

# DIAGNOSTIC MEDICAL SONOGRAPHY A.A.S.

65 credit hours required to graduate

## Prerequisite

|          |      |  |                 |
|----------|------|--|-----------------|
| BIOL     | 2401 | Anatomy and Physiology I.....                        | 4               |
| BIOL     | 2402 | Anatomy and Physiology II.....                       | 4               |
| MATH     | 1314 | College Algebra.....                                 | 3               |
| ENGL     | 1301 | Composition I.....                                   | 3               |
| PSYC     | 2301 | Introduction to Psychology.....                      | 3               |
| PHYS     | 1401 | Physics I OR   |                 |
| PHYS     | 1415 | Physical Science I.....                              | 4               |
| Elective |      | Language, Philosophy & Culture or Creative Arts..... | 3               |
|          |      |  | <b>TOTAL 24</b> |

## Freshman First Semester (Fall)

|      |      |                                 |                 |
|------|------|---------------------------------|-----------------|
| DMSO | 1110 | Introduction to Sonography..... | 1               |
| DMSO | 1441 | Abdominopelvic Sonography.....  | 4               |
| DMSO | 1302 | Basic Ultrasound Physics.....   | 3               |
| DMSO | 1266 | Practicum.....                  | 2               |
|      |      |                                 | <b>TOTAL 10</b> |

## Freshman Second Semester (Spring)

|      |      |  |                |
|------|------|--|----------------|
| DSVT | 1103 | Introduction to Vascular Technology..... | 1              |
| DMSO | 2305 | Sonography of Obstetrics/Gynecology..... | 3              |
| DMSO | 2243 | Advanced Ultrasound Physics.....         | 2              |
| DMSO | 1366 | Practicum.....                           | 3              |
|      |      |  | <b>TOTAL 9</b> |

## Freshman Third Semester (Summer)

|      |      |   |                |
|------|------|---|----------------|
| DMSO | 2253 | Sonography of Superficial Structures..... | 2              |
| DMSO | 2242 | Sonography of High Risk Obstetrics.....   | 2              |
| DMSO | 1267 | Practicum.....                            | 2              |
|      |      |   | <b>TOTAL 6</b> |

## Sophomore First Semester (Fall)

|      |      |  |                |
|------|------|--|----------------|
| DMSO | 1355 | Sonographic Pathophysiology.....       | 3              |
| DSVT | 1300 | Principles of Vascular Technology..... | 3              |
| DMSO | 1367 | Practicum.....                         | 3              |
|      |      |  | <b>TOTAL 9</b> |

## Sophomore Second Semester (Spring)

|      |      |  |                |
|------|------|--|----------------|
| DSVT | 2335 | Advanced Vascular Technology.....              | 3              |
| DMSO | 2130 | Advanced Ultrasound and Review (Capstone)..... | 1              |
| DSVT | 1364 | Practicum.....                                 | 3              |
|      |      |  | <b>TOTAL 7</b> |

## ADMISSION TO THE ECHOCARDIOGRAPHY CERTIFICATE PROGRAM

Admission to Weatherford College does not guarantee selective admission to the Echocardiography Certificate Program. The number of students admitted to this program is limited. Students admitted to the Echocardiography Certificate Program are selected on the basis of admission to the college, reading, writing, and math level, prior educational achievement, and health status. For specific application information and deadlines, contact the Sonography Program Director or the academic counselor.

**DMSO 1267-Practicum III (51.0910) 2 semester hours (0-0-18)**

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisites: DSVT 1103, DMSO 2305, DMSO 2243 DMSO 1366. Corequisites: DMSO 2242, DMSO 2253. 18 contact hours per week.

**DMSO 1302-Basic Ultrasound Physics (51.0910) 3 semester hours (2-2-0)**

Basic acoustical physics and acoustical waves in human tissue. Emphasis on ultrasound transmission in soft tissues, attenuation of sound energy, parameters affecting sound transmission, and resolution of sound beams. Corequisites: DMSO 1110, DMSO 1441, DMSO 1266. 2 lecture hours and 2 lab hours per week.

**DMSO 1355-Sonographic Pathophysiology (51.0910) 3 semester hours (3-0-0)**

Pathology and pathophysiology of the abdominal structures visualized with ultrasound. Includes abdomen, pelvis, and superficial structures. Prerequisites: DMSO 2253, DMSO 2242, DMSO 1267. Corequisites: DSVT 1300, DMSO 1367. 3 lecture hours per week.

**DMSO 1366-Practicum II (51.0910) 3 semester hours (0-0-24)**

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisites: DMSO 1110, DMSO 1441, DMSO 1302, DMSO 1266. Corequisites: DSVT 1103, DMSO 2305, DMSO 2243. 24 contact hours per week.

**DMSO 1364-Practicum V (51.0910) 3 semester hours (0-0-24)**

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisites: DMSO 1367. Corequisites: DMSO 2130, DSVT 2335. 24 contact hours per week.

**DMSO 1367-Practicum IV (51.0910) 3 semester hours (0-0-24)**

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisites: DMSO 1267. Corequisites: DMSO 2253, DSVT 1300. 24 contact hours per week.

**DMSO 1441-Abdominopelvic Sonography (51.0910) 4 semester hours (3-4-0)**

Normal anatomy and physiology of the abdominal and pelvic cavities as related to scanning techniques, transducer selection, and scanning protocols. Corequisites: DMSO 1110, DMSO 1266, DMSO 1302. 3 lecture hours and 4 lab hours per week.

**DMSO 2130-Advanced Ultrasound and Review (51.0910) 1 semester hour (0-3-0)**

Knowledge, skills, and professional values within a legal and ethical framework addressing emerging technologies and professional development. Prerequisites: DMSO 1355, DSVT 1300, DMSO 2253, DMSO 1367. Corequisites: DSVT 2335, DMSO 1364. 3 lab hours per week.

**DMSO 2242-Sonography of High Risk Obstetrics (51.0910) 2 semester hours (1-2-0)**

Knowledge, skills, and professional values within a legal and ethical framework addressing emerging technologies and professional development. Prerequisites: DSVT 1103, DMSO 2305, DMSO 2243, DMSO 1366. Corequisites: DMSO 2253, DMSO 1267. 1 lecture hour and 2 lab hours per week.

**DMSO 2243-Advanced Ultrasound Physics (51.0910) 2 semester hours (1-2-0)**

Theory and application of ultrasound principles. Includes advances in ultrasound technology. Prerequisites: DMSO 1110, DMSO 1441, DMSO 1266, DMSO 1302. Corequisites: DSVT 1103, DMSO 2305, DMSO 1366. 1 lecture hour and 2 lab hours per week.

2360. Corequisites: DSAE 2335, DSAE 2461. 3 lecture hours and 2 lab hours per week.

**DSAE 2461-Clinical (Capstone)** (51.0910) 4 semester hours (0-0-24)

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 16 contact hours per week. Prerequisites: DSAE 1440, DSAE 2303, DSAE 1303, DSAE 2360. Corequisites: DSAE 2404, DSAE 2335. 24 contact hours per week.

**DSVT 1103-Introduction to Vascular Technology** (51.0910) 1 semester hour (1-0-0)

Introduction to basic non-invasive vascular theories. Emphasizes image orientation, transducer handling, and identification of anatomic structures. Prerequisites: DMSO 1110, DMSO 1441, DMSO 1302, DMSO 1266. Corequisites: DMSO 2305, DMSO 2243, DMSO 1366. 1 lecture hour per week.

**DSVT 1300-Principles of Vascular Technology** (51.0910) 3 semester hours (2-2-0)

Introduction to non-invasive vascular technology modalities. Includes 2D imaging, Doppler, plethysmography, and segmental pressures. Emphasis on performing basic venous and arterial imaging and non-imaging exams. Prerequisites: DSVT 1103, DMSO 1366. Corequisites: DMSO 2253, DMSO 1367. In lieu of prerequisites/corequisites, will accept RDMS, RVT, or RDCS. 2 lecture hours and 4 lab hours per week.

**DSVT 1364-Practicum V** (51.0910) 3 semester hours (0-0-24)

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisites: DSVT 1103, DSVT 1300. Corequisites: DMSO 2130, DSVT 2335. 24 contact hours per week.

**DSVT 2335-Advanced Vascular Technology** (51.0910) 3 semester hours (2-2-0)

Non-Invasive vascular concepts. Includes harmonics, contrast, power Doppler, digital intraoperative, intravascular, abdominal vascular, graft surveillance, vascular interventions, and research. Emphasizes extensive review of case studies, technical reporting, preliminary interpretation, and registry review. Prerequisites: DSVT 1300, DMSO 2253, DMSO 1367. Corequisites: DMSO 2130, DSVT 1364. For Vascular Certificate Coursework, in lieu of prerequisites/corequisites, will accept RDMS, RVT, or RDCS. 2 lecture hours and 2 lab hours per week.

## **DRAM/DRAMA**

**DRAM 1120, 1121, 2120, 2121 – Theatre Practicum** (50.0506.53 26) 1 semester hour (0-3-0)

Practicum in theatre with emphasis on techniques and procedures with experience gained in play productions. May be repeated for credit up to nine semester hours. Three hours lab per week.

**DRAM 1161, 1162 – Musical Theatre** (50.0903.61 26) 1 semester hour (0-5-0)

Study and performance of works from the musical theater repertoire. Also listed as MUSI 1159, 2159. Five hours lab per week.

**DRAM 1310 – Introduction to Theatre** (50.0501.51 26) 3 semester hours (3-0-0)

Survey of all phases of theatre including its history, dramatic works, stage techniques, production procedures, and relation to the fine arts. Three hours