

Midland College
Syllabus
Fall Semester
DMSO 2230
Advanced Ultrasound and Review (2-0-0)

Course Description:

This capstone course covers the knowledge, skills, and professional values within a legal and ethical framework addressing emerging technologies and professional development.

Text, References and Supplies:

None.

Student Learning Outcomes:

Upon successful completion of the course the student will discover and be able to describe various advanced sonographic practices and procedures. The following learning outcomes will be addressed:

1. Demonstrate the knowledge and ability to write professional papers and case studies for publication in professional journals.
2. Demonstrate knowledge and understanding of the various lab accreditation practices with respect to the practice of diagnostic ultrasound.
3. Demonstrate knowledge and understanding of the legal aspects and implications of the practice of sonography.
4. Demonstrate knowledge and explore the technological advancements in the field of ultrasound including: 3D, tissue harmonics, equipment advances and limitations for improved resolution.
5. Demonstrate knowledge and understanding of the use of contrast agents.
6. Demonstrate knowledge and familiarity with intraoperative, intravascular, brachytherapy, cryo ablation techniques and procedures utilizing ultrasound
7. Demonstrate knowledge and understand the importance of coding and reimbursement issues affecting sonography
8. Demonstrate knowledge and awareness of the various aspects of musculoskeletal injuries and ergonomics encountered in ultrasound.
9. Demonstrate knowledge and awareness of our culturally diverse nation and apply this knowledge to clinical practice in sonography and medicine.
10. Demonstrate knowledge of and exhibit professional behavior that is consistent with the profession of sonography.

Student Contributions, Responsibilities and Class Policies:

Attendance is essential to the student's success and is outlined in the Midland College Catalog and Student Handbook, as well as, the Diagnostic Medical Sonography Student Handbook. The student is expected to participate in class discussions. Reading assignments are also important and should be completed prior to lectures for each unit. Material from reading which is not covered in class may

appear on tests. Missed exams and late assignments will be accepted with the loss of one (1) letter grade per scheduled class day that it is late. Alternate exams and/or exam format may be substituted. Failure to comply with all components of this course will result in a failing grade.

Evaluation of Students:

The final grade will be a criterion-referenced standard percentage, not curved, composed as follows: 20% from academic paper, 15% for written abstracts of case studies (5) and written case study, 20% for written journal articles and case studies, 15% from class assignments, attendance and discussion board, 30% from the practice finals.

1. There will be an academic paper on Professionalism. This paper will be 5 pages in length. Each paper will be graded for content (50%), clarity (10%), APA format and grammar (15%), spelling and punctuation (10%), references (10%) and original thought (5%).
2. Each student will write 5 abstracts for 5 of the case study presentations done in previous or this semester. See module for guidance.
3. Each student will write a case study for possible publication in the ultrasound professional journal: JDMS. This should be from a case study that was presented in prior semesters. See module for guidance.
4. Each student will present a case study. It should be over Pediatrics if possible. In case there are no Pediatrics available then you may do 1 over anything previously covered. It will follow the format utilized in previous classes.
5. There will be two written journal article for this class. They will follow the format utilized in previous classes. Topics included are: technological advances or new procedures utilizing sonography, and contrast agents. One must be over contrast agents.
6. Each student will be required to pass with an 80% or better on a comprehensive exam in ultrasound physics and instrumentation, abdomen or ob/gyn. (Two exams) These will be similar to the registry.

Course Schedule:

The student will conduct research on the various topics on their own. Some topics will be presented in a lecture format. In this case, class will meet Monday from 4:00 – 5:00 pm.

Licensure Eligibility Notification

Completion of Midland College degrees and/or certificates does not guarantee eligibility to take a certification/registry/licensure examination. The eligibility of each person is determined on an individual basis by the regulatory body of the specific discipline. If you have a conviction of a crime other than a minor traffic violation, physical or mental disability/illness, hospitalization/treatment for chemical dependency within the past five years, current intemperate use of drugs or alcohol or a previous denial of a licensure or action by a licensing authority, you will need to contact the specific regulatory body for an individual ruling. Some programs require a criminal background check and urine and drug screen.

Non-Discrimination Statement

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individuals have been designated to handle inquiries regarding the non-discrimination policies: **Tana Baker, Title IX Coordinator/Compliance Officer, 3600 N. Garfield, SSC 242, Midland, TX 79705, (432) 685-4781, tbaker@midland.edu; Natasha**

Morgan, Director Human Resources/Payroll, 3600 N. Garfield, PAD 104, Midland, TX 79705, (432) 685-4534, nmorgan@midland.edu. For further information on notice of non-discrimination, visit <http://wdcrobcolp01.ed.gov/CFAPPS/OCR/contactus.cfm> or call 1 (800) 421-3481.

Americans with Disabilities Act (ADA):

Any student who, because of a disabling condition, may require some special arrangements in order to meet course requirements should contact Shep Grinnan as soon as possible. Mr. Grinnan's office is located in the Scharbauer Student Center Building. These conditions may include documented physical or educational disabilities. Please be aware that services or accommodations are not automatic. Each student must request them and secure the proper authorizations/documentation.

Instructors Information:

Laurie Fitzgerald, RDMS, RN
DFHS Bldg., RM 110
432-685-4760
lfitzgerald@midland.edu
Office hours: As posted.

Students are encouraged to contact their instructor; making an appointment will help facilitate an instructor's availability at a specific time.

Division Information: Health Sciences

Division Dean: Carmen Edwards, DNP, MSN, RN, 209 DFHS Building, 432-686-4822
Interim Program Chair: Brandi Havner, RDMS, BAAS, 108 DFHS Building, 432-685-5572
Division Secretary: Karen Harris, 208 DFHS Building, 432-685-4600