

Diagnostic Medical Sonography

Associate of Applied Science Degree Program

Contact Hours: 2,100

Semester Credits: 87.5

Instructional Weeks – Full Time: 80

Average Time to Complete – Full Time: 20 Months

Program Overview

Diagnostic medical sonographers use special imaging equipment that directs sound waves into a patient's body (in a procedure commonly known as an ultrasound, sonogram, or echocardiogram) to assess and diagnose various medical conditions.

The Diagnostic Medical Sonography curriculum integrates didactic and clinical instruction with increasing expectations at each level. Clinical sites utilized by the program are geographically dispersed. Students may have to travel outside of the local area for clinical placements.

Program Delivery

The Diagnostic Medical Sonography program is delivered in a blended format. Courses will be delivered entirely online, entirely on-ground or with an appropriate blend of both online and on-ground hours in the same course. Of the 2,100 program hours, a maximum of 745 course hours (35.5%) may be offered online (including general education courses). Campuses may have the option to deliver general education courses either online or on-ground depending on local need and availability.

Program Objectives

To prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the following concentration(s) it offers:

- Abdominal sonography - Extended
- Obstetrics and gynecology sonography

Graduates of this program will develop skills to:

1. Be clinically competent to perform appropriate procedures and record anatomic, pathologic, and/or physiologic data;
2. Apply critical thinking and problem-solving skills to exercise discretion and judgment in performance of diagnostic sonography;
3. Demonstrate appropriate communication skills; and
4. Demonstrate professionalism and growth in the profession.

The program will continually monitor program effectiveness through assessment and evaluation to ensure that the needs of the community are met.

Term 1

| Course # | Course Title | Pre-Requisites | Co-Requisites | Theory Hours (Ground/Online) | Lab Hours (Ground/Online) | Clinical Hours (Ground/Online) | Semester Credit Hours |
|----------|---------------------------------|----------------|---------------|---------------------------------|------------------------------|-----------------------------------|--------------------------|
| COMM1310 | Elements of Human Communication | | | 45 (0 / 45) | 0 (0 / 0) | 0 (0 / 0) | 3 |
| MATH1320 | College Algebra | | | 45 (0 / 45) | 0 (0 / 0) | 0 (0 / 0) | 3 |

| | | | | | |
|-----------------|---------------------------|--------------------|------------------|----------------|-----------|
| ENGL1310 | English Composition I | 45 (0 / 45) | 0 (0 / 0) | 0 (0 / 0) | 3 |
| BIOL1405 | Anatomy & Physiology | 60 (0 / 60) | 0 (0 / 0) | 0 (0 / 0) | 4 |
| BIOL1131 | Anatomy & Physiology VLab | 0 (0 / 0) | 30 (0 / 30) | 0 (0 / 0) | 1 |
| Subtotal | | 195 (0/195) | 30 (0/30) | 0 (0/0) | 14 |

Term 2

| Course # | Course Title | Pre-Requisites | Co-Requisites | Theory Hours (Ground/Online) | Lab Hours (Ground/Online) | Clinical Hours (Ground/Online) | Semester Credit Hours |
|-----------------|--------------------------------------|----------------|---------------|------------------------------|---------------------------|--------------------------------|-----------------------|
| HPRS1320 | Foundations for Health Professionals | | | 45 (0 / 45) | 0 (0 / 0) | 0 (0 / 0) | 3 |
| PHYS1311 * | Introductory Physics | | | 45 (0 / 45) | 0 | 0 | 3 |
| ENGL1320 | English Composition II | | | 45 (0 / 45) | 0 (0 / 0) | 0 (0 / 0) | 3 |
| PSYC1310 | General Psychology | | | 45 (0 / 45) | 0 (0 / 0) | 0 (0 / 0) | 3 |
| Subtotal | | | | 180 (0/180) | 0 (0/0) | 0 (0/0) | 12 |

Term 3

| Course # | Course Title | Pre-Requisites | Co-Requisites | Theory Hours (Ground/Online) | Lab Hours (Ground/Online) | Clinical Hours (Ground/Online) | Semester Credit Hours |
|-----------------|-------------------------------------|----------------------|---------------|------------------------------|---------------------------|--------------------------------|-----------------------|
| DMSG1210 | Scanning Lab I | HPRS1320 PHYS1310 | | 0 (0 / 0) | 80 (65 / 15) | 0 (0 / 0) | 2.5 |
| DMSG1321 | Sonographic Cross-Sectional Anatomy | HPRS1320 PHYS1310 | | 45 (20 / 25) | 0 (0 / 0) | 0 (0 / 0) | 3 |
| DMSG1810 | Physics and Instrumentation | HPRS1320 PHYS1310 | | 120 (60 / 60) | 0 (0 / 0) | 0 (0 / 0) | 8 |
| Subtotal | | | | 165 (80/85) | 80 (65/15) | 0 (0/0) | 13.5 |

Term 4

| Course # | Course Title | Pre-Requisites | Co-Requisites | Theory Hours (Ground/Online) | Lab Hours (Ground/Online) | Clinical Hours (Ground/Online) | Semester Credit Hours |
|-----------------|----------------------|----------------------------------|---------------|------------------------------|---------------------------|--------------------------------|-----------------------|
| DMSG1220 | Scanning Lab II | DMSG1210 DMSG1321 DMSG1810 | | 0 (0 / 0) | 80 (70 / 10) | 0 (0 / 0) | 2.5 |
| DMSG1820 | Abdominal Sonography | DMSG1210 DMSG1321 DMSG1810 | | 120 (30 / 90) | 0 (0 / 0) | 0 (0 / 0) | 8 |
| Subtotal | | | | 120 (30/90) | 80 (70/10) | 0 (0/0) | 10.5 |

Term 5

| Course # | Course Title | Pre-Requisites | Co-Requisites | Theory Hours (Ground/Online) | Lab Hours (Ground/Online) | Clinical Hours (Ground/Online) | Semester Credit Hours |
|-----------------|----------------------|----------------------|---------------|---------------------------------|------------------------------|-----------------------------------|--------------------------|
| DMSG2210 | Scanning Lab III | DMSG1220 DMSG1820 | | 0 (0 / 0) | 80 (70 / 10) | 0 (0 / 0) | 2.5 |
| DMSG2810 | OB/GYN Sonography | DMSG1220 DMSG1820 | | 120 (30 / 90) | 0 (0 / 0) | 0 (0 / 0) | 8 |
| Subtotal | | | | 120 (30/90) | 80 (70/10) | 0 (0/0) | 10.5 |

Term 6

| Course # | Course Title | Pre-Requisites | Co-Requisites | Theory Hours (Ground/Online) | Lab Hours (Ground/Online) | Clinical Hours (Ground/Online) | Semester Credit Hours |
|-----------------|-------------------------------------|----------------------|---------------|---------------------------------|------------------------------|-----------------------------------|--------------------------|
| DMSG2230 | General Vascular Sonography I | DMSG2210 DMSG2810 | | 30 (30 / 0) | 0 (0 / 0) | 0 (0 / 0) | 2 |
| DMSG2710 | Clinical Education I | DMSG2210 DMSG2810 | | 0 (0 / 0) | 0 (0 / 0) | 320 (320 / 0) | 7 |
| Subtotal | | | | 30 (30/0) | 0 (0/0) | 320 (320/0) | 9 |

Term 7

| Course # | Course Title | Pre-Requisites | Co-Requisites | Theory Hours (Ground/Online) | Lab Hours (Ground/Online) | Clinical Hours (Ground/Online) | Semester Credit Hours |
|-----------------|--------------------------------------|----------------------|---------------|---------------------------------|------------------------------|-----------------------------------|--------------------------|
| DMSG2240 | General Vascular Sonography II | DMSG2230 DMSG2710 | | 30 (10 / 20) | 0 (0 / 0) | 0 (0 / 0) | 2 |
| DMSG2720 | Clinical Education II | DMSG2230 DMSG2710 | | 0 (0 / 0) | 0 (0 / 0) | 320 (320 / 0) | 7 |
| Subtotal | | | | 30 (10/20) | 0 (0/0) | 320 (320/0) | 9 |

Term 8

| Course # | Course Title | Pre-Requisites | Co-Requisites | Theory Hours (Ground/Online) | Lab Hours (Ground/Online) | Clinical Hours (Ground/Online) | Semester Credit Hours |
|-----------------|---------------------------|----------------------|---------------|---------------------------------|------------------------------|-----------------------------------|--------------------------|
| DMSG2220 | Registry Review | DMSG2240 DMSG2720 | | 30 (30 / 0) | 0 (0 / 0) | 0 (0 / 0) | 2 |
| DMSG2730 | Clinical Education III | DMSG2240 DMSG2720 | | 0 (0 / 0) | 0 (0 / 0) | 320 (320 / 0) | 7 |
| Subtotal | | | | 30 (30/0) | 0 (0/0) | 320 (320/0) | 9 |
| Total | | | | 870 (210/660) | 270 (205/65) | 960 (960/0) | 87.5 |

*For students who start on or after September 18, 2023, this course will change from PHYS1310 to PHYS1311

General education courses (those with prefixes other than DMSG) may be scheduled in any term providing that prerequisites are honored. In addition, these courses may be offered 100% online or 100% on ground