include probability density function, reliability function, hazard/failure rate function, life characteristic curve, and reliability modeling for components and systems. Semester Planned: Spring	
QUAL 103 Probability and Statistics for Quality Assurance	4		
Semester Prerequisite: None This course introduces the student to basic probability and statistics as related to quality assurance. Material covered includes probability concepts, counting techniques, binomial distribution, hypergeometric distribution, normal distribution, process capability concepts, distribution of averages, and alpha and beta errors. Semester Planned: Fall, Spring			
QUAL 105 Control Charts and Problem Solving I	4		
Semester Prerequisite: QUAL 103 This course introduces the student to the theory, application, selection, and implementation of both variable and attribute control charts. It also covers the basic problem solving techniques used in quality assurance. Semester Planned: Fall, Spring			
QUAL 115 Metrology I	3		
Semester Prerequisite: QUAL 103/Approval Introduces the student to the theory, use, and application of conventional and digital precision instrumentation. Designed to fulfill the needs of quality assurance and skilled trades students requiring a foundation in metrology. Semester Planned: Fall			

<p>QUAL 212 Applied Statistics for Quality Assurance 4</p> <p>Semester Prerequisite: QUAL 105 This course covers the topics of hypothesis testing, confidence intervals and sample size determination as applied to various distributions, such as the normal, student T, chi-squared and F. Correlation, and regression will also be covered. Semester Planned: Fall</p>	<p>READ 100 Reading Clinic IA 4</p> <p>Semester Prerequisite: None Designed to teach fundamental reading skills and also to improve confidence and self-esteem. Provides a personal program which combines private tutoring with directed practice. For students whose reading skills range from pre-literate to basic literacy. Requires enrollment in READ 005, which arranges times for laboratory attendance. (May repeat for credit three times.) Semester Planned: Fall, Spring, Summer</p>
<p>QUAL 215 Experimental Design in Quality Assurance 4</p> <p>Semester Prerequisite: QUAL 212 This course covers the concepts of analysis of variance and experimental design. Topics include one and two way ANOVA, various graphical and numerical tests for effects, determination and testing of residuals, and the use of mathematical models. Semester Planned: Spring</p>	<p>READ 101 Reading Clinic IIA 4</p> <p>Semester Prerequisite: None Designed to teach fundamental reading skills and also to improve confidence and self-esteem. Provides a personal program which combines private tutoring with directed practice. For students who have some basic literacy skills. Requires enrollment in READ 005, which arranges times for laboratory attendance. (May repeat for credit three times.) Semester Planned: Fall, Spring, Summer</p>
<p>QUAL 218 Quality Auditing 3</p> <p>Semester Prerequisite: None This course prepares the student to plan, develop, review material, and implement quality audits in manufacturing and service organizations. This course may be used as a refresher in preparation for the Certified Quality Auditor (CQA) certification examination through the American Society for Quality Control. Semester Planned: Fall</p>	<p>READ 102 Reading Clinic IB 3</p> <p>Semester Prerequisite: None Designed to teach fundamental reading skills and also to improve confidence and self-esteem. Provides a personal program which combines private tutoring with directed practice. For students who have some basic literacy skills. Requires enrollment in READ 005, which arranges times for laboratory attendance. (May repeat for credit three times.) Semester Planned: Fall, Spring, Summer</p>
<p>QUAL 221 Weibull Analysis 2</p> <p>Semester Prerequisite: QUAL 209 Introduces the student to the Weibull distribution, its parameters, and methods used to calculate and plot data to determine these parameters. The student will learn to use parameter calculations to determine reliability characteristics and analyze Weibull plots. Semester Planned: Spring</p>	<p>READ 103 Reading Clinic IIB 3</p> <p>Semester Prerequisite: None Designed to teach fundamental reading and also to improve confidence and self-esteem. Provides a personal program which combines private tutoring with directed practice. For students who have some basic literacy skills. Requires enrollment in READ 005, which arranges times for laboratory attendance. (May repeat for credit three times.) Semester Planned: Fall, Spring, Summer</p>
<p>QUAL 224 Manufacturing Supervision 3</p> <p>Semester Prerequisite: None This course will help students to develop skills for supervising personnel in a production environment consistent with current quality engineering principles. Topics include customer focus, employee selection and development, task analysis equipment and resource utilization, and continuous improvement of quality and productivity utilizing data and employee involvement. Semester Planned: Fall</p>	<p>READ 104 Reading Skills IA 4</p> <p>Semester Prerequisite: None Designed to teach fundamental reading skills and also to improve confidence and self-esteem. Provides a personal program which combines private tutoring with directed practice. For students whose reading skills range from pre-literate to basic literacy. Requires enrollment in READ 005, which arranges times for laboratory attendance. (May repeat for credit three times.) Semester Planned: Fall, Spring, Summer</p>
<p>QUAL 239 Quality Improvement Projects 3</p> <p>Semester Prerequisite: QUAL 215 This course requires the student to utilize previous knowledge gained in the Quality Assurance curriculum to set up projects, gather data, analyze data, and reach appropriate conclusions and recommendations. Possible project areas may include control charts, hypothesis testing, regression analysis, and experimental design. Semester Planned: Fall, Summer</p>	<p>READ 105 Reading Skills IIA 4</p> <p>Semester Prerequisite: None Designed to teach fundamental reading skills and also to improve confidence and self-esteem. Provides a personal program which combines private tutoring with directed practice. For students who have some basic literacy skills. Requires enrollment in READ 005, which arranges times for laboratory attendance. (May repeat for credit three times.) Semester Planned: Fall, Spring, Summer</p>
<p>RDGR 101 Personal Reading I 1</p> <p>Semester Prerequisite: Departmental Approval May be taken concurrently with other reading courses to provide extra instruction and practice. One-to-one instruction. Requires enrollment in READ 005 (lab). (May repeat for credit three times.) Semester Planned: Fall, Spring, Summer</p>	<p>READ 106 Reading Skills IB 3</p> <p>Semester Prerequisite: None Designed to teach fundamental reading skills and also to improve confidence and self-esteem. Provides a personal program which combines private tutoring with directed practice. For students who have some basic literacy skills. Requires enrollment in READ 005, which arranges times for laboratory attendance. (May repeat for credit three times.) Semester Planned: Fall, Spring, Summer</p>
<p>RDGR 102 Personal Reading II 2</p> <p>Semester Prerequisite: Departmental Approval May be taken concurrently with other reading courses to provide extra instruction and practice. One-to-one instruction. Requires enrollment in READ 005 (lab). (May repeat for credit three times.) Semester Planned: Fall, Spring, Summer</p>	<p>READ 107 Reading Skills IIB 3</p> <p>Semester Prerequisite: None Designed to teach fundamental reading skills and also to improve confidence and self-esteem. Provides a personal program which combines private tutoring with directed practice. For students who have some basic literacy skills. Requires enrollment in READ 005, which arranges times for laboratory attendance. (May repeat for credit three times.) Semester Planned: Fall, Spring, Summer</p>
<p>RDGR 103 Personal Reading III 3</p> <p>Semester Prerequisite: Departmental Approval May be taken concurrently with other reading courses to provide extra instruction and practice. One-to-one instruction. Requires enrollment in READ 005 (lab). (May repeat for credit three times.) Semester Planned: Fall, Spring, Summer</p>	<p>READ 005 Reading Laboratory 0</p> <p>Semester Prerequisite: None READ 005 arranges the days and times when students will attend Reading Clinic courses. Students must register for both a Reading Clinic course, such as READ 100, and a section of READ 005. Semester Planned: Fall, Spring, Summer</p>

<p>READ 108 Individualized Reading A 4</p> <p>Semester Prerequisite: None</p> <p>Designed for average readers, especially adults in the working community who wish to improve their reading proficiency with one-to-one instruction and directed practice. Students concentrate on areas that need strengthening. Requires enrollment in READ 005, which arranges times for laboratory attendance. (May repeat for credit three times.)</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>REAL 271 Introduction to Real Estate 2</p> <p>Semester Prerequisite: None</p> <p>Overview of the real estate business. Emphasis on points of law and real estate principles useful to the beginning salesperson and/or potential buyer, seller, or investor.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>READ 109 Individualized Reading B 3</p> <p>Semester Prerequisite: None</p> <p>Designed for average readers, especially adults in the working community who wish to improve their reading proficiency with one-to-one instruction and directed practice. Students concentrate on skill areas that need strengthening. Requires enrollment in READ 005, which arranges times for laboratory attendance. (May repeat for credit three times.)</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>REAL 273 Real Estate Investment 3</p> <p>Semester Prerequisite: REAL 271/REAL 274/Departmental Approval</p> <p>Emphasis on investment analysis, financing, depreciation, capital gains, exchanging, and federal tax implications of real estate acquisitions, ownership, and disposal.</p> <p>Semester Planned: Fall, Spring</p>
<p>READ 110 Reading: Essential Strategies 4</p> <p>Semester Prerequisite: Placement Test</p> <p>Basic Skills Prerequisite: Reading Level 2</p> <p>Designed to provide a transition from mastery of basic reading skills and individualized tutorial literacy instruction to a mainstream, classroom learning experience. Includes emphasis in reading for main ideas, rapid information processing skills for improving comprehension, drawing conclusions from implied meaning, and application of techniques to insure academic survival.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>REAL 274 Real Estate License Exam 3</p> <p>Semester Prerequisite: None</p> <p>Intense study in the fundamentals of real estate. Preparation for the State of Michigan License Examination, administered by the Applied Measurement Professionals (AMP). This class meets statutory requirements including four hours in fair housing.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>READ 113 Reading Skills 4</p> <p>Semester Prerequisite: None</p> <p>Designed to help students further skills in comprehension in various types of reading. This course emphasizes discernment in reading skills through classroom activities.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>REAL 275 Real Estate Financing 3</p> <p>Semester Prerequisite: None</p> <p>Significance and nature of mortgage lending, mortgage money markets, sources, types of mortgages, instruments, qualifying, the land contract and its use, administration of a mortgage loan, and a loan portfolio and methods of foreclosure.</p> <p>Semester Planned: Fall, Spring</p>
<p>READ 115 Reading Comprehension 4</p> <p>Semester Prerequisite: Placement Test</p> <p>Basic Skills Prerequisite: Reading Level 3</p> <p>Designed to increase basic comprehension skills, build vocabulary, and prepare students for college-level reading through the exploration of effective study techniques.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>REAL 277 Property Management 3</p> <p>Semester Prerequisite: None</p> <p>Covers management and the market, marketing residential and commercial rental space, creating an organized management plan, tenant and landlord laws, rent collection, leases, tenant screening, fair-housing requirements, tenant-owner relations, accounting for investment properties, real estate as an investment, managing apartments, office space, retail stores, and special-purpose buildings.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>READ 164 Speed Reading 3</p> <p>Semester Prerequisite: Placement Test</p> <p>Basic Skills Prerequisite: Reading Level 5</p> <p>Designed for the student of average or better-than-average reading ability. Increases reading rate and comprehension for greater efficiency in studying and in general reading. Special attention is given to vocabulary improvement, the multiple purposes of reading, the importance of flexibility in reading, and increased concentration.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>REAL 278 Real Estate Inspection and Construction 3</p> <p>Semester Prerequisite: None</p> <p>A course in basic construction for salespersons, brokers, and those interested in learning more about single-family residential construction. Topics include construction basics, from excavation to finished stages; various architectural styles; mechanical systems, their operation and interrelationships; reading a house plan; common problems of house, site selection; and building materials.</p> <p>Semester Planned: Fall, Spring</p>
<p>READ 173 Critical Reading I 3</p> <p>Semester Prerequisite: Placement Test, Departmental Approval</p> <p>Basic Skills Prerequisite: Reading Level (See Class Schedule)</p> <p>Designed to help students think critically about what they read. This course focuses on evaluating factual material, looking at such things as the authority of the writer, bias/objectivity of the writer, purpose of the writer, up-to-dateness/validity of the material, use of reasoning and support, and the bias/objectivity of the reader. This course precedes Critical Reading II.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>REAL 279 Residential Appraisal 3</p> <p>Semester Prerequisite: None</p> <p>This is a survey course on the appraisal of the single family residence. It is designed to expose the student to the basic economic, political, social and environmental foundations upon which real estate valuation rests. The student will then encounter the processes by which free standing, single family dwellings are valued. Students will also be acquainted with professional standards and ethics.</p> <p>Semester Planned: Fall, Spring</p>
<p>READ 174 Critical Reading II 3</p> <p>Semester Prerequisite: Placement Test</p> <p>Basic Skills Prerequisite: Reading Level 5</p> <p>Designed to go beyond reading comprehension at the literal level and to develop in the individual the ability to grasp implied meanings and draw conclusions. The reader must also be able to perceive the structural and developmental pattern in written material and to judge rationally what he/she reads.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>REAL 280 Real Estate Law 3</p> <p>Semester Prerequisite: REAL 271/REAL 274/Departmental Approval</p> <p>Topics covered include: land and its elements, land titles, and land interests, abstracts and title insurance, deeds, easements, liens, mortgages, land contracts, and foreclosures and landlord-tenant relations; private land-use controls including restrictions; condominiums and tax policies pertaining to real estate.</p> <p>Semester Planned: Fall, Spring</p>
<p>REAL 253 HP 17B Seminar .5</p> <p>Semester Prerequisite: None</p> <p>This seminar will acquaint the user of the Hewlett Packard HP-17B Calculator with basic functions, financial calculations, and related real estate calculations. It is designed to provide additional practice with the HP-17B for students currently enrolled in REAL 273, but it is open to any interested students.</p> <p>Semester Planned: Spring</p>	<p>REAL 281 Successful Home Buying Seminar 1</p> <p>Semester Prerequisite: None</p> <p>The successful home buying seminar introduces students to the fundamentals of selling and buying a home. Participants will learn what they need to know about the buying and selling process, from determining needs to closing procedures.</p> <p>Semester Planned: Fall, Spring</p>
	<p>REAL 283 Property Tax Appeal .5</p> <p>Semester Prerequisite: None</p> <p>This course is designed to acquaint the homeowner/taxpayer with the principles behind the computation of Michigan's ad valorem real property tax assessment. Special attention will be paid to real property appraisal and the tax appeal process.</p> <p>Semester Planned: Spring</p>

<p>REAL 285 Real Estate Update Seminar .25</p> <p>Semester Prerequisite: None</p> <p>A series of topical workshops designed to meet the needs of real estate professionals for continuing education in their industry.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>RESP 131 Respiratory Therapy Technology I 4</p> <p>Semester Prerequisite: Admission to Program</p> <p>Introductory course in professional respiratory care that includes didactic instruction, campus lab and clinical lab experience. The emphasis is placed on infection control, medical gases, aerosol and humidity therapy, physical assessment, and patient care principles. Topics of universal precautions and hygiene for the health-care provider are stressed.</p> <p>Semester Planned: Fall</p>
<p>RELG 211 World Religions I 4</p> <p>Semester Prerequisite: WRIT 121/Equivalent</p> <p>This course describes and analyzes the beliefs and practices of Hinduism, Jainism, Buddhism, Sikhism, Confucianism, and Taoism from their origins to the present, and examines their influence on literature and the arts, beliefs and values, socio-economic and political systems, and science and technology in world civilizations.</p> <p>Semester Planned: Fall</p>	<p>RESP 132 Respiratory Therapy Technology II 4</p> <p>Semester Prerequisite: RESP 131</p> <p>Exploration of theory and techniques in individual respiratory care technique. The areas include medical gas, analyzers and blenders, aerosol therapy, airway management, chest physiotherapy, maximum demand inspiration (M.D.I.), intermittent positive pressure breathing (I.P.P.B.), and continuous mechanical ventilation.</p> <p>Semester Planned: Spring</p>
<p>RELG 212 World Religions II 4</p> <p>Semester Prerequisite: WRIT 121/Equivalent</p> <p>This course describes and analyzes the beliefs and practices of Judaism, Christianity, Islam and other Western religions from their origins to the present, and examines their influence on literature and the arts, beliefs and values, socio-economic and political systems, and science and technology in world civilizations.</p> <p>Semester Planned: Spring</p>	<p>RESP 133 Respiratory Therapy Technology III 4</p> <p>Semester Prerequisite: RESP 132</p> <p>A continuation of the techniques in RESP 132. Emphasis is placed in the following areas: advanced critical care techniques, pulmonary diagnostics, resuscitation and advanced cardiac life support, rehabilitation and home care, hemodynamic monitoring, chest radiology, neonatology, and pediatrics.</p> <p>Semester Planned: Summer</p>
<p>RELG 241 Old Testament Literature 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL/WRIT 122 Recommended)</p> <p>This course surveys the content of Judaism's Bible (Christianity's Old Testament) in its original Hebrew cultural and religious context, using some of the insights of modern critical scholarship. The origins and early development of the Hebrews and their religious beliefs and practices are examined.</p> <p>Semester Planned: Fall</p>	<p>RESP 142 Respiratory Therapy Clinical Practice I 9</p> <p>Semester Prerequisite: RESP 131</p> <p>Companion clinical practice course emphasizing the techniques covered in lecture and campus lab in RESP 132.</p> <p>Semester Planned: Spring</p>
<p>RELG 242 New Testament Literature 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL/WRIT 122 Recommended)</p> <p>This course surveys the content of Christianity's New Testament in its original Hebraic and Greco-Roman context, using some of the insights of modern critical scholarship. The origins and early development of Christianity and its religious beliefs and practices are examined.</p> <p>Semester Planned: Spring</p>	<p>RESP 143 Respiratory Therapy Clinical Practice II 5</p> <p>Semester Prerequisite: RESP 132, RESP 142</p> <p>Companion clinical practice course emphasizing the techniques covered in lecture and campus lab in RESP 132 and RESP 133.</p> <p>Semester Planned: Summer</p>
<p>RELG 250 Religions of East Asia 4</p> <p>Semester Prerequisite: WRIT 121 (ENGL/WRIT 122 Recommended)</p> <p>This course surveys the origins and development of East Asian religions. The religious beliefs and practices of Confucianism, Taoism, Buddhism (Mahayana and Tibetan), and Shinto are examined in terms of their vital role in the development of ancient and modern East Asian civilizations.</p> <p>Semester Planned: Spring</p>	<p>RESP 234 Respiratory Therapy Technology IV 3</p> <p>Semester Prerequisite: RESP 133</p> <p>Presents advanced concepts and techniques necessary in specialized areas of a respiratory therapy practice with an emphasis on emerging concepts in techniques and care appliances for this decade. Units of instruction in material and personal management for a clinical environment are presented.</p> <p>Semester Planned: Fall</p>
<p>RESP 123 Cardiopulmonary Applied Basic Sciences and Microbiology 4</p> <p>Semester Prerequisite: Admission to Program</p> <p>This course explores selected areas of physical and biological sciences as applied to the practice of cardiopulmonary care. Basic physical sciences emphasize the states of matter, gases, fluid, and application laws. Biological science application concerns microbiology of pathogens, infections control, and surveillance in medical practice.</p> <p>Semester Planned: Fall</p>	<p>RESP 235 Respiratory Therapy Technology V 3</p> <p>Semester Prerequisite: RESP 234</p> <p>A continuation of RESP 234 which presents concepts and techniques necessary in specialized areas of respiratory practice with an emphasis on emerging concepts in techniques and care appliances for this decade.</p> <p>Semester Planned: Spring</p>
<p>RESP 125 Cardiopulmonary Anatomy and Medical Terminology 3</p> <p>Semester Prerequisite: Admission to Program</p> <p>The course explores general medical terminology while providing an in-depth study of cardiopulmonary anatomy and physiology. An emphasis will be placed on building medical vocabulary and word usage in relation to anatomy and physiology of the respiratory, cardiovascular, and blood and lymph systems.</p> <p>Semester Planned: Fall</p>	<p>RESP 244 Advanced Respiratory Clinical Practice III 8</p> <p>Semester Prerequisite: RESP 143</p> <p>Designed to provide practice of respiratory care in actual clinical settings for specialized contemporary care. These areas include required areas of adult and pediatric critical care, chronic respiratory care, pulmonary function studies, and neonatal intensive care. Optional areas of study include sleep studies, pulmonary home care, pulmonary rehabilitation, and cardiology.</p> <p>Semester Planned: Fall</p>
<p>RESP 126 Cardiopulmonary Physiology and Disease 5</p> <p>Semester Prerequisite: RESP 123, RESP 125/Departmental Approval</p> <p>Explores the physiology and pathophysiology of the cardiopulmonary system. Detailed analysis of pulmonary mechanics and studies, gas transport, circulatory system, acid/base balance, V/Q relationships, control of ventilation, and hypoxia is provided. Emphasis is placed in study of the systems in health and disease.</p> <p>Semester Planned: Spring</p>	<p>RESP 245 Advanced Respiratory Clinical Practice IV 8</p> <p>Semester Prerequisite: RESP 244</p> <p>As the continuation of RESP 244, it too is designed to provide supervised practice of respiratory care in actual clinical settings for each of the highly specialized contemporary care areas.</p> <p>Semester Planned: Spring</p>
<p>RESP 128 Cardiopulmonary Pharmacology and Metrology 2</p> <p>Semester Prerequisite: Admission to Program</p> <p>A study of general concepts of pharmacology and metrology for use in cardiopulmonary care. Emphasis is placed in pulmonary drugs and cardiovascular drugs. Medically-related math skills are developed through example and exercise.</p> <p>Semester Planned: Fall</p>	<p>RESP 251 Practice of Pulmonary Medicine 2</p> <p>Semester Prerequisite: RESP 133</p> <p>Practicing respiratory therapist, pulmonologist and other physicians share theory, techniques, and ethics involved in their practice of pulmonary medicine. Designed to not only shape the roles and practices of new therapist, but to promote understanding among different professionals involved in the practice of pulmonary medicine.</p> <p>Semester Planned: Fall</p>

RESP 252 Respiratory Professional Testing and Management	2	ROMS 225 IBM Query	2
Semester Prerequisite: RESP 251		Semester Prerequisite: CISB 100	
Examines in detail two vital areas of professional development of the Respiratory Therapist. The system of professional advancement for therapist is explored: diagnostic and practice professional examination for the Certification and Registry levels are analyzed closely. Units of instruction in material and personal management for a clinical environment are presented.		IBM Query is a powerful, easy-to-use software package which runs on an IBM AS/400 computer. It is widely used to create display screens, reports, and files by retrieving data from AS/400 files. The student will have extensive hands-on use of Query accessing a complex data base on an AS/400. This course is designed for students with no programming experience.	
Semester Planned: Spring		Semester Planned: Fall, Spring	
RESP 280 Pulmonary Function Diagnostics	3	ROMS 230 Electronic Data Interchange	2
Semester Prerequisite: None		Semester Prerequisite: CISB 100	
Provides an in-depth clinical instruction and practice in pulmonary function testing and other associated areas of pulmonary diagnostics.		Electronic Data Interchange (EDI) is the electronic transfer of business data from one company's computer system to another. Automotive suppliers are the principle users of EDI. Students will learn how EDI works, benefits and costs, standards, third party networks, and how to implement EDI. The course will include classroom demonstrations of EDI software use.	
Semester Planned: Fall		Semester Planned: Fall, Spring	
ROMS 100 Introduction to Information Systems and Technology	3	ROMS 235 Cost Management Systems for Advanced Technology	2
Semester Prerequisite: None		Semester Prerequisite: ROMS 105/ROMS 100/Departmental Approval	
This course introduces the student to resource planning systems including MRPII and their relationships to marketing, bar code/electronic data interchange, design, quality, manufacturing systems, and technology. The student will learn concepts and techniques relevant to APICS certification.		This course covers the cost techniques for a production system transformed from labor intensive to time-based and technology-intensive processes. Topics include activity-based analysis, cost drivers, non-financial measurements, and cost-system analysis.	
Semester Planned: Fall, Spring		Semester Planned: Spring	
ROMS 105 Introduction to Just-In-Time	3	ROMS 240 Bar Code Systems	3
Semester Prerequisite: None		Semester Prerequisite: None	
This course introduces the student to principles, concepts, and techniques of time-based management strategies. Topics include synchronous manufacturing, process flow, total quality, employee involvement, facilities management, and cost reduction. Emphasis is on synchronous manufacturing techniques.		This course introduces the student to the fundamentals of bar code technology including symbologies, standards, and hardware and software systems. Applications and interfaces covered include data collection systems and electronic data interchange. Students will focus on information processing that targets market strategies and improvement drivers.	
Semester Planned: Fall, Spring		Semester Planned: Fall	
ROMS 200 Master Production Planning	3	ROMS 245 Managing Productivity	2
Semester Prerequisite: None		Semester Prerequisite: None	
This course introduces the student to master planning concepts and practices in engineer-to-order, make-to-order, assemble-to-order, and make-to-stock manufacturing environments. Master Production Planning is a primary way to increase customer service and improve utilization of resources in a manufacturing enterprise.		This course emphasizes current concepts related to productivity and the need to stimulate improvements in organizations. The relationships among elements of change, teamwork, communication, and technology are stressed. Students will learn techniques such as process mapping, best practices, and assessments.	
Semester Planned: Fall		Semester Planned: Fall	
ROMS 205 Material and Capacity Requirements Planning	3	ROMS 250 Product Management	2
Semester Prerequisite: None		Semester Prerequisite: None	
Material and Capacity Requirements Planning is a time-phased priority planning system which includes MRP that supports the building plan as defined in the master production schedule. Capacity management is a function of planning, measuring, monitoring, and adjusting levels of capacity sufficient for the execution of the manufacturing system.		This course introduces students to subjects relating to the design, sale and service of a product, such as product life cycle, identifying and satisfying customer needs, creating products and service, and improvement of products in the field. This course will cover marketing and sales, field service, product design and development, and the relationships among these.	
Semester Planned: Spring		Semester Planned: Fall	
ROMS 210 Production Activity Control	3	ROMS 255 Integrated Operations Support	3
Semester Prerequisite: None		Semester Prerequisite: None	
This course covers the principles, approaches, and techniques used by managers to plan, schedule, control, and evaluate the effectiveness of shop production operations.		This course covers the functional responsibilities, direction, strategic issues, and performance measurements for information systems, human resources, total quality management, and finance. Emphasis is placed on the integrated management of resources and the interrelationships of all functional areas throughout an enterprise.	
Semester Planned: Summer		Semester Planned: Fall	
ROMS 215 Total Productive Maintenance	3	ROMS 260 Manufacturing Process Systems	2
Semester Prerequisite: None		Semester Prerequisite: None	
Total Productive Maintenance (TPM) creatively combines preventive and corrective maintenance techniques with principles of design-to-life-cycle-cost to assure reliability in function and ease of maintenance. Students will learn about the principle features of TPM such as total effectiveness, total maintenance systems, and total participation of all employees.		This course is a survey of how manufacturing processes work together to make the products designated by the other activities of an integrated manufacturing system. The course includes four major topics: industrial facilities management, process design and development, manufacturing, and their relationships. On-site studies of an area manufacturer will supplement the course.	
Semester Planned: Fall, Spring		Semester Planned: Spring	
ROMS 220 Materials Logistics	3	ROMS 290 ROMS Independent Study	2
Semester Prerequisite: None		Semester Prerequisite: Instructor Approval	
This course covers the concepts and techniques for the planning and procurement of materials, inventory control in manufacturing, and the distribution of products to customers. Areas covered: inventory planning and control, procurement, distribution, and the relationship among these areas. Topics include inventory methods, supplier partnerships, sourcing, traffic management, warehousing, and finished goods management.		Course content customized to meet needs and interests of student.	
Semester Planned: Spring		Semester Planned: Fall, Spring, Summer	

SAFE 110 Safe Practices and First Aid	3	SDEV 125 Career Planning	2
Semester Prerequisite: None Covers first aid and treatment through lectures, demonstrations, and practice as outlined by the American Red Cross or equivalent; safe working practices with hand tools and around machines; safety devices on machines and how to identify and use them. Semester Planned: Fall, Spring		Semester Prerequisite: None Students learn a career planning process by identifying their interests, values, and skills through a variety of self-assessment exercises. Students will utilize available resources to research career options and participate in classroom discussions on topics relating to career decision making. Semester Planned: Fall, Spring, Summer	
SCIS 124 Seminar: Sex Differences in the Human Brain	2	SDEV 126 Elimination of Self-Defeating Behavior	2
Semester Prerequisite: None Gender differences in the brain are explored through discussion of current research. Topics include anatomical sex differences in the brains of animals and humans, prenatal and postnatal influence of hormones on brain development, lateralization, and sex differences in sensory perception. Students are required to make an oral presentation. Semester Planned: Spring		Semester Prerequisite: None Learning how self-defeating behaviors are started, maintained, and how they can be eliminated is the goal of the course. Behavior change is aimed at teaching people how to live life more fully and happily by identifying and cultivating life-giving behaviors. Semester Planned: Fall, Spring, Summer	
SCIS 297 Independent Study in Science	1	SDEV 127 Job Search Skills	2
Semester Prerequisite: Departmental Approval Special study in science topics such as geology, astronomy, physiology, chemistry, physics, ecology, zoology, or other natural sciences. The topic is chosen by the student, and the project is supervised by a member of the Science Department. Students meet with a supervising instructor by arrangement. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Skills and techniques in the job search process are taught. Course content covers filling out applications, writing résumés and cover letters, interviews, and other techniques used in seeking employment. Group discussions focus upon personal attitudes toward job hunting. Semester Planned: Fall, Spring, Summer	
SCIS 298 Independent Study in Science	2	SDEV 142 Assertiveness I	2
Semester Prerequisite: Departmental Approval Special study in science topics such as geology, astronomy, physiology, chemistry, physics, ecology, zoology, or other natural sciences. The topic is chosen by the student, and the project is supervised by a member of the Science Department. Students meet with a supervising instructor by arrangement. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Assertive behavior is interpersonal behavior in which a person expresses her/his opinions, feelings, beliefs, wants, personal rights, and values in such a way that the rights of others are not violated. Techniques covered teach participants to identify and practice exercising interpersonal rights and assertive skills. Semester Planned: Fall, Spring, Summer	
SCIS 299 Independent Study in Science	3	SDEV 145 Organizing Time	2
Semester Prerequisite: Departmental Approval Special study in science topics such as geology, astronomy, physiology, chemistry, physics, ecology, zoology, or other natural sciences. The topic is chosen by the student, and the project is supervised by a member of the Science Department. Students meet with a supervising instructor by arrangement. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None The most effective and efficient use of time is learned through structured discussions, audiovisuals, written exercises, and readings dealing with goal setting, getting organized, time and work analysis, procrastination, and other barriers to successful time and task management. Semester Planned: Fall, Spring, Summer	
SDEV 103 Preventing Parent Burnout	1	SDEV 150 Divorce Adjustment	1
Semester Prerequisite: None This course is designed to facilitate an understanding of parent burnout and its impact on mental and physical functions. The class will address causes, stages and symptoms, family and relationship dynamics, and problem solving. The course will provide multiple skills and mechanisms to cope with stress and prevent parent burnout. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This course is designed for those who are experiencing or who have recently completed a divorce. The student-centered atmosphere is supportive and geared toward coping with and finding constructive alternatives to the emotional crisis of divorce. Semester Planned: Fall, Spring	
SDEV 118 Stretching Your Dollars	2	SDEV 152 Men and Masculinity	2
Semester Prerequisite: None Assistance is given in very basic money management, budget procedures, record-keeping, wise shopping practices, low-cost entertainment and recreation, effective debt payment methods, and financial goal-setting and planning. Consumer awareness and problems in the marketplace will also be addressed. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This course will examine and explore contemporary masculinity, participants will gain a clearer understanding of the male role, make stereotypes, and societal expectations and their impact on men, on relationships, one's self, and one's culture. Semester Planned: Fall, Spring, Summer	
SDEV 121 Exploring Your Potential	2	SDEV 156 I'm OK/You're OK	2
Semester Prerequisite: None This course is designed to help each person identify past and present achievements which suggest the presence of strengths and potential. The goal of this class is greater realization of one's potential through self-determination. Semester Planned: Fall, Spring		Semester Prerequisite: None This course shows the basic concepts related to transactional analysis (T.A.) and how these concepts can enrich our lives. Within each of us is a child, an adult, and a parent reacting to the world around us. Increased personal awareness about ourselves can help us to be more effective. Semester Planned: Fall, Spring, Summer	
SDEV 124 Techniques of Study	2	SDEV 157 Single Parenting	2
Semester Prerequisite: None Students examine their study habits and work toward practicing skills to enhance classroom performance. Classes include weekly lectures, discussions, and assignments. Skills covered include goal setting, time management, notetaking, reading and memory strategies, library use, and taking exams. A valuable aid for beginning and advanced students. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None This course includes such topics as communication, discipline, time-structuring, and the unique concerns of adults faced with the responsibilities of raising children in a single parent family. Semester Planned: Fall, Spring	

SDEV 158 Anger Awareness	2	SDEV 202 Teach Yourself a New Way to Think	2
Semester Prerequisite: None		Semester Prerequisite: None	
Based on the objective redefinition of anger, this course offers the opportunity to better understand and express this most troublesome human emotion. Self-exploration exercises, journal writing, group sharing, role-playing, lectures, and reading are parts of the learning process leading to "adaptive anger" skills which enhance self-esteem and relationships.		Sessions are designed to break traditional mind patterns to assist the change process. Students study a variety of thinking strategies and learn new creative thinking techniques. These include imagination, motivation, humor, forced relationships, visualization, and fantasy. This course is general in approach and not specific to any one academic discipline.	
Semester Planned: Fall, Spring		Semester Planned: Fall, Spring	
SDEV 169 Women as Winners	1	SDEV 204 Self Defense and Women I	1
Semester Prerequisite: None		Semester Prerequisite: None	
This course is designed to offer participants new tools for insight, self-awareness, and understanding so that they can learn to set their own goals, emancipate themselves from the boundaries they have set for themselves, and, therefore, learn to become more authentic and self-actualizing.		This seminar is a combination of consciousness-raising and skill-building experiences intended to increase students' understanding, resources, and skills in sexual assault prevention and self-defense. Self-defense techniques taught in this seminar will focus on responses to unarmed attacks.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
SDEV 171 Rational Living	2	SDEV 205 Self Defense and Women II	1
Semester Prerequisite: None		Semester Prerequisite: SDEV 204	
Using the teachings of Rational Emotive Training, a variety of approaches will be used to provide students with insight into the sources of problems. Techniques are offered to avoid frustration when the world is not the way it "should" be and for overcoming difficult situations at school, home, and on the job.		This seminar is both a review and expansion of the techniques and skills taught in "Women and Self-Defense I" (SDEV 204). Self-defense techniques taught in this class will focus on "ground defense," responses to armed attacks, multiple attackers, and special assaultive situations.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
SDEV 173 Women Moving Beyond Codependency	2	SDEV 220 Parenting Skills	2
Semester Prerequisite: None		Semester Prerequisite: None	
Students will learn to recognize and value relational strength which they already possess but which are largely unrecognized and undervalued by society. Students will gain understanding of the characteristics of healthy and unhealthy relationships.		This course is designed for anyone interested in the development of parenting skills. Skills will include active listening, problem-solving, and resolution of family conflict. Application of skills involves infants, pre-schoolers, school-age, and older children.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring	
SDEV 176 Widow(er)hood I	2	SDEV 226 Career Planning and Women	2
Semester Prerequisite: None		Semester Prerequisite: None	
Techniques to meet change and crisis in a positive way will be explored. Possible new directions in life and ways to make crisis work for the widowed will be explored in a supportive atmosphere.		Students will be guided through the process of career-decision making focusing on self-exploration and career exploration. Discussions and exercises, in a small group setting, help students identify their interests, skills, and values, including women's issues. Concurrently, students explore careers through library research, computerized resources, and information interviews.	
Semester Planned: Fall, Spring		Semester Planned: Fall, Spring	
SDEV 188 Rape Education	1	SDEV 237 Black Women's Awareness	1
Semester Prerequisite: None		Semester Prerequisite: None	
This course provides information in the following areas: the social and economic causes of sexual assault, motivations of rapists and the victim selection process, medical treatment needs, the legal definition, the psychological recovery process, resistance strategies, and an introduction to the concept of the basics of self-defense.		This class is an exploration of concerns and issues confronting the Black woman in America today. Students will have the opportunity to share their viewpoints and life experiences in response to such questions as: Who is the African-American woman? What are her needs? How can those needs be met?	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
SDEV 190 Success Group	1	SDEV 240 Empathy Training - Listening Skills/Facilitating Decisions	2
Semester Prerequisite: None		Semester Prerequisite: None	
Designed to stress improvement of academic performance, the course provides mutual support and deals directly with the problems of underachievement. Students will learn to set and achieve short-term goals, identify motives, attitudes and study behaviors that lead to success, and those that are related to failure.		The student will learn how to use empathy as a technique to deal with emotions, values, and decision-making in the communication process. The skills will be taught in a small group emphasizing a supportive, experiential atmosphere.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
SDEV 192 Counseling for College Success	2	SDEV 242 Dealing With Stress	2
Semester Prerequisite: None		Semester Prerequisite: None	
Designed to stress improvement of academic performance, the course provides mutual support and is solution focused to setting and achieving short term goals. Students learn to identify motives, attitudes and behaviors that lead to success. Group interaction will enhance understanding.		An understanding of stress and how stress affects health and behavior will be taught. The goal is to aid participants in identifying lifetime skills which promote good mental and physical health. Topics include symptoms, personality, dietary influences, communication, balancing roles, goal setting and wellness.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Fall, Spring, Summer	
SDEV 195 Building Healthy Relationships	2	SDEV 244 Widow(er)hood II	2
Semester Prerequisite: None		Semester Prerequisite: SDEV 176	
For those who wish to take a serious look at "what helps" and "what hurts" in building human relationships. Insights can be applied to any type of relationship and will help participants focus on changes they can/need to make in building a healthier relational life style.		This course is an extension of Widow(er)hood I with a focus on growth. Concerns, such as "single-again" issues, single-parenting, balancing new responsibilities, and the emotional adjustment involved, are covered. A supportive environment which enhances the individual potential of each class member is maintained.	
Semester Planned: Fall, Spring, Summer		Semester Planned: Summer	

<p>SDEV 248 Women's Reentry Seminar 2</p> <p>Semester Prerequisite: None</p> <p>Adjusting to change, setting personal and career goals, building support and confidence, preparing for academic success, and communication skills are emphasized in this course designed for those in transition from a homemaker role to that of student or worker.</p> <p>Semester Planned: Fall, Spring</p>	<p>SIGN 168 Expressive Manual Communication 3</p> <p>Semester Prerequisite: SIGN 162</p> <p>This course focuses on synthesizing grammatical elements of American Sign Language and using them in an expressive mode. It creates awareness of conversational behaviors used by the deaf community and provides practice of those behaviors in classroom and other settings.</p> <p>Semester Planned: Summer</p>
<p>SDEV 271 Living Alone Creatively 1</p> <p>Semester Prerequisite: None</p> <p>Designed for both single men and single women this course focus on creative and positive aspects of living alone (or with others). Information will be shared to increase self-awareness, develop skills, and create a support system to further the goal of living alone creatively.</p> <p>Semester Planned: Fall, Summer</p>	<p>SIGN 170 Creative Arts Signing 3</p> <p>Semester Prerequisite: SIGN 162/Departmental Approval</p> <p>This class explores uses, considerations, and techniques for signing elements of the creative arts including poetry, storytelling, and song.</p> <p>Semester Planned: Summer</p>
<p>SDEV 289 Burnout Prevention Workshop 1</p> <p>Semester Prerequisite: None</p> <p>This student will explore identify the emotions, behaviors, and physical symptoms that are present in the experience of burnout. Attention will be given to the causes of burnout associated with interpersonal relations in the work-place and in non-work life. Methods of control of burnout will be reviewed.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>SIGN 250 Deaf Culture and History 3</p> <p>Semester Prerequisite: SIGN 163/Concurrently</p> <p>This course looks closely at the unique experiences of those in the deaf community. Examines the history of the deaf community in America and the sociology of the hearing-impaired (both deaf and the hard-of-hearing).</p> <p>Semester Planned: Spring</p>
<p>SIGN 160 Orientation to Deafness 2</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Reading Level 3; Writing Level will be Effective Beginning Spring 1996 (See Class Schedule)</p> <p>This course is designed to introduce the student to pathological and cultural perspectives on deafness, and the implications those perspectives have, for persons who are deaf. Topics will be explored through discussions, readings, audiovisual presentations and guest lecturers.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>SIGN 251 Psychosocial Aspects of Hearing Loss 3</p> <p>Semester Prerequisite: SIGN 163/Departmental Approval</p> <p>Provides the student with a more advanced understanding of the effects of hearing impairment on the development of individuals and families. Several different models of human development are explored as they relate to hearing-impaired children and adults, as well as their families and social systems.</p> <p>Semester Planned: Summer</p>
<p>SIGN 161 American Sign Language I 3</p> <p>Semester Prerequisite: SIGN 160/Concurrently/Departmental Approval</p> <p>Designed for students who wish to develop basic knowledge of American Sign Language vocabulary and grammar. There is also emphasis in the use of pantomime to explore non-verbal communication and its function within ASL.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>SIGN 260 Linguistic Principles of American Sign Language 3</p> <p>Semester Prerequisite: SIGN 163/Departmental Approval</p> <p>An overview of the linguistic organization of ASL, including a linguistic perspective on how ASL is learned and how it is (and is not) influenced by English. Topics relevant to interpreting, such as language variation and translation, will be emphasized.</p> <p>Semester Planned: Fall</p>
<p>SIGN 162 American Sign Language II 3</p> <p>Semester Prerequisite: SIGN 161/Departmental Approval</p> <p>Designed to increase students' knowledge and use of American Sign Language vocabulary and grammar, as well as to focus on specific grammatical elements for more in-depth analysis and practice.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>SIGN 261 Principles of Interpreting I 3</p> <p>Semester Prerequisite: ITP Screening/Departmental Approval</p> <p>Surveys basic interpreting through lecture, role playing, and classroom discussion. Introduces the ethics of interpreting, roles, and responsibilities of the interpreter. Examines the role and necessary skills of the interpreter in various settings: educational, mental health, vocational rehabilitation, legal, religious, phone, television, medical, deaf, blind, and minimal language skills.</p> <p>Semester Planned: Fall</p>
<p>SIGN 163 American Sign Language III 3</p> <p>Semester Prerequisite: SIGN 162, SIGN 166</p> <p>Designed to provide additional vocabulary and synthesis of grammatical elements of American Sign Language through expressive and receptive use of conversational sign language.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>SIGN 262 Principles of Interpreting II 3</p> <p>Semester Prerequisite: SIGN 261</p> <p>This course is designed to provide students with simulated testing interpreter/transliterating settings using interactive videotapes of hearing and deaf individuals with the purpose of developing skills necessary for interpreter evaluation.</p> <p>Semester Planned: Summer</p>
<p>SIGN 164 American Sign Language IV 3</p> <p>Semester Prerequisite: SIGN 163/Departmental Approval</p> <p>This course is intended to build conceptual understanding and use of American Sign Language. Students will develop American Sign Language skills by interpreting in ASL paragraphs which are presented in English context.</p> <p>Semester Planned: Fall</p>	<p>SIGN 263 Sign to Voice Interpreting I 3</p> <p>Semester Prerequisite: SIGN 167</p> <p>This course is designed to develop and refine necessary basic skills and fluency in receptive sign language and for voicing all levels of communication of deaf individuals. Techniques taught include interpreter task analysis, listening, attending, internal message formulation, vocabulary search, and monitoring output.</p> <p>Semester Planned: Spring</p>
<p>SIGN 166 Fingerspelling 2</p> <p>Semester Prerequisite: SIGN 162/Concurrently</p> <p>Provides the student with concentrated instruction and practice in both expressive and receptive fingerspelling skills.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>SIGN 264 Sign to Voice Interpreting II 3</p> <p>Semester Prerequisite: SIGN 263/Departmental Approval</p> <p>This course is an advanced class in skill development and fluency in voicing for all communication levels of deaf persons. Techniques taught are voice projection, breathing and relaxation, analysis of sign information, anticipation and prediction, closure, modality switching, correction, image search, décalage and pacing.</p> <p>Semester Planned: Fall</p>
<p>SIGN 167 Receptive Manual Communication 3</p> <p>Semester Prerequisite: SIGN 163/Concurrently</p> <p>Designed to increase the student's receptive skills in conversational sign language focusing on comprehension of the various manual communication systems utilized by deaf persons. Sign-to-voice techniques and practice will be introduced through use of prepared videotapes.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>SIGN 265 Advanced Interpreting and Transliterating Techniques 3</p> <p>Semester Prerequisite: SIGN 262/Departmental Approval</p> <p>This course is designed to continue the development of skills necessary for interpreter evaluation/qualification. Students will be provided with simulated testing situations using interactive videotapes of hearing/deaf individuals requiring students to interpret/transliterate.</p> <p>Semester Planned: Fall</p>

SIGN 267 Practicum I	3	SOCL 288 Third World	3
Semester Prerequisite: SIGN 261/Departmental Approval Combines student transliterated lectures and supervised placement in various interpreting settings to allow directed observation and application of practical interpreting skills. Students will spend a total of 32 clock hours in their placement setting. Semester Planned: Spring		Semester Prerequisite: SOCL 120 An interdisciplinary introduction to the history, society, economy, and politics of Third World nations in Asia, Africa, and Latin America, with emphasis on dilemmas of economic development, cultural and social dependency, and national sovereignty in an interdependent world. These topics will be explored through an analysis of specific case studies. Semester Planned: Fall	
SIGN 268 Practicum II	3	SOCL 295 One Credit Independent Study in Sociology	1
Semester Prerequisite: SIGN 267/Departmental Approval Combines student interpreted lectures and supervised placement in various interpreting settings to allow directed observation and application of practical interpreting skills. Students will spend a total of 32 clock hours in their placement setting. Semester Planned: Summer		Semester Prerequisite: Departmental Approval Independent project involving research, reading and experience in sociology and/or anthropology. The project, chosen by the student, must be approved by the department chair and be supervised by a faculty member. The project must meet specific academic goals. Semester Planned: Fall, Spring, Summer	
SIGN 269 Practicum III	4	SOCL 296 Two Credit Independent Study in Sociology	2
Semester Prerequisite: SIGN 267/Departmental Approval Combines student interpreted lectures and supervised placement in various interpreting settings to allow directed observation and application of practical interpreting skills. Students will spend a total of 64 clock hours in their placement setting. Semester Planned: Summer		Semester Prerequisite: Departmental Approval Independent project involving research, reading and experience in sociology and/or anthropology. The project, chosen by the student, must be approved by the department chair and be supervised by a faculty member. The project must meet specific academic goals. Semester Planned: Fall, Spring, Summer	
SOCL 120 Introduction to Sociology	4	SOCL 297 Three Credit Independent Study in Sociology	3
Semester Prerequisite: None Basic Skills Prerequisite: Reading Level 4; Writing Level (See Class Schedule) A survey of major theoretical perspectives, concepts, and methods of sociology. Emphasis is given to societal origins, evolution, and organization; culture; socialization; stratification; social institutions; and social change. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Departmental Approval Independent project involving research, reading and experience in sociology and/or anthropology. The project, chosen by the student, must be approved by the department chair and be supervised by a faculty member. The project must meet specific academic goals. Semester Planned: Fall, Spring, Summer	
SOCL 185 The Africans	2	SOWK 101 Introduction to Social Work	3
Semester Prerequisite: None A survey of the cultural, social, political, and economic importance of Africa in the modern world. The course will include the television series, <i>The Africans</i> . Semester Planned: Spring		Semester Prerequisite: None This course introduces the principles of social work practice. Emphasis is on social work careers, description of methods, skills and standards of practice, definitions of the helping roles, survey of helping agencies and institutions, and overview of social issues and client needs relative to social work practice. Semester Planned: Fall	
SOCL 196 Japan Adventure Orientation	1	SOWK 203 Social Work Interviewing: Concepts and Skill Practice	3
Semester Prerequisite: None This course is designed specifically for the Japan Adventure participants in order to offer them information on the background, nature, activities, and related rules and regulations of the Japan Adventure program. Semester Planned: Fall		Semester Prerequisite: SOWK 101/HUSE 100 This course examines the purposes and basic concepts of the interview relationship with emphasis on the helping interview. It provides instruction in the techniques of interviewing with an opportunity to engage in practice interviews, including videotaping and feedback. Semester Planned: Spring	
SOCL 254 Marriage and Family	3	SOWK 205 Social Welfare	3
Semester Prerequisite: SOCL 120/PSYC 200 A study of the changes in society over the past century in terms of their dramatic impact on sexual relationships, marriage, and family life. Topics will include sex and gender roles, sexual behavior, values, psychological needs, divorce, and parenting. Semester Planned: Fall		Semester Prerequisite: SOWK 101/HUSE 100 This course introduces the definition and concept of social welfare, its history, programs, attitudes, values, and philosophy. It emphasizes the development of private and public services, changing patterns of services, the evolving changes in the Social Security Act and community action, with attention to current issues in social welfare policy. Semester Planned: Spring	
SOCL 255 Contemporary Social Problems	3	SOWK 209 Community Organization	3
Semester Prerequisite: SOCL 120 Consideration of current social problems, such as family stability, environmental decline, educational decline, health care, public and private indebtedness, racism, poverty, crime, and/or urbanization, from a framework of sociological theory and recent empirical studies. Semester Planned: Spring		Semester Prerequisite: SOWK 101/HUSE 100 This course introduces the principles, concepts, and methods of community organization techniques. Emphasis is on the introduction of basic practice skills and intervention techniques within a framework of beginning theoretical knowledge. Semester Planned: Fall	
SOCL 260 Minority Groups	3	SPAN 101 Elementary Spanish I	4
Semester Prerequisite: SOCL 120 An introduction to the culture and contemporary life styles of American minorities. Emphasis is placed on basic sociological and anthropological concepts with respect to selected minority groups, particularly the African American, Mexican American, Native American, and Asian American. Semester Planned: Fall		Semester Prerequisite: None First course of a two-semester sequence in elementary Spanish. Designed for persons with no knowledge of Spanish who wish to develop basic language skills. Elementary practice in listening comprehension, speaking, reading, and writing. Provides useful information of the Spanish-speaking world. Class taught largely in Spanish. Semester Planned: Fall, Spring, Summer	
SOCL 261 America in the Civil Rights Years	3		
Semester Prerequisite: None This course explores the social, political, and economic aspects of the civil rights movement in the United States from 1954 to 1965. Key concepts, events, and participants in the movement will be studied in order to illuminate how it has affected the course of American politics and society. Semester Planned: Spring			

<p>SPAN 102 Elementary Spanish II 4</p> <p>Semester Prerequisite: SPAN 101/Equivalent/Approval</p> <p>Second course of a two-semester sequence in elementary Spanish. Introduces more complex structures while developing a foundation in the essentials of the language. Emphasizes practice in listening comprehension, speaking, reading, and writing. Provides useful information about the Spanish-speaking world. Class taught largely in Spanish.</p> <p>Semester Planned: Spring</p>	<p>SPCH 120 Dynamics of Communication 3</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Reading Level 2; Writing Level (See Class Schedule)</p> <p>Introduction to the theory and practice of speaking and listening effectively in interpersonal, group, and public communication. The course utilizes readings, lectures, discussions, learning activities, and oral and written assignments to help students both understand the communication process and become more skillful interpersonal, group, and public communicators.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>SPAN 115 Conversational Spanish I 3</p> <p>Semester Prerequisite: None</p> <p>First course of a two-semester sequence in conversational Spanish. Designed for persons who have no knowledge of Spanish and who wish to develop basic conversational skills in the language. Course emphasizes pronunciation of Spanish sounds, practical vocabulary, culture, and essential grammar for communication. Class taught largely in Spanish.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>SPCH 130 Fundamentals of Public Speaking 3</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Reading Level 2; Writing Level (See Class Schedule)</p> <p>Helps beginning speakers develop the skills and confidence needed to speak effectively to audiences in public situations. Through a carefully planned series of speaking assignments, students learn the proper techniques for researching, developing, organizing, outlining, and delivering effective informative and persuasive speeches.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>SPAN 116 Conversational Spanish II 3</p> <p>Semester Prerequisite: SPAN 115/Equivalent</p> <p>Second course of a two-semester sequence in conversational Spanish. Designed for persons who have some knowledge of the language and wish to continue developing basic conversational skills. Course emphasizes practical vocabulary, some aspects of Hispanic cultures, and essential grammar for communication. Class taught largely in Spanish.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>SPCH 140 Interpersonal Communication 3</p> <p>Semester Prerequisite: None</p> <p>Introduction to fundamental principles and skills of interpersonal communication. Students investigate techniques for interacting effectively in family, intercultural, and male/female relationships. Class discussions, learning activities, and assignments assist students in examining the impact of their communication on others and in developing effective interpersonal skills.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>SPAN 201 Intermediate Spanish I 4</p> <p>Semester Prerequisite: SPAN 102/Equivalent/Approval</p> <p>First course of a two-semester sequence in intermediate Spanish. Begins with intermediate review of grammar, intensive vocabulary building, listening comprehension, and writing compositions. Encourages conversation by introducing discussions about the cultures of the Spanish-speaking world. Class taught entirely in Spanish.</p> <p>Semester Planned: Fall</p>	<p>SPCH 250 Advanced Public Speaking 3</p> <p>Semester Prerequisite: SPCH 130/Departmental Approval</p> <p>Intended for students seeking advanced instruction in the principles and techniques of public speaking. Students' knowledge of public communication is enhanced through the investigation of rhetorical theories and relevant research findings. Students' performance techniques are strengthened through a series of oral assignments focusing on informative, persuasive, and special-occasion speaking.</p> <p>Semester Planned: Spring</p>
<p>SPAN 202 Intermediate Spanish II 4</p> <p>Semester Prerequisite: SPAN 201/Equivalent/Approval</p> <p>Second course of a two-semester sequence in intermediate Spanish. Continues an intermediate review of grammar, intensifies vocabulary building, strengthens listening comprehension and composition-writing, and improves oral fluency through intense discussions on the cultures of the Spanish-speaking world. Class taught entirely in Spanish.</p> <p>Semester Planned: Spring</p>	<p>SPCH 260 Nonverbal Communication 3</p> <p>Semester Prerequisite: None</p> <p>Introduction to the ways people communicate without words. Students investigate nonverbal communication theory and research and learn the messages that gestures, facial expressions, vocal cues, physical appearance, clothing, touch, distance and time convey in American and foreign cultures. Students' nonverbal communication skills are enhanced through assignments and in-class learning activities.</p> <p>Semester Planned: Fall</p>
<p>SPAN 295 Independent Study 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Special research projects and/or individual readings in Spanish. Students will invest no less than 32 hours for each credit earned. Enrollment is usually restricted to honors students who have grade-point averages of at least 3.0 in courses offered by this department.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>SPCH 270 Mass Communication 3</p> <p>Semester Prerequisite: None</p> <p>Introduction to broadcast, film, and print media and their impact on the individual and society. Students investigate theory and research on topics including values the media convey, media stereotypes, violence, news, advertising, and the role of media in political campaigns. Assignments and observational projects help students become enlightened media consumers.</p> <p>Semester Planned: Spring</p>
<p>SPAN 296 Independent Study 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Special research projects and/or individual readings in Spanish. Students will invest no less than 32 hours for each credit earned. Enrollment is usually restricted to honors students who have grade-point averages of at least 3.0 in courses offered by this department.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>SPCH 280 Intercultural Communication 3</p> <p>Semester Prerequisite: None</p> <p>Introduction to intercultural communication theory and skills. Students investigate the concepts of communication and culture and learn how such variables as perception, world view, religion, language, and nonverbal systems influence interactions between people of different cultural backgrounds. Class discussions, learning activities, and assignments help students develop their intercultural communication skills.</p> <p>Semester Planned: Spring</p>
<p>SPCH 110 Oral Communications for Business 3</p> <p>Semester Prerequisite: None</p> <p>Introduction to oral communication skills in businesses and organizations. Students will investigate and practice techniques for interacting effectively in diverse workplace situations. Activities include: participating in interviews, managing group dynamics, orienting employees, giving planned presentations, planning conferences, and using current technology to enhance business communication.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>SPCH 295 Independent Study in Speech I 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Individual projects in speech communication. Students will spend at least two hours a week for each credit in independent study.</p> <p>Semester Planned: Fall, Spring, Summer</p>

<p>SPCH 296 Independent Study in Speech II 2</p> <p>Semester Prerequisite: Departmental Approval Individual projects in speech communication. Students will spend at least two hours a week for each credit in independent study. Semester Planned: Fall, Spring, Summer</p>	<p>SURG 104 Operative Procedures 6</p> <p>Semester Prerequisite: SURG 100, SURG 101 Lectures will present indications for surgery, patient preparation, special equipment and supplies, purpose and expected outcome, and possible complications. Semester Planned: Spring</p>
<p>SPEL 005 Spelling Laboratory 0</p> <p>Semester Prerequisite: None SPEL 005 arranges the days and times when students will attend spelling lab courses. Students must register for both a spelling lab course, such as SPEL 109, and a section of SPEL 005. Semester Planned: Fall, Spring, Summer</p>	<p>SURG 121 Applied Surgical Techniques I 1</p> <p>Semester Prerequisite: Admission to Program First clinical session at an assigned hospital. Application of theory in the use of surgical supplies and equipment before scrubbing in actual procedures. Semester Planned: Fall</p>
<p>SPEL 109 Spelling Development I 3</p> <p>Semester Prerequisite: Placement Test Focuses on basic spelling problems and principles progressing from elementary three-letter words through words frequently used but commonly misspelled. Prepares students for Spelling Development II. Semester Planned: Fall, Spring, Summer</p>	<p>SURG 122 Applied Surgical Techniques II 4</p> <p>Semester Prerequisite: SURG 121, Departmental Approval Clinical session at hospital. Students' first experience of application of theory and clinical skills in actual surgical procedures. Semester Planned: Fall</p>
<p>SPEL 110 Spelling Development II 3</p> <p>Semester Prerequisite: SPEL 109/Placement Test Advances from intermediate to college level. Covers words frequently misspelled and misused in general college work and practical adult life situations. Includes meaning, pronunciation, and the most useful spelling principles plus their exceptions. Semester Planned: Fall, Spring, Summer</p>	<p>SURG 123 Applied Surgical Techniques III 8</p> <p>Semester Prerequisite: SURG 122, Departmental Approval Clinical session at hospital. Continued application of theory and clinical skills in advanced surgical procedures. Semester Planned: Spring</p>
<p>SPEL 165 Business Spelling 2</p> <p>Semester Prerequisite: SPEL 110/Placement Test Covers sophisticated and specialized college-level words frequently misspelled and misused in business. Includes general spelling principles and their exceptions, unusual and unexpected spellings in the context of dictation, pronunciation, proof-reading, and correct usage. Semester Planned: Fall, Spring, Summer</p>	<p>SURG 124 Applied Surgical Techniques IV 3</p> <p>Semester Prerequisite: SURG 123, Departmental Approval Clinical session at hospital. Application of theory and clinical skills in advanced surgical procedures and surgical specialty areas. Semester Planned: Spring</p>
<p>STAT 170 Introduction to Statistics 3</p> <p>Semester Prerequisite: 2.0 Minimum in MATH 121/Placement Test This is a survey course in statistics for students in social science, psychology, education, and other non-business disciplines. Topics studied include descriptive statistics, probability, random variables, confidence intervals, hypotheses testing, and linear regression. In addition, students will solve applied problems by completing required computer assignments using a statistical software package. Semester Planned: Fall, Spring, Summer</p>	<p>TDTP 110 Truck Train I 3</p> <p>Semester Prerequisite: Program Admission This is the initial course in a sequence of three. This course is intended to prepare the student to pass the State of Michigan CDL written exam. Some vehicle orientation is included. Semester Planned: Fall, Spring, Summer</p>
<p>STAT 215 Introduction to Probability and Statistics for Business 3</p> <p>Semester Prerequisite: 2.0 Minimum in MATH 122/MATH 126/MATH 130/ Placement Test This is a first course in probability and statistics with emphasis on business applications. Topics studied include descriptive statistics, data analysis, laws of probability, random variables, confidence intervals, and hypothesis testing. In addition, students will solve applied problems by completing required computer assignments using a statistical software package. Semester Planned: Fall, Spring, Summer</p>	<p>TDTP 111 Truck Train II 3</p> <p>Semester Prerequisite: TDTP 110 This is the second course in a sequence of three. Students will operate the vehicles on the driving range, developing the skills necessary to interact with highway traffic. Semester Planned: Fall, Spring, Summer</p>
<p>SURG 100 Fundamental Surgical Technician 3</p> <p>Semester Prerequisite: Admission to Program Introduction to role and function of Surgical Technologist as a member of the surgical team. Lectures present all skills, procedures, and protocol necessary to participate in the operating room. Semester Planned: Fall</p>	<p>TDTP 112 Truck Train III 3</p> <p>Semester Prerequisite: TDTP 111 This is the final course in the Truck Driver Training Program. The students will complete range driving and backing, do local highway driving, and complete an extensive road trip. In the final week, the CDL third-party exam will be administered. Semester Planned: Fall, Spring, Summer</p>
<p>SURG 101 The Surgical Patient 2</p> <p>Semester Prerequisite: Admission to Program Lectures will present the protocol and procedures directly affecting the care and safety of the patient. This includes the ethical, legal, and moral responsibilities of the technologist, the concepts of patient care, and preoperative routines. Semester Planned: Fall</p>	<p>TECH 101 Applied Algebra 4</p> <p>Semester Prerequisite: TECH 100/MATH 040/MATH 050/Placement Test This course introduces and/or reviews basic algebraic operations with emphasis on those operations essential in solving practical problems encountered in shop and/or field operations. Simple trigonometric ratios are introduced for analysis of industrial problems. Calculators are used. Semester Planned: Fall, Spring</p>
<p>SURG 103 Surgical Asepsis 2</p> <p>Semester Prerequisite: Allied Health Professional Basic course on hospital infections including definitions, pathogenic organisms, bacteria fungi, viruses, protozoa, and transmission of infectious agents. Covers sterilization and disinfection of equipment and supplies in the operating room. Semester Planned: Fall</p>	<p>TECH 102 Applied Geometry and Trigonometry 4</p> <p>Semester Prerequisite: TECH 101/MATH 062/Placement Test Applications of geometric and basic trigonometric functions in the solution of practical shop and field problems. Provides opportunities to use critical thinking skills in the solution of problems taken directly from industry. Semester Planned: Fall, Spring</p>
	<p>TECH 103 Compound Angles 4</p> <p>Semester Prerequisite: TECH 102 This course combines solid geometry and advanced (solid) trigonometry, enabling students to solve setup problems involving angles and tilted work. Emphasis on application of actual tooling setups for complex machining operations is used to make the course relate to real life situations. Semester Planned: Spring</p>

<p>TECH 110 Technical Math 5</p> <p>Semester Prerequisite: Placement Test</p> <p>This course applies topics from algebra and trigonometry to architectural, civil, GIS, landscape, electronics, and construction technologies. Topics include quadratic equations, trigonometry, vectors, number bases, basic logic, and Boolean Algebra.</p> <p>Semester Planned: Fall</p>	<p>TECH 171 Offset Printing I 3</p> <p>Semester Prerequisite: None</p> <p>This course explores basic printing processes and operations. It covers offset techniques, stripping, layout, and composition processes.</p> <p>Semester Planned: Fall, Spring</p>
<p>TECH 115 Technical Related Seminar 1.5</p> <p>Semester Prerequisite: None</p> <p>This course will cover a variety of topics in technical related fields. For individuals already employed in the technical environment seeking to upgrade their skills or anyone looking to be employed in a particular technology.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>TECH 172 Offset Printing II 3</p> <p>Semester Prerequisite: TECH 171</p> <p>This is a further study of individual interest areas: press operations, processes, process camera, halftones, and new techniques and tricks of the trade.</p> <p>Semester Planned: Fall</p>
<p>TECH 120 Technical Communications 4</p> <p>Semester Prerequisite: None</p> <p>This course uses a practical approach to clear communication, including organizational skills, a review of grammar, and skills needed to write and speak effectively on the job. Written assignments include memos and business letters.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>TECH 181 Technical Related Seminar 1</p> <p>Semester Prerequisite: None</p> <p>This course will cover a variety of topics in technical related fields. For individuals already employed in the technical environment seeking to upgrade their skills or anyone looking to be employed in a particular technology.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>TECH 124 Technical Report Writing 3</p> <p>Semester Prerequisite: TECH 120</p> <p>This course covers technical writing style, format, and techniques. Emphasis is on organization and purpose. Special unit on developing materials for employment applications. Recommended for second-year students.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>TECH 183 Technical Related Seminar 3</p> <p>Semester Prerequisite: None</p> <p>This course will cover a variety of topics in technical related fields. For individuals already employed in the technical environment seeking to upgrade their skills or anyone looking to be employed in a particular technology.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>TECH 125 Technical Presentations 2</p> <p>Semester Prerequisite: None</p> <p>This course covers the technical knowledge, skills, and techniques for preparing and delivering informative and persuasive speeches to small, technically knowledgeable groups in industrial settings.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>TECH 184 Technical Related Seminar 4</p> <p>Semester Prerequisite: None</p> <p>This course will cover a variety of topics in technical related fields. For individuals already employed in the technical environment seeking to upgrade their skills or anyone looking to be employed in a particular technology.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>TECH 130 PC Applications for Technology 3</p> <p>Semester Prerequisite: None</p> <p>This course provides students with a basic understanding and skill level in some PC applications used in technology. In addition to DOS, applications covered include a word processor, a spreadsheet, a database manager and a computer-assisted drafting/design program. This is an introduction to four different applications commonly found on microcomputers used in technology.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>THEA 041 Art and Craft of Acting: Scene Study Workshop for High School Students 4</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Students work on basic acting, voice, and movement skills, analyze dramatic literature, and present a final classroom performance. Designed for motivated high school students.</p> <p>Semester Planned: Summer</p>
<p>TECH 132 PC/MS DOS Applications for Technology 2</p> <p>Semester Prerequisite: TECH 130</p> <p>This course provides intermediate to advanced instruction in the PC-DOS/MS-DOS operating system. Topics include the directory structure, batch files, retrieving lost files, and all major DOS commands. This course is especially valuable for those responsible for installing and maintaining software on PCs, including CAD/CAM systems, and other technology-related applications.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>THEA 071 Musical Theatre Workshop for High School Students 6</p> <p>Semester Prerequisite: Approval by Audition</p> <p>A workshop which includes class voice, musical theatre dance technique, and basic acting skills. Workshop culminates in a studio performance of a musical revue in which all students must act, sing, and dance.</p> <p>Semester Planned: Summer</p>
<p>TECH 161 Gunsmithing 2</p> <p>Semester Prerequisite: None</p> <p>Topics include installation of sights, scopes and rebarrelling actions. Repairing and restocking rifles and shotguns as well as assembling muzzle-loading kits are topics that could be covered.</p> <p>Semester Planned: Fall</p>	<p>THEA 081 Theatre Classics Workshop for High School Students 3</p> <p>Semester Prerequisite: Departmental Approval</p> <p>High school workshop in which students will analyze classical scripts, scan verse scripts, develop understanding of power of poetry, and work as a choral unit. Students will work with both Shakespeare and Greek scripts. Workshop culminates in a recital performance of scenes.</p> <p>Semester Planned: Summer</p>
<p>TECH 164 Boat Building 2</p> <p>Semester Prerequisite: None</p> <p>The students learn to build a boat with materials and processes using wood and modern adhesives and coatings in a manner suitable for work in a small shop. Subjects covered include boat design, alternate construction methods, materials required, and laying out the hull.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>THEA 091 Studio Performance Workshop: Play Performance for High School Students 5</p> <p>Semester Prerequisite: Approval by Audition</p> <p>Students will perform an entire production of a chosen script. Focus in the workshop will be on basic acting skills, script analysis, script scoring, rehearsal techniques and strategies, and production skills.</p> <p>Semester Planned: Summer</p>
<p>TECH 166 Bicycle Repair and Maintenance 2</p> <p>Semester Prerequisite: None</p> <p>This course covers basic reconditioning techniques for bicycles, including wheel respoking, truing wheels, and general maintenance.</p> <p>Semester Planned: Fall, Spring</p>	<p>THEA 110 Introduction to Theatre 3</p> <p>Semester Prerequisite: None</p> <p>Introduction to Theatre includes definition and analysis of theatrical art, incorporating script analysis, theatre history, the relationship between theatre and the culture from which it comes, and the roles of theatre practitioners.</p> <p>Semester Planned: Fall, Spring, Summer</p>
	<p>THEA 111 Production Practicum I 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Introduction to the techniques of stage craft for the performing arts: the basic fundamentals involved in tool usage and safety, stage lighting, lighting plot interpretation, and understanding of the organization of backstage production.</p> <p>Semester Planned: Fall, Spring</p>

THEA 112 Production Practicum II	2.5	THEA 172 Dramatic Form and Function II	3
Semester Prerequisite: THEA 111 In-depth study of stage craft for the performing arts. Student must work as crew chief in some technical area on a studio or mainstage production. Semester Planned: Fall, Spring		Semester Prerequisite: Departmental Approval Dramatic Form and Function II focuses on the writings of Shakespeare and the classical Greeks. The student will read a minimum of eight classical scripts, analyze them using Aristotelian analysis, and research one script in terms of production styles through history. Semester Planned: Fall, Spring	
THEA 116 Design Practicum I	3	THEA 181 Improvisation	2.5
Semester Prerequisite: None Introduction to the elements of design and how they relate to performance. Introduction to color theory as it relates to paint, light, and fabric. Techniques of rendering, translation of a picture to three-dimensionality, spatial relationships, and development of a design concept also covered. Semester Planned: Fall, Spring		Semester Prerequisite: Departmental Approval By using the improvisational techniques of mask work and developmental exercises, this course will train the student in long-term, in-depth character development. Semester Planned: Fall, Spring	
THEA 120 Introduction to Acting	2	THEA 182 Advanced Improvisation	1
Semester Prerequisite: None Explores various acting techniques and introduces the beginning student to the skills necessary to maintain a sustained dramatic performance. Theatre games and improvisation exercises to overcome stage fright and to develop concentration and listening skills are heavily emphasized. Students present final short scene. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Departmental Approval Students will develop performance materials for classroom presentation based on current issues of public concern selected by the instructor, and will develop one character. Semester Planned: Fall, Spring	
THEA 122 Introduction to Scene Study	1	THEA 192 Scene Study	2
Semester Prerequisite: THEA 120, Departmental Approval Students rehearse and perform short scenes from contemporary plays. Course includes scoring and script analysis by beats. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: THEA 120 This course is designed for non-majors and focuses on analysis of contemporary scripts ranging from Ibsen to Shepard and Mamet. Students will study both dramatic and comedic material. THEA 192 is usually offered in an eight-week format. Semester Planned: Fall, Spring	
THEA 124 Introduction to TV/Film Acting	2	THEA 193 Scene Study: Performance	2
Semester Prerequisite: THEA 120 Designed to introduce the acting student to the basic skills needed for working in front of the camera. Activities include scene study, learning basic terminology, and developing energy in front of the camera. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: THEA 192, Departmental Approval Students will rehearse and perform selected comedic and dramatic scenes and present them for an invited audience. THEA 193 is usually offered in an eight-week format. Semester Planned: Fall, Spring	
THEA 131 Studio Theatre Performance I	1	THEA 194 Acting Comedy Styles	2
Semester Prerequisite: Departmental Approval Course includes rehearsal, performance, and evaluation of a contemporary script. Focus is on an understanding and implementation of skills acquired in THEA 141 and the relationships experienced between actor and director. Semester Planned: Fall, Spring		Semester Prerequisite: THEA 120 Designed for non-majors, this course surveys comic material throughout theatrical history, studying the philosophical and psychological theories of comedy. The student will study six different comic styles. THEA 194 is usually offered in an eight-week format. Semester Planned: Fall, Spring	
THEA 132 Studio Theatre Performance II	1	THEA 195 Acting Comedy Styles: Performance	2
Semester Prerequisite: Departmental Approval Course includes rehearsal, performance, and evaluation of verse script or scenes from Shakespeare or the classical Greeks. Focus on application of skills acquired in THEA 142, and on relationship between actor and director. Majors only. Semester Planned: Fall, Spring		Semester Prerequisite: THEA 194, Departmental Approval Students will select five of the six comedic styles studied in THEA 194 to rehearse and perform for an invited audience. THEA 195 is usually offered in an eight-week format. Semester Planned: Fall, Spring	
THEA 141 Acting I - Contemporary	2.5	THEA 198 The Actor and the Playwright	2
Semester Prerequisite: Departmental Approval Fundamentals of acting, including improvisational techniques; mask work; the physical, vocal, and internal development of character; analysis and scoring by beats of a contemporary script. Majors only. Semester Planned: Fall, Spring		Semester Prerequisite: THEA 120 This course is designed for non-majors and focuses on a different playwright each semester. Students will read from the playwright's works, study scenes from his/her works, and analyze the contribution made by the given playwright to the theatre. Semester Planned: Fall, Spring	
THEA 142 Acting II - Classics	2.5	THEA 199 Performance: The Actor and the Playwright	2
Semester Prerequisite: Departmental Approval Fundamentals of acting in heightened context. Students will pursue improvisational work, mask work, and scoring. Students will develop an understanding of the power of language through verse scansion and the physical, vocal, and internal development of characters from classical literature. Majors only. Semester Planned: Fall, Spring		Semester Prerequisite: THEA 198, Departmental Approval Students will rehearse and perform scenes and monologues from chosen playwright's work for an invited audience. THEA 199 is usually offered in an eight-week format. Semester Planned: Fall, Spring	
THEA 171 Dramatic Form and Function I	3	THEA 210 Theatre History	3
Semester Prerequisite: Departmental Approval An analysis of modern contemporary classics of the theatre. The student will read and analyze a minimum of eight contemporary scripts from Ibsen to Shepard. The student will develop a comprehensive production concept for one of these scripts. Semester Planned: Fall, Spring		Semester Prerequisite: None Examination of the history of drama from primitive times to the present, introducing the overall pattern of theatre history with emphasis on European and American development. Required for all majors. Semester Planned: Fall, Spring	

<p>THEA 213 Stage Management 2</p> <p>Semester Prerequisite: None</p> <p>Introduction to the basic techniques of stage management, emphasizing the stage manager's responsibilities, the relationship of stage manager to the producer, director, designer, crew, cast; techniques to work up production and rehearsal schedules, contact sheets, scene breakdowns, blocking notations and cueing of show.</p> <p>Semester Planned: Fall, Spring</p>	<p>THEA 238 Theatre Special Projects 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Students will be given the opportunity to direct, design, produce, or perform in College-supported outdoor theatrical events in the amphitheatre or a comparable space. Students will also participate in company class, in which new ideas in acting training will be presented.</p> <p>Semester Planned: Summer</p>
<p>THEA 216 Design Practicum II 3</p> <p>Semester Prerequisite: THEA 116</p> <p>Advanced studies in stage design concepts and practice. The student will learn specialized design and drafting methods as elements in the design process.</p> <p>Semester Planned: Fall, Spring</p>	<p>THEA 241 Acting III - Creating Theatre 2.5</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Explores acting techniques and styles of different historical periods and/or cultures. Student will survey a cross-section of acting styles and periods then focus on in-depth exploration of particular period or style. Class limited to second-year majors. In-depth area of study selected by instructor.</p> <p>Semester Planned: Fall, Spring</p>
<p>THEA 217 Beginning Lighting Design 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Beginning studies in lighting design concepts and practice. The student will learn instrumentation, use of color and intensity, history of lighting, and will apply these to a design concept.</p> <p>Semester Planned: Fall, Spring</p>	<p>THEA 251 Stage Voice for the Actor 3</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Course will cover strategies in vocal production and variety; will focus on exercises to develop vocal flexibility from Lessac, Linklater, and/or Berry techniques; and will experience vocal techniques which lead to greater emotional awareness and responsiveness. For second-year theater majors.</p> <p>Semester Planned: Fall, Spring</p>
<p>THEA 218 Scene Painting 2</p> <p>Semester Prerequisite: None</p> <p>Designed to teach the basics of scene painting, including instruction in color theory, various brands and types of paint available, and the use of tools and techniques of scene painting.</p> <p>Semester Planned: Fall, Spring</p>	<p>THEA 261 Movement for the Actor 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Course will cover strategies developing student's physical endurance, strength, flexibility, and grace. Student may explore movement to music, stage combat, pantomime, and/or dance styles, and techniques from many world cultures. For second-year theatre majors.</p> <p>Semester Planned: Fall, Spring</p>
<p>THEA 220 Beginning Directing 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Student will learn history of directing, staging, motivational blocking, relationship to actors and design staff, and will apply to staging of short scene or short one-act play.</p> <p>Semester Planned: Spring</p>	<p>THEA 271 Dramatic Form and Function III 3</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Student will study a particular topic through different theatrical forms, plays, and historical periods. The class culminates in each student's selection of a topic and completion of research into the theatrical response to that topic. For second-year theater majors.</p> <p>Semester Planned: Fall, Spring</p>
<p>THEA 222 Directed Study 2</p> <p>Semester Prerequisite: Instructor Approval</p> <p>Directed study for advanced students working under the guidance of faculty on special projects outside the scope of standard classroom instruction.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>THEA 281 Advanced Improvisation II 1</p> <p>Semester Prerequisite: THEA 182, Departmental Approval</p> <p>Students will continue to edit and polish the scripts and performances created in THEA 182. Students may also work improvisationally with local student groups to develop spontaneity, creativity, and cooperation.</p> <p>Semester Planned: Fall, Spring</p>
<p>THEA 223 Directed Study 3</p> <p>Semester Prerequisite: Instructor Approval</p> <p>Course for advanced students working under the guidance of faculty on special projects outside the scope of standard classroom instruction.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>THEA 283 Audition Workshop 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An intense workshop in which participants prepare and polish audition materials suited for a professional audition or audition for advance training. Course usually taught by guest actors, agents or teachers from larger theatrical or film markets.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>THEA 233 Studio Theatre Performance III 1</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Studio Theatre Performance III provides rehearsal and performance opportunities in oral interpretation and/or readers theatre presentations. Usually offered in eight-week format. Second-year theatre majors only.</p> <p>Semester Planned: Fall, Spring</p>	<p>THEA 285 Stage Makeup 2</p> <p>Semester Prerequisite: None</p> <p>A course in the application of stage makeup to develop a character and to assist the actor in sustaining the character in performance. Emphasizes skills in the use of different kinds of makeup, hairstyling, and appearance changes.</p> <p>Semester Planned: Fall, Spring</p>
<p>THEA 235 Studio Theatre Performance V 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Studio Theatre Performance V provides the second-year theatre major an opportunity to explore a specific theatrical period or style in both rehearsal and performance.</p> <p>Semester Planned: Fall, Spring</p>	<p>THEA 295 Acting Styles I 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>An elective course for advanced students, this course will give the student an opportunity to explore theatrical styles from musical theater to the Greeks. Style is selected by instructor previous to given semester. Usually offered in eight-week format.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>THEA 236 Theatre Special Projects 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Student will be given the opportunity to direct, design, produce, or perform in a touring production mounted by the College. Limited to individuals who have been selected as cast members or technical or design staff in scheduled tour.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>THEA 296 Acting Styles Performance 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Students choose to rehearse and perform an in-class presentation of skills developed in THEA 295. Usually offered in eight-week format.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>THEA 237 Theatre Special Projects 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Student will be given the opportunity to direct, design, perform, or produce productions for College functions on the main stage or comparable space. Limited to individuals who have been selected as cast members or technical or design staff in a scheduled LCC performance.</p> <p>Semester Planned: Fall, Spring, Summer</p>	

TRVL 100 Introduction to Travel Agency Operations	3	TRVL 150 Tourism/Travel Operations	3
Semester Prerequisite: None An introduction to the career opportunities in travel agency, airline, and tour escorting operations. This class is designed to provide an overview of the travel industry—past, present, and anticipated future. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None An introduction to the principles of tourism, practices, and philosophies and offers a practical and realistic education in the business of tourism. Semester Planned: Fall, Spring	
TRVL 110 Travel Agency Ticketing Domestic/International	3	TRVL 170 Opening/Operating/Franchising a Travel Agency	3
Semester Prerequisite: TRVL 100 Recommended The fundamentals of air scheduling, reading and correctly using domestic and international air tariffs, and calculating the correct fares for air itineraries. Learning correct procedures for issuing accountable and non-accountable tickets. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None The description and explanation of the procedures involved in starting a new travel agency or acquiring an existing agency. The advantages and disadvantages of co-ops, consortiums, and franchising will also be discussed. This course will provide insight into travel agency operations from a management perspective. Semester Planned: Fall, Spring	
TRVL 120 North American Travel I	3	TRVL 180 Your Career/Flight Attendant	3
Semester Prerequisite: None History and development of the 50 U.S. states, Canada, and Mexico with specific location and identification projects. Major points of tourism interest will be discussed along with climate, ethnic influences, distances, and time zones. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None To provide information and practical knowledge of a career as a flight attendant via lectures, discussion, films, and demonstrations both in the classroom and on an aircraft. Information on the duties and responsibilities of the pilot and flight crew will be discussed. Semester Planned: Fall, Spring	
TRVL 125 Foreign Country Travel II	3	TRVL 190 Internship and Seminar	3
Semester Prerequisite: None The history and development of Central America, South America, and the Caribbean with specific location and identification projects. These will include countries, capitals, principal cities, rivers, lakes, and mountains. Major points of tourist interest will be discussed along with climate, distances and time zones, passports, visas, and other entry requirements. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: Credits in Travel Program Available to students who have completed or are approaching 200 hours of work experience in tourism or travel agency operations. A term project is required. Semester Planned: Fall, Spring, Summer	
TRVL 130 Foreign Country Travel III	3	TRVL 200 Profitable Travel Sales, Marketing, and Counseling	3
Semester Prerequisite: None A study of history and development of the Middle East and Europe, with specific location and identification projects. Major points of tourist interest will be discussed along with climate, distances and time zones, passports and visas, and other entry requirements. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None An introduction to methods and techniques used in the modern travel agency covering the marketing environment, identifying consumer needs, and examining the product, price, and promotion. To accomplish the above, the art of negotiations, role playing, telephone etiquette, and human relations skills will be included in the course content. Semester Planned: Fall, Spring, Summer	
TRVL 131 Foreign Country Travel IV	3	TRVL 210 Group Travel/Escorting Operations	4
Semester Prerequisite: None A study of history and development of Africa, Asia, and the Pacific with specific location and identification projects. Major points of tourist interest will be discussed along with climate, distance, and time zones. Passports, visas, and other entry requirements will be covered. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None An overview of group tours and tour escorting operations, and policies and procedures required by most tour companies. Content includes how to locate groups, how to organize group travel, how to assemble the group tour package, and how to be an effective tour leader. Semester Planned: Fall, Spring	
TRVL 135 Airline/Airport Operations	3	TRVL 220 International Relations	3
Semester Prerequisite: None An introduction of tasks performed by airline and airport personnel along with the basic structure and functions of an airport and the airline carriers. Topics to be discussed include ticket counter operation, the gate area, cargo handling and loading, aircraft weight and balance, and various principles of aeronautics. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Discusses political, social and economic relationships between countries and their effects on the travel and tourism industry. Defining and discussing cultural differences, introducing foreign currencies, discussing travel tips and adjusting to inter-cultural living experience. Semester Planned: Fall, Spring, Summer	
TRVL 140 Computer Reservation Training	3	TRVL 230 Travel and Tourism Law and Current Events	3
Semester Prerequisite: TRVL 100/Ability to Type 30 WPM This is the first class of a three class course in instruction and use of the American Airlines SABRE airline reservation system. This course is designed to give the student the basic skills required for making airline computer reservations and use of SABREWorks to create correspondence relating to the travel industry. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None A course for travel agents and their personnel, as well as individuals interested in Travel Agency Operations. Creates an awareness of the responsibilities and rights which the law imposes upon and grants to the travel agent. The course will also discuss the consequences caused by failure in those responsibilities. Semester Planned: Fall, Spring	
TRVL 145 Introduction to Cruise Sales and Ground Transportation	3	TRVL 250 Advanced Computer Ticketing	3
Semester Prerequisite: None An analysis of cruise, railroads, car rentals, and bus transportation, including how to sell the above. Other information will include costs, selling techniques, and how to select the best transportation for your client using current profiles and listings and reference materials for domestic and international destinations. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: TRVL 110, TRVL 140 The course will begin with review of materials learned in TRVL 140 and progress to pricing and ticketing, followed by fare construction, fare rules, car and hotel reservations. SABREVision, the hotel display with pictures and maps, will be utilized, and further uses of SABREWorks will be taught. Semester Planned: Fall, Spring, Summer	
TRVL 146 Seminar at Sea	2	TRVL 255 Advanced Sabre Training	3
Semester Prerequisite: None A seminar designed to develop a basic understanding of cruise lines and their ships. Students will be able to gain firsthand knowledge of cruise lines and pier/dock facilities and also have dialogue with cruise ship staff members and observe daily cruise activities. Semester Planned: Fall, Spring		Semester Prerequisite: TRVL 250 A course designed to give extended use of the American Airlines SABRE computer. Skills will be taught in the expanded capabilities of the computer in use of international reservations and ticketing, tour bookings, fare storing, and destination information. Skills taught in the use of SABREWorks, using spreadsheets and database. Semester Planned: Fall, Spring, Summer	

<p>TRVL 260 Travel Agency Accounting 2</p> <p>Semester Prerequisite: None</p> <p>A course designed to explain and describe basic travel agency accounting concepts. Approximately one-half of the course will be dedicated to the compilation and interpretation of financial statements. The other half of the course will discuss how accounting systems should be constructed for the travel agency business.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>WELD 140 Creative Welding 2.5</p> <p>Semester Prerequisite: WELD 100</p> <p>This is a course for people with an interest in artwork in a metal medium. Participants will become familiar with welding and cutting processes for the opportunity to explore creative expression.</p> <p>Semester Planned: Fall, Spring</p>
<p>VCBL 109 Vocabulary Improvement I 2</p> <p>Semester Prerequisite: Placement Test</p> <p>Basic Skills Prerequisite: Reading Level 5</p> <p>Knowledge of and extensive practice with word parts (roots, prefixes, and suffixes) are used to develop skills in building vocabulary. Emphasis given to correct oral and written usage, dictionary skills, and mastery of troublesome words.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>WELD 194 Welding Project Lab 4</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Further welding skills in maintenance welding, production welding, resistance welding and/or tool and die welding, depending on the direction the student would like to take his/her welding skills.</p> <p>Semester Planned: Fall, Summer</p>
<p>VCBL 110 Vocabulary Improvement II 2</p> <p>Semester Prerequisite: VCBL 109/Placement Test</p> <p>Basic Skills Prerequisite: Reading Level 8</p> <p>Builds on skills developed in Vocabulary Improvement I (word memory, detecting word meaning from context, using dictionary, mastery of roots, prefixes, suffixes) by applying previously mastered roots and skills to learning new, advanced, and career words.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>WELD 201 Tool and Die Welding 4</p> <p>Semester Prerequisite: WELD 101, WELD 111, MACH 135</p> <p>Theory and practice methods involved in welding various alloyed metals, preheating and postheating of metals, recognition of materials, alloying elements, and their effects. Also, the proper usage of air, oil, and water hardening steels.</p> <p>Semester Planned: Fall, Spring</p>
<p>WELD 100 Combination Welding 4</p> <p>Semester Prerequisite: None</p> <p>This is a beginning theory and practice course which will introduce the safe operations and applications of oxyacetylene welding, cutting, brazing and shielded metal arc welding. Practice will consist of these methods of joining steel in the horizontal, flat, and vertical positions. Destructive testing will also be provided.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>WELD 205 Pipe Welding 4</p> <p>Semester Prerequisite: WELD 101, WELD 120</p> <p>Theory, cutting, fitup, and practice on different sizes of pipe using shielded metal arc welding. Varied weld and base metal testing methods are used to the strict code requirements. Focus on low hydrogen type electrodes in groove and fillet welds in the 2G, 5G, and 6G positions.</p> <p>Semester Planned: Fall</p>
<p>WELD 101 Advanced Arc Welding 4</p> <p>Semester Prerequisite: WELD 100</p> <p>Will develop the skills necessary to produce quality multiple pass fillet and groove welds on steel plates. Conventional and low hydrogen electrodes are used in preparation of passing performance tests in all positions. Destructive testing methods, weld profiles, and welding symbols as related to arc welding are introduced.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>WELD 210 Aircraft Welding 2</p> <p>Semester Prerequisite: Departmental Approval</p> <p>Presents welding applications and methods used in repairs and inspection of aircraft structures in accordance with approved aviation maintenance techniques.</p> <p>Semester Planned: Fall, Spring</p>
<p>WELD 110 Gas Metal Arc Welding 4</p> <p>Semester Prerequisite: WELD 100</p> <p>Provides technical understanding and applications of Gas Metal Arc Welding and Flux Cored Arc Welding. Fundamentals, safety, equipment adjustments, metal transfers, and shielding gases will be covered. Develops manual skill in all positions on different thicknesses and types of metals, including basic programming of an automated robot cell.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>WRIT 005 Writing Laboratory 0</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Writing Level (See Class Schedule)</p> <p>WRIT 005 arranges the days and times when students will attend writing lab courses. Students must register for both a writing lab course and a section of WRIT 005.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>WELD 111 Gas Tungsten Arc Welding 4</p> <p>Semester Prerequisite: WELD 100</p> <p>Will develop the skills, principles, and applications of Gas Tungsten Arc Welding and Plasma Arc Welding. Welds will be done on different thicknesses of ferrous and non-ferrous metals in all positions. Proper material cleaning, fit up, and safety are also introduced.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>WRIT 101 Writing Laboratory I 1</p> <p>Semester Prerequisite: None</p> <p>Designed to teach fundamental writing skills and improve confidence and self-esteem. Provides a personal program combining one-to-one tutoring with directed practice. Requires enrollment in WRIT 005, which arranges times for laboratory attendance. (May repeat for credit three times.)</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>WELD 120 Structural Fabrication and Inspection 4</p> <p>Semester Prerequisite: WELD 101</p> <p>Introduction to steel fabrication in accordance with the American Welding Society Structural Welding Code D1.1 applications and requirements. The student will be introduced to the numerous destructive and non-destructive methods of welding inspections. Satisfactory completion of this course will assist the student in passing a welding certification test.</p> <p>Semester Planned: Fall, Spring</p>	<p>WRIT 102 Writing Laboratory II 2</p> <p>Semester Prerequisite: None</p> <p>Designed to teach fundamental writing skills and improve confidence and self-esteem. Provides a personal program combining one-to-one tutoring with directed practice. Requires enrollment in WRIT 005, which arranges times for laboratory attendance. (May repeat for credit three times.)</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>WELD 125 Structural Blueprint Reading for Welders 2</p> <p>Semester Prerequisite: TECH 100/MATH 050</p> <p>Blueprint and welding symbols are the universal language of the welding industry. It is developed for students, apprentices, technicians, and others who must develop the ability to read and accurately interpret blueprints. Teaches awareness of the advancement in metallurgy, welding processes, consumables and strict code enforcement used in industry today.</p> <p>Semester Planned: Fall</p>	<p>WRIT 103 Writing Laboratory III 3</p> <p>Semester Prerequisite: None</p> <p>Designed to teach fundamental writing skills and improve confidence and self-esteem. Provides a personal program combining one-to-one tutoring with directed practice. Requires enrollment in WRIT 005, which arranges times for laboratory attendance. (May repeat for credit three times.)</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>WRIT 104 Writing Laboratory IV 4</p> <p>Semester Prerequisite: None</p> <p>Basic Skills Prerequisite: Writing Level (See Class Schedule)</p> <p>Designed to teach fundamental writing skills and improve confidence and self-esteem. Provides a personal program combining one-to-one tutoring with directed practice. Requires enrollment in WRIT 005, which arranges times for laboratory attendance. (May repeat for credit three times.)</p> <p>Semester Planned: Fall, Spring, Summer</p>	

WRIT 110 Confidence in Writing 4	WRIT 122 Composition II 4
Semester Prerequisite: Placement Test Basic Skills Prerequisite: Writing Level (See Class Schedule) Designed to help students understand the writing process, reduce writing anxiety, and develop basic writing skills. Emphasizes planning, composing, and revising strategies for experiential writing. Provides frequent writing practice in a supportive workshop environment. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: WRIT 121 Builds upon the writing skills developed in WRIT 121 to help students write argumentative essays which use logical support and appropriate documentation. Emphasizes research techniques and use of sources, and the development, structure, and style of the research paper. Some sections use word processing. Semester Planned: Fall, Spring, Summer
WRIT 111 Writing Preparation I 2	WRIT 131 Honors Composition I 4
Semester Prerequisite: None Basic Skills Prerequisite: Writing Level (See Class Schedule) Prepares students for Writing Preparation II by teaching students to see themselves as writers, to take responsibility for developing their writing and editing skills, to use language skills interactively to support their writing projects. The classroom offers a supportive workshop environment; the lab offers individualized tutorial assistance with editing skills. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: Departmental Approval Covers the same material as WRIT 121 but with additional work to challenge the superior writer. Semester Planned: Fall, Spring
WRIT 113 Business Research Report Writing 3	WRIT 132 Honors Composition II 4
Semester Prerequisite: None Basic Skills Prerequisite: Writing Level (See Class Schedule) This course emphasizes the use of reports in the business environment and the steps necessary to create effective reports. Included in the course is studying the nature of research, conducting research using primary and secondary sources, and writing an entire report with business applications. Semester Planned: Spring	Semester Prerequisite: Departmental Approval Covers the same material as WRIT 122 but with additional work to challenge the superior writer. Semester Planned: Fall, Spring
WRIT 114 Business English 3	WRIT 195 Writing User Documentation 3
Semester Prerequisite: None Basic Skills Prerequisite: Writing Level (See Class Schedule) This course is designed to review all parts of grammar, punctuation, and sentence structure. There will be special emphasis on rules covering proper usage of punctuation, capitalization, possessives, number usage, plurals, and mechanics for written business communication. Business English is required for machine transcription and business communication. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: None Designed for data processing students and professionals. Teaches students to write effective documentation for users of computer systems. Focuses on writing step-by-step procedures explaining the responsibilities and activities of users. Emphasizes the clear, precise communication necessary for successful system operation and smooth work flow. Semester Planned: Fall, Spring
WRIT 115 Business Communications 3	WRIT 262 Prose Style 3
Semester Prerequisite: WRIT 114/OADM 125 Basic Skills Prerequisite: Writing Level (See Class Schedule) This course emphasizes competent writing in business through learning appropriate business writing style. Emphasis is placed on tone, clarity, conciseness, and completeness. Sentence structure and appropriate paragraphing are stressed for effective total messages. Students practice writing routine, informational, persuasive, and employment-related communications. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: None An advanced study of non-fictional prose writing. Extensive directed practice helps experienced writers make their own writing clear, precise, direct, and graceful. Workshop sessions include a study of the expectations and choices in various types of writing, and of the relationships among purpose, structure, words, sentences, grammar, punctuation, and style. Semester Planned: Spring
WRIT 117 Writing Preparation II 4	WRIT 269 Reviewing The Arts 3
Semester Prerequisite: None Basic Skills Prerequisite: Writing Level (See Class Schedule) Designed to help students improve their writing in preparation for transfer-level academic courses. Students who earn exit competency in this course will have a writing skill level of 4. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: WRIT 122/ENGL 122/Departmental Approval Develops criteria for evaluating the visual and performing arts, music, and literature. Sharpens the student's skills as a reviewer of the arts through reading, writing, and viewing mass media presentations, exhibits, and performances on and off campus. Concepts of form, content, style, and medium of expression will be introduced. Semester Planned: Spring
WRIT 118 Personal Writing 3	WRIT 281 Writing For Publication 3
Semester Prerequisite: None Explores the various forms of personal writing (diaries, journals, letters, personal narratives, and autobiography) through written exercises and selected readings. The student's observations and life experiences are the focus of written assignments. Emphasizes language, style, and tone appropriate to the different forms of personal writing. Semester Planned: Fall	Semester Prerequisite: None Study of freelance writing and marketing, with focus on non-fiction. Students review a variety of effective writing techniques, study marketing information for their particular fields such as analyses of potential publishers and query letters, and discuss their writing in a workshop setting. Students prepare manuscripts for submission to editors. Word processing available. Semester Planned: Fall
WRIT 121 Composition I 4	WRIT 282 Forum for Authors 3
Semester Prerequisite: None Basic Skills Prerequisite: Reading Level 3; Writing Level (See Class Schedule) The study and practice of expository and argumentative discourse to help students write more effectively. Emphasizes content development, organization, and style, and includes instruction in basic library skills. Students will write summaries, reports, and analytical expository and argumentative essays. Some sections use word processing. Semester Planned: Fall, Spring, Summer	Semester Prerequisite: None An advanced course in freelance writing for authors working on manuscripts. Students meet in a workshop setting to refine ideas, critique writing, solve problems, and develop material for submission to periodical or book editors. Includes advanced study of effective writing techniques and market information. Occasional speakers. Word processing available. Semester Planned: Spring
	WRIT 285 Creative Writing I 3
	Semester Prerequisite: None WRIT 285 is designed to help students develop expressive abilities in writing poetry and short stories. Emphasizes narrative modes of the short story, traditional meter, and free verse forms of poetry. Includes models from students and masters in both fiction and poetry. Semester Planned: Fall, Spring
	WRIT 286 Creative Writing II 3
	Semester Prerequisite: WRIT 285/Departmental Approval Emphasizes improving the ability to write effective poems, short stories, and novellas. Students select their own subjects and receive immediate responses through group discussion. Semester Planned: Fall

WRIT 287 Writing Workshop

3

Semester Prerequisite: Departmental Approval

Examines language and style as the most critical choices a creative writer makes in directing the reader's perception of and response to the work. Develops the writer's ability to control tone and style. Manuscripts will be reproduced and discussed in a workshop setting.

Semester Planned: Spring

WRIT 295 Independent Study in Writing I

1

Semester Prerequisite: Departmental Approval

Individual projects in writing or journalism. Students will spend at least two hours a week for each credit in Independent Study.

Semester Planned: Fall, Spring, Summer

WRIT 296 Independent Study in Writing II

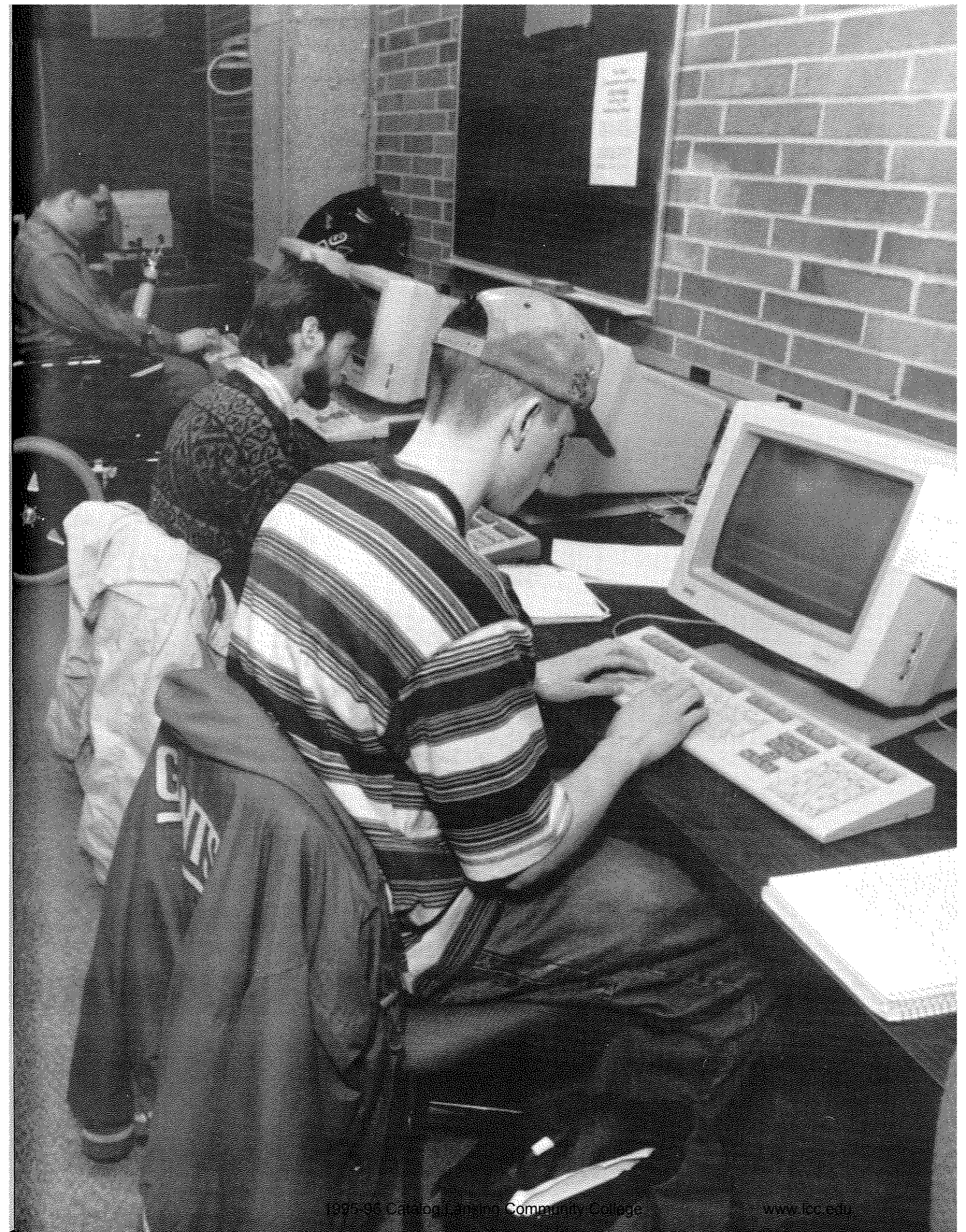
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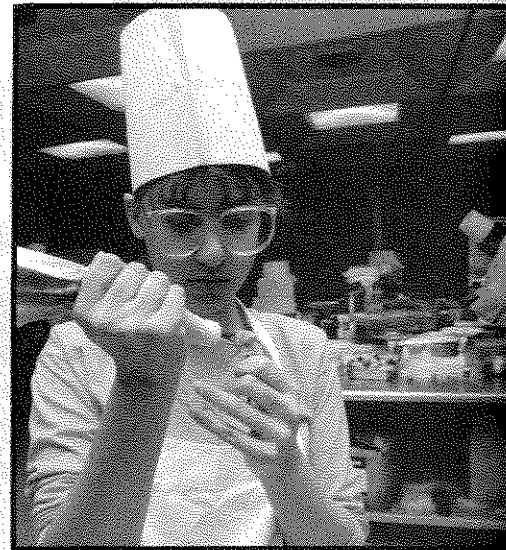
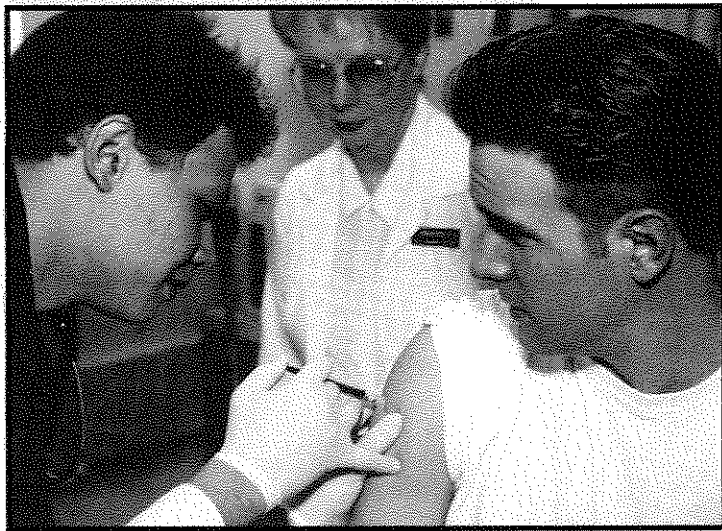
Semester Prerequisite: Departmental Approval

Individual projects in writing or journalism. Students will spend at least two hours a week for each credit in Independent Study.

Semester Planned: Fall, Spring, Summer







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C A T A L O G

SPECIAL COURSES

The following courses are generally not offered for enrollment by individual students. These courses are designed in cooperation with various organizations such as businesses, governmental agencies, school districts, labor organizations, or other groups to meet their special needs. For additional information, please contact the Community Service and Continuing Education Division at (517) 483-9850.

DESCRIPTIONS

CHEM 115 Environmental Issues of Japan	3	Semester Prerequisite: None The course will include a discussion of several global environmental problems as they relate to Japan. Specific topics include air pollution, water pollution, solid waste management, the ozone layer, the greenhouse effect, nuclear energy, and disposal of radioactive wastes. Semester Planned: Summer	COOP 272 Cooperative Education MDOT II	3	Semester Prerequisite: Departmental Approval This seminar provides second-year civil technology students with practical work experience in their career field. The student works for the Michigan Department of Transportation (MDOT) in jobs related to highway and bridge construction, as well as attending in-class instruction. Enrollment is restricted to MDOT Civil Technology cooperative education students. Semester Planned: Fall, Spring, Summer
CIVL 129 Survey Refresher	5	Semester Prerequisite: None This course provides survey training for recently graduated civil engineers. Emphasis is on practical application and use of equipment. Semester Planned: Fall, Spring	DTDS 100 Basic Drafting	3	Semester Prerequisite: None This course focuses on basic concepts in orthographic projection, including sketching of both orthographics and pictorials. Lettering techniques are stressed with a brief introduction to dimensioning techniques. Semester Planned: Fall, Spring, Summer
CIVL 130 Highway Concrete Inspection	5	Semester Prerequisite: None This course covers the determination of properties of density, concrete and bituminous materials. Methods of sampling and testing bituminous concrete mixes and the density of various materials are taught. Introduces mix designs and concrete/bituminous designs. Semester Planned: Fall, Spring	FIRE 290 Fire Officer Seminars	1	Semester Prerequisite: Certified Michigan Firefighter This seminar consists of eighteen individual weekend seminars leading to certification as Fire Officer I, II, III. These courses are presented by the National Fire Academy through the auspices of the Michigan Fire Fighter's Training Council. Semester Planned: Fall, Spring
CIVL 180 Concrete Technician	3	Semester Prerequisite: None This course is sponsored by the Michigan Ready Mix Concrete Association and the Portland Cement Association to train students to receive certification as a concrete technician: Michigan Level I, Concrete Field Testing Technician, and Michigan Level II, Concrete Technician. Both Level I and Level II are ACI approved programs. Semester Planned: Spring	FIRE 291 Fire Officer Seminars	.75	Semester Prerequisite: Certified Michigan Firefighter This seminar consists of eighteen individual weekend seminars leading to certification as Fire Officer I, II, and III. These courses are presented by the National Fire Academy through the auspices of the Michigan Fire Fighter's Training Council. Semester Planned: Fall, Spring
CIVL 181 Concrete Technician Level I	2	Semester Prerequisite: None This course is sponsored by the Michigan Concrete Association and the Portland Cement Association to train students to receive certification as a concrete technician: Michigan Level I, Concrete Field Testing Technician. Level I is an ACI approved program. Semester Planned: Spring	FIRE 292 Fire Officer Seminars	.5	Semester Prerequisite: Certified Michigan Firefighter This seminar consists of eighteen individual weekend seminars leading to certification as Fire Officer I, II, and III. These courses are presented by the National Fire Academy through the auspices of the Michigan Fire Fighter's Training Council. Semester Planned: Fall, Spring
CIVL 250 Interactive Graphics Road Design System I (IGRDS I)	3	Semester Prerequisite: GRET 203 Interactive Graphics Road Design System I is a comprehensive set of computer processes for roadway design. The capabilities provided by these processes help the designer to establish horizontal and vertical alignments, enter terrain data from a digital terrain model and display existing ground profiles. Semester Planned: Fall, Spring, Summer	FIRE 293 High Angle Rescue	3	Semester Prerequisite: FIRE 101/Firefighter A hands-on seminar for fire department members who desire to participate in high angle rescue operations. Equipment is provided for the class. Semester Planned: Fall, Spring, Summer
CIVL 255 Interactive Graphics Road Design System II (IGRDS II)	3	Semester Prerequisite: CIVL 250 Interactive Graphics Road Design System II is a comprehensive set of computer processes for roadway design. Capabilities provided by these processes help the designer to define the roadway template, sideslope, and median dimensions; develop and modify design cross sections; and compute earthwork quantities. Generate contour and perspective views. Semester Planned: Fall, Spring	FIRE 294 Tactical and Heavy Rescue Operations	4	Semester Prerequisite: Firefighter/Police Officer/EMS Tactical rescue encompasses low angle trench and confined space rescue elements. This seminar is hands on. Adherence to safety requirements is stressed. Semester Planned: Fall, Spring, Summer
COOP 271 Cooperative Education MDOT I	2	Semester Prerequisite: Departmental Approval This seminar provides first-year civil technology students with practical work experience in their career field. The student works for the Michigan Department of Transportation (MDOT) in jobs related to highway and bridge construction as well as attending in-class instruction. Enrollment is restricted to MDOT Civil Technology cooperative education students. Semester Planned: Summer	FIRE 295 Hazardous Materials Awareness Level	.5	Semester Prerequisite: None This course is OSHA required training for first responders. The course is designed to heighten the awareness of emergency personnel to the potential dangers of a hazardous materials incident in their community. Semester Planned: Fall, Spring, Summer
			FIRE 296 Hazardous Materials Operations Level	1	Semester Prerequisite: FIRE 295 This course is designed to comply with OSHA training requirements on hazardous materials as defined in 29 CFR 1910, 120 and to create further awareness regarding the dangers of responding to a haz-mat incident. Semester Planned: Fall, Spring, Summer
			FIRE 297 Hazardous Materials Air Monitoring	.5	Semester Prerequisite: FIRE 296 This seminar addresses advanced techniques in air monitoring at hazardous material emergency sites for the operational level practitioner. Semester Planned: Fall, Spring, Summer
			FIRE 298 Confined Space Rescue	1	Semester Prerequisite: FIRE 101/Firefighter The Confined Space Rescue emphasizes practical techniques and considerations when effecting rescue from vessels, sewers, tanks, and other confined areas. This seminar is hands on. Adherence to safety requirements is stressed. Semester Planned: Fall, Spring, Summer

<p>HMFS 160 Hotel/Motel Internship 3</p> <p>Semester Prerequisite: None</p> <p>A seminar class for hotel-restaurant management students who are participating in Program Hermandad and have completed or are approaching (200 hours) of work experience in the Hospitality Industry.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HMFS 186 Japan Adventure Orientation 2</p> <p>Semester Prerequisite: Program Approval</p> <p>An orientation into Japan as a society and people designed to acquaint the Japan Adventure students to their new environment.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HMFS 170 Menu Design and Layout 3</p> <p>Semester Prerequisite: None</p> <p>This course includes the basics in menu planning, analysis, and pricing. Menu layout and design fundamentals are covered; and the integration of the menu into the operational aspects of purchasing, production and service is explored. Project required.</p> <p>Semester Planned: Fall, Spring</p>	<p>HMFS 187 Japan Horizon Internship 2</p> <p>Semester Prerequisite: None</p> <p>Attend morning meetings each working day. Perform work duties as assigned by the student supervisor(s) and the host company.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HMFS 177 Introduction to Hotel and Food Service Operations 1</p> <p>Semester Prerequisite: None</p> <p>An introduction to the hotel-motel-food service industry, its management departments, responsibilities. Designed specifically for Japan Adventure/Horizon students.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HMFS 188 Japan Horizon Internship 2</p> <p>Semester Prerequisite: None</p> <p>Attend morning meeting each working day. Perform work duties as assigned by the student supervisor(s) and the host company.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HMFS 178 Practicum in Japanese Culture 2</p> <p>Semester Prerequisite: None</p> <p>Introducing the principles and philosophy of Japanese calligraphy, the use of abacus, and the understanding of various types of Japanese traditional dresses. Practical training in calligraphy and abacus.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HMFS 189 Hotel/Motel Internship 3</p> <p>Semester Prerequisite: None</p> <p>A seminar class for Hotel-Restaurant management students who are participating in Program Hermandad and have completed or are approaching (200 hours) of work experience in the Hospitality Industry.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>HMFS 179 Practicum in Japanese Culture 2</p> <p>Semester Prerequisite: Program Approval</p> <p>Introducing the principles and philosophy of Japanese calligraphy and the use of abacus and understanding of various types of Japanese traditional dresses. Practical training in calligraphy and abacus.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HSAB 009 Auto Body 7</p> <p>Semester Prerequisite: E.I.S.D. Student</p> <p>This is a two-year program for Eaton Intermediate School District students. This program consists of first- and second-year students. The first-year students are enrolled in Auto Body Welding/Metal Finishing and Basic Auto Painting. Second-year students are enrolled in Major Collision Repair and Advanced Painting.</p> <p>Semester Planned: Fall, Spring</p>
<p>HMFS 180 Japan Adventure Internship 2</p> <p>Semester Prerequisite: None</p> <p>Attend morning meeting each working day. Perform work duties as assigned by the student supervisor(s) and the host company.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HSAH 101 Pre-Allied Health Careers 7</p> <p>Semester Prerequisite: E.I.S.D. Student</p> <p>Designed to explore and present the basic applied concepts of biological sciences, physical science and human interaction fundamentals necessary to pursue training as a health care professional.</p> <p>Semester Planned: Fall, Spring</p>
<p>HMFS 181 Japan Adventure Internship 2</p> <p>Semester Prerequisite: None</p> <p>Attend morning meeting each working day. Perform work duties as assigned by the student supervisor(s) and the host company.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HSAH 102 EISD Public Safety Services I 9</p> <p>Semester Prerequisite: E.I.S.D. Student</p> <p>First in a series of two courses which introduces high school students to careers in Fire Fighting, EMS, and Law Enforcement. This course covers general job search preparation, college success skills, a career as a fire fighter and a career in law enforcement. Field trips and some "hands-on" included.</p> <p>Semester Planned: Fall</p>
<p>HMFS 182 Japan Adventure Internship 2</p> <p>Semester Prerequisite: None</p> <p>Attend morning meeting each working day. Perform work duties as assigned by the student supervisor(s) and the host company.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HSAH 103 EISD Public Safety Services II 9</p> <p>Semester Prerequisite: E.I.S.D. Student</p> <p>Second in a series of two courses which introduce high school students to careers in Fire Fighting, EMS, and Law Enforcement. This course offers the first semester of Basic EMT. Those successfully completing will be admitted at the second semester level during the summer semester. Field trips and skills training included.</p> <p>Semester Planned: Spring</p>
<p>HMFS 183 Practicum in Japanese Culture 2</p> <p>Semester Prerequisite: Program Approval</p> <p>Introducing the principles and philosophy of Japanese calligraphy and the use of abacus and understanding of various types of Japanese traditional dresses. Practical training in calligraphy and abacus.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HSAM 010 Auto Mechanics 7</p> <p>Semester Prerequisite: E.I.S.D. Student</p> <p>This is a one-year continuous program of instruction for Eaton Intermediate School District students. This program covers basic automotive repair, theory and application. This program will give students entry-level job skills. Students spend one day per week in the classroom on service procedures, and four days in the lab in an actual job atmosphere working on customer vehicles.</p> <p>Semester Planned: Fall, Spring</p>
<p>HMFS 184 Practicum in Japanese Culture 2</p> <p>Semester Prerequisite: None</p> <p>Introducing the philosophies of different schools of flower arrangement. Learning the basic skills in flower arrangements.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>HSAT 040 Architectural Drafting 7</p> <p>Semester Prerequisite: E.I.S.D. Student</p> <p>This is a one-year continuous course of instruction for EISD students. This course is initially centered around basic concepts of orthographic projection, sketching, lettering techniques and dimensioning. Emphasis will shift to identifying component parts and correctly drawing various building details. Basic model building using various materials to construct architectural study models will be taught.</p> <p>Semester Planned: Fall, Spring</p>
<p>HMFS 185 Practicum in Japanese Culture 3</p> <p>Semester Prerequisite: Program Approval</p> <p>Introducing the principles and philosophy of Japanese calligraphy and the use of abacus and understanding of various types of Japanese traditional dresses. Practical training in calligraphy and abacus.</p> <p>Semester Planned: Fall, Spring, Summer</p>	

<p>HSBK 015 Banking Operations 7 Semester Prerequisite: E.I.S.D. Student An introductory course in banking covering the following topics: data processing for bankers, principles of banking, marketing for bankers and customer relations. Semester Planned: Fall</p>	<p>HSHF 092 Food Services II 7 Semester Prerequisite: E.I.S.D. Student A review of all areas of study included in Food Services I. In addition, responsibility for setting up and costing menus, menu and production planning, short order restaurant service, and guest check and cash register controls are emphasized. A total restaurant operation is experienced. Semester Planned: Fall, Spring</p>
<p>HSBK 016 Banking Operations 7 Semester Prerequisite: E.I.S.D. Student An introductory course in banking covering the following topics: consumer lending, Lotus 1-2-3 and teller training. Semester Planned: Spring</p>	<p>HSIA 017 Automation Principles I 7.5 Semester Prerequisite: E.I.S.D. Student Provides hands-on experience in current manufacturing technology, social ramifications of its use, and basic employability skills. Students will learn to use the industrial personal computer, software, and a multitasking operating system. Students will learn the basic process of manufacturing, including hands-on experience with production inventory management, computer-aided design, industrial fluid power, and statistical process control. Semester Planned: Fall</p>
<p>HSCA 105 EISD Commercial Art I 7 Semester Prerequisite: E.I.S.D. Student HSCA 105 and HSCA 106 form a one year non-articulated program for high school students. Commercial art techniques for graphic arts pre-press production emphasizing studio skills, lettering, typography, and layout design. Includes terminology, studio tool and material usage, keylining and preparation of camera-ready art, lettering and typography, identification and use of design principles and elements as related to layout composition. Semester Planned: Fall</p>	<p>HSIA 018 Automation Principles II 7.5 Semester Prerequisite: E.I.S.D. Student Continuation of HSIA 017 providing experience in relay logic, programmable logic controllers, machine vision, discrete electronic components, and the integration of processes. Integration of processes stress the use of standard industrial computer application software to bridge between operations. Semester Planned: Spring</p>
<p>HSCA 106 EISD Commercial Art II 7 Semester Prerequisite: E.I.S.D. Student HSCA 105 and HSCA 106 form a one year non-articulated program for high school students. Commercial art techniques for graphic arts pre-press production emphasizing studio skills, lettering, typography, and layout design. Includes terminology, studio tool and material usage, keylining and preparation of camera-ready art, lettering and typography, identification and use of design principles and elements as related to layout composition. Semester Planned: Spring</p>	<p>HSMK 020 Marketing/Retailing/Small Business 8 Semester Prerequisite: E.I.S.D. Student This course covers topics in retailing, marketing, small business management, and employability skills. Students will gain a basic understanding of the principles of marketing and retailing. Students will complete a business plan on a business of their choice and a personal résumé. Semester Planned: Fall</p>
<p>HSCS 101 Computer Information Systems First Semester for Eaton ISD 6 Semester Prerequisite: E.I.S.D. Student This course provides high school vocational students an opportunity to earn college credit for Introduction to Computer Information Systems (CISB100) and Introduction to DOS (CISB104). Semester Planned: Fall</p>	<p>HSMK 021 Business Management/Current Issues In Business 6 Semester Prerequisite: E.I.S.D. Student A general study of all elements involved in operating a business of your own. The course considers the steps in planning, making decisions, and developing solutions to the problems facing the small business person. The course also enhances the value of our business programs by contributing to the student's occupational preparedness. Semester Planned: Spring</p>
<p>HSCS 102 Computer Information Systems Second Semester for Eaton ISD 6 Semester Prerequisite: E.I.S.D. Student This course provides high school vocational students an opportunity to earn college credit for Advanced Microcomputer Applications (CISB105) and dBASE Programming (CISB210). Semester Planned: Spring</p>	<p>HSMK 022 Sales 3 Semester Prerequisite: E.I.S.D. Student This course covers the fundamentals and role of sales in the marketing mix. Student develop basic skills in behavioral sciences and skills needed to enter the field. Customer buying habits, sales process, product demonstration techniques, and analysis of human relations aspects are all discussed. Semester Planned: Spring</p>
<p>HSDT 030 Industrial Drafting 7 Semester Prerequisite: E.I.S.D. Student This is a one-year continuous course of instruction for EISD students. This course is initially centered around basic concepts of orthographic projection, sketching, lettering techniques and dimensioning. Emphasis will shift to more detailed work with orthographic projection, sections and auxiliary views. More advanced techniques will be introduced, along with preparation of welding or fabrication type drawings. Semester Planned: Fall, Spring</p>	<p>HSWT 015 Welding and Cutting 7 Semester Prerequisite: E.I.S.D. Student This is a course for high school students interested in the industrial trades. Students will learn the basics of welding through lectures and hands-on experience. Semester Planned: Fall, Spring</p>
<p>HSEC 010 EISD Electronics I 7 Semester Prerequisite: E.I.S.D. Student An introduction to DC and AC theory is presented. Students cover the same material as ELCT 111. Emphasis is placed on hands-on learning through the use of laboratory exercises. Semester Planned: Fall</p>	<p>HUMS 125 Japan: Past and Present 3 Semester Prerequisite: None This course traces the development of Japan's tradition with strong emphasis on history, religion, and literature. Further, this course demonstrates that modern Japan can best be understood in light of its distinctive traditions. Semester Planned: Fall, Spring</p>
<p>HSEC 020 EISD Electronics II 7 Semester Prerequisite: E.I.S.D. Student This course continues the electronic fundamentals begun in HSEC 010. Students cover the same material as ELCT 112 and ELCT 131 (transistors and digital basics). Emphasis is placed on learning through the use of lab exercises. Semester Planned: Fall, Spring</p>	<p>HVAC 184 Heating, Ventilating and Air Conditioning Seminar 4 Semester Prerequisite: None Seminar may cover any or all of the following topics: cooling, heating, humidifying, filtering, servicing and/or ventilating, etc. For individuals already in the Heating, Ventilating, Air Conditioning and Refrigeration (HVACR) field or anyone interested in these areas. Semester Planned: Fall, Spring, Summer</p>
<p>HSHF 084 Food Services I 7 Semester Prerequisite: E.I.S.D. Student The study of sanitation, employee responsibility and training as related to restaurants. Proper food purchasing, receiving, storing, preparation, and serving are heavily emphasized. Semester Planned: Fall, Spring</p>	<p>IASM 001 Industrial Automation Seminar I 1 Semester Prerequisite: None Seminar content is dependent upon course requirement. Semester Planned: Fall, Spring, Summer</p>

IASM 002 Industrial Automation Seminar II	2	MDCR 276 Building High Performance Teams	.5
Semester Prerequisite: None Seminar content is dependent upon course requirement. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Dynamic leaders develop dynamic teams. They need followers, but followers who can function independently and cooperatively in the organizational endeavor. This course instructs participants in practical strategies for creating dynamic teams. Semester Planned: Fall, Spring, Summer	
IASM 003 Industrial Automation Seminar III	3	MDCR 277 Facilitating Group Decision Making	.5
Semester Prerequisite: None Seminar content is dependent upon course requirement. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None In order for groups to work together, leaders must be skilled in people and task functions. They must be able to lead a group through a process of decision making while maintaining positive relationships and high quality decisions. This seminar will train participants in the skills of leading and the processes of decision making. Semester Planned: Fall, Spring, Summer	
IASM 004 Industrial Automation Seminar IV	4	MDCR 278 Developing Strategic Plans	.5
Semester Prerequisite: None Seminar content is dependent upon course requirement. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Effective strategic planning is essential for long-term success in the work market. It focuses on doing the right thing, on being effective. This seminar teaches a team approach to strategic planning. Semester Planned: Fall, Spring, Summer	
MDCR 201 Assertive Training	.5	MDCR 279 Communicating Thoughts Orally	.5
Semester Prerequisite: None This one-day seminar is designed to introduce participants to some of the principles and dynamics of assertive behavior. It will help participants identify and accept their basic interpersonal rights while respecting the rights of others. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Collecting one's thought and speaking extemporaneously to present one's reaction, viewpoint, or pertinent information is a vital ability for leaders. This workshop will instruct participants in the strategies for gathering one's thoughts and presenting them clearly and logically. Semester Planned: Fall, Spring, Summer	
MDCR 224 Introduction to Negotiating Skills	.5	MDCR 280 Strengthening Interpersonal Relationships	.5
Semester Prerequisite: None Certain basic negotiating skills can be applied to a number of different situations both business and personal. This training will focus on strategies for conducting negotiation sessions with employees, customers, and suppliers. It will not cover strategies for negotiating union contracts. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Good interpersonal skills are essential for productive working relationships and for maintaining an efficient working environment. This seminar provides training to managers on techniques for strengthening interpersonal skills for improved working relationships. Semester Planned: Fall, Spring, Summer	
MDCR 227 Effective Board Training	2	MDCR 281 Dealing With Difficult People	.5
Semester Prerequisite: None The purpose of this seminar is to provide participants with knowledge, skills, and attitudes for serving in voluntary, elected, or appointed positions on boards, committees, and commissions in government, business, and human service. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Difficult people create problems! In this practical seminar participants will observe and practice effective strategies for handling difficult people. Participants will be able to reduce the problems difficult people create. Semester Planned: Fall, Spring, Summer	
MDCR 242 Consultative Selling	2	MDCR 282 Analyzing and Solving Performance Problems	.5
Semester Prerequisite: None This seminar is based on a combination of education, experience and application. It is a comprehensive and in-depth look at the tools and techniques available to expand current sales knowledge and develop new sales skills for the sales professionals. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None A primary element for solving performance problems is creating and sustaining a supportive work environment. This seminar provides training to supervisors and managers that will help identify and solve work problems and encourage peak employee activity. Semester Planned: Fall, Spring, Summer	
MDCR 245 Customer Service	1	MDCS 270 Management II	1.75
Semester Prerequisite: None All employees have the potential for creating good customer relations and improving the image of the organization. The critical factors include increased motivation through a positive mental attitude; effective communication with different types of customer personalities; sensitive handling of customer complaints and successful strategies for meeting needs to satisfy customers. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Management II is a four-day course for supervisors with limited or no experience. It focuses on the special needs of transition into management and fundamental concepts and issues needed when someone becomes a supervisor. Further, it gives participants an opportunity to learn from each other about special concerns and how to handle various management problems. Semester Planned: Fall, Spring, Summer	
MDCR 252 Supervisory Skills Training	.5	MDCS 271 Management III	1.75
Semester Prerequisite: None This seminar is an eight-hour program that will address the basic concepts and skills for new supervisors in addition to providing some self-assessment. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Management III is a four-day course for experienced managers. It concentrates on skills necessary to build and supervise more effective work groups through participative management. Semester Planned: Fall, Spring, Summer	
MDCR 264 Leading Effective Meetings	.25	MDCS 272 Management IV	1.75
Semester Prerequisite: None The purpose of this seminar is to help participants develop the skills necessary for leading effective meetings. These include many facets of planning and preparing for a meeting, conducting a meeting, and following up on a meeting. Semester Planned: Fall, Spring, Summer		Semester Prerequisite: None Management IV is a four-day course for experienced managers. It examines group dynamics and processes and synergistic functioning; provides techniques for organizational development, for improving organization climate, and for attaining organization goals; emphasizes group decision-making, problem-solving, project/program management, and team-building. Semester Planned: Fall, Spring, Summer	
MDCR 275 Establishing Dynamic Leadership	.5		
Semester Prerequisite: None Dynamic leaders create visions and translate those visions into reality within their organizations. This seminar describes the essential features and functions of dynamic leadership in the context of the present world market. Participants will be inspired to develop their abilities as dynamic leaders. Semester Planned: Fall, Spring, Summer			

<p>MUSC 101 Lansingers Vocal Ensemble 1</p> <p>Semester Prerequisite: Audition Approval</p> <p>The purpose of Lansingers, a vocal jazz ensemble, is to develop artistic and creative vocal jazz skills for ensemble performance. Advanced solo experience, microphone techniques, and vocal improvisational skills will be developed. Students are required to attend live performances. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>QSEM 131 Quality Assurance Seminar 3.75</p> <p>Semester Prerequisite: None</p> <p>Seminar content is dependent upon course requirement.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 102 Women's Chorus 1</p> <p>Semester Prerequisite: Audition Approval</p> <p>An ensemble of women vocalists composed of students and community members, which develops general musicianship and provides training in choral singing. This group performs two to four concerts throughout the year. Students are required to attend live performances. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>QSEM 135 Quality Assurance Seminar 3.5</p> <p>Semester Prerequisite: None</p> <p>Seminar content is dependent upon course requirement.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 108 Concert Choir 1</p> <p>Semester Prerequisite: Audition Approval</p> <p>A select group of singers who perform a wide range of music, sacred and secular. This group performs two to four concerts throughout the year. Students are required to attend live performances. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring</p>	<p>QSEM 140 Quality Assurance Seminar 4</p> <p>Semester Prerequisite: None</p> <p>Seminar content is dependent upon course requirement.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 119 Lansing Concert Band 1</p> <p>Semester Prerequisite: Audition Approval</p> <p>A community band serving as the official band of the City of Lansing. The group performs throughout the year, and plays all types of music but primarily concentrates on traditional concert band literature. Students are required to play in public performances of the band. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>QSEM 145 Quality Assurance Seminar 4.5</p> <p>Semester Prerequisite: None</p> <p>Seminar content is dependent upon course requirement.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>MUSC 123 Jazz Ensemble 1</p> <p>Semester Prerequisite: Audition Approval</p> <p>The jazz ensemble will rehearse and perform pieces of various styles and from various periods in jazz and big band development. Improvisational skills will be taught and developed. The group performs two to four concerts throughout the year. Students are required to attend live performances. May be taken up to six semesters for credit.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>QSEM 150 Quality Assurance Seminar 5</p> <p>Semester Prerequisite: None</p> <p>Seminar content is dependent upon course requirement.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>POLS 280 Politics and Government of Japan 3</p> <p>Semester Prerequisite: None</p> <p>An introduction to the Japanese governmental structures and political process, with emphasis on the unique characteristics of Japanese political culture, Japanese style of decision-making, and Japanese concepts of democracy.</p> <p>Semester Planned: Fall, Spring</p>	<p>READ 119 Concentrated Speed Reading 1</p> <p>Semester Prerequisite: Placement Test</p> <p>Basic Skills Prerequisite: Reading Level 5</p> <p>Designed for the average or better-than-average reader. Students improve rate by developing good reading habits, increasing reading flexibility, and practicing efficient reading techniques. Focuses on the aspects of perception and selectivity in rapid information processing.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>QSEM 005 Quality Assurance Seminar .5</p> <p>Semester Prerequisite: None</p> <p>Seminar content is dependent upon course requirement.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>RSEM 005 Resource and Operations Management Systems Seminar .5</p> <p>Semester Prerequisite: None</p> <p>Course content varies with the seminar</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>QSEM 110 Quality Assurance Seminar 1</p> <p>Semester Prerequisite: None</p> <p>Seminar content is dependent upon course requirement.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>RSEM 110 Resource and Operations Management Systems Seminar 1</p> <p>Semester Prerequisite: None</p> <p>Course content varies with the seminar.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>QSEM 115 Quality Assurance Seminar 1.5</p> <p>Semester Prerequisite: None</p> <p>Seminar content is dependent upon course requirement.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>RSEM 115 Resource and Operations Management Systems Seminar 1.5</p> <p>Semester Prerequisite: None</p> <p>Course content varies with seminar.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>QSEM 120 Quality Assurance Seminar 2</p> <p>Semester Prerequisite: None</p> <p>Seminar content is dependent upon course requirement.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>RSEM 120 Resource and Operations Management Systems Seminar 2</p> <p>Semester Prerequisite: None</p> <p>Course content varies with seminar.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>QSEM 125 Quality Assurance Seminar 2.5</p> <p>Semester Prerequisite: None</p> <p>Seminar content is dependent upon course requirement.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>RSEM 125 Resource and Operations Management Systems Seminar 2.5</p> <p>Semester Prerequisite: None</p> <p>Course content varies with seminar.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>QSEM 130 Quality Assurance Seminar 3</p> <p>Semester Prerequisite: None</p> <p>Seminar content is dependent upon course requirement.</p> <p>Semester Planned: Fall, Spring, Summer</p>	<p>RSEM 130 Resource and Operations Management Systems Seminar 3</p> <p>Semester Prerequisite: None</p> <p>Course content varies with seminar.</p> <p>Semester Planned: Fall, Spring, Summer</p>
<p>SOCL 280 Introduction to Japanese Culture 3</p> <p>Semester Prerequisite: None</p> <p>An introduction to contemporary Japan in its cultural context. Emphasis is on the unique features of the Japanese way of life in terms of Japanese values, social system, and cultural background.</p> <p>Semester Planned: Fall, Spring</p>	

SPAN 189 Seminar: Spanish for Hermandad

3

Semester Prerequisite: SPAN 116/Successful Score on Spanish Placement Test
Designed for persons who have knowledge of Spanish, and wish to develop conversational as well as reading skills in the language. Students learn practical vocabulary, and essential grammar for expressing themselves in Spanish. They become familiar with different aspects of the Hispanic culture through readings, informal lectures, and audio-visual presentations.

Semester Planned: Fall, Spring, Summer

TECH 299 College Teaching Project

2

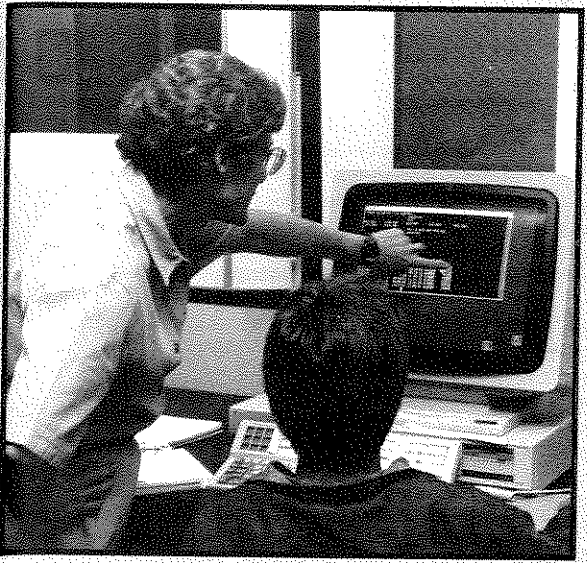
Semester Prerequisite: Previous/Current Teaching Assignment at the Community College Level

It is the purpose of this course to introduce beginning instructors at the community college level to basic principles and processes that will allow for a productive teaching experience and successful student learning. By the end of this course, each participant will have constructed a complete course and will be prepared to start a teaching assignment with confidence.

Semester Planned: Fall, Spring







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AND
STAFF

FACULTY AND STAFF DIRECTORY

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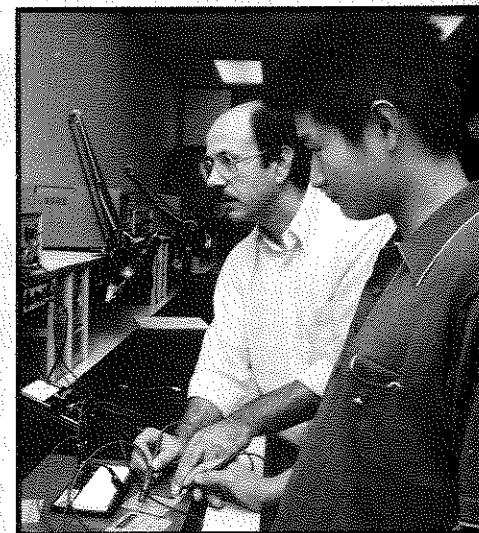
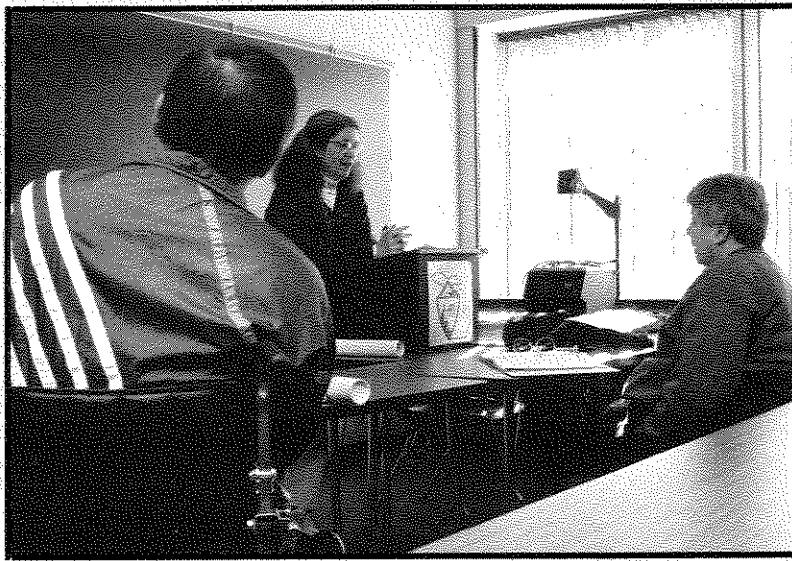
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C A T A L O G

INDEX

MAPS

INDEX

A

Academic Advising	29
Academic Definitions	15
Academic Honesty	22
Academic Information	
Academic Standing Policies	16
Credit/No-Credit Grading	16
Definitions	15
Grade Changes	16
Grade Point Average, Computing	16
Grade Reports	16
Grading System	15
Academic Standing Policies/Grading System	16
Table for Determining	16
Accounting, Course Descriptions	40
Admissions Information	
Appeal of Denial	9
Criteria, General	8
Financial Aid Information	9
Procedures, General	8
Special Program/Special Circumstance	8
Admission Procedures, General	
Admissions Application, Procedures for Completing	8
Basic Skills Assessment and Advising	8
Admission, Special Program/Special Circumstance	
Dual Enrollment Program	9
Guest Applicants	9
International Applicants	8
Selective Admission Programs	8
Special Admission Program	9
Aerospace Studies, Course Descriptions	41
Alcohol Usage	23
Allied Health Courses, Course Descriptions	41
American Institute of Banking: Lansing Area, Course Descriptions	41
Anatomy, Course Descriptions	42
Anthropology, Course Descriptions	42
Aquatics, Course Descriptions	133
Architecture, Course Descriptions	43
Art, Course Descriptions	45
Art Seminars and Workshops, Course Descriptions	47
Assaults	22
Assembly	23
Associate Degree	
Applied Arts and Applied Science, Criteria	20
Arts and Science, Criteria	19
Business, Criteria	20
General, Criteria	20
How to Apply for	20
Institutional Requirements	19
Programs	32
Associate Degree, Additional, Regulation for Granting	21
Associate Degree, When Student Has Earned Bachelor's Degree	21
Assurance of Quality	21
Astronomy, Course Descriptions	48
Attendance	22
Auditing Classes	14
Automotive, Course Descriptions	48
Aviation Airframe Maintenance, Course Descriptions	50
Aviation Continuing Education, Course Descriptions	50
Aviation Electronics, Course Descriptions	51
Aviation Flight Training, Course Descriptions	51
Aviation General Maintenance, Course Descriptions	52
Aviation Ground School, Course Descriptions	52
Aviation Instrument Repair, Course Descriptions	53
Aviation Powerplant Maintenance, Course Descriptions	53
Aviation Simulator Training, Course Descriptions	53
B	
Biology, Course Descriptions	54
Broadcasting (see Media Technology)	
Building Related, Course Descriptions	55
Building Trades, Course Descriptions	56
Business, Course Descriptions	56
Business Development Seminars, Course Descriptions	53
C	
Canceled Classes	14
Career and Employment Development Services	29
Certificate of Achievement	
How to Apply for	20
Institutional Requirements	19
Programs	34
Cheating	22
Chemistry, Course Descriptions	65, 164
Child Development, Course Descriptions	64
Chinese, Course Descriptions	66
Civil Technology, Course Descriptions	71, 164

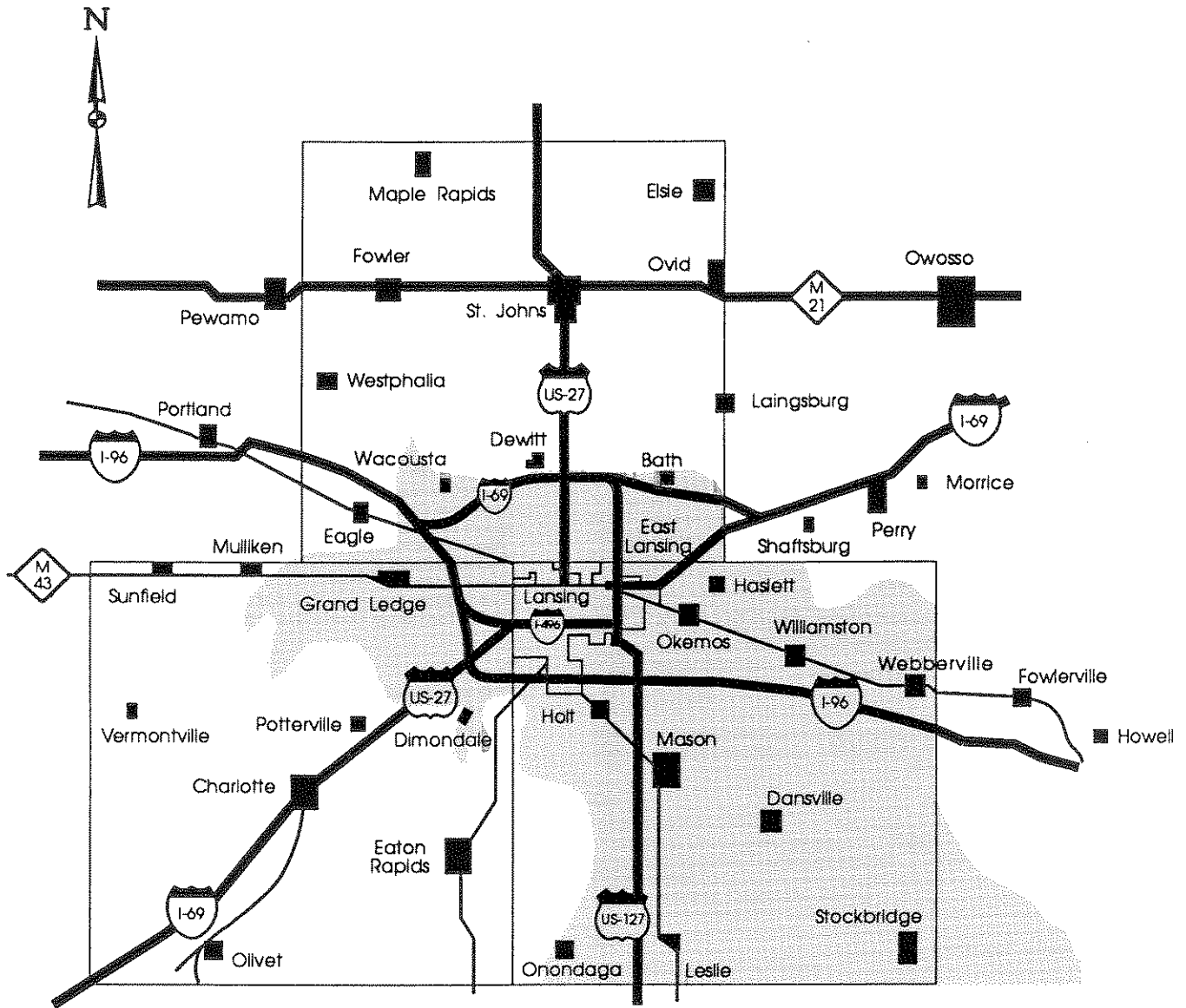
College Responsibilities	28
Combative/Weight Training, Course Descriptions	134
Communications Service Technician (see Electronics Technology)	
Community Health Services, Course Descriptions	66
Compositions (see Writing)	
Computer Aided Drafting and Design, Architecture	44
Computer Applications Using Business Software, Course Descriptions	57
Computer Graphics, Architecture	44
Computer Graphics, Art	45
Computer Information Systems for Business, Course Descriptions	68
Computer Office Applications, Course Descriptions	74
Computer Science, Course Descriptions	74
Computerized Numerical Control Program, Course Descriptions	74
Conduct, Student Rights, Responsibilities, and	21
Continuing Health Careers, Course Descriptions	60
Cooperative Education, Course Descriptions	74, 164
Counseling and Academic Advising Services	29
Course Codes	
ACCG Accounting	40
AERO Aerospace Studies	41
AHCC Allied Health Courses	41
AIBL American Institute of Banking: Lansing Area	41
ANAT Anatomy	42
ANTH Anthropology	42
ARCH Architecture	43
ARTS Art	45
ARWS Art Seminars and Workshops	47
ASTR Astronomy	48
AUTO Automotive	48
AVAF Aviation Airframe Maintenance	50
AVCE Aviation Continuing Education	50
AVEL Aviation Electronics	51
AVFT Aviation Flight Training	51
AVGM Aviation General Maintenance	52
AVGS Aviation Ground School	52
AVIR Aviation Instrument Repair	53
AVPP Aviation Powerplant Maintenance	53
AVST Aviation Simulator Training	53
BDCS Business Development Seminars	53
BIOL Biology	54
BLDR Building Related	55
BLDT Building Trades	56
BUSN Business	56
CABS Computer Applications Using Business Software	57
CACR Court and Conference Reporting	59
CHCE Continuing Health Careers	60
CHDV Child Development	64
CHEM Chemistry	65, 164
CHIN Chinese	66
CHSE Community Health Services	66
CISB Computer Information Systems for Business	68
CIVL Civil Technology	71, 164
CJUS Criminal Justice	72
CNCP Computerized Numerical Control Program	74
COOP Cooperative Education	74, 164
CPOA Computer Office Applications	74
CPSC Computer Science	74
CUAI Credit Union Accounting and Insurance	75
CUMA Credit Union Management	75
DADH Dental Assistant/Dental Hygiene	75
DANC Dance	75
DAST Dental Assisting	78
DHYG Dental Hygiene	79
DNDS Dental Service Courses	80
DTDS Drafting and Design	80, 164
ECON Economics: Business	81
EDUC Education	82
ELCT Electronics Technology	82
ELTE Electrical Technology	84
EMSA Emergency Medical Services	85
EMSB Emergency Medical Services Seminars	85
EMTA Emergency Medical Technology	86
ENGL English	87
ENR1 Enrichment	88
ESLA English as a Second Language	88
ESLT English as a Second Language: Technical	89
FIRE Fire Science	89, 164
FREN French	90
GEOG Geography	90
GEOL Geology	90
GERO Gerontology	91
GRET Geographical Resource and Environmental Technology	93
GRMN German	95
HIST History	95
HMFS Hotel/Motel and Food Service Operations	96, 165
HONR Honors	98
HORT Horticulture	98
HSAB E.I.S.D. Auto Body	165
HSAH E.I.S.D. Allied Health	165
HSAM E.I.S.D. Auto Mechanics	165

HSAT	E.I.S.D. Architecture	165	VCBL	Vocabulary Improvement	158
HSBK	E.I.S.D. Banking	166	WELD	Welding Technology	158
HSCA	E.I.S.D. Commercial Art	166	WRIT	Writing	158
HSCS	E.I.S.D. Computer Information Systems	166	Course Descriptions		36
HSDT	E.I.S.D. Drafting	166	Court and Conference Reporting, Course Descriptions		59
HSEC	E.I.S.D. Electronics Technology	166	Credit by Examination		
HSHF	E.I.S.D. Hotel and Food Service Operations	166	Comprehensive Exams		19
HSIA	E.I.S.D. Industrial Automation	166	Other Examinations		19
HSMK	E.I.S.D. Marketing	166	Credit Evaluations for Transfer Students		17
HSWT	E.I.S.D. Welding Trades	166	Credit-No Credit Grading		16
HUMS	Humanities	99, 166	Credit for Previously Acquired Knowledge and Learning Experience		18
HUSE	Human Services	100	Appeals Procedures, Student		19
HVAC	Heating, Ventilating, and Air Conditioning	101, 166	Applicability of Credit		19
IASM	Industrial Automation Seminars	166	Application Procedures		18
IDMS	Diagnostic Medical Sonography	102	Assessment Committee		18
IMAG	Photography Technology	102	Documentation		18
IMRI	Magnetic Resonance Imaging	104	Credit Requirements, Student		14
INAU	Industrial Automation	105	Credit Union Accounting and Insurance, Course Descriptions		75
INSU	Insurance	105	Credit Union Management, Course Descriptions		75
INTR	Interior Design	106	Criminal Justice, Course Descriptions		72
IPFL	International Program in Foreign Language	107			
IPFT	International Program in Foreign Travel	107			
IRAD	Radiation Therapy Technology	107			
IRXT	Radiologic Technology	108			
ISCI	Integrated Science	109			
JAPN	Japanese	110			
JRNL	Journalism	110			
LABR	Labor Relations	110			
LAND	Landscape	110			
LEGL	Legal Assistant/Law	113			
LING	Linguistics	114			
MACH	Machine Tool Technology	114			
MASG	Massage Therapy	115			
MATH	Mathematics	116			
MDCR	Management Development Restricted	167			
MDCS	Management Development Seminars	117, 167			
MEDA	Medical Assistant	119			
METR	Meteorology	120			
MFGM	Manufacturing Maintenance	120			
MGMT	Management	120			
MICR	Microbiology	123			
MILS	Military Science	123			
MKTG	Marketing	123			
MTEC	Media Technology	124			
MUSC	Music	126, 168			
NURS	Nursing	131			
OADM	Office Administration	131			
OCNL	Oceanology	133			
PARA	Paramedic	133			
PFAQ	Physical Fitness: Aquatics	133			
PFCW	Physical Fitness: Combative/Weight Training	134			
PFDA	Physical Fitness: Dance Courses	135			
PFFT	Physical Fitness: Fitness Courses	135			
PFHC	Physical Fitness: Health/Fitness Cardiac	136			
PFHW	Physical Fitness: Health/Fitness Wellness	136			
PFIS	Physical Fitness: Individual Sport/Interest	137			
PFOA	Physical Fitness: Outdoor Activity	139			
PFPR	Physical Fitness: Professional Courses	139			
PFTS	Physical Fitness: Team Sport	140			
PHGY	Physiology	140			
PHIL	Philosophy	140			
PHON	Phonics	140			
PHYS	Physics	140			
POLS	Political Science	141, 168			
PSYC	Psychology	142			
PVAA	Property Valuation and Assessment Administration	143			
QSEM	Quality Assurance Seminars	168			
QUAL	Quality Assurance	143			
RDGR	Reading: Restricted	144			
READ	Reading	144, 168			
REAL	Real Estate	145			
RELG	Religion	146			
RESP	Respiratory Therapy Courses	146			
ROMS	Resource and Operations Management Systems	147			
RSEM	Resource and Operations Management Systems Seminars	168			
SAFE	Safety	148			
SCIS	Science Seminars	148			
SDEV	Student Development	148			
SIGN	Sign Language	150			
SOCL	Sociology	151, 168			
SOWK	Social Work	151			
SPAN	Spanish	151, 169			
SPCH	Speech Communication	152			
SPEL	Spelling Development	153			
STAT	Statistics	153			
SURG	Surgical Technology	153			
TDTP	Truck Driver Training Program	153			
TECH	Technology General	153, 169			
THEA	Theater	154			
TRVL	Tourism: Airline and Travel Agency Operations	157			
			D		
			Dance, Course Descriptions		75
			Dance, Physical Fitness, Course Descriptions		135
			Degree and Certificate Programs		30
			Dental Assistant/Dental Hygiene, Course Descriptions		75
			Dental Assisting, Course Descriptions		78
			Dental Hygiene, Course Descriptions		79
			Dental Service Courses, Course Descriptions		80
			Diagnostic Medical Sonography, Course Descriptions		102
			Directory of Departments		6
			Disabilities, Information for Persons with		29
			Drafting and Design, Course Description		80, 164
			Dress		23
			Drops and Adds		14
			Drug and Alcohol Regulations		23
			Drug Usage		23
			Dual Enrollment		9
			Due Process		27
			Disciplinary Action		27
			Membership of the Judicial Board		27
			Student Appeals		27
			Due Process, Student Appeals		
			of Administrative Withdrawal		28
			of Disciplinary Action, Violation of General Rules and Regulations		27
			of Violation of Academic Rules and Regulations or		
			of Academic Disciplinary Action		28
			Student Complaints		28
			Student Grade Appeals		28
			E		
			E.I.S.D. Allied Health, Course Descriptions		165
			E.I.S.D. Architecture, Course Descriptions		165
			E.I.S.D. Auto Body, Course Descriptions		165
			E.I.S.D. Auto Mechanics, Course Descriptions		165
			E.I.S.D. Banking, Course Descriptions		166
			E.I.S.D. Commercial Art, Course Descriptions		166
			E.I.S.D. Computer Information Systems, Course Descriptions		166
			E.I.S.D. Drafting, Course Descriptions		166
			E.I.S.D. Electronics Technology, Course Descriptions		166
			E.I.S.D. Hotel and Food Service Operations, Course Descriptions		166
			E.I.S.D. Industrial Automation, Course Descriptions		166
			E.I.S.D. Marketing, Course Descriptions		166
			E.I.S.D. Welding Trades, Course Descriptions		166
			Economics: Business, Course Descriptions		81
			Education, Course Descriptions		82
			Electrical Technology, Course Descriptions		84
			Electronics Technology, Course Descriptions		82
			Emergency Medical Services, Course Descriptions		85
			Emergency Medical Services Seminars, Course Descriptions		85
			Emergency Medical Technology, Course Descriptions		86
			Employment, Student		10
			Employment Placement		
			(See Career and Employment Development Services)		
			English, Course Descriptions		87
			English as a Second Language, Course Descriptions		88
			English as a Second Language: Technical, Course Descriptions		89
			Enrichment, Course Descriptions		88
			Evaluation of Instructional Quality		22
			Examinations		22
			Explosives, Weapons and		24
			Extension and Community Education		29
			F		
			Faculty and Staff Directory		170
			Field Trips		23
			Fighting		23

Financial Aid	9	Industrial Automation Seminars, Course Descriptions	166
Advance Check	11	Insurance, Course Descriptions	105
Appeals	12	Interior Design, Course Descriptions	106
Budgeting Financial Aid Package	11	International Applicants	8
Credit Hour Load	11	International Program in Foreign Language, Course Descriptions	107
Expected Family Contribution	11	International Program in Foreign Travel, Course Descriptions	107
Falsification of Information	11	International Programs	29
How and When to Apply	10		
Need and Financial Assistance Package	11	J	
Renewal of	12	Japan Adventure, Course Descriptions	165
Repayment of Grants	12	Japan Horizon, Course Descriptions	165
Rights and Responsibilities of Students Receiving	11	Japanese, Course Descriptions	110
Rights to Information	12	Journalism, Course Descriptions	110
Satisfactory Academic Progress Requirements	12		
Selection Criteria	11	L	
Short Course Eligibility	11	Labor Relations, Course Descriptions	110
Sources of Financial Assistance	10	Landscape, Course Descriptions	110
Student Financial Services Committee	12	Lansing Community College Foundation	29
Tuition Refunds	11	Laws	22
Work Study	11	Legal Assistant/Law, Course Descriptions	113
Veterans Information	12	Library Information Services	29
Financial Assistance, Sources of		Limited English Proficiency Program	29
Employment	10	Linguistics, Course Descriptions	114
Grants	10	Literature Table (See Student Literature Table, Regulations for Use)	
Loans	10	Loans, Student	10
Scholarships	10		
Special Situation Funds	10	M	
Financial Responsibility	23	Machine Tool Technology, Course Descriptions	114
Fire Science, Course Descriptions	89, 164	MACRAO Transfer Agreement	21
Fitness, Course Descriptions	135	Magnetic Resonance Imaging, Course Descriptions	104
Food Service (see Hotel/Motel and Food Service Operations)		Management, Course Descriptions	120
Foreign Languages (see Chinese, French, German, Japanese, Spanish)		Management Development Restricted, Course Descriptions	167
French, Course Descriptions	90	Management Development Seminars, Course Descriptions	117, 167
		Manufacturing Maintenance, Course Descriptions	120
G		Marketing, Course Descriptions	123
Games and Recreational Activities	23	Massage Therapy	115
General Information	4	Mathematics, Course Descriptions	116
Geographical Resource and Environmental Technology, Course Descriptions	93	Media Technology, Course Descriptions	124
Geography, Course Descriptions	90	Medical Assistant, Course Descriptions	119
Geology, Course Descriptions	90	Meetings	23
German, Course Descriptions	95	Meteorology, Course Descriptions	120
Gerontology, Course Descriptions	91	Microbiology, Course Descriptions	123
Grade Changes	16	Military Science, Course Descriptions	123
Grade Point Average, Computing	16	Minority Outreach and Recruitment	29
Grade Reports	16	Motion Pictures (see Photography Technology)	
Grading, Credit-No Credit	16	Music, Course Descriptions	126, 168
Grading System	15		
Audits	16	N	
Incompletes	15	Numerical Control (see Computerized Numerical Control)	
Withdrawals	16	Nursing, Course Descriptions	131
Graduation Requirements, Certificates and Degrees			
Associate Degree in Applied Arts and		O	
Associate Degree in Applied Science, Criteria for	20	Obstructing and Jostling	24
Associate Degree in Arts and		Oceanology, Course Descriptions	133
Associate Degree in Science, Criteria for	19	Office Administration, Course Descriptions	131
Associate Degree in Business, Criteria for	20	Organizations	24
Associate Degree, General, Criteria for	20	Outdoor Activities, Course Descriptions	139
Associate Degrees, Institutional Requirements	19		
Assurance of Quality	21	P	
Certificates of Achievement, Institutional Requirements	19	Paramedic, Course Descriptions	133
How to Apply for the Associate Degree or Certificate of Achievement	20	Pets	24
MACRAO Transfer Agreement	21	Philosophy, Course Descriptions	140
Granting Additional Associate Degree, Regulation for	21	Phonics, Course Descriptions	140
Granting Associate Degree When Student Has Bachelor's Degree, Regulation for	21	Photography Technology, Course Descriptions	102
Semester Transition Program Completion Information	20	Physical Fitness: Aquatics	133
Transfer Information	21	Physical Fitness: Combative/Weight Training	134
Grants, Student	10	Physical Fitness: Dance Courses	135
Guest Applicants	9	Physical Fitness: Fitness Courses	135
Guest Speakers	23	Physical Fitness: Health/Fitness Cardiac	136
		Physical Fitness: Health/Fitness Wellness	136
H		Physical Fitness: Individual Sport/Interest	137
Health Concerns, Disclosure of	22	Physical Fitness: Outdoor Activity	139
Health/Fitness, Cardiac, Course Descriptions	136	Physical Fitness: Professional Courses	139
Health/Fitness, Wellness, Course Descriptions	136	Physical Fitness: Team Sport	140
Heating, Ventilating and Air Conditioning, Course Descriptions	101, 166	Physics, Course Descriptions	140
History, Course Descriptions	95	Physiology, Course Descriptions	140
Honors, Course Descriptions	98	Plagiarism	24
Horticulture, Course Descriptions	98	Policies, Procedures, and Regulations	8
Hotel/Motel and Food Service Operations, Course Descriptions	96, 165	Political Science, Course Descriptions	141, 168
Housing	13	Poster Regulations	24
Human Services, Course Descriptions	100	Appeal of Poster Denial or Removal, Student or Student Organization	25
Humanities, Course Descriptions	99, 166	General Regulations	24
		Off-campus Organizations and Individuals	25
I		Preschool Learning Environment (see Child Development)	
Identification Cards	23	President's Message	3
Individual Sport/Interest, Course Descriptions	137		
Industrial Automation, Course Descriptions	105		

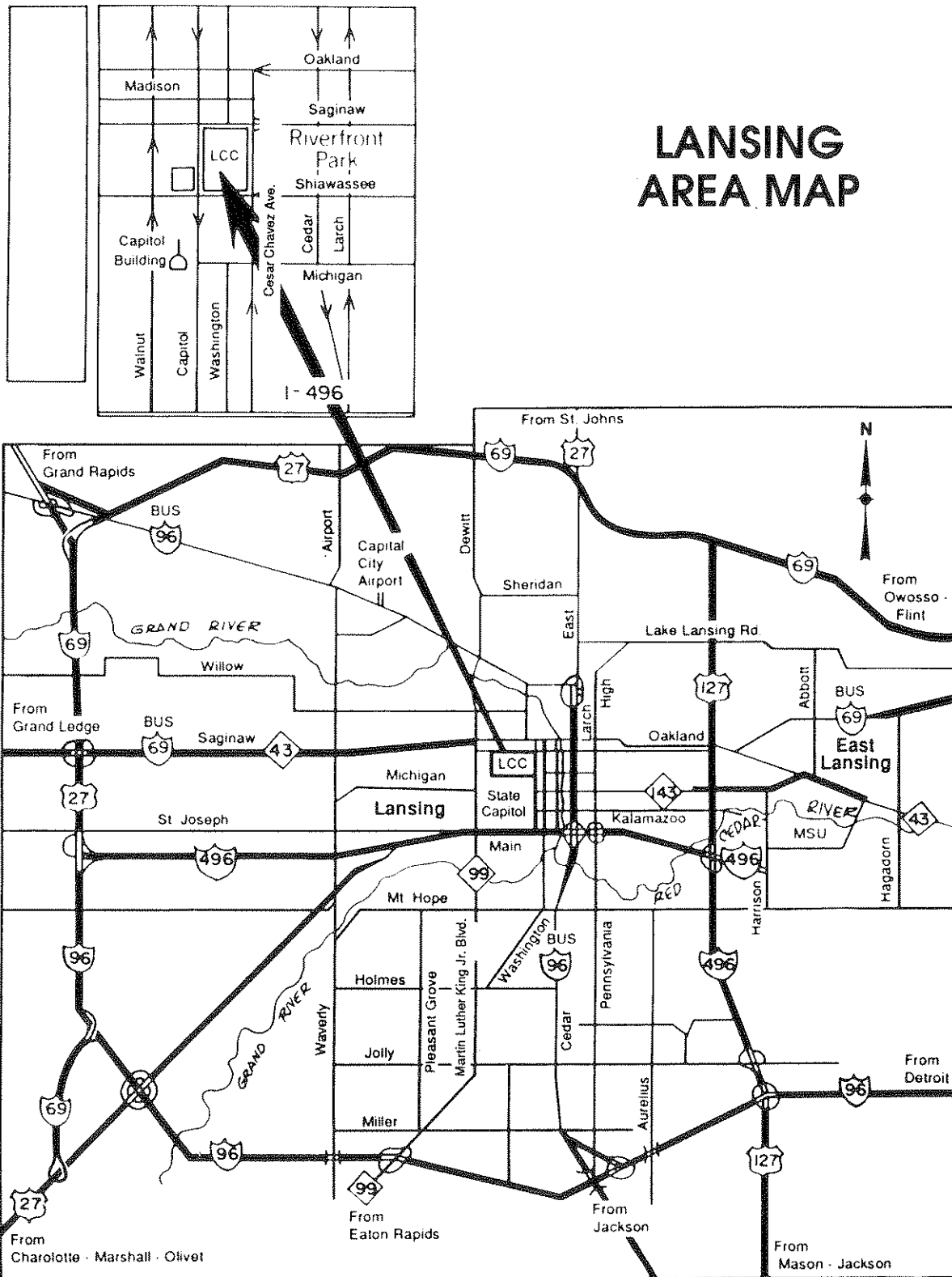
Professional Courses, Physical Fitness, Course Descriptions	139	Semester Transition Program Completion	20
Property Valuation and Assessment Administration, Course Descriptions	143	Sexual Harassment and Discrimination	
Psychology, Course Descriptions	142	Definition, Discrimination	26
Q		Definition, Sexual Harassment	26
Quality Assurance, Course Descriptions	143	Sexual Harassment/Discrimination Complaint Process	26
Quality Assurance Seminars, Course Descriptions	168	Filing a Complaint	26
		Investigation Procedures	26
R		Complainants	26
Radiation Therapy Technology, Course Descriptions	107	Confidentiality	26
Radiologic Technology, Course Descriptions	108	Investigator(s)	26
Reading, Course Descriptions	144, 168	Notification	26
Reading: Restricted, Course Descriptions	144	Timetable	26
Real Estate, Course Descriptions	145	Resolution	27
Records, Student	17, 24	Responsibility to Report	26
Acceptance and Evaluation of Credits from Other Institutions	17	Sign Language, Course Descriptions	150
Access to Records, Student	17	Smoking	24
Credit by Examination	19	Social Work, Course Descriptions	151
Credit for Previously Acquired Knowledge and Learning Experience	18	Sociology, Course Descriptions	151, 168
Transcripts	17	Spanish, Course Descriptions	151, 169
Transfer of Credits	17	Special Admission Program	9
Refund Policy	14	Special Programs and Services	29
Registration Information		Career and Employment Development Services	29
Auditing	14	Counseling and Academic Advising Services	29
Canceled Classes	14	Extension and Community Education	29
Drops and Adds	14	International Programs	29
Procedures	13	Lansing Community College Foundation	29
Repeat Courses	14	Library Information Services	29
Semester Class Schedules	13	Limited English Proficiency Program	29
Student Credit Requirements	14	Minority Outreach and Recruitment	29
Tuition and Fees	13	Student Life Office	29
Withdrawal	14	Tutorial Program	29
Regulation Revisions and Additions	27	Volunteer Services	29
Religion, Course Descriptions	146	Women's Resource Center	29
Repeat Courses	14	Special Situation Funds	10
Residency		Speech Communication, Course Descriptions	152
Classification	13	Spelling Development, Course Descriptions	153
Eligibility for Paying Resident Tuition	13	Statistics, Course Descriptions	153
Military Personnel and Dependents, Residency Status of	13	Strategic Goals	1
Non-resident Owners of In-district Property	14	Student Development, Course Descriptions	148
Petitioning for a Change in Residency Status	13	Student Life Office	29
Proof of Residency	13	Student Literature Table, Regulations for Use	25
Resource and Operations Management Systems, Course Descriptions	147	Appeal of Denial Flow Chart	26
Resource and Operations Management Systems Seminars, Course Description	168	Appeal of Denial of Use	26
Respiratory Therapy Courses, Course Descriptions	146	Use Request Flow Chart	26
Responsibilities, College	28	Student Rights, Responsibilities, and Conduct	21
Responsibilities, Student	22, 28	Surgical Technology, Course Descriptions	153
Attendance	22		
Conduct—Interim Due Process Suspension	22	T	
Evaluation of Instructional Quality	22	Table for Determining Academic Status	16
Examinations	22	Team Sports, Course Descriptions	140
Health Concerns, Disclosure of	22	Technology General, Course Descriptions	153, 169
Laws	22	Telephone Directory	6
Rights, Responsibilities, and Conduct	21	Theater, Course Descriptions	154
Rules and Regulations, General		Tourism: Airline and Travel Agency Operations, Course Descriptions	157
Academic Honesty	22	Transcripts, Student	17
Assaults	22	Transfer Credits from Other Institutions, Acceptance and Evaluation	
Assembly	23	Accredited and Non-Accredited Institutions	18
Dress	23	Non-Accredited Institutions	18
Drug and Alcohol Regulations	23	Transfer Information	21
Field Trips	23	MACRAO Transfer Agreement	21
Fighting	23	Truck Driver Training Program, Course Descriptions	153
Financial Responsibility	23	Tuition and Fees	
Games and Recreational Activities	23	Payment of	14
Guest Speakers	23	Refund Policy	14
Identification Cards	23	Residency	13
Meetings	23	Tutorial Program	29
Obstructing and Jostling	24		
Organizations	24	V	
Pets	24	Vandalism	24
Plagiarism	24	Veterans' Information	12
Poster Regulations	24	Certification Policy for VA Educational Benefits	13
Records	24	Satisfactory Progress for Veterans Benefits Eligibility	13
Sexual Harassment and Discrimination	26	Video Cassette	24
Smoking	24	Vocabulary Improvement, Course Descriptions	158
Vandalism	24	Volunteer Services	29
Video Cassette	24		
Weapons and Explosives	24	W	
		Weapons and Explosives	24
S		Welding Technology, Course Descriptions	158
Safety, Course Descriptions	148	Withdrawal	
Scholarships	10	Administrative	14
Science Seminars, Course Descriptions	148	Procedure for Resolving Health-Related Issues	15
Semester Class Schedules	13	Student Initiated	14
		Women's Resource Center	29
		Work Study	11
		Writing, Course Descriptions	158

SERVICE AREA MAP



The following School Districts constitute the LCC Resident District

LANSING AREA MAP



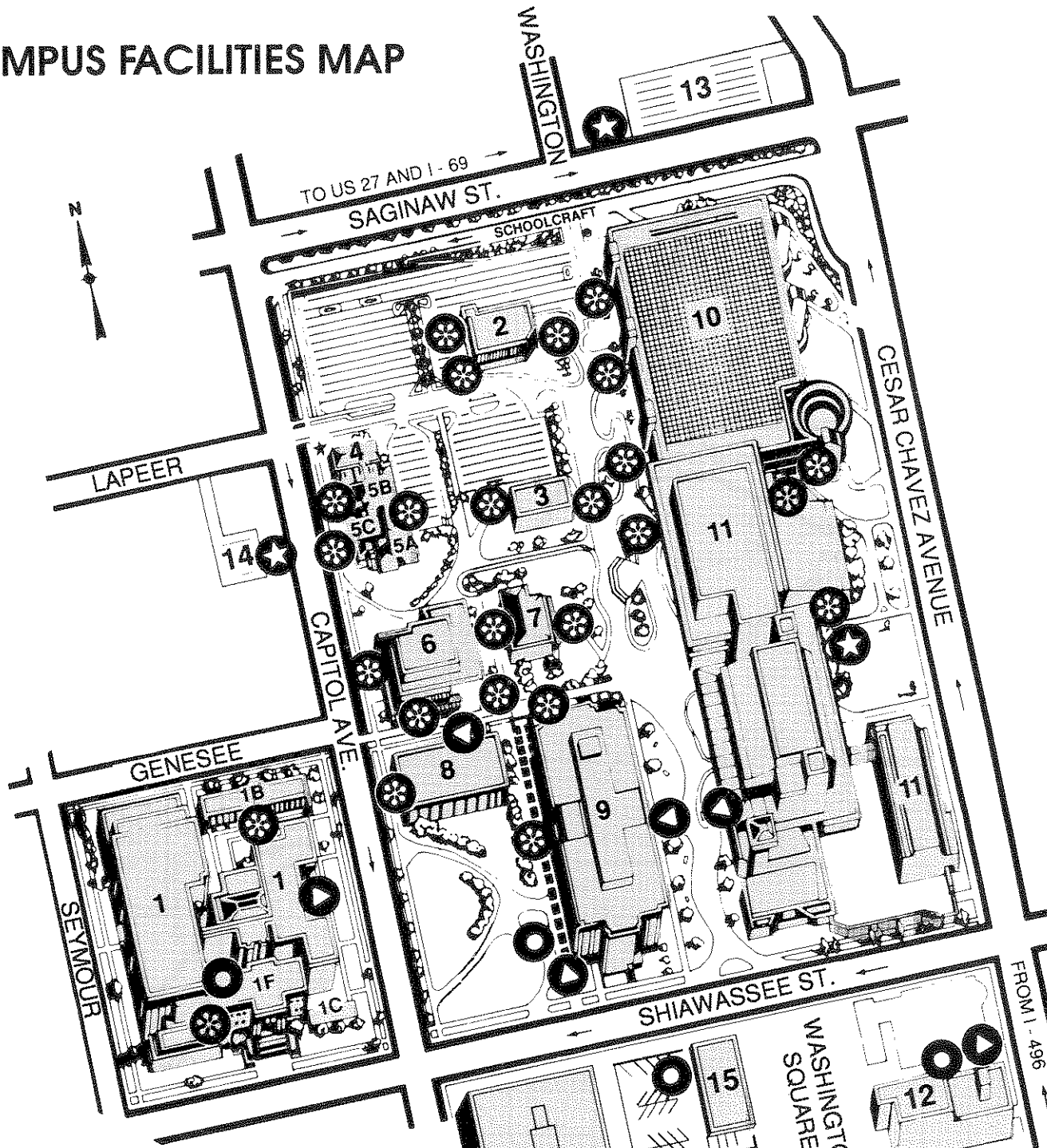
VISITORS TO LANSING COMMUNITY COLLEGE

The LCC Visitor Parking Area is located in the AutoCenter Courtyard in the 400 block of Cesar Chavez Avenue.

ENTERING THE LOT





1. Traveling north on Cesar Chavez Avenue, the AutoCenter Courtyard is located just past the intersection of Cesar Chavez Avenue and Shiawassee Street.
2. Visitor parking is located along the south wall of the Courtyard (on your left as you drive in). All visitor spaces are posted with signs.
3. Attach your visitor parking permit (using the sticky tape) to the left rear window (not the side window) so the permit is visible from the rear of the car.
4. Throw away your visitor parking permit (after the expiration date) when use is completed.

CAMPUS FACILITIES MAP

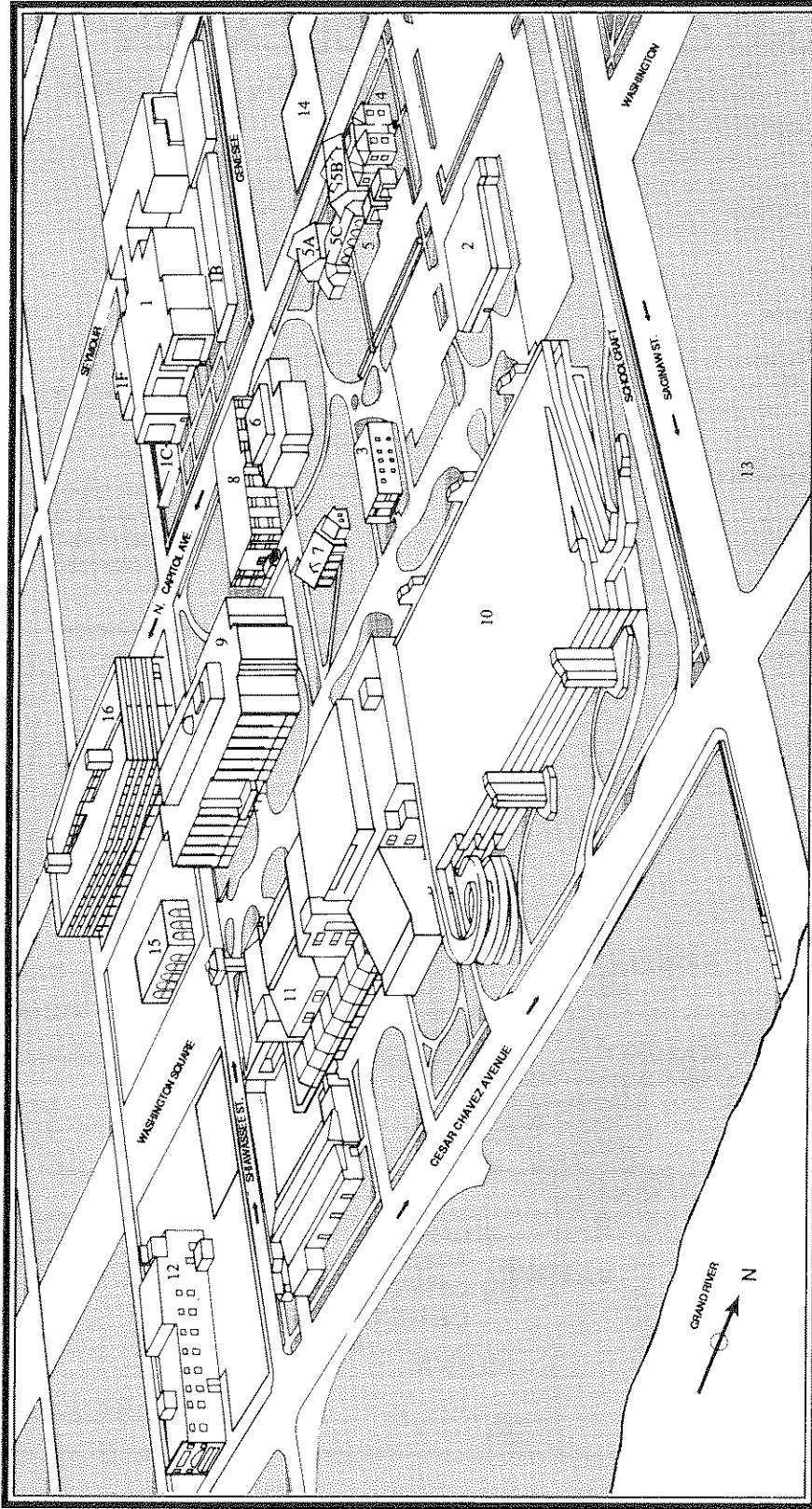


Building Information

- | | |
|---|--|
| 1B. Office Unit B (OUB) | 7. Turner House (TH) |
| 1C. Office Unit C (OUC) | 8. Student Personnel Services (SPS) |
| 1F. Office Unit F (OUF) | 9. Arts & Sciences (A&S) |
| 1. Old Central (OC) | 10. LCC Parking Ramp
(Quick Card and Cash) |
| 2. Photography Center (PC) | 11. Gannon Vocational/Technical Center (GVT) |
| 3. Administration (ADM) | 12. Academic & Office Facility (AOF) |
| 4. North House (NH) | 13. Student Employee Parking Lot
(Student Employee Parking Card Only) |
| 5. Herrmann Conference
Center Complex (HCC): | 14. Parking Lot (Quick Card Only) |
| 5A. Herrmann Conference Center | 15. Continental Building (CB) |
| 5B. Rogers-Carrier House | 16. City Parking Ramp
(Quick Card and Cash) |
| 5C. LCC Board Room | |
| 6. Dart Auditorium (DRT) | |

-  Emergency Phone
-  Handicapper Entrances
-  Handicapper Entrances with Electronic Doors
(Push-button electronic door at 2nd floor
entrance of GVT from Parking Ramp)
-  Handicapper Parking (Parking on 2nd floor
of Parking Ramp and other marked spaces)

CAMPUS MAP



Building Key

- | | | |
|---|--|--|
| 1B. Office Unit B (OUB) | 5A. Herrmann Conference Center | 11. Gannon Vocational/Technical Center (GVT) |
| 1C. Office Unit C (OUC) | 5B. Rogers-Carrier House | 12. Voc-Tech Automotive Center |
| 1F. Office Unit F (OUF) | 5C. LCC Board Room | 13. Academic & Office Facility (AOF) |
| 1. Old Central (OC) | 6. Dart Auditorium (DRT) | 14. Student Employee Parking Lot |
| 2. Photography Center (PC) | 7. Turner House (TH) | 15. Student Employee Parking Card Only |
| 3. Administration (ADM) | 8. Student Personnel Services (SPS) | 16. Parking Lot (Quick Card Only) |
| 4. North House (NH) | 9. Arts & Sciences (A&S) | 17. Continental Building |
| 5. Herrmann Conference Center Complex (HCC) | 10. LCC Parking Ramp (Quick Card and Cash) | 18. City Parking Ramp (Quick Card and Cash) |

LEARNING CENTER LOCATIONS EXTENSION AND COMMUNITY EDUCATION

Learning Center Locations

BYRON

Byron High School

CHARLOTTE

Charlotte High School

DANSVILLE

Dansville High School

DEWITT

Dewitt High School

EAST LANSING

Bailey Community Center
East Lansing High School

EATON RAPIDS

King Street School

FOWLerville

Fowlerville High School
Fowlerville Middle School

GRAND LEDGE

Grand Ledge High School

HASLETT

Haslett High School

HOLT

Holt Computer Center
Holt High School
Holt Junior High School
Hope Middle School

HOWELL

Howell Center
Howell High School
Livingston Educational Service
Agency

LAINGSBURG

Laingsburg High School

LANSING

Capital Area Career Center
Cristo Rey Community Center
Lansing Catholic Central
Lansing Mall
Lansing School District

MASON

Capital Area Career Center
Mason High School

OKEMOS

Okemos Community Education Center
Okemos High School

OWOSSO

Lincoln School
Owosso High School

PORTLAND

Portland High School

ST. JOHNS

St. Johns High School

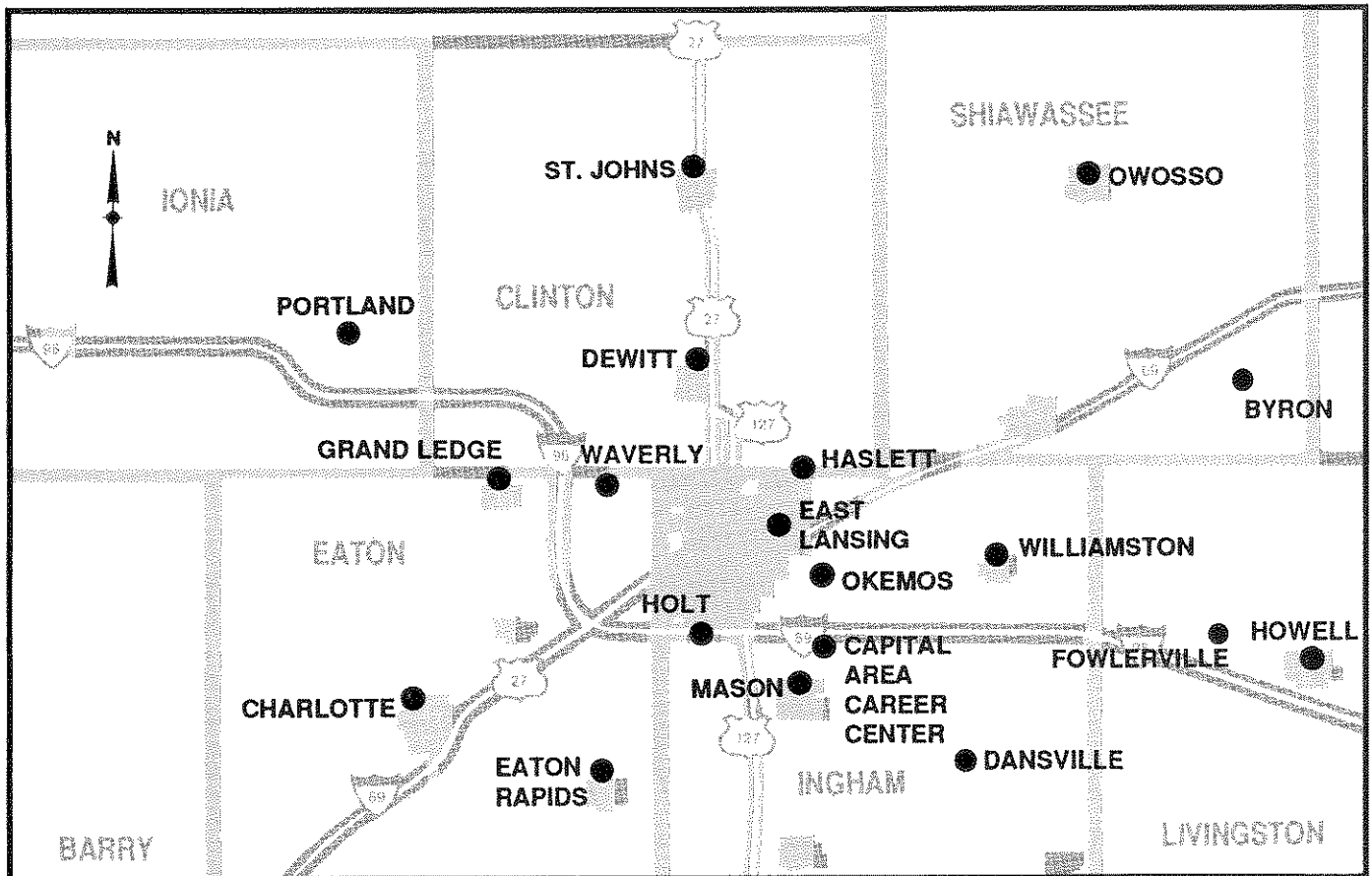
WAVERLY

Waverly High School
Waverly Middle School

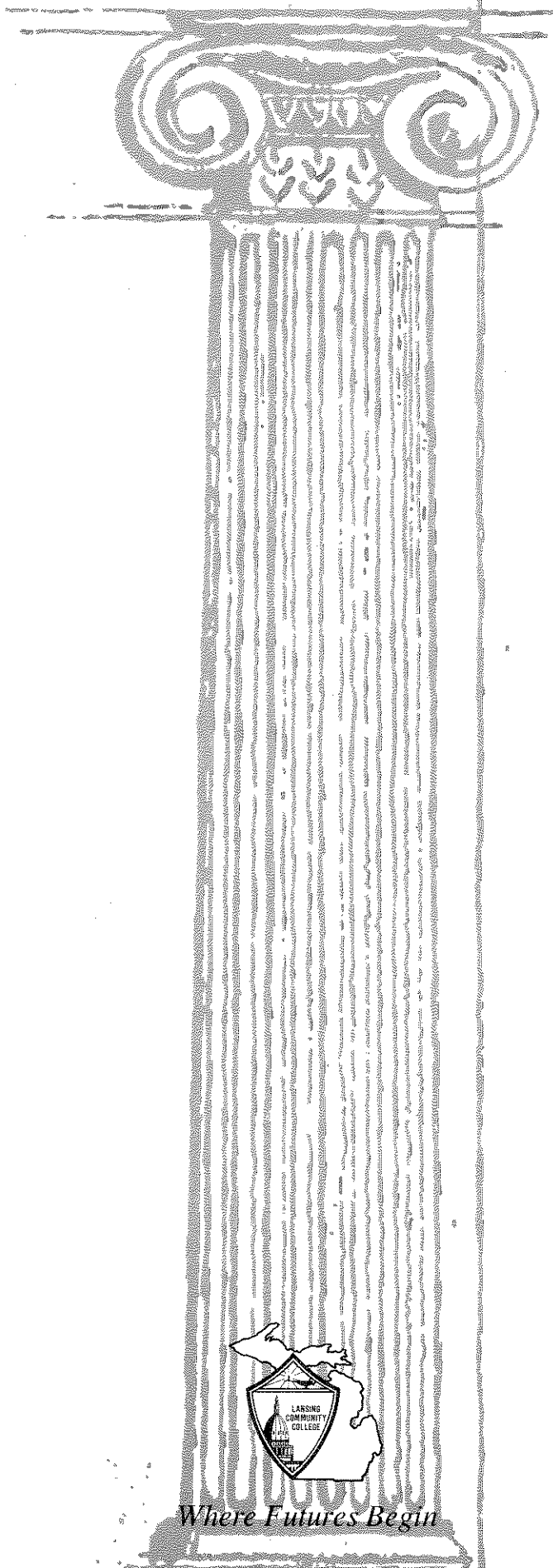
WILLIAMSTON

Williamston Community Center
Williamston High School

For more information call the
Extension and Community
Education Office at
(517) 483-1860



● LCC classes are held at local schools in partnership with Community Education Offices in these locations.



Where Futures Begin

400-600 North Washington Square, P.O. Box 40010, Lansing, Michigan 48901-7210

1995-96 Catalog Lansing Community College

www.lcc.edu