## Ultrasound: Diagnostic Medical Sonography A.A.S.

Career Community: Health and Human Service Careers
Curriculum Code: 0790
Effective: Summer 2023 - Summer 2025

## Description

A Diagnostic Medical Sonographer provides patient services in a variety of medical settings using medical ultrasound under the supervision of a physician. Sonographers assist the physician in gathering sonographic data necessary to diagnose a variety of conditions and diseases. Sonographers obtain, review, and integrate patient history and supporting clinical data to facilitate optimum diagnostic results. They perform appropriate procedures and record anatomical, pathological, and/or physiological data as well as sonographic data and other pertinent observations made during the procedure for interpretation by a physician. They provide patient education related to medical ultrasound and promote principles of good health.

## Milestone

In addition to the required General Education courses in Math and English, completion of IDMS 201 and IDMS 234 with a 2.5 or higher is a key component for success in completing this program. Knowledge obtained in these courses is the foundation for learning in other required courses. Students are encouraged to contact their faculty if they need additional assistance with learning the concepts presented in these courses.

## Additional Information

The D.M.S. curriculum is an integrated six-semester program that incorporates didactic and clinical training designed to prepare the student for employment in the field of diagnostic medical sonography. The program is aligned with the standards and guidelines of the Joint Review Commission on Diagnostic Medical Sonography and is accredited by the Commission on Accreditation of Allied Health Education Programs (JRCDMS-CAAHEP), 1361 Park Street, Clearwater, FL 33756. Graduates of the program are prepared for either the examination by the American Registry of Diagnostic Medical Sonographers (ARDMS) or the American Registry of Radiologic Technologists (ARRT).

This is a selective admission program. In order to be considered as a candidate for this program, students must meet basic admission requirements beyond those required for admission to the college. All the courses in Semesters I and II are required for admission and must be completed by December $31^{\text {st }}$ of the year prior to the April $1^{\text {st }}$ D.M.S. Program admission application deadline. This includes: BIOL 145 or BIOL 201 and BIOL 202; MATH 120 (or higher) or STAT 170 or STAT 215; PHYS 120 or PHYS 200; and the General Education requirements including English Composition or Applied English, English Composition (second course)/Communications or Applied Communications, and Humanities and Fine Arts or Social Sciences or Applied Social Sciences requirements.

A 2.5 minimum grade is required in all courses in this curriculum, including the General Education requirements, with the exception of PHYS 120 or PHYS 200 which requires a minimum 2.0 grade.

## Contact Information

The admission and/or graduation requirements for this program may change each academic year. The program requirements below apply only to those students who have been admitted to the program for the 2023/2024 academic year. For further information, including about career options, admission requirements, course substitutions and waivers, etc., contact the Diagnostic Medical Sonography program, Health and Human Services Building, Room 108, telephone number 517-483-1410, or the Academic Advising Department, Gannon Building StarZone, telephone number 517-483-1904.

## General Education - Applied Degrees, Recommended Courses

(For the full list of options, see General Education)

- English Composition or Applied English - Select one ENGL 121, Composition I, 4 credits / 4 billing hours
ENGL 122, Composition II, 4 credits / 4 billing hours ENGL 127, Business Writing, 3 credits / 3 billing hours ENGL 131, Honors Composition I, 4 credits / 4 billing hours ENGL 132, Honors Composition II, 4 credits / 4 billing hours
- English Composition (second course)/Communications or Applied Communications Program of Study Required Courses for Admission will meet this requirement
- Humanities and Fine Arts or Social Sciences or Applied Social Sciences - Select one SOCL 120, Introduction to Sociology, 4 credits / 4 billing hours
- Mathematics or Applied Mathematics Program of Study Required Courses for Admission will meet this requirement
- Natural Sciences Lab or Applied Science and Technology Lab Program of Study Required Courses for Admission will meet this requirement

Program of Study Required Course for Admission, Limited Choice - English Composition (second course)/Communication - Select one. This course will satisfy the General Education English Composition (second course)/Communication or Applied Communication requirement.

| Course Code | Course Title | Credit / Billing Hours |
| :--- | :--- | :--- |
| COMM 110 | Communication in the Workplace | $3 / 3$ |
| COMM 120 | Dynamics of Communication | $3 / 3$ |
| COMM 130 | Fundamentals Public Speaking | $3 / 3$ |


| Course Code | Course Title | Credit / Billing Hours |
| :--- | :--- | :--- |
| COMM 240 | Interpersonal Communication | $3 / 3$ |
| SIGN 160 | Intro to the Deaf Community | $3 / 3$ |

## Program of Study Required Course for Admission, Limited Choice - Mathematics

- Select one. This course will satisfy the General Education Mathematics or Applied

Mathematics requirement. (Any course from the College Algebra area of the General Education Mathematics category may also be selected.)

| Course Code | Course Title | Credit / Billing Hours |
| :--- | :--- | :--- |
| MATH 120 | College Algebra | $4 / 4$ |
| STAT 170 | Introduction to Statistics | $4 / 4$ |
| STAT 215 | Intro to Probability and Stats | $4 / 4$ |

Program of Study Required Course for Admission, Limited Choice - Natural
Sciences Lab - Select BIOL 145 or, BIOL 201 and BIOL 202. This course will satisfy the General Education Natural Sciences Lab or Applied Science and Technology Lab requirement.

| Course Code | Course Title | Credit / Billing Hours |
| :--- | :--- | :--- |
| BIOL 145 | Intro Anatomy and Physiology | $4 / 6$ |
| BIOL 201 and 202 | Human Anatomy and Human Physiology | $8 / 11$ (total) |

Program of Study Required Course for Admission, Limited Choice - Select one

| Course Code | Course Title | Credit / Billing Hours |
| :--- | :--- | :--- |
| PHYS 120 | The Art of Physics | $4 / 5$ |
| PHYS 200 | Intro to Applied Physics | $4 / 5$ |

Program of Study Required Courses

| Course Code | Course Title | Credit / Billing Hours |
| :--- | :--- | :--- |
| CHSE 120 | Medical Terminology | $4 / 4$ |
| IDMS 170 | Intro to Ultrasound Knobology | $2 / 3$ |
| IDMS 200 | Sonographic Introduction | $2 / 2$ |
| IDMS 201 | General Sonography I: Abdomen | $4 / 4$ |
| IDMS 202 | OB/GYN Sonography I | $4 / 4$ |
| IDMS 234 | Sonographic Physics | $2 / 2$ |
| IDMS 245 | Sonographic Instrumentation | $2 / 2$ |
| IDMS 265 | General Sonography II | $4 / 4$ |
| IDMS 266 | OB/GYN Sonography II | $4 / 4$ |
| IDMS 270 | Sonographic Positioning I | $2.5 / 4$ |
| IDMS 271 | Sonographic Positioning II | $1.5 / 2$ |
| IDMS 280 | Clinical Experience I | $6 / 6$ |
| IDMS 281 | Clinical Experience II | $7 / 7$ |
| IDMS 282 | Clinical Experience III | $8 / 8$ |

## Minimum Total Credit Hours

75 credits / 81 billing hours

## Recommended Course Sequence

| Semester I (Fall) |
| :--- |
| Gen Ed - English Composition or Applied English |
| Program of Study Required Course for Admission - Mathematics |
| BIOL 145 or (BIOL 201 and BIOL 202) |


| Semester II (Spring) |
| :--- |
| Gen Ed - Humanities and Fine Arts or Social Sciences or Applied Social Sciences |
| COMM 110, 120, 130, 240, or SIGN 160 |
| PHYS 120 or PHYS 200 |


| Semester III (Summer) |
| :--- |
| CHSE 120 |
| IDMS 170 |
| IDMS 200 |
| IDMS 270 |


| Semester IV (Fall) |
| :--- |
| IDMS 201 - Milestone course |
| IDMS 202 |
| IDMS 234 - Milestone course |
| IDMS 271 |
| IDMS 280 |


| Semester V (Spring) |
| :--- |
| IDMS 245 |
| IDMS 265 |
| IDMS 266 |
| IDMS 281 |

## Semester VI (Summer)

IDMS 282

LCC makes every effort to limit revisions to the pathways during their effective timeframe. However, the College reserves the right to update certificate and degree title changes, and make course changes as needed, without prior notice.

