

Advanced Ultrasound and Review

Class

DMSO 2130

Knowledge, skills, and professional values within a legal and ethical framework addressing emerging technologies and professional development. (0-3-0)

Course Learning Objectives

Apply problem solving and critical thinking skills in the context of professional transition; demonstrate registry examination preparedness; and examine sonography practice within a collaborative ethical and legal framework.

Required Textbooks

Textbook of Diagnostic Sonography Vol One and Two, 8th Edition Sandra L. Hagen-Ansert, Elsevier ISBN 978-0-323-35375-5

Vascular Technology, An Illustrated Review 5th edition,
Claudia Rumwell & Michalene McPharlin – Davies Publishing
ISBN: 978-0-9410-2285-9

Evaluation Standards

- Edpuzzle Video Participation (Objectives I-IV): 10%
- Mock Registry Exams (Objectives I-IV): 60%
- Course Finals (Objectives I-IV): 30%

Grading Standards:

- A: 92-100%
- B: 85-91%
- C: 78-84%
- F: <78%

Course Progression

I. Prepare for general abdominal registry examination. (F 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 15, 16, CI, 5, 11, 12, 13, 14, 19, 20)

A. Describe physiology, anatomy, location, sonographic appearance, size, technique, pathology, and laboratory values for the following:

1. Liver
2. Biliary system
3. Pancreas
4. Urinary system
5. Spleen
6. Retroperitoneum
7. Abdominal vasculature
8. Gastrointestinal tract
9. Breast
10. Abdominal wall

11. Musculoskeletal structures
12. Scrotum and prostate
13. Neck
14. Peritoneum, non-cardiac chest, and invasive procedures.

II. Prepare for OB/GYN registry examination. (F 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 15, 16, CI, 5, 11, 12, 13, 14, 19, 20)

A. Describe physiology, anatomy, location, sonographic appearance, size, technique, pathology, and laboratory values for the following:

1. Female pelvis /uterus, ovaries, adnexa, infertility
2. Obstetrical examinations
 1. First trimester OB
 2. Second trimester OB
 3. Third trimester OB
3. Fetal abnormalities and syndromes
4. Complications in pregnancy, placenta, and umbilical cord.

III. Prepare for the vascular registry examination. (F 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 15, 16, CI, 5, 11, 12, 13, 14, 19, 20)

A. Describe physiology, anatomy, location, sonographic appearance, size, technique, pathology, and laboratory values for the following:

1. Arterial / Upper Extremity, Lower Extremity
2. Venous
 1. Upper Extremity
 2. Lower Extremity
3. Cerebrovascular
 1. Intracranial
 2. Extracranial

IV. Describe patient care and techniques for the sonographer. (F 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 15, 16, CI, 5, 11, 12, 13, 14, 19, 20)

1. Discuss patient care
2. Describe sonographer responsibilities
3. Discuss topics relevant to the patient history
4. Describe the transabdominal examination
5. Describe the gynecological examination
6. Describe the obstetric examination
7. Describe the transvaginal examination
8. Describe the translabial examination
9. Discuss transducer care

Absences

Attendance is the biggest predictor of your success. Attendance for the ONLINE lecture component of this class is considered when you are logged in and active in the Canvas course; posting assignments, taking quizzes, and/or completing discussion boards. If you will be absent/not active in the class for more than 72 hours, it is **YOUR** responsibility to let the instructor know immediately.

All quizzes and exams must be taken at their specified time. An exam missed may *not* be made up, and the student will receive a grade of zero (0) for that exam. Under certain circumstances, exceptions may be made by the instructor, this will be handled on a case-by-case basis. Quizzes may not be made up under any circumstances.

All assignments are due on their specified dates no later than the designated time. Failure to submit an assignment on time will result in a grade of "0." There will be no exceptions to this rule, unless you have previously contacted the instructor by email and have been given permission.

You will be allowed to miss three days (exception for test days) without it adversely affecting your grade. Every one absence over the allotted days will result in your final grade being reduced by one letter grade. If you are more than 15 minutes late to class, this will constitute an absence. Being late for class less than 15 minutes is considered "tardy". Three tardy-s count as one day absent. You are required to notify the instructor prior to any absences. Failure to do so will result in an absence.

An exam missed because of an excused absence must be made up the day that you return to class. An exam missed because of an unexcused absence may *not* be made up, and you will receive a grade of zero (0) for that exam.

A student shall retain all rights to work created as part of instruction or using College District technology resource

Disabilities

ADA Statement:

Any student with a documented disability (e.g. learning, psychiatric, vision, hearing, etc.) may contact the Office on the Weatherford College Weatherford Campus to request reasonable accommodations. *Phone:* 817-598-6350 *Office Location:* Office Number 118 in the Student Services Building, upper floor. *Physical Address:* Weatherford College 225 College Park Drive Weatherford, TX.

Academic Integrity

Academic Integrity is fundamental to the educational mission of Weatherford College, and the College expects its students to maintain high standards of personal and scholarly conduct. Academic dishonesty of any kind will not be tolerated. Academic dishonesty includes, but is not limited to, cheating on an examination or other academic work, plagiarism, collusion, and the abuse of resource materials including unauthorized use of Generative AI. Departments may adopt discipline specific guidelines on Generative AI usage approved by the instructional dean. Any student who is demonstrated to have engaged in any of these activities will be subject to immediate disciplinary action in accordance with institutional procedures.

SCANS

The Secretary's Commission on Achieving Necessary Skills (SCANS) identified Competencies in the area of Resources, Interpersonal, Information, Systems, and Technology; and foundation skills in the areas of Basic Skills, Thinking Skills, and Personal Qualities. This course is part of a program in which each of these Competencies and skills are integrated. The specific SCANS Competencies that are recognized throughout this course are noted at the end of the appropriate Competencies or tasks listed.