

**LANSING
COMMUNITY
COLLEGE**

**Arts &
Sciences
1981-82**

Division of Arts & Sciences

**Course
Descriptions**



*1957-1982
A Quarter Century
of
Quality Education*

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Joan Hartwig

TO THE STUDENT:

This handbook has been prepared to assist you in becoming more knowledgeable about courses in the Division of Arts and Sciences. It contains an up-dating of courses listed in the College Catalog for the Arts and Sciences Division prior to the Catalog's reprinting later in the year. You will find the course descriptions very useful in selecting a program of study at Lansing Community College.

If you should have any questions about the course descriptions contained in this booklet, contact the appropriate department. The five departments in the Division of Arts and Sciences are:

<u>DEPARTMENT</u>	<u>TELEPHONE</u>	<u>LOCATION</u>
Communication	373-7450	A&S Bldg. Rm 201
Humanities	373-7073	A&S Bldg. Rm 255
Mathematics	373-7238	A&S Bldg. Rm 165
Science	373-7070	A&S Bldg. Rm 408
Social Science	373-7048	A&S Bldg. Rm 353

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DIVISION OF
ARTS AND
SCIENCES

Dean Sam Kintzer

The Division of Arts and Sciences offers liberal arts education to students. Originally, the meaning of liberal arts was that they "liberated" students from the chains of superstition and ignorance. Today, the purpose of a liberal arts education is to present knowledge and ideas about the world around us from the perspectives of the behavioral and natural sciences and the humanities. Through this program of study the student can develop the abilities of analytical reasoning and informed judgement which are the hallmarks of a broadly educated individual. Such a person will be more versatile in dealing with the complexities of modern technological society and be better prepared for positions of leadership and responsibility.

The Division of Arts and Sciences is established:

1. To provide general education for all students.
2. To offer freshman and sophomore liberal arts courses paralleling the first two years of university training.
3. To award Associate Degrees in Arts and Associate Degrees in Science to students who earn 90 credits of study and who also meet the academic requirements for graduation as stated by the college.
4. To offer pre-professional curricula enabling students to transfer after two years of study to advanced training at four-year colleges and universities.
5. To provide a program of study through which the student is assisted to develop an awareness of self and to build a foundation for the election of a value system.
6. To encourage the student to search for truth in the heritages of our civilization and of other cultures so that the dignity of man may be comprehended.

To facilitate the attainment of these goals, the Division of Arts and Sciences:

- * Provides students with an array of instructional environments: independent study, off-campus courses in the field and community, individualized self-paced learning courses, audio-visual-tutorial studies, lecture-discussion, laboratory, and seminar classes.
- * Provides students with courses during the day and evening permitting an appropriate schedule selection for those students who need to spend part of each day at work. Those individuals fully employed during the daytime, whether at a job or in the home, may begin their college education by enrolling in evening courses.
- * Recognizes that thoughtful understanding of the issues of concern of the closing decades of the twentieth century requires of each individual the ability to read, write, and speak with clarity and sophistication. To accomplish this, the Division provides for all students courses that will assist them to read with comprehension and to write and speak effectively.
- * Establishes honors courses, invites guest speakers, holds special workshops and seminars for the academically able student with a wider range of interest.

DUAL ENROLLMENT

High school students who have demonstrated academic ability may, upon recommendation of the high school principal, be admitted during their junior year in high school to the dual enrollment program of the College. Students are accepted prior to graduation from high school and may earn a number of hours of credit toward their pre-professional or Associate Degree while they complete their high school program. Students usually attend afternoon or evening classes. They enroll in regular sections of the courses for which they are registered and their credits are fully transferable to other colleges and universities.

SEMINAR SERIES

Special seminars are drawn from any area within departments in the Division of Arts and Sciences. The courses are designed and offered by faculty in topics that may reflect the forefront of knowledge about ourselves or others and are designed to help us acquire new skills or insights. Credits are variable from one to four. Prerequisites are listed individually for each offering.

HONORS PROGRAM

The Division of Arts and Sciences offers an Honors Program for students of outstanding academic ability. This program offers the advantages of independent study as well as regularly scheduled honors courses, and provides these students with the opportunity to explore their academic interests in depth.

Twenty-one awards covering full tuition and fees are offered each year to new students of superior academic ability who intend to study in this Division. These awards are competitive and are based solely on academic excellence. Application forms are available on request from the Honors Program Coordinator, Division of Arts and Sciences, Room 111, A&S Bldg.

CRITERIA FOR THE ASSOCIATE DEGREES IN ARTS AND SCIENCES

DIVISION OF ARTS AND SCIENCES

I. Requirements:

1. 90 credits
2. GPA of 2.0 or better
3. 30 credits in attendance at LCC
4. Completion of SS 103, or 104, or 105
5. The student is required to take a core of at least 12 credits in each of the following areas: Composition/English, Humanities, Science and Social Science.

- a. It is recommended that the requirement of 12 credits in Humanities be fulfilled by the sequence in Western Civilization, HUM 201, 202, 203.

Students may substitute other courses in the curriculum of the Humanities Department for any of the above, provided that these are distributed in at least two of the following four areas:

- 1) Art and Music History (HUM 101, 150, 151, 152)
- 2) History (HST 104 - 296)
- 3) Literature (ENG 201 - 296 and HUM 102)
- 4) Philosophy and Religion (PHL 101 - 296; REL 150 - 296 and HUM 104)

Please note that Western Civilization courses (HUM 201, 202, 203) are counted as History courses when only one or two of them are taken to fulfill general education requirements.

- b. The Composition/English requirement can be fulfilled by courses in writing and freshman English. The following are possible alternatives a student may take in fulfilling the Composition/English requirements for the Associate Degree:

***	***	***	***
WRI 121	WRI 121	WRI 121	WRI 121
ENG 122	WRI 122	ENG 122	WRI 122
ENG 123	ENG 123	WRI 123	WRI 123

Those students permitted to waive WRI 121 are required to take a third course from 200-level offerings in Communication, Writing, and English.

- c. The 12 required credits in Social Science must include either SS 103, or 104, or 105. The remaining eight credits may be selected from any of the following: SS 101, 102, sociology, anthropology, psychology, political science, or geography.

- d. It is required that 12 credits in Science be fulfilled by courses that grant laboratory credit. Students must select at least four credits in a biological science and at least four in a physical science.

6. Students intending to transfer to four-year colleges and universities should follow curriculum guides of suggested courses for transfer to the institution of their choice. Consultation with faculty and/or counselor is recommended.
7. In choosing electives, no more than eight credit hours may be submitted from the 100-level Arts and Sciences Seminars beginning with the designation SEMINAR in the title. These courses may not be used to fill core course requirements.
8. All courses listed on any single Arts and Sciences curriculum guide are acceptable towards either an Arts or Science Degree whichever is appropriate when such guide is submitted with a degree application. In addition, traditional liberal arts courses offered in other divisions such as Studio Art, Music, Economic History, Economics, may be accepted towards the degree up to a maximum of eight credits. Acceptable lists of elective courses in other divisions are available from any Counseling Office or from the Dean of Arts and Sciences.
9. Courses coded beginning with "0" will not be included in the 90-credit total.

- II. A student may appeal a decision not to grant an Associate Degree in Arts or Sciences for lack of fulfillment of the above criteria. Students may appeal such decision to the General Council of the Arts and Sciences Division which shall serve as a review committee and recommend to the Dean of Arts and Sciences appropriate action. Voting members shall be department chairpersons, faculty representatives, and student representative.

- III. Effective date of implementation: Academic Year 1981 - 1982.

FIELD OF STUDY

The Arts and Sciences Curricula are grouped into three general categories. They include:

ARTS (PRE-MAJOR)	SCIENCES (PRE-MAJOR)
100 Liberal Arts Non-Declared	151 General Science
101 General Liberal Arts - Associate Degree	155 Biology
104 Communication with Foreign Language Emphasis	156 Horticulture
105 English	160 Chemistry
106 Journalism - General Associate Degree	165 Mathematics
107 Communication with Journalism Emphasis	170 Physics
108 American Studies	175 Natural Resources
109 History	176 Earth Science
110 Philosophy and/or Religion	180 Geology
111 Black History	185 Engineering
112 Social Science	
116 Sociology	
117 Psychology	
118 Geography	
119 Political Science	
120 Communication with Speech Emphasis	
124 Human Services	
129 Social Work - Transfer	

PRE-PROFESSIONAL (ASSOCIATE DEGREE)

205 Architecture
207 Chiropractic
209 Dental Hygiene - Transfer
210 Dentistry - Transfer
211 Home Economics Teaching
213 Landscape Architecture
215 Law
220 Medical
221 Medical Technology
225 Mortuary Science
226 Nursing Programs - State of Michigan
227 Registered Nurse - Transfer
232 Occupational Therapy
235 Optometry
237 Packaging - Transfer
240 Pharmacy
242 Agriculture, Building Construction
245 Physical Therapy
255 Elementary Teaching
258 Outdoor Education
259 Physical Education - General Associate Degree
260 Secondary Education
261 Recreation & Youth Leadership
262 Occupational Education
265 Theology
270 Veterinary Science

DEPARTMENT OF COMMUNICATION

Chairperson: Dr. George R. Bramer

The Department of Communication offers instruction in the following areas, under the course codes indicated:

CHN: Chinese	JRN: Journalism
COM: Communication	RDG: Reading
ESL: English as a Second Language	SGN: Sign Language
FRN: French	SPH: Speech
GRM: German	SPN: Spanish
ITL: Italian	WRI: Writing

Seminars in speed reading, creative and functional writing, and conversational foreign languages are also offered.

The department offers testing services to help you select appropriate courses in composition and/or reading. You are urged to inquire in the Communication Department Laboratory about a composition placement test. A reading test is administered and advising is given during regular registration before each term. Additional reading testing and advising can be arranged in the department laboratory.

295, 296, 297, 298 Independent Study Credits variable, one to four

Individual projects in communication, reading, writing, speech, journalism, or foreign languages. Students will spend at least two hours a week for each credit in independent study. Prerequisites: Minimum of 3.0 grade-point average in related Department of Communication courses, and departmental approval.

COURSE DESCRIPTIONS

COMMUNICATION (COM)

- 031 Vocabulary Improvement I Two credits
Explains the precise meanings of words, evolution of words into contemporary English, and word choices appropriate for varying situations. Helps students improve vocabulary for reading, writing, and speaking. 2 (2-0)
- 032 Vocabulary Improvement II Two credits
Builds on the work of Vocabulary Improvement I, offering activities for expanding the student's ability to recognize and use words in various contexts. 2 (2-0)
- 035 Spelling Improvement Two credits
Examines, in context, words that are frequently misused, mispronounced, and misspelled. Emphasizes basic phonic patterns, complicated consonant and vowel combinations, and word families. Includes study of syllabification and commonly misspelled words. 2 (2-0)
- 150 The Press in a Free Society Three credits
An examination of the role and impact of journalism, print and electronic, in a democratic society. Major focus is on an understanding of the concepts of "freedom" and "responsibility" and on development of the student's ability to evaluate press performance intelligently. 3 (3-0)
- 209 Mass Communication Four credits
Provides an understanding of the impact of mass communication on the knowledge and attitudes of U.S. audiences. Explores operational aspects of newspapers, magazines, radio, television and film in the light of communication theory and evidence from research. Covers such specific topics as news, advertising, violence in the media, and stereotyping. 4 (4-0)
- 230 Introduction to English Linguistics Four credits
Examines the English language from the perspective of contemporary American linguistics: generative syntax, phonology, regional and social variation. Considers implications for teachers. 4 (4-0)

READING (RDG)

- 016, 017, 018 Reading Clinic I, II, III Four credits each
This series of clinic reading courses is designed to provide skill appraisal, advice, and instruction for students whose special problems in reading are more fundamental than those provided for in RDG 019. Through private consultation, each student will receive a prescriptive plan and will be guided into an individualized program supervised by the professional clinic staff. 4 (0-8)
- 019 Reading Comprehension I Four credits
Deals with strategies for understanding the printed word. Special attention is given to comprehension, vocabulary building, and study techniques as preparation for college level reading assignments. 4 (4-0)
- 020 Reading Comprehension II Four credits
Improves the student's ability to read critically. Enables the student to perceive reading not merely as a mechanical process but as one of absorbing and interpreting ideas. Emphasis is placed on analyzing the message and its implications. 4 (4-0)
- 021 Speed Reading Four credits
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. 4 (4-0)
- 023 College Reading Survival Skills Two credits
Instruction in reading skills which are instrumental in effective academic performance at the college level. Emphasis in such areas as reading rate and comprehension, textbook study techniques, note-taking, library resources, essay tests, and objective tests. 2 (2-0)

WRITING (WRI)

Placement testing is conducted during the first week of each term for all students in WRI 101, WRI 102, and WRI 121. Some students are advised to drop the course for which they have registered and to add a more appropriate course,

either more basic or more advanced. The Composition/English requirement for the Associate Degree in Arts or Science (AA or AS) can be fulfilled in various ways. The first required course, WRI 121, can be waived for a limited number of qualified students, passed by comprehensive examination, or taken as a term-length course. Inquire about these possibilities in the Admissions Office or the Department of Communication. The second required course can be either WRI 122 or ENG 122, and the third can be either WRI 123 or ENG 123. The Departments of Communication and Humanities have various options for students who waive WRI 121.

101 Fundamentals of Writing Four credits

An individualized course designed to help prepare the student for freshman writing. Builds confidence and increases fluency. Develops skill in choosing words and writing sentences, paragraphs, and brief essays. Instruction includes laboratory activities and group work in weekly class meetings, as well as flexible scheduling, self-pacing, and professional tutorial assistance. 4 (1-6)

102 GRAMMAR/MECHANICS IN WRITING Four credits
121 Composition I Four credits

Designed to help the student develop writing ability. Emphasizes the organization and development of informational prose. Includes units in use of the dictionary and college reading skills. 4 (4-0)

122 Composition II Four credits

Continuation of WRI 121 and an alternative to ENG 122. Writing and reading skills are further developed with special attention to sentence style and word choice. Deals with problems in communication between readers and writers, especially those involving fact, opinion, logic, and persuasion. Includes an introduction to documentation of sources. Prerequisite: WRI 121. 4 (4-0)

123 Composition III Four credits

Continuation of the basic composition program, and an alternative to ENG 124. Emphasizes investigative techniques, library resources, and writing the research paper with full documentation by footnotes and bibliography. Prerequisite: WRI 122 or ENG 122. 4 (4-0)

131 Honors Composition I Four credits

Designed for superior writers, as identified by tests or by high school grades in English; an alternative to WRI 121. Includes an introduction to the principles of effective writing and critical thinking; writing practice in expository prose; and components in reading and dictionary skills. Prerequisite: Departmental approval. 4 (4-0)

132 Honors Composition II Four credits

Designed for superior writers; meets second-term requirement of the Composition/English program; an alternative to WRI 122 or ENG 122. Deals with writing problems involving fact, opinion, logic, and persuasion. The student will have a chance to experiment with variations in purpose, audience, and style. Prerequisite: Departmental approval. 4 (4-0)

133 Honors Composition III Four credits

Designed for superior writers; meets third-term requirement of the Composition/English program; an alternative to WRI 123 or ENG 123. Major writing assignment is the fully documented research paper, with attention to personal style and patterns of argument. Prerequisite: Departmental approval. 4 (4-0)

272 Short Story Writing Four credits

A practical course in how to write the short story. The students write at least six stories on subjects of their choosing, using narration, dialogue, description, exposition, structure and style. Includes individual conferences with the instructor. 4 (4-0)

273 Poetry Writing Four credits

A practical course in how to write effective poetry. The students write seven to ten poems of approximately fifteen lines each on a variety of subjects, using various poetic meters, free verse techniques, structures and styles. Includes individual conferences with the instructor. 4 (4-0)

281 Writing for Publication Three credits

Students review a variety of effective writing techniques; study marketing information in their particular fields, such as manuscript preparation, query letters, and potential publishers; and discuss their writing in a workshop setting. 3 (3-0)

SPEECH (SPH)

101 Human Communication Four credits

An investigative course in which the students study and apply theories of human communication. The students evolve their own models of communicating with others; verbally and nonverbally, in interpersonal, small-group, organizational, and cross-cultural situations. 4 (4-0)

102 Interpersonal Communication Four credits

Explores the verbal and nonverbal dimensions of face to face communication. Emphasizes the recognition and elimination of communication barriers. 4 (4-0)

103 Small Group Communication Four credits

Theoretical study and guided practice in small group discussion (formal and informal, vocational and avocational). Emphasizes learning about the group: structure, purposes, leadership styles, and roles. 4 (4-0)

104 Fundamentals of Public Speaking Four credits

Introductory course. Study and application of the basic principles of effective public speaking. Students make seven speeches during the term. 4 (4-0)

105 Voice and Articulation Three credits

Theory and practice of effective voice production and precise diction. Emphasis on understanding the speech organs and their operation and on applying successful techniques to make the best use of the instruments of speech. 3 (3-0)

201 Oral Interpretation Three credits

Introduces students to techniques of presenting literature and communication orally, focusing on specific skills of voice and gesture. Emphasizes selection, preparation, and delivery of literary material. 3 (3-0)

203 Advanced Public Speaking Three credits

Designed to acquaint the student with classical rhetoric theory as well as modern communication models related to persuasion. Critical analysis is

developed through the study of speech models while performance techniques are refined through a series of 10-minute speeches. Prerequisite: SPH 104 3 (3-0)

206 Nonverbal Communication Four credits

Provides the student with an understanding of the many ways people communicate without words. The student will learn what messages the face, the body, personal appearance, touch, time and space convey in American culture. The student's skills as a nonverbal communicator will be increased through in-class activities. 4 (4-0)

ENGLISH AS A SECOND LANGUAGE (ESL)

016 English as a Second Language Five credits

First of a three-term sequence in American English as a second language. For advanced beginners who have been introduced to some basic structures but have not yet mastered them. Class sessions focus on the spoken form and homework on the written form. Tapes provide supplementary aural-oral experience. 5 (5-0)

017 English as a Second Language II Five credits

Second of a three-term sequence in American English as a second language. Reinforces the instruction of ESL 016, introduces new verb forms and complex sentence patterns, and gives increased attention to writing. Tapes provide supplementary aural-oral experience. 5 (5-0)

018 English as a Second Language III Five credits

Third of a three-term sequence in American English as a second language. Emphasis is on advanced grammatical structures with some preparation for taking college classes. Tapes provide supplementary aural-oral experience. 5 (5-0)

JOURNALISM (JRN)

151 News Writing Four credits

Considers what is of news interest and how to turn news facts into a publishable news story. The students learn news terminology, the importance of news style, objectivity, attribution, accuracy, grammar and spelling. 4 (4-0)

152 Reporting Four credits

Shows how, when and where to go after facts, how to conduct interviews, and how to cover speeches, meetings and news conferences. Students develop a sense for digging out information and using facts for a clear, readable, balanced news story. Prerequisite: JRN 151. 4 (4-0)

167 Journalism Practicum Two credits

Provides students with practical newspaper experience while they contribute to the college publication. Students primarily write news stories, but also take part in such activities as editing and headline writing. The ethical responsibility of the press is explored. Prerequisite: JRN 151. 2 (0-4)

254 Editorial Writing Four credits

A course in how to write effective editorials and concentrated study of editorial concept, structure, and style. Student analyzes editorial models, learns methods of research, and writes at least six editorials on local issues. Prerequisite: JRN 151. 4 (4-0)

256 Newsletter Writing and Publication Four credits

Provides the student with an understanding of the communication process, a working knowledge of writing and editing in journalistic style, and the techniques necessary for producing a newsletter or house organ. 4 (4-0)

FOREIGN LANGUAGES

Advanced placement in foreign language study may be arranged for students who have satisfactorily completed two or more years of a language in high school, and those who have established language proficiency by other means. Tests will be given when there is a question concerning the student's proficiency level.

FRENCH (FRN)

101, 102, 103 Elementary French Five credits each

Three-term sequence of elementary French designed to teach pronunciation, vocabulary, conversation, and reading from graded texts and writing. Practice in mastery of the sound system, linguistic patterns, and grammatical structure of the language is afforded by a coordinated schedule of laboratory sessions (using tapes of native speakers) and class recitations. Prerequisites: For FRN 101, none; for FRN 102, FRN 101; for FRN 103, FRN 102; or the equivalent of these prerequisites. 5 (5-0)

201, 202, 203 Intermediate French Five credits each

Three-term sequence of intermediate French involving systematic review of syntactic patterns, conversation, and extensive reading of modern texts. Increasing emphasis is placed on the oral and written use of the language, as well as the cultural background of the French people. Prerequisites: for FRN 201, FRN 103; for FRN 202, FRN 201; for FRN 203, FRN 202; or the equivalent of these prerequisites. 5 (5-0)

GERMAN (GRM)

101, 102, 103 Elementary German Five credits each

Three-term sequence in contemporary German. Students explore topics of current interest concerning German-speaking cultures as a vehicle for learning basic communication skills. Conversation and class participation are emphasized. Tape recordings accompanying the text provide additional exercise in pronunciation and comprehension. Prerequisite for GRM 101, none; for GRM 102, GRM 101; for GRM 103, GRM 102; or the equivalent of these prerequisites. 5 (5-0)

201, 202, 203 Intermediate German Five credits each

Three-term sequence in contemporary German offering advanced training and practice in the four basic skills - speaking, listening comprehension, reading and writing. Includes a thorough review of basic German grammar, intensive vocabulary building, small-group discussions, writing compositions, and student presentations on German culture. Cassette recordings accompanying

the text provide students with additional listening comprehension practice.

Prerequisites: For GRM 201, GRM 103; for GRM 202, GRM 201; for GRM 203, GRM 202; or the equivalent of these prerequisites. 5 (5-0)

SPANISH (SPN)

101, 102, 103 Elementary Spanish Five credits each

Three-term sequence of elementary Spanish emphasizing use of the language for practical communication. Classwork features intensive small-group conversation practice, and an introduction to Hispanic culture. Classes meet one hour daily, and students can increase their pronunciation and comprehension of spoken Spanish by listening to cassette tapes available in the Communication Department Laboratory. Prerequisites: For SPN 101, none; for SPN 102, SPN 101; for SPN 103, SPN 102; or the equivalent of these prerequisites. 5 (5-0)

201, 202, 203 Intermediate Spanish Five credits each

Three-term sequence of intermediate Spanish; includes a thorough review of basic Spanish grammar, intensive vocabulary building, extensive small-group discussion on assigned reading topics, guided composition writing, and student presentations of special projects pertinent to Hispanic people and their cultures. Cassette tape recordings are available to help students improve their pronunciation and comprehension of spoken Spanish. Prerequisites: For SPN 201, SPN 103; for SPN 202, SPN 201; for SPN 203, SPN 202; or the equivalent of these prerequisites. 5 (5-0)

SIGN LANGUAGE (SGN)

160 Orientation to Deafness One credit

Introduces the student to deafness and its effects. Lectures and audio-visual presentations cover areas of interest to those working professionally with deaf persons, parents, and families of deaf individuals, and those desiring greater awareness of the "world of the deaf". Class experience includes guest lectures to further acquaint students with the deaf community. 1 (1-0)

161 Sign Language I Four credits

First course in a sequence. Provides the student with a basic knowledge of the sign language of the deaf and the major sign language systems. The student will become familiar with 400 signs and the manual alphabet used in American Sign Language (ASL). Prerequisite: SGN 160 or concurrent enrollment. 4 (3-2)

162 Sign Language II Four credits

Second course in a sequence. Designed to increase students' expressive and receptive sign language skills and vocabulary and to introduce and develop a basic understanding of American Sign Language (ASL) syntax and grammar. Study areas include use of facial expression, body language, and mime; use of verb tenses; and introduction to idioms. Prerequisite: SGN 161 or departmental approval. 4 (3-2)

163 Sign Language III Four credits

Third course in a sequence; for students completing SGN II or comparable course. Students will demonstrate mastery of additional sign language vocabulary and basic knowledge of American Sign Language (ASL) syntax and grammatical rules. Study areas covered include expressive and receptive use of conversational sign language, idioms, and creative signing techniques. Prerequisite: SGN 162 or departmental approval. 4 (3-2)

164 Fingerspelling One credit

Provides concentrated instruction and practice in fingerspelling, emphasizing the development of receptive skills. Prerequisite: SGN 161 or departmental approval. 1 (1-0)

165 Receptive Manual Communication Four credits

Designed to increase the student's skill in conversational sign language. Focuses on the reception, analysis and comprehension of the various manual communication systems utilized by the hearing impaired in conversational situations. Skills in American Sign Language (ASL) are emphasized. Prerequisite: SGN 163; concurrent enrollment with SGN 163 with departmental approval. 4 (3-2)

260 Linguistic Principles of American Sign Language (ASL) Three credits

Designed to provide concentrated instruction in the structure and principles of American Sign Language as used by the American deaf community. Prerequisite: SGN 165 or departmental approval. 3 (3-0)

261 Principles of Interpreting I Five credits

Surveys basic interpreting through lecture, role playing, and classroom discussion. Introduces the ethics (RID Code) and responsibilities of the interpreter. Examines the role and necessary skills of the interpreter in various settings: education, medical, legal, human services, etc. Provides sign language vocabulary acquisition through laboratory experiences. Prerequisite: SGN 260 or departmental approval. 5 (4-2)

262 Principles of Interpreting II Five credits

Designed to provide in-depth understanding of various interpreter settings and to develop proficiency in interpreting. Increases awareness of oral and deaf-blind interpreting and interpreting for individuals with minimal language skills. Provides sign language acquisition with emphasis upon specific vocabularies through laboratory experiences. Prerequisite: SGN 261 with a grade of "B" or better. 5 (3-4)

263 Sign to Voice Interpreting/Transliterating Three credits

Designed to provide an understanding of the principles and problems of interpreting the manual, oral and written communication of deaf persons into their spoken or written standard English equivalents. Develops skill and fluency in receiving and expressing all levels of communication of deaf individuals. Prerequisite: SGN 261. 3 (3-0)

267 Practicum I Four credits

Combines lecture and supervised placement in various interpreter settings to allow directed observation and application of practical interpreting skills. Prerequisite: Departmental approval. 4 (2-5)

268, 269, 270 Advanced Practicum Credits variable, four to six

Designed to provide interpreting experience through placement in various settings. Includes weekly seminars and bi-weekly individual conferences between interpreter trainee and practicum supervisor. Depending upon credit choice, students will spend 6, 8, or 10 hours each week in their placement setting. Prerequisite: Departmental approval. 4-6 (1-6 to 10)

DEPARTMENT OF HUMANITIES

Chairperson: Dr. Joseph Anderson

The Department of Humanities offers courses under the following course codes:

HUM: Humanities	HST: History	REL: Religion
ENG: English	PHL: Philosophy	

All of the courses offered by this Department require college level reading and writing skills. Analytical and critical papers and examinations are considered normal requirements for most courses.

The Composition/English requirement for the Associate Degree in Arts or Science can be fulfilled in a number of ways. A student who has completed or has been permitted to waive WRI 121 may elect ENG 122 and ENG 123 as alternatives to WRI 122 and WRI 123.

The Humanities requirement for the Associate Degree in Arts or Science can also be fulfilled in a number of ways. HUM 201, 202, 203: Western Civilization I, II, III is the recommended sequence of courses. Students may substitute other courses in the curriculum of the Humanities Department for any of the above, provided that these are distributed in at least two of the following four areas:

- Art and Music History (HUM 101, 150, 151, 152)
- History (HST 104-296)
- Literature (ENG 201-296 and HUM 102)
- Philosophy and Religion (PHL 101-296; REL 150-296 and HUM 104)

Please note that Western Civilization courses (HUM 201, 202, 203) are counted as History courses when only one or two of them are taken to fulfill general education requirements.

296, 297, 298, 299 Independent Study Credits variable, one to four

Special research projects and/or individual readings in Humanities, English, History, Philosophy, or Religion. Students will invest no less than 20 hours for each credit earned. Enrollment usually restricted to students who have grade-point averages of at least 3.0 in courses offered by this department. Prerequisite: Arrangement with an instructor and approval by the Department Chairperson before registration.

COURSE DESCRIPTIONS

HUMANITIES (HUM)

101 Art and Music History In Western Civilization Four credits

An introduction to the masterpieces of art and music history from pre-historic times to the present, and their importance in Western Civilization. Extensive use made of multi-media. 4 (4-0)

102 Mythology Four credits

An introduction to mythic thinking and its importance in literature and culture as a way of self-understanding. Classical myths and their contemporary functioning will be emphasized. 4 (4-0)

104 Introduction to Humanities Four credits

An interdisciplinary approach to people as users of language and makers of meaning. Emphasis will be placed on the creation of symbolic universes and human self-interpretation through the arts and sciences. 4 (4-0)

150 History of Art I Four credits

Study of architecture, painting and sculpture in Egypt, the Middle East, Byzantium, and Europe from prehistoric times to early Middle Ages. Slide lectures and museum excursions. 4 (4-0)

151 History of Art II Four credits

Study of architecture, painting and sculpture in Italy, the Low Countries, France, Germany, Spain and England from the high Middle Ages through the Renaissance, Baroque and Rococo periods. Slide lectures and museum excursions. 4 (4-0)

152 History of Art III Four credits
201 Western Civilization I Four credits

First of a series of three courses in the cultural foundations of Western man. Traces the social, intellectual, religious, philosophic, legal and artistic patterns of Ancient Near Eastern, Greek, and Roman Civilizations. Emphasizes the relationship of man's creative works to his beliefs and values, showing how others have understood themselves and how this understanding has shaped our views and conditions today. Prerequisite: WRI 121 recommended. 4 (4-0)

202 Western Civilization II Four credits

Europe from the ninth century to 1715 A.D. Concerned primarily with the development of ideas, new social forms, and the reflection of man's beliefs and values in philosophy, religion, literature, and the arts. Prerequisite: HUM 201 recommended. 4 (4-0)

203 Western Civilization III Four credits

The French Revolution and its impact in the nineteenth and twentieth centuries: democracy, nationalism, industrialism, imperialism, the two World Wars, and the fusing of Western and World Civilization. Development of contemporary culture as reflected in philosophy, religion, literature, and the arts. Prerequisite: HUM 202 recommended. 4 (4-0)

ENGLISH (ENG)

122 Freshman English Four credits

A continuation of WRI 121, ENG 122 is an alternate to WRI 122. Emphasis is on the reading of short stories. Writing skills are also emphasized, plus a further development of library and research skills. Prerequisite: WRI 121. 4 (4-0)

123 Freshman English Four credits

A continuation of ENG 122 or WRI 122; ENG 123 is an alternate to WRI 123. An introduction to the various literary forms, plus the development of analytical and writing skills and research techniques. Prerequisite: ENG 122 or WRI 122. 4 (4-0)

132 Honors Section of Freshman English Four credits

Same as ENG 122 but taught on an advanced level. Prerequisite: Departmental approval. 4 (4-0)

133 Honors Section of Freshman English Four credits

Same as ENG 123 but taught on an advanced level. Prerequisite: Departmental approval. 4 (4-0)

201 The Poetic Imagination Four credits

Designed to help students understand and appreciate various forms of the poetic imagination. Emphasizes the nature of poetic language and meaning, as well as

literary techniques and conventions. Required for English majors and minors.
Prerequisite: ENG 122 recommended. 4 (4-0)

202 Introduction to Drama Four credits

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.
Prerequisite: WRI 121 (ENG 122 recommended). 4 (4-0)

203 Introduction to Prose Four credits

Designed to introduce students to the epic in prose translation, the romance, the novel, and satire. Students will read representative selections ranging from Homer's THE ODESSY to Sinclair Lewis' BABBITT. Prerequisite: WRI 121, (ENG 122 recommended). 4 (4-0)

210 The 19th Century American Novel Four credits

Study of the major 19th century American novels ranging from James Fenimore Cooper to Jack London. Emphasis is on historical development of the novel form in America and the novelist's interpretation of the American scene.
Prerequisite: ENG 122 or WRI 122. 4 (4-0)

211 The 20th Century American Novel Four credits

Intensive study of some of the influential American novels of this century. Students will read such authors as Faulkner, Hemingway, and Steinbeck.
Prerequisite: ENG 122 or WRI 122. 4 (4-0)

215 Utopia: The Future Through The Past Four credits

The study of representative utopian literature of the western world, plus a few anti-utopian works, for the dual purposes of reviewing and understanding the past but also, and more importantly, considering and evaluating social, political, economic, and moral issues of the near future. Prerequisite: ENG 122 recommended. 4 (4-0)

220 Science Fiction Four credits

Designed to acquaint students with this popular and modern literary form. Some history and definitions of science fiction, but emphasis on short stories and novels and their unique view of the future. Also included are movies and audio-tapes. Prerequisite: WRI 121 (ENG 122 recommended). 4 (4-0)

225 The Popular Political Novel Four credits

English 225 is inherently an interdisciplinary course concerned with three general areas; (1) popular culture, (2) the novel form as used by popular and commercial writers, and (3) politics. Although a non-American novel or two may be used, the emphasis is on recent American novels that deal with the American political scene. Prerequisite: WRI 122, (ENG 122 recommended). 4 (4-0)

240 The Film as Art Four credits

An introduction to film as an art form capable of making a meaningful and perceptive comment on our civilization. Viewing and analysis of six to eight films, both foreign and American, of recognized merit. Prerequisite: WRI 121, (ENG 122 recommended). 4 (2-3)

245 Popular Culture and Mass Media Four credits

A study of the popular culture distributed by mass media (including film, television, newspapers and magazines and radio) and how the media and popular culture reflect and shape our cultural beliefs. Extensive use of multi-media.
Prerequisite: ENG 122 recommended. 4 (4-0)

250 Masterpieces of American Literature Four credits

Designed to acquaint the student with some of the masterpieces of great American writers. Emphasis on such works as the essays of Emerson and Thoreau, poetry of Whitman and Frost, prose of Hawthorne, Melville, and Hemingway, and plays of O'Neill. Required for most students in pre-elementary teaching.
Prerequisite: WRI 121, (ENG 122 recommended). 4 (4-0)

255 Russian Literature in Translation: The "Golden Age" of Realism Four credits

An in-depth study of representative works by acknowledged masters of Russian realistic fiction, emphasizing but not limited to Turgenev, Dostoevsky, Tolstoy, and Chekhov, and set against the background of Pushkin and Lermontov's romanticism, and Gogol's naturalism. Prerequisite: WRI 121 (ENG 122 recommended). 4 (4-0)

260 Survey of Afro-American Literature Four credits

A survey of Afro-American literature from the 17th century to the 20th century. Designed to introduce the student to the various genres in the literature of Black Americans. Prerequisite: WRI 121, (ENG 122 recommended). 4 (4-0)

270 Literature by Women Four credits

A study of the works of 19th and 20th century North American women. Designed to further student understanding and appreciation of the themes, images, issues and modes of expression of female writers. Prerequisite: WRI 121, (ENG 122 recommended). 4 (4-0)

275 The Philosophical Imagination in Literature Four credits

This course presents an interdisciplinary approach to philosophy and literature through selected readings in the various literary genres and media: the literary essay, the novel, the drama, poetry, and the cinema. The course offers a general background of important philosophical ideas channeled into aesthetic and ethical problems. Prerequisite: ENG 122 or WRI 122. 4 (4-0)

290 Shakespeare Four credits

Introductory course in the dramatic works of William Shakespeare. Students will read six to nine plays representative of the author's comedies, histories, and tragedies. Prerequisite: ENG 122 or WRI 122. 4 (4-0)

HISTORY (HST)

104 World Affairs Since 1945 Four credits

A study of contemporary world affairs since 1945, emphasizing the most recent political, economic, military, and diplomatic developments of significance. 4 (4-0)

111 American History I Four credits

First of a sequence of two courses. Traces the origins of the history of the United States from its European beginnings through the Civil War. 4 (4-0)

112 American History II Four credits

The United States from the Reconstruction to the present. 4 (4-0)

150 Afro-American History Four credits

Traces the developments which led to the African slave trade, the slave systems in North and South America, the cultural heritage of the black man in the Americas, and the problems of race in North American culture. 4 (4-0)

160 Modern Mexico Four credits

Political, social, economic and intellectual developments in Mexico since 1850. Particular emphasis on the Revolution of 1910 and relationships with the United States in the 20th Century. 4 (4-0)

210 Studies in American History Four credits

Covers problems of research, writing, philosophy of history and interpretation, involving a detailed examination of a particular area of American history. Prerequisite: HST 112 and approval of the instructor. 4 (4-0)

215 Herstory: Women in American History Four credits

A survey of American history from colonial times to the present which examines women's roles in the family, production and social and political life. 4 (4-0)

220 Michigan History Four credits

A survey of the political, economic and social development of the State of Michigan from pre-colonial times to the present. 4 (4-0)

230 British History I (1066-1689) Four credits

A survey of British history and culture from the Norman conquest (1066) to the Glorious Revolution (1688-89). Special emphasis will be placed on the interaction of political, constitutional, legal, social, and cultural forces and influences which have shaped British history from the Middle Ages to the seventeenth century. 4 (4-0)

231 British History II (1689-present) Four credits

A survey of the political, economic and social forces which have shaped the development of British history and society from the seventeenth century to the present with particular emphasis on the 19th and 20th centuries. 4 (4-0)

232 History of Modern Ireland Four credits

A survey of 19th and 20th century Irish history and politics with special emphasis on the causes and nature of the conflict in Northern Ireland. Also Irish to U.S. and Michigan history. 4 (4-0)

255 African History: An Introduction Four credits

A general survey of the African continent with emphasis on special selected topics (and regions) as follows: Precolonial Africa, the scramble for Africa,

the rise of African Nationalism and Independence, Africa's internal and external relations. 4 (4-0)

270 The Modern Middle East Four credits

Historical survey of the region extending from the eastern Mediterranean to eastern Iran, with the main emphasis upon the contemporary Middle East. Ethnic, social, and political diversities of the states in the area will be traced as a background to the smoldering, even explosive, character of Middle Eastern rivalries and problems. 4 (4-0)

275 Modern East Asia Four credits

Traces the transformation of East Asia in the modern era, including an introduction to the cultural, religious, and political traditions of its peoples. Emphasis will be placed on the development of China and Japan, the impact of the West, and the differing responses of these two civilizations to the modern world. 4 (4-0)

PHILOSOPHY (PHL)

101 Principles of Reasoning Four credits

An introduction to the elements of reasoning with special attention given to problems of the adequacy of definitions, the validity of arguments, and the empirical support of assertions. Emphasis will be placed on the practical application of logical methods. 4 (4-0)

103 Values and Moral Reasoning Four credits

A course designed to improve moral reasoning through student participation in systematic examination of currently prominent social issues. 4 (4-0)

211 Who Am I? Four credits

An introduction to philosophy as the art of wondering in a quest for self-understanding and truth. 4 (4-0)

212 Self and Society Four credits

An exploration of the relationship between individual and culture, and their mutual molding process. No prerequisite, but PHL 211 is useful. 4 (4-0)

213 Life, Cosmos, and Ultimate Meaning Four credits

An inquiry into life, nature, and the search for ultimate meaning in our existence. No prerequisites, but PHL 211 or 212 useful. 4 (4-0)

270 Philosophy of Science Four credits

A critical examination of some of the basic concepts and problems of the natural social sciences. Particular consideration is given to the concept of "confirmation" and related problems of scientific concept formation. Theory construction and explanation are also considered. 4 (4-0)

RELIGION (REL)

150 World Religions Four credits

Survey of the thought and practice of five major religions: Hinduism, Buddhism, Judaism, Christianity, and Islam. Emphasis is upon deepening our understanding of ourselves and others through a new appreciation of the role of religions in the development of human culture and values. 4 (4-0)

201 Religions of East Asia Four credits

Survey of the traditional religions of China and Japan, with primary emphasis on the contemporary role and influence of these religions in the modern world. 4 (4-0)

203 Religion in American Life Four credits

The changing role of religion in the history of the United States from colonial days to the present. Emphasis on contemporary institutional and theological trends in relation to American culture and society. 4 (4-0)

211 Old Testament Literature Four credits

The origin and development of Hebrew religion and Judaism as reflected in the canon of the Hebrew Bible (Old Testament). 4 (4-0)

212 New Testament Literature Four credits

A study of Christian origins and beliefs as reflected in the literature of the New Testament, viewed in its original historical setting. 4 (4-0)

SPECIAL COURSES (HUM, ENG, HST, PHL, REL)

DEPARTMENT OF MATHEMATICS

Chairperson: Dr. Gary Knippenberg

The Department of Mathematics offers courses under the following course codes:

CPS: Computer Science MTH: Mathematics

The Department of Mathematics offers courses in four different program areas. These four programs include developmental mathematics, transfer level mathematics, statistics, and computer science.

The developmental mathematics courses are designed to provide students with the opportunity to start a program of study at a level which is appropriate for their experience and educational background and then to proceed to any level of mastery of mathematics which they need or desire. To help students achieve this goal, many of the developmental courses are offered using different instructional modes. First of all, each developmental course is offered in the Mathematics Laboratory. This facility allows students to proceed through their course at their own pace, working independently, but at the same time always having one-to-one instruction available from Lab Instructors. Secondly, two developmental courses, MTH 012 and MTH 102, are also offered using a traditional lecture method of presentation.

The transfer level courses parallel the freshman and sophomore levels of university work in mathematics. Credits earned in these courses are applicable to all Associate Degrees and are transferable to other colleges and universities throughout the country.

The third program area in the Department of Mathematics is that of statistics. The courses in this program also provide credit toward all Associate Degrees and transfer to other colleges and universities.

The fourth program area is computer science. This program is offered in cooperation with the Department of Science at L.C.C. and is designed to provide students with the opportunity to develop the background in computer science necessary to continue a major in the discipline at a four-year college or university.

To determine the proper entry level course, students are encouraged to avail themselves of the Department's Math Placement Testing Service. This free testing is provided in the Mathematics Laboratory, Arts and Sciences room 150. Students are advised to make use of this service before or during registration.

COURSE DESCRIPTIONS

MATHEMATICS (MTH)

Developmental Courses

095 Mathematics Laboratory No Credit

MTH 095 is a notation for an arranged time in the Mathematics Laboratory. It is not a course. At the time of registration, a student must register for both a specific course (such as MTH 008 or MTH 009) and a MTH 095 section. The MTH 095 section arranges the time for the student's attendance in the Mathematics Laboratory. The courses available in the Mathematics Laboratory include MTH 008, MTH 009, MTH 010, MTH 012, and MTH 102. MTH 012 and MTH 102 are also available in lecture format which is conducted in a traditional classroom environment.

008 Basic Arithmetic Five Credits

The focus is on practical uses of arithmetic. Operations with whole numbers and decimals are emphasized. Practical work is done both with fractions, percents and proportions. Work is done both with and without a calculator. Prerequisite: Placement test. 5(5-0)

009 Pre-Algebra Five credits

The emphasis is on those concepts and skills needed before a student begins an algebra course. Topics emphasized include operations on fractions, percents, proportions, measurement and simple algebraic equations. An introduction to the Metric System is included. Word problems are emphasized with all topics. Use of a calculator is optional for checking calculations. Prerequisite: MTH 008 or proficiency on placement test. 5(5-0)

010 Metric System Two credits

The Metric System is presented as a better way to measure. Covers the commonly used metric units of measurement for length, area, volume, mass, and temperature. Prerequisite: MTH 009 or proficiency on placement test. 2(2-0)

012 Beginning Algebra Five credits

An introductory course in algebra covering the real number system, linear equations, polynomials, factoring, fractions, radicals, systems of equations, graphing and applications. Prerequisite: MTH 009 or proficiency on placement test. 5(5-0)

102 Intermediate Algebra Five credits

An extension of Beginning Algebra with emphasis on functions, graphing, inequalities, polynomials, systems of equations, fractions, radicals, quadratic equations and applications. Prerequisite: MTH 012 or proficiency on placement test. 5(5-0)

Transfer Level Mathematics

164 College Algebra and Trig I Five credits

Topics include exponents and radicals, linear equations and inequalities, quadratic equations and inequalities, use of calculator in solving numerical problems involving logarithmic and exponential functions, matrices, systems of linear equations, complex numbers, synthetic division and theory of equations. Prerequisite: A grade of C or better in MTH 102 within the previous two terms or a score of 12 or better on the placement test. 5(5-0)

165 College Algebra and Trig II Five credits

A continuation of MTH 164. Topics included are trigonometric functions, trigonometric identities, applications, DeMoivre's Theorem, sequences, mathematical induction, combinatorics and linear programming. Prerequisite: MTH 164. 5(5-0)

166 Finite Mathematics Five credits

An alternate course to MTH 165 for students whose program does not require the study of trigonometry. Topics include permutations and combinations, probability, the binomial theorem, vectors and matrices, linear programming and graph theory. Business applications are emphasized. Prerequisite: MTH 164 or departmental approval. 5(5-0)

200 Arithmetical Foundations Five credits

Required of all elementary pre-teachers. Included is a study of the real number system, numeration, measurement and intuitive geometry. An activity-oriented approach is emphasized using standard teaching aids. Prerequisite: MTH 102 or proficiency on placement test. 5(5-0)

213 Analytic Geometry and Calculus I Five credits

Topics include the meaning of the derivative, formulas for differentiation, implicit differentiation, continuity, curve sketching, applied maximum-minimum problems, mean value theorem, Newton's Method, conic sections, introduction of integration, differentiation and integration of sine and cosine functions. Prerequisite: MTH 165 or four years of high school math

including two years of algebra, plus trigonometry and geometry. Placement
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test available. 5(5-0)

214 Analytic Geometry and Calculus II Five credits

Topics include The Fundamental Theorem of Calculus, applications of integration, techniques of integration, integration and differentiation of transcendental functions. Prerequisite: MTH 213 or equivalent. 5(5-0)

215 Analytic Geometry and Calculus III Five credits

Topics include a study of polar coordinates, vectors, functions of two or more variables, directional derivatives, partial differentiation, exact differentials, double and triple integration with applications, surface integrals and line integrals. Prerequisite: MTH 214 or equivalent. 5(5-0)

216 Analytic Geometry and Calculus IV Five credits

Topics include sequences and infinite series, tests for convergence, Taylor Series, alternating series, solutions of differential equations and applications of differential equations. Prerequisite: MTH 215 or equivalent. 5(5-0)

223 Computer Applications of Calculus I One credit

An applications course which utilizes the BASIC programming language to formulate and solve problems selected from topics studied in MTH 213, Calculus I. Prerequisite: MTH 213 taken previously or concurrently. 1(1-0)

224 Computer Applications of Calculus II One credit

A continuation of MTH 223 using the BASIC programming language to formulate and solve problems selected from topics studied in MTH 214, Calculus II. Prerequisite: MTH 214 taken previously or concurrently. 1(1-0)

234 Theory of Matrices Five credits

Topics include systems of linear equations, matrices, determinants, vector spaces, linear transformations, eigenvalues, eigenvectors and quadratic forms. Prerequisite: MTH 215 or equivalent. 5(5-0)

Statistics

170 Introduction to Statistics Five credits

Topics include descriptive statistics, elementary probability, estimation, confidence intervals and hypothesis testing. The course is especially designed for students in curricula such as social science, political science, medical technology or human ecology where only one term of statistics is required. Prerequisite: MTH 164 or equivalent. 5(5-0)

205 Statistics I Five credits

Topics include frequency distributions, measures of central tendency and dispersion, Chebyshev's Theorem, laws of probability, random variables, expectation, probability distributions, limit theorem, sampling distributions, estimation and confidence intervals. The course is especially designed for students in curricula such as business or economics which require more than one term of statistics. Prerequisite: MTH 165 or MTH 166 or equivalent. 5(5-0)

206 Statistics II Five credits

A continuation of MTH 205. Topics include hypothesis testing, Chi-Square testing, analysis of variance, Bayesian decision making, regression and correlation. Prerequisite: MTH 205. 5(5-0)

COMPUTER SCIENCE (CPS)

130 Computers in Society Four credits

A relatively non-technical introduction to the use and impact of computers in contemporary society. Designed for liberal arts students, core topics include historical development of number systems and computers, description of modern general-purpose digital and brief introduction to the programming language BASIC along with "hands-on" programming experience. Social and economic implications of the role of computers, large data banks and related questions of privacy and security, modeling and computer simulation and recent advances in computer technology and also considered. 4(3-1)

150 Advanced Algorithms in FORTRAN Four credits
~~Introduction to Computer Science~~

Techniques of top-down design and structured programming are applied in the implementation of various fundamental numeric and non-numeric algorithms using FORTRAN. Concepts of number systems, data structures, representation and storage of data are also studied. Of special interest to students in engineering, computer science, mathematics, and the natural and biological sciences. Prerequisite: DP 120 or DP 110 or CPS 150 and MTH 164. 4(4-0)

255 Algorithms and PASCAL I Four credits

Techniques of top-down design and structured programming are applied in the design of algorithms and their implementation in PASCAL. This course is designed to establish an understanding of fundamental computational procedures so as to form a basis for continuing study in further courses in computer

science. Topics include numeric and character data, data types, arrays, procedures and decision structures. Prerequisite: MTH 213 or equivalent. 4(4-0)

256 Algorithms and PASCAL II Four credits

A continuation of CPS 255. Topics include numeric computation, string processing, internal representation and storage of data, data structures, problem solving techniques and programming style. Prerequisite: CPS 255. 4(4-0)

260 Introduction to Discrete Structures Four credits

Applied mathematical concepts which are required to understand such computer functions as numerical computation, symbol manipulation, and information retrieval are studied. Topics include computer representation of sets and set operations, relations, matrix representation of graphs and digraphs, minimization of computer memory used for storage of matrices, Gorn trees and address structures, networks, simple concepts of Algol-like languages, Boolean algebra and its application to computer arithmetic, and an introduction to symbolic logic. Prerequisite: DP 120 or DP 110 or CPS 150, MTH 213 or equivalent. 4(4-0)

DEPARTMENT OF SCIENCE

Chairperson: Dr. David L. Shull

The Department of Science offers courses under the following course codes:

ANT: Anatomy	MET: Meteorology
AST: Astronomy	MIC: Microbiology
BIO: Biology	NS : Natural Science
CEM: Chemistry	OCN: Oceanography
CPS: Computer Science	OER: Outdoor Education
FC : Foundations of Conservation	PGY: Physiology
GE : Geology	PHY: Physics
HOR: Horticulture	SC : Science Seminars

The Science Department offers courses in a variety of disciplines, including Biology, Physics, Chemistry, and Earth Sciences. Among the innovative educational methods employed for several courses are the Audio-Visual-Tutorial System, computer-assisted instruction, and self-pacing.

The instructional program of the Science Department is designed to serve three basic purposes. These are (1) to provide a full range of courses that fulfill general education science requirements for an Associate Degree, (2) to develop and offer specialized courses in support of programs offered by other departments within the College, and (3) to provide an opportunity for qualified students to select independent study, honors options or seminars on science subjects.

Students who wish to acquaint themselves with a science subject, but have no need for a grade or credit in that course may register to audit. The Science Department welcomes the opportunity to provide this option to interested students.

COURSE DESCRIPTIONS

BIOLOGY (BIO) MICROBIOLOGY (MIC)

100 Human Nutrition Two credits

An introductory course in human nutrition. Topics include an explanation of the Recommended Dietary Allowance (RDA), a discussion of the nutritional status of the U.S. population, the misuse of vitamins, misconceptions about organic foods, the relation of diet to heart disease, the interest in fad diets, and other current topics in nutrition. 2 (2-0)

101 Biology Four credits

A course in selected biological, physical and chemical concepts which are foundations to the understanding of human physiology. Cell structure and function, cell chemistry (including chemical bonds, electrolytes, pH, carbohydrates, lipids, proteins, nucleic acids, and chemical energy transformations), diffusion, osmosis, dialysis filtration, mitosis, meiosis and genetics are included. This course is especially designed as a prerequisite for certain Human Anatomy and Physiology courses and is a requirement for students enrolled in many health career programs. 4 (3-2)

102 Michigan Birds Two credits

An introduction to ornithology. A field study of Avian Biology, including the identification of birds by sight, song, habits, and migration patterns. The course includes the study of open, wooded, and wetland habitats, as well as the ecological and economic importance of birds. The outdoor field investigations will usually be scheduled on weekends. 2 (1-2)

103 Michigan Reptiles and Amphibians Two credits

A course in Herpetology and Amphibia. Students examine the evolution, life history, and habits of reptiles and amphibians in the local area and learn to identify common species of turtles, snakes, frogs and others belonging to these groups. Field studies provide an opportunity to observe local species fulfilling their various ecological roles in the natural habitats. 2 (2-0)

107 Cellular Biology Four credits

Deals with the nature of science and its processes, cell structure and cell processes. It includes cell division and heredity. Forms and functions of cells are related in the study of tissues. Applications of statistics and probability to genetics and the theory of evolution are also considered.

4 (3-3)

108 Life Processes Four credits

A molecular approach to life functions. The course opens with an introduction to chemistry sufficient to understand its biological applications that follow. The structure and functions of body systems such as digestive, nervous, circulatory, excretory, respiratory, and reproductive are studied. Processes such as photosynthesis, respiration, and hormonal control are included.

4 (3-3)

109 Principles of Ecology Four credits

This course is oriented to field investigations and laboratory study of organisms and their relation to natural environment. Taxonomy is studied where it is relevant to ecology.

4 (3-3)

201 Zoology I Four credits

First of two courses designed to survey the field of zoology and serve as a foundation for advanced courses. Deals with the characteristics of life, cellular structures and their functions, cellular divisions, histology, anatomy and physiology. Emphasis is on the organ systems of the vertebrates, principally the mammals.

4 (2-4)

202 Zoology II Four credits

Continuation of Biology 201. Begins with an introduction to heredity, population genetics and the theory of evolution. 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. Prerequisite: BIO 201 or departmental approval.

4 (2-4)

207 Cell Biology Four credits

An introductory course which parallels Cellular Biology 107 except for greater emphasis on cell ultrastructure and chemistry, and omission of the study of

plant cells. This course satisfies the prerequisites for Physiology 212 or Histology 280 and is a preferred alternative to Cellular Biology 107 for health-oriented career fields.

4 (3-0)

211 Foundations of Biological Science Four credits

Primarily for students seeking an elementary education certificate. Emphasis is modern biology. Topics include photosynthesis, energy transfer, nutrition, metabolism, and heredity. Laboratory activities involve the students directly with natural phenomena, their relationships and application of principles studied. Methodology of biological science teaching is included. Prerequisite: NS 123 or equivalent college biology course. Foundations of Physical Science recommended.

4 (2-4)

250 General Entomology Four credits

An introduction to the study of insects that emphasizes their classification, evolution, life cycles, behavior, and their external and internal structures and function. The biology and control of economically and medically significant species is discussed, with emphasis on the various ecological roles of insects. Laboratory and field work stresses recognition, observation, and collection of major insect groups found in Michigan. Prerequisite: One term of general biology recommended.

4 (3-3)

260 Botany (Plant Morphology) Four credits

A morphological study of plants. The course deals with plant structures and life cycles, and consideration of ontological and evolutionary development. Prerequisite: One term of biology recommended.

4 (2-4)

261 Plant Physiology Four credits

An introductory course dealing with the functional aspects of plant structures and with plant processes and their mechanisms. Includes photosynthesis, respiration, hormonal regulation, functional relation to physical environmental factors, and the processes of flowering and seed germination. In the laboratory, students employ such techniques as chromatography, radiography, manometry, electrophoresis and various forms of assays.

4 (3-3)

262 Systematic Botany Four credits

This course deals with the classification and relationships of vascular plants. The study includes the adaptive value of morphological features.

Evolutionary trends and mechanisms are emphasized. In the laboratory, the student will practice methods common to plant systematics in the study of important families and genera. Fluency in the use of dichotomous keys will be stressed. 4 (3-3)

270 Human Heredity Four credits

An introduction to principles of heredity with emphasis on the human, including discussions of inheritance of physiological and psychological traits as well as the hereditary implications of evolution. Topics include mitosis, meiosis, mechanisms of chromosome movement, aberrations in chromosome number, structure, and their significance. Human genetics as it relates to social and medical problems is discussed. Prerequisite: NS 123 or one term of biology. 4 (4-0)

271 Genetics Laboratory One credits

The course includes human and animal genetics exercises. Topics include blood testing, breedings experiments, and cellular preparations. Prerequisite: BIO 270 or concurrent. 1 (0-2)

272 Genetics Three credits

The traditional concepts of genetics are examined through discussions of the principles of heredity in animals, plants, and microorganisms. A study of quantitative inheritance, linkage, chromosomal aberrations and recent developments in the field will also be included. Prerequisite: BIO 270 and 271. 3 (3-0)

203 Microbiology Four credits

An introductory study of the history of microbiology and of classification rickettsia, mycoplasmas, yeasts, molds, and protozoa. Emphasis is given to bacteria, viruses, immunology, genetics, selected diseases, culture media, isolation of pure culture, identification of unknown bacteria, staining methods, practical sterilization, and the collecting and handling of specimens. Lecture and laboratory format. Prerequisite: BIO 101 or equivalent. 4 (2-4)

280 Histology Five credits

Deals with cells and their arrangement in tissues. Composition, appearance, function and interrelation of tissues are studied. While non-human tissues may be used occasionally for illustration, the emphasis is on non-pathological human tissue. Techniques of photomicrography, microtomy and staining of

frozen and embedded tissues are included. Prerequisite: BIO 207 or equivalent and PGY 212 are desirable. 5 (2-6)

290 Principles of Embryology Three credits

Emphasis is on processes and mechanisms of development beginning at the molecular level and extending to the cellular and tissue levels. Cellular and tissue differentiation and interaction are examined in detail. Prerequisite: PGY 212 recommended. 3 (3-0)

291 Embryology Laboratory Two credits

This course is the laboratory experience for BIO 290. It emphasizes observational experiences with live and preserved embryos and prepared slides of embryos, whole and sectioned. The student becomes familiar with developmental stages of chick and pig embryos with some comparison made to human embryos. Prerequisite: BIO 290 or concurrent. 2 (0-6)

210 Foundations of Conservation Four credits

Study of natural resources and the principles of utilization through management and conservation. Topics include history of conservation, ecology, soils, minerals, water, forests, wildlife, human populations and man's effect on the natural resources of the earth. The laboratory consists of field investigations and guidance for conservation majors or others according to specific interest or declared vocations. 4 (2-4)

ANATOMY (ANT)

150 Anatomy and Physiology Five credits

A one-term introductory course in the structure and function of the human body. Skeletal, muscular, nervous, sensory, circulatory, respiratory, digestive, urinary, reproductive and endocrine systems are included. This course is designed for students in the Dental Hygiene curriculum. Prerequisite: BIO 101 or equivalent. 5 (4-2)

151 Anatomy and Physiology I Four credits

Emphasizes the function of all systems in the human body. Study of the cell, tissues, skeletal system, muscular system, nervous system and special sense organs is included. The first of two-term sequence in human anatomy and physiology, designed for students pursuing certain vocational programs,

including medical secretaries, psychology majors, and other programs requiring a basic understanding of human systems. 4 (3-2)

152 Anatomy and Physiology II Four credits

A continuation of Anatomy and Physiology I. The course covers the circulatory, respiratory, digestive, urinary, reproductive and endocrine systems. The second of a two-term sequence in human anatomy and physiology, designed for students pursuing certain vocational programs, including medical secretaries, psychology majors, and other programs requiring a basic understanding of human systems. Prerequisite: ANT 151. 4 (3-2)

211 Human Anatomy Five credits

A study of the anatomy of the human body designed to meet the needs of students in biology or related applied fields, such as nursing, radiologic technology, respiratory therapy, and physical education. The anatomies of the skeletal, muscular, nervous, sensory, circulatory, respiratory, digestive, excretory, endocrine and reproductive systems are studied. Prerequisite: BIO 101 or equivalent. 5 (3.5-3)

PHYSIOLOGY (PGY)

212 Human Physiology Five credits

The physiology of the skeletal, muscular, nervous, sensory, circulatory, respiratory, digestive, urinary, endocrine and reproductive systems is studied. Other topics include metabolism, water and electrolyte balance, acid-base balance, and stress. Prerequisite: ANT 211 or BIO 101 or departmental approval. 5 (5-0)

221 Physiology I Four credits

The first of a two-term course in human physiology designed for students who intend to pursue a medical program for which an intensive study of physiology is necessary. Topics include the nervous system, muscles, the endocrine system, and gastrointestinal physiology. Prerequisites: BIO 101 and ANT 211; CEM 165 or equivalent recommended. 4 (4-0)

222 Physiology II Four credits

Continuation of PGY 221. Topics include the physiology of the respiratory, renal, cardiovascular, and reproductive systems. Prerequisite: PGY 221.

CHEMISTRY (CEM)

110 Fundamentals of Chemistry Five credits

This course is designed for those students who need an introduction to chemistry before proceeding to more advanced courses, and for those who are interested in chemistry as part of their liberal arts studies. Emphasis is on basic chemical concepts and their relationships to the chemical world in which we live. The course is not intended as a substitute for any course in the freshman college sequences in chemistry. 5 (5-0)

131 Introduction to Chemistry Lecture I Three credits

First of three lecture courses designed to meet the needs of students requiring one year of chemistry and an introduction to basic inorganic and organic chemistry. The student should take the lecture courses (CEM 131, 132, 133) and the laboratory courses (CEM 141, 142, 143) concurrently. CEM 131 (inorganic) introduces the principles of measurement, properties, and structure of matter (atomic and electronic structure); chemical bonding; nomenclature; chemical equations; stoichiometry; and properties of gases, liquids, solids, and changes of state. Prerequisite: High school algebra. 3 (3-0)

132 Introduction to Chemistry Lecture II Three credits

Continuation of CEM 131. CEM 132 (inorganic) introduces basic principles of solution chemistry, acid-base chemistry, oxidation-reduction, kinetics and equilibrium, and nuclear chemistry. The student should take CEM 142 concurrently. Prerequisite: CEM 131 3 (3-0)

133 Introduction to Chemistry Lecture III Three credits

A survey of the principles of organic chemistry. The course introduces the student to the structure, nomenclature, chemical and physical properties, and selected characteristic preparations and reactions of the most common classes of organic compounds. Topics include polymers, optical isomerism, and selected reaction mechanism. Students enrolled in this course should take CEM 143 concurrently. Prerequisite: CEM 132 or equivalent. 3 (3-0)

141 Introduction to Chemistry Laboratory I One credit

First in a series of three laboratory courses which are designed to be taken concurrently with the CEM 131, 132, 133 lecture courses. Students are intro-

duced to laboratory procedures, measurement, preparation of oxygen, types of chemical reactions, composition of compounds, heat of reactions, and gas laws. Prerequisite: Credit or concurrent enrollment in CEM 131. 1 (0-3)

142 Introduction to Chemistry Laboratory II One credit

A course designed to provide laboratory experience related to topics covered in CEM 132, including solutions, acids and bases, oxidation-reduction reactions, and chemical equilibrium. Prerequisite: CEM 141 and CEM 132 concurrent enrollment in CEM 132. 1 (0-3)

143 Introduction to Chemistry Laboratory III One credit

An organic chemistry course designed to parallel the lecture course, CEM 133. The purpose of the laboratory is to complement the student's grasp of organic principles through practical experiences which directly relate to the material presented in CEM 133. Students should enroll in this course only if they also enroll in CEM 133. Prerequisite: CEM 132 and 142 or equivalent. 1 (0-3)

165 Concepts in Biochemistry Five credits

Required for students pursuing nursing and several other health career programs, and designed to provide an understanding of the chemistry of life processes. This course emphasizes enzymes, amino acids, nucleic acids, blood and urine chemistry, and includes physiological and pathological applications. Prerequisites: High school chemistry within past two years or CEM 110, BIO 101, or equivalent recommended. 5 (4-2)

171 General Chemistry Lecture I Four credits

CEM 171 is the first of three lecture courses which form an introduction to general chemistry for students in the physical sciences, life sciences, and engineering. CEM 171 covers atomic and molecular structure, chemical bonding, nomenclature, stoichiometry, gas laws, solutions, phase rule, the liquid and solid states, colloids, and the descriptive chemistry of the noble gases, Group IA and VIIA. Prerequisite: High school chemistry and algebra or departmental approval. Students should enroll in CEM 181 concurrently. 4 (4-0)

172 General Chemistry Lecture II Three credits

CEM 172 is a continuation of CEM 171. Topics include acid-base theory, a brief introduction to ionic equilibria, oxidation-reduction, electrochemistry, chemical kinetics, chemical equilibrium, basic thermodynamics and descriptive chemistry

of Groups IIA, IVA, VA and VIA. Prerequisites: CEM 171 or departmental approval. Students should enroll in CEM 182 concurrently. 3 (3-0)

173 General Chemistry Lecture III Three credits

CEM 173 is the third lecture course in the 170 series. Topics include ionic equilibria, solubility product constants, an introduction to coordination chemistry, organic chemistry, biochemistry, nuclear chemistry and fundamental particles. Prerequisites: CEM 172 or departmental approval. Students should enroll in CEM 183 concurrently. 3 (3-0)

181 General Chemistry Laboratory I One credit

CEM 181 is the first in a series of three general chemistry laboratory courses which are designed to accompany lecture courses CEM 171, 172, and 173. CEM 181 stresses laboratory techniques and includes a treatment of density determination, synthesis, gas laws, freezing point depression, and acid-base titrations. Prerequisites: Credit or enrollment in CEM 171. 1 (0-3)

182 General Chemistry Laboratory II Three credits

CEM 182 is the second term general chemistry laboratory with emphasis on quantitative analysis. CEM 182 includes acid-base titrations, oxidation-reduction titrations, complexation titrations, spectrophotometric analysis and chemical kinetics. Prerequisites: Credit or enrollment in CEM 172 and credit in CEM 181. 3 (1-6)

183 General Chemistry Laboratory III Two credits

CEM 183 is the third term general chemistry laboratory; it is a self-paced systematic qualitative analysis lab which uses semi-micro techniques to determine the presence of common cations and anions. Prerequisites: Credit or enrollment in CEM 173 and credit in CEM 182. 2 (0-6)

241 Principles of Organic Chemistry I Five credits

CEM 241 is the first course of a sequence designed primarily to introduce the field of organic chemistry to those requiring only one year in this subject. Topics include the chemical and physical properties of aliphatic and aromatic hydrocarbons with an emphasis on nomenclature, preparation, reactions, mechanisms and spectroscopy. Laboratory exercises are selected to give the student experience with the chemicals, techniques and equipment commonly employed in organic laboratories with particular attention given to compounds studied in the lecture. Prerequisites: CEM 172 and 182 or equivalent. 5 (4-3)

242 Principles of Organic Chemistry II Five credits

CEM 242 is a continuation of Chemistry 241. Topics include carboxylic acids and their derivatives, carbonyl compounds, lipids, amines, carbohydrates, amino acids and proteins. Nomenclature, preparations and reactions are stressed with increased emphasis on synthetic and analytical applications of the reactions studied. Prerequisites: Satisfactory completion of CEM 241. 5 (4-3)

243 Principles of Organic Chemistry III Three credits

CEM 243 is a continuation of Chemistry 242. Topics include enzymes, nucleic acids, high-energy compounds and carbohydrate and lipid metabolism. 3 (3-0)

251 Organic Chemistry I Five credits

CEM 251 is the first course of a three-term sequence in Organic Chemistry designed primarily for chemistry majors and for those students wishing a rigorous treatment of the subject. The topics parallel those covered in CEM 241, but with greater emphasis on reaction mechanisms, theory, and problem solving. Laboratory exercises are selected to give the student experience with the chemicals, techniques and equipment commonly employed in organic laboratories with particular attention given to compounds studied in the lecture. Prerequisites: CEM 172 and 182 or equivalent. 5 (3-6)

252 Organic Chemistry II Five credits

Continuation of CEM 251. Topics parallel those covered in CEM 242 but in greater detail, particularly with regard to mechanisms, theory, problem solving and application of spectroscopy. Organic qualitative analysis is emphasized in the laboratory. Prerequisite: Satisfactory completion of CEM 251. 5 (3-6)

253 Organic Chemistry III Five credits

Continuation of CEM 252. Topics parallel those covered in CEM 243 but in greater detail in the areas of molecular rearrangements and the chemistry of poly-functional organic compounds. The laboratory introduces the student to the use of the chemical literature. Prerequisite: Satisfactory completion of CEM 252. 5 (3-6)

ASTRONOMY (AST)

201 Introduction to Astronomy Four credits

A non-mathematical survey of astronomy, with emphasis on recent discoveries. Topics include the solar system, stellar evolution, quasars, black holes, cosmology, and the expanding universe. Laboratory work includes astronomical observation, planetarium demonstrations, and class projects on astronomical topics. 4 (4-1)

METEOROLOGY (MET)

112 Basic Meteorology Two credits

Provides a basic background in the principles and terminology of meteorology. Includes weather phenomena, instrumentation, weather maps, and simple weather prediction. This course should be taken by journalism students. Science majors should select MET 212. 2 (2-0)

212 Introduction to Meteorology Four credits

Introductory study and observations of the atmosphere designed to acquaint the student with the elements of weather, their interrelationships, meteorological instruments and weather maps. General and specific weather phenomena and the climatology of the United States will be considered. Prerequisite: NS 121. 4 (2-4)

GEOLOGY (GE)

101 Western National Parks Two credits

(Geology of the Western United States)

This course emphasizes the geological features found in the national parks and national monuments. Most of the Western parks were established specifically because of their geologic characteristics and provide excellent examples of the significant geological features of the Western United States. 2 (2-0)

201, 202, 203 Geology Field Studies One to three credits

Field studies in geology for students concurrently enrolled in one of the traditional geology courses for which extensive outdoor field work is essential. Students should consult the class schedule before enrolling in a field study course. Prerequisites: Concurrent enrollment in GE 221, 222, 223, or

study course. Prerequisites: Concurrent enrollment in GE 221, 223, or 224; or previous completion of an equivalent course.

221 Geology I Four credits

Minerals and rocks of the earth's crust; constructive and destructive forces, including volcanism, erosion by water, ice, gravity, wind and waves; mountain building; rock deformation; concepts of the earth's structure, origin and age; history of geology and geologic history. Laboratory consists of either field investigations to nearby areas and a one-weekend extended field trip, or on-campus laboratory activities. 4 (3-3)

222 Geology II Four credits

Applies the principles of physical geology to the study of the historical development of the earth from its inception to present time. Topics included are uniformitarianism, fossils and their interpretation, chemical evolution, environments of deposition of rock units, and geologic time. The course includes a laboratory and an extended weekend field investigation. 4 (3-3)

223 Geology III Four credits

Traces the historical development of the earth with special emphasis on the North American continent. Topics include the Precambrian, Paleozoic, Mesozoic, and Cenozoic eras; geologic maps and their interpretation; geotectonics; fossil fuels and mineral resources. 4 (3-3)

224 Michigan Geology Four credits

A general survey of the geology of Michigan and its immediate environs. Discussion of the Canadian Shield areas of the northern peninsula along with the development and nature of the Michigan Basin and the Pleistocene Epoch. Emphasis is placed on economic, environmental and special interest aspects of Michigan geology. 4 (3-3)

OCEANOLOGY (OCN)

225 Basic Oceanology and Limnology Four credits

An introduction to the physical and chemical properties of natural waters, wave action, currents, geological structure and formation of ocean and lake basins, marine and fresh water biology, and man's interactions with the

natural waters. Two full-day field trips are usually included in the course: one to Lake Michigan and one to a small inland lake. 3 (3-2)

NATURAL SCIENCE (NS)

A three-course sequence in Natural Science designed to give the student a basic understanding of some of the important scientific principles related to the animate and inanimate world. The audio-visual-tutorial presentation employs a variety of media as an aid to understanding both the empirical and conceptual aspects of science. It will be a better experience for students if the courses are taken in numerical sequence.

121 The Physical World Four credits

Introduces the fundamental laws, theories, and principles of chemistry and physics. Includes such topics as kinetic, atomic and molecular theory and problems of the physical environment. One year of high school algebra or MTH 012 is recommended. 4 (2-4)

122 Rocks and Stars Four credits

Topics include an introduction to astronomy and the Solar System; minerals and rocks, geological processes, and environmental geology. 4 (2-4)

123 Living World Four credits

Explores the biology of both external and internal environments. Topics include energy flow in ecosystems, ecological cycles, population growth and regulation, cell structure and function, cell division, and genetics. The lectures emphasize current biological topics such as encephalitis, toxic substances, cancer, and recombinant DNA. 4 (2-4)

COMPUTER SCIENCE (CPS)

Note: See also Math Department course listings.

150 Interactive FORTRAN for Science and Engineering Three credits

An introduction to FORTRAN programming which uses an interactive computer system with individual terminals. Basic elements of the FORTRAN language are presented; the student interacts with the computer through the terminal. Of special interest to students of physical and biological sciences, mathematics,

NEW

CPS 110 Introduction to BASIC for Arts and Science 3 credits

This is an introductory course in the use of ANSI standard BASIC, a computer language. The student will use terminals with a time-sharing mini computer. Weekly program assignments will prepare students to use the computer in other college courses. Alternative program assignments are available to meet the needs and interest of a variety of goals.
Prerequisite: None.

CPS 160 Interactive Pascal 3 credits

This is an introductory course to the language PASCAL. This language is becoming increasingly popular because of its structure, particularly in the area of computer science. The design of the language is such that it encourages good programming practices. Its increasing availability on microcomputers attests to its growing popularity.
Prerequisite: MTH 165 or equivalent.

with applications or computer graphics programming. Of special interest to students of physical and biological sciences, mathematics, engineering, and computer science. Prerequisite: MTH 165 and CPS 150 or CPS 210 recommended.
3 (2-2)

PHYSICS (PHY)

191 Physics for the Life Sciences Five credits

A one-term course in general physics designed to fulfill the physics requirement for certain life science and health career programs such as Respiratory Therapy and X-Ray Technology. Topics include force, motion, and energy; conservation theorems, fluid pressure and flow; wave phenomena; atomic structure and radioactive decay. This course may not be taken in place of a full year of physics; nor may it satisfy any other general physics requirement unless prior approval is obtained. Prerequisites: Intermediate algebra or departmental approval. 5 (5-0)

201 Physics (Mechanics and Heat) Four credits

First of a series of three courses designed to give the student an understanding of the fundamental principles of physics. Considers the principles of mechanics (the laws of motion and equilibrium and their relation to work, energy, and power), as they are applied to solids and fluids. Also includes the principles of heat and thermodynamics and their relationship to the operation of engines.
Prerequisite: Trigonometry or approval of department. 4 (4-2)

202 Physics (Electricity, Magnetism and Wave Motion) Four credits

Designed to explain the electrical nature of matter and to investigate its electrostatic and electromagnetic properties. Considers also the properties of waves and their application to sound. Engineering applications are emphasized. Prerequisite: PHY 201 or approval of department 4 (4-2)

203 Physics (Optics and Modern Physics) Four credits

A course in modern physics designed to present such topics as optics, atomic structure, solid state and nuclear reactions. Prerequisite: PHY 202 or approval of department. 4 (4-2)

209 Foundations of Physical Science Four credits

Primarily for students seeking an elementary education certificate. Surveys the theoretical as well as the practical aspects of physics, inorganic and organic chemistry. Methodology of teaching physical science will be included. Prerequisite: NS 121 or equivalent. 4 (4-2)

211 Physics (Mechanics and Heat) Four credits

Designed to teach the static and dynamic behavior of solids and fluids, using calculus to derive relationships. The first of a series of three courses designed for science and engineering majors. Prerequisite: Calculus I or its equivalent, or approval of department. 4 (4-2)

212 Physics (Electricity, Magnetism, and Sound) Four credits

Designed to teach the basic principles of electricity and sound. Similar to PHY 202 but uses calculus extensively. Prerequisite: PHY 211, or approval of department. 4 (4-2)

213 Physics (Optics and Modern Physics) Four credits

Principles of geometric and physical optics as well as developments in modern physics such as: atomic and nuclear phenomena, relativity, solid state physics, and quantum physics phenomena. Prerequisite: PHY 212 or approval of department. 4 (4-0)

INDEPENDENT STUDY IN SCIENCE (SC)

297, 298, 299 Independent Study in Science One to three credits

Special study, field work, or laboratory work in specific science topics such

The Division of Arts and Sciences is established:

1. To provide general education for all students.
2. To offer freshman and sophomore liberal arts courses paralleling the first two years of university training.
3. To award Associate Degrees in Arts and Associate Degrees in Science to students who earn 90 credits of study and who also meet the academic requirements for graduation as stated by the college.
4. To offer pre-professional curricula enabling students to transfer after two years of study to advanced training at four-year colleges and universities.
5. To provide a program of study through which the student is assisted to develop an awareness of self and to build a foundation for the election of a value system.
6. To encourage the student to search for truth in the heritages of our civilization and of other cultures so that the dignity of man may be comprehended.

To facilitate the attainment of these goals, the Division of Arts and Sciences:

- * Provides students with an array of instructional environments: independent study, off-campus courses in the field and community, individualized self-paced learning courses, audio-visual-tutorial studies, lecture-discussion, laboratory, and seminar classes.
- * Provides students with courses during the day and evening permitting an appropriate schedule selection for those students who need to spend part of each day at work. Those individuals fully employed during the daytime, whether at a job or in the home, may begin their college education by enrolling in evening courses.
- * Recognizes that thoughtful understanding of the issues of concern of the closing decades of the twentieth century requires of each individual the ability to read, write, and speak with clarity and sophistication. To accomplish this, the Division provides for all students courses that will assist them to read with comprehension and to write and speak effectively.
- * Establishes honors courses, invites guest speakers, holds special workshops and seminars for the academically able student with a wider range

DUAL ENROLLMENT

High school students who have demonstrated academic ability may, upon recommendation of the high school principal, be admitted during their junior year in high school to the dual enrollment program of the College. Students are accepted prior to graduation from high school and may earn a number of hours of credit toward their pre-professional or Associate Degree while they complete their high school program. Students usually attend afternoon or evening classes. They enroll in regular sections of the courses for which they are registered and their credits are fully transferable to other colleges and universities.

SEMINAR SERIES

Special seminars are drawn from any area within departments in the Division of Arts and Sciences. The courses are designed and offered by faculty in topics that may reflect the forefront of knowledge about ourselves or others and are designed to help us acquire new skills or insights. Credits are variable from one to four. Prerequisites are listed individually for each offering.

HONORS PROGRAM

The Division of Arts and Sciences offers an Honors Program for students of outstanding academic ability. This program offers the advantages of independent study as well as regularly scheduled honors courses, and provides these students with the opportunity to explore their academic interests in depth.

Twenty-one awards covering full tuition and fees are offered each year to new students of superior academic ability who intend to study in this Division. These awards are competitive and are based solely on academic excellence. Application forms are available on request from the Honors Program Coordinator, Division of Arts and Sciences, Room 111, A&S Bldg.

COURSE DESCRIPTIONS

SOCIAL SCIENCE (SS)

101 Introduction to Social Science I Four credits

Survey of major concepts and methods of sociology and anthropology. Emphasis is given to selective aspects of culture, socialization, social stratification, associations, primary groups, collective behavior, population-ecology, and cultural history. 4 (4-0)

102 Introduction to Social Science II Four credits

Deals with the economic institutions in their social context. The genesis and development of capitalism are covered, as well as comparisons with other major economic systems. Last portion of the course deals with the principle issues in economic development. 4 (4-0)

103 Introduction to Social Science III Four credits

Deals with political behavior and institutions in their social context. Comparative approach is used to provide an understanding of modern political systems. Problems of democracy are examined from several perspectives with special attention given to the implications of political sociology. 4 (4-0)

104 American Government Four credits

An analysis of the American political system. Emphasizes federal and state systems, with special attention given to American democracy from local to national levels. 4 (4-0)

105 State and Local Government Four credits

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. 4 (4-0)

112 Honors Section of Introduction to Social Science II Four credits

Same as SS 102; taught on an advanced level in a seminar. Outstanding students will be enrolled by invitation only; they will be notified of their eligibility before registration. Prerequisite: Invitation only. 4 (4-0)

113 Honors Section of Introduction to Social Science III Four credits

Same as SS 103; but taught on an advanced level in a seminar. Outstanding students will be enrolled by invitation only; they will be notified of their eligibility before registration. Prerequisite: Invitation only. 4 (4-0)

GEOGRAPHY (GEO)

101 Principles of Geography Four credits

Specific geographic principles course emphasizing landforms, gradational forces, weather and climatic elements, and soils, on a worldwide basis. 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. 4 (4-0)

201 World Regional Geography Four credits

Describes and analyzes human and natural resources of countries and cultures of the world with major emphasis on their distribution over the surface of the earth. 4 (4-0)

202 Geography of North America Three credits

A study of the human and physical resources of North America, Central America, and the Panama Canal Zone. Focus on distinct characteristics of the various regions. 3 (3-0)

203 Economic Geography Three credits

Study of geographic distribution and production of agricultural commodities, raw materials for industry, and the location of industries throughout the world. Some emphasis placed on trade of raw materials and finished products among nations. 3 (3-0)

POLITICAL SCIENCE (PLS)

150 American Political Parties and Elections Three credits

Deals with the origins, structure and functions of political parties; examines the American political system in terms of citizen concern about the community and government, and serves as a guide to political action by the citizenry. 3 (3-0)

200 Introduction to Political Behavior Four credits

Introduction to theories, concepts, and methods of political science with emphasis on the functions of political institutions and behavior of political action. 4 (4-0)

207 Government Internship Four credits

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. Prerequisite: Department approval. 4 (1-12)

210 Contemporary Political Affairs Three credits

Analysis of current domestic and international political problems utilizing theoretical background and current reading to understand the ideologies, forces and interests shaping today's politics. 3 (3-0)

260 Introduction to Comparative Government Four credits

Introduction to the political institutions of modern government with emphasis given to the United Kingdom, France, Germany, USSR, and the European Economic Community. The course includes dynamics of political behavior in these and other societies as well as special problems of the newly emerging nations. 4 (4-0)

271 International Relations Four credits

Course in contemporary relations, with emphasis upon politics. Concepts, theories and rudimentary methods are surveyed. Relationships between international politics, foreign policy, and domestic policy in the U.S. explored. 4 (4-0)

PSYCHOLOGY (PSY)

151 Business Psychology Three credits

Will apply principles of Psychology to the work environment and those aspects of daily living which influence work. The major emphasis (35% of the course) will be in developing knowledge and behavioral skills required in the process of being interviewed for a job and communicating effectively while at work.

Other topics include: needs, attitude change, problem solving, learning, assertive behavior and working in groups. 3 (3-0)

153 Psychology for Health Careers Three credits

A course designed for students in the health careers who must use Psychology in the areas of effective interpersonal communication, helping relationships, death and dying, and interacting with special populations such as children, the aged, and the physically and emotionally disabled. 3 (3-0) *NEW*

200 Introductory Psychology: Social-Individual Behavior Four credits

A basic orientation to the field of psychology with emphasis on social and individual behavior. Topics include interpersonal behavior, group process, personality, emotions, cognition, measurement and therapy. The course is designed both as a general survey and as a preparation for all advanced courses in psychology. 4 (4-0)

201 Introduction to Psychology: Principles and Methods Four credits

An introduction to the methods and principles of the science of psychology. Emphasis is on processes underlying human behavior. Content includes brain function, sensation, perception, maturation, conditioning, verbal learning, and motivation. Experiments conducted by students in a laboratory. Prerequisite: PSY 200. 4 (3-2)

202 Psychology of Personality Four credits

Discussion of concepts of adjustment, conflict, mental hygiene and behavior modification. Survey of leading theories of personality, emphasizing their implications for assessing and modifying normal personality. Prerequisite: PSY 200. 4 (4-0)

203 Introduction to Social Psychology Four credits

Designed to give the student an understanding of the influence of social interaction upon the development of personality. Interaction between the individual and society is stressed. Prerequisite: PSY 200 or SS 101. 4 (4-0)

204 Educational Psychology Four credits

An investigation of the contribution of psychology to education. Emphasis is upon aspects of child growth and development, learning, measurement, and group dynamics which affect the achievement of pupils in the classroom. The course includes experiences in which students are able to practice some of the tasks

and interpersonal skills involved in teaching. Prerequisite: PSY 200 4 (4-0)

205 Human Growth and Development Four credits

A study of the human life cycle from conception to death. Designed to investigate, describe, and explain changes in human behavior that are a result of the continuous interaction of maturation and experience. Prerequisite: PSY 200. 4 (4-0)

221 Child Psychology Four credits

Explores theories and principles of child development from conception to puberty. The course covers psychological, sociological, and biological aspects of maturation and development. Prerequisite: PSY 200. 4 (4-0)

222 Adolescent Psychology Four credits

Examines theoretical and empirical literature related to adolescence, emphasizing biological, psychological, and sociological aspects of maturation and development from puberty to young adulthood. Prerequisite: PSY 200. 4 (4-0)

250 Abnormal Psychology Four credits

An exploration of the nature, development, diagnosis, and treatment of psychopathology viewed from a general-systems (i.e., psychological, social, and physiological) perspective. Significant research, major theories, diagnostic techniques, and therapeutic techniques are discussed with respect to various psychological disorders. Prerequisite: PSY 200. 4 (4-0)

SOCIOLOGY/ANTHROPOLOGY (SA)

160 Contemporary Chicano Problems Three credits

A survey of the social problems confronting the Mexican-American community. Emphasis will be placed on cultural identity, social integration, political participation, and economic status. 3 (3-0)

200 Principles of Sociology Four credits

Introductory analysis and description of the structure of human society, with emphasis on social norms, groups, social stratification and institutions as they are analyzed by modern sociological methodology. Prerequisite: SS 101 or approval. 4 (4-0)

210 Introduction to Research Methods in Social Science Four credits

Fundamental principles basic to empirical social science research. Overview of various forms and approaches involved in planning and conducting scientific studies. Intended to develop ability to understand and evaluate social science research literature. Practicum and field experience included. Prerequisite: SS 101. 4 (4-0)

230 Introduction to Substance Abuse Four credits

An overview of substance abuse and use from a historical, sociological, and psychological perspective. Includes drug classifications, street terminology, and cause of abuse. Also examines present and past legislation regarding substance abuse and use. 4 (4-0)

254 Men, Women and Change Four credits

A study of the changes in society over the past century in terms of their dramatic impact on sexual relationships, marriage, and family life. The course includes sex roles, sexual behavior, values, psychological needs, divorce, and parenting. Prerequisite: SS 101 4 (4-0)

255 Contemporary Social Problems Three credits

Consideration of current social problems from a framework of sociological theory with special regard for current hypotheses and recent empirical studies relevant to particular problems; i.e., family stability, racism, urbanism, etc. Prerequisite: SS 101. 4 (4-0)

260 Minority Groups Four credits

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 Black-American. 4 (4-0)

270 Introduction to Cultural Anthropology Four credits

Fields, methods, and findings of the science of man. Primary attention given to literature of culture. Historical development of anthropological theory and methodology will be surveyed. Students will research a cross-cultural study. Prerequisite: SS 101. 4 (4-0)

275 Introduction to Physical Anthropology and Archeology Four credits

An introduction to human biological and cultural evolution; mechanisms of evolution; human origins and biological and cultural evidence from the fossil record; behavior among other animals and the development of human culture, culture as an adaptive mechanism; and modern human variation. 4 (4-0)

HUMAN SERVICES CORE COURSES (HUS)

101 Introduction to Human Services Four credits

An overview for the basic programs and social institutions which provide human services. The student will be exposed to both a philosophical as well as practical view of the goals, structure and policies of specific human services institutions and programs in our own community. Focus will be on the sub-specialty areas where human service workers are needed as well as on identifying a variety of curriculum choices for the Associate of Arts Degree. 4 (4-0)

102 Introduction to Mental Health Three credits

This course will provide the student with an overview of the field of Mental Health with an emphasis on a 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. 3 (3-0)

103 Introduction to Domestic Violence Three credits

This course is designed to provide an overview of the historical, socio-economic, cultural, and psychological factors related to domestic violence. 3 (3-0)

110 Introduction to Child Abuse/Neglect Three credits

An overview of the history and scope of the problem; the dynamics of child abuse/neglect and the world of abnormal rearing; roles of community agencies and disciplines; approaches to treatment and coordination of cases and services; legal aspects and the law. 3 (3-0)

203 Skills and Methods of Human Services Four credits

A course in basic social work methods and generic problem-solving skills used by human service workers in a variety of settings: community service agencies, crisis centers, and residential rehabilitation programs. Prerequisite: SS 101 or HUS 101. 4 (4-0)

205 Personal Dimensions of Human Services Four credits

An exploration of the nature and development of personal dimensions of human services to meet the needs of the people preparing to work in the "helping professions". 4 (4-0)

207 Group Process Skills Four credits

Introduction to the concepts, principles, goals and skills of social group work as a method of human service. Emphasis is upon the introduction of basic practice skills and intervention techniques within a framework of beginning theoretical knowledge. Prerequisite: HUS 101 or SW 101. 4 (4-0)

212 Family Treatment - Child Abuse/Neglect Three credits

This course will address the special problems encountered working as a professional, paraprofessional or volunteer with abusive and neglectful families using individual, group, and family techniques. Legal, treatment, and value issues will be considered. A secondary focus of this course will be the issue of work attrition in the field of abuse and neglect; its causes and some individual and agency solutions to the problem. 3 (3-0)

214 Practicum I Three credits

Beginning practical experience and training in the field for individual students. The student is placed with community-based social agencies and institutions twelve hours per week. Accompanying classroom seminar (HUS 217) serves to integrate field experience with theoretical concepts and principles of human service. Prerequisite: Department approval. 3 (0-12)

215 Practicum II Three credits

A continuation of HUS 214 providing additional practical experience and training in the field of human services. The student is placed with community-based social agencies and institutions twelve hours per week. Accompanying classroom seminar (HUS 218) serves to integrate field experience with theoretical concepts and principles of human services. Prerequisite: HUS 214. 3 (0-12)

216 Practicum III Three credits

A continuation of HUS 214 providing additional practical experience and training in the field of social work. The student is placed with community-based social agencies and institutions twelve hours per week. Accompanying classroom seminar (HUS 219) serves to integrate field experience with the theoretical concepts and principles of social work. Prerequisite: HUS 215. 3 (0-12)

217 Organizational Systems Two credits

The course is designed to provide the student with knowledge of the community power structure, funding bases and the internal workings of human services organizations. Prerequisite: HUS 214 concurrently. 2 (2-0)

218 Services Delivery Skills Two credits

The course is designed to help the human services student to identify the systems and resources to link the systems with the people and how to mobilize the systems and the people. Prerequisite: HUS 215 concurrently. 2 (2-0)

219 Employment Readiness Two credits

The course is designed to prepare students for the job market. They will learn how to complete applications, prepare resumes and how to apply for the state certification. Prerequisite: HUS 216 concurrently. 2 (2-0)

CHILD ADVOCACY (CA)

101 Introduction to Child Advocacy Four credits

Historical look at childhood, discussion of children's rights, both legal and philosophical, philosophy and definition of child advocacy, a look at legislation affecting children, and an overview of advocacy skill and programs. 4 (4-0)

203 Methods and Skills of Child Advocacy Four credits

Teaches students to analyze controversies, construct logical arguments from available evidence, and present a point of view persuasively. Upon completion of this course, the child advocate will be equipped to use techniques of argumentation effectively in both formal and informal settings. Prerequisite: CA 101. 4 (4-0)

205 Child and Family Law Four credits

This course is a review of basic legal concepts and principles with an emphasis on the balancing of rights among family, children and the state. This is a substantive review and not intended to explore and review the procedural aspects of the legal system as it deals with the family and the law. Discussions and readings will include the areas of child abuse, neglect, marriage, divorce, foster care, adoption and juvenile status offenses. Prerequisite: CA 101. 4 (4-0)

207 The Legal System and the Family Four credits

A survey of family law cases in the legal process including a review of the procedures of Courts and supporting institutions, the procedural rights of parents and children, and major court decisions. The course emphasizes the role of Protective Services and the Guardian Ad Litem in the Juvenile Justice System and the Friend of the Court in Michigan's divorce process. Prerequisite: CA 101 or Department approval. 4 (4-0)

CHILD DEVELOPMENT (CD)

101 Infants and Toddlers, 0-2½ Years Two credits

Deals with the physiological and physical growth-patterns, nutritional requirements, emotional, social, and cognitive skills of children, 0-2½ years. Prepares individuals for caring for the child at home or in a child-care setting. Includes discussion of the relative influences of genetics and environment on growth, the relationship of the development of the body systems to the child's nutritional status and the acquisition of skills in recognizing, recording, and interpreting child behavior. 2 (2-0)

102 Infant and Toddler Laboratory Two credits

A supervised laboratory situation in which students have an opportunity to work directly with infants and toddlers four hours per week. Emphasis is on application of development information and caregiving skills discussed in CD 101. Prerequisite: CD 101 concurrently. 2 (0-4)

110 Introduction to CDA Credentials Four credits

This course will examine the Child Development Associate (CDA) Credential, the Credential award system; and explore ways the student can meet the CDA competency standards, and provide assistance in beginning the credentialing process through course work and in the field supervision. Prerequisite: Instructor approval. 4 (2-8)

121 The Preschool Child, 2½-6 Years Four credits

Physiological and physical growth patterns, nutritional requirements, and emotional, social and cognitive skills of children, 2½-6 years. This would include: relative influences of genetics and environment on growth; the relationship of the development of the body systems to the nutritional status of the child; acquisition of skills in recognizing, recording, and interpreting

child behavior. This course partially addresses the first and third competencies as stated in the CDA Competency Standards. 4 (4-0)

280 Preschool Administration Three credits

Analysis of the administrator's role in menu planning, preparation and serving of food for infants, toddlers, and preschool children; application of philosophy, communication, and business techniques necessary to operate an early childhood education program; acquisition of knowledge about safety, licensing, and health regulations. This course addresses the sixth competency as stated in the CDA Competency Standards. 3 (3-0)

281 Preschoolers with Special Needs Two credits

This course addresses the special needs of preschool children including various categories of exceptionality, mainstreaming, play skill development and working with parents. A portion of competency three, as stated in the CDA Competency Standards, is covered in this course. 2 (2-0)

282 Curriculum Development Four credits

This course centers on curriculum development that will encourage physical and intellectual development including the following areas: gross and fine motor skills, sense development, science, health, language, and creativity. This course, which includes field observation, specifically addresses the second competency as stated in the CDA Competency Standards. No prerequisite, but CD 121 is recommended. 4 (2-4)

283 Preschool Learning Environment Four credits

This course focuses on the physical and social learning environment of the preschool child including safe and healthy learning environments, guidance techniques, interaction with parents, and interaction skills with early childhood staff members. This course, which includes field observation, specifically addresses the first, fourth, and fifth competencies as stated in the CDA Competency Standards. No prerequisite, but CD 121 is recommended. 4 (2-4)

EDUCATION (ED)

101 Curriculum Reinforcement I Three credits

Role orientation of the teacher aide as a significant person in the reinforce-

ment of the school curriculum. Includes theory and methods of preparing audio-visual materials in support of instruction. Introduction to school records, safety, discipline and permissible first aid. Techniques of assisting teachers through dramatic play and story telling. 3 (3-0)

102 Curriculum Reinforcement II Four credits

Methods of assisting an elementary teacher in math, reading, evaluation, home visits, parent-teacher conferences, art techniques, and classroom songs and games. Prerequisite: ED 101. 4 (4-0)

150 Introduction to Education Three credits

An introduction to teaching as a profession and education as a career. Included is an overview of the foundation, philosophy, history and organization of education as a human endeavor. Current issues and trends in education are examined. Students are offered an opportunity to assist teachers in the schools. 3 (3-0)

PUBLIC SERVICE (PS)

201 Fundamentals of Public Administration Four credits

Deals with the development and application of the basic principles and concepts underlying the generic field of public administration in federal, state, and local government. The relevance of these principles and concepts to para-professional and mid-management public employees will be emphasized. 4 (4-0)

202 Public Personnel Administration Four credits

A study of the principles of personnel administration as applied to government. Emphasis is on improving competencies and solving contemporary personnel problems as a first-line or mid-management public employee. 4 (4-0)

203 Public Fiscal Administration Four credits

Deals with the developmental and application of basic concepts of fiscal administration as related to federal, state, and local government. An emphasis is placed on contemporary problems in public fiscal administration facing employees from para-professional to mid-management levels. Prerequisite: SS 103 or Department approval. 4 (4-0)

231 Staff Roles and Relations in Substance Abuse Two credits

A survey of present funding sources and staffing patterns within substance

abuse agencies. Points of conflict within agencies and among agencies, and the functional relationships between roles are addressed. 2 (2-0)

242 Public Sector Collective Bargaining and Arbitration Four credits

A study of the principles of preparation for, and participation in collective bargaining and dispute resolution in the public sector. Students are given an opportunity to bargain collectively and to participate in various modes of dispute and impasse resolution. 4 (4-0)

243 Fundamentals of Manpower Planning Four credits

This course deals with the development and application of the basic principles and concepts underlying the area of local governmental comprehensive manpower program planning. The relevance of these principles and concepts to para-professional and mid-level manpower planners will be emphasized. 4 (4-0)

261 Public Grants-In-Aid Four credits

Deals with the principles and administration of the development, writing, and funding of public grants-in-aid as related to federal, state, and local government. An emphasis is placed on contemporary problems in public development and administration facing employees from para-professional to mid-management levels. 4 (4-0)

SOCIAL WORK (SW)

101 Introduction to Social Work Four credits

Introduction to the principles of social work practice. Emphasis 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. 4 (4-0)

203 Social Work Interviewing Four credits

An examination of the purposes and basic concepts of the interview relationship with emphasis on the helping interview. Instruction in the techniques of interviewing with an opportunity to engage in practice interviews including video-taping and feedback. Prerequisite: HUS 101 or SW 101. 4 (4-0)

205 Social Welfare Three credits

Introduction to the definition and concept of social welfare, its history,

programs, attitudes, values and philosophy. Emphasis is upon 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. Prerequisite: SW 101. 3 (3-0)

209 Community Organization Three credits

Introduction to 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. Prerequisite: SW 101 or HUS 101. 3 (3-0)

230 Substance Abuse: Addiction and Treatment Three credits

Covers the addiction cycle of alcoholics and drug abusers, personality and interactional patterns of addiction, and casework and group work techniques. 3 (3-0)

231 Substance Abuse Agencies and Treatment Modalities Three credits

A review and analysis of current models of treatment within programs. Includes review of inpatient, outpatient, Halfway Houses, and occupational programs. 3 (3-0)

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Title IX/Section 504 Coordinator: Room 101, Administration Bldg., 374-5098