Course Description:
This course is a detailed study of the pelvis and obstetrics/gynecology as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols.
Prerequisites: DMSO 1405

Text, References and Supplies:

Student Learning Outcomes:
Upon successful completion of the course the student will understand and demonstrate competency in the following:

1. Explain maternal physiology as it occurs prior to fertilization
2. Describe the embryological development of the fetus, the fetal membranes and placenta
3. Define and describe appropriate patient communication, patient preparation, obtaining patient history and clinical indications for the obstetrical/gynecological ultrasound exam.
4. Identify normal pelvic anatomy on diagrams, photographs, models and images taken with diagnostic x-rays, CT, MRI or ultrasound in multiple dimensions: sagittal, coronal, trans-axial and oblique planes
5. List and describe the various methods of fetal dating, stage of fetal development that are indicated, the normal ranges of the common obstetrical measurements and their implication to fetal well-being.
6. Identify first trimester pregnancies and their associated complications
7. Describe and identify the function, appearance, physiology and associated complications of the normal and abnormal placenta, the umbilical cord and membranes and amniotic fluid
8. Identify and describe common fetal anomalies of the central nervous system, abdomen and thorax, gastrointestinal system, genitourinary system, skeletal system and the cardiovascular system.
9. Identify and describe multiple gestations and their implications to fetal well being
10. Identify and discuss common gynecological pathology and abnormalities of the female pelvis.

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 and workbook assignment are also important and should be completed prior to lectures for each unit. Material from reading/workbook which is not covered in class may appear on exams. Missed quizzes and/or exams are required to be made up by/on the next scheduled class date (with the loss of 5 points). Any assignments made up later than this date will be accepted with the loss of (1) one letter grade per day that it is late. Alternate exams and/or format may be substituted. Late assignments will be accepted with the loss of 25% per scheduled class day.

Evaluation of Students:

The final grade will be a criterion-referenced standard percentage, not curved, composed as follows: 5% attendance, 10% from journal articles and from computer aided instruction (2.5% for each), 20% from unit quizzes, 40% from unit exams, and 25% from the final examination. Failure to comply with all components of this course will result in a failing grade.

1. There will be three unit exams consisting of approximately 50-100 questions. Each exam will be constructed from a random sample of the material presented prior to the exam date. Multiple formats may be used including short answer, short essay, diagram labeling and multiple choice.

2. The final exam will consist of 100-200 multiple choice questions and will be similar to the format utilized by the registry. The exam will be constructed of a random sample of all the material presented during the semester.

3. In the event that an exam is missed, it is the student’s responsibility to arrange for the make-up exam as soon as possible: a loss of one letter grade per day for any missed exam and an additional letter grade for each successive day thereafter will be assessed. The student may also expect an alternate method of testing for the make-up exam. If an exam is not made up, the student will receive a zero for that exam, and the grades will be averaged accordingly.

4. Class assignments may consist of online tasks including journal articles and worksheets. Lab assignments will consist of computer aided instruction and scan lab assignments.

5. Weekly unit quizzes will consist of 10-50 questions over the material covered in the previous week. Multiple quizzing formats will be utilized.

Course Schedule:

Class will meet every Tuesday from 1:00 – 4:00 pm except for scheduled Midland College holidays. See attached class schedule for lecture topics to be covered, quiz and exam schedule. Lab for distance students will meet every Tuesday from 11:30 – 1:00 pm and 4:00 – 6:00 pm except for Midland College holidays.

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.
Division Information: Health Sciences

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