

DMS A126: OB/GYN SONOGRAPHY

Item	Value
Top Code	122700 - Diagnostic Medical Sonography
Units	4 Total Units
Hours	72 Total Hours (Lecture Hours 72)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Open Entry/Open Exit	No
Grading Policy	Standard Letter (S)

Course Description

A cross-sectional anatomical and sonographic study of the female reproductive system including the nongravid pelvis as well as the gravid pelvis; includes specific study of embryology, fetal biometric data, normal and abnormal fetal anatomy, placenta, amniotic fluid, umbilical cord, menstrual cycle and pathology of the female nongravid pelvis. Topics of discussion will include appropriate laboratory tests, ultrasound scan protocols of the American Institute of Ultrasound in Medicine (AIUM) and other imaging modalities utilized in OB/GYN. PREREQUISITE: DMS A123 and DMS A150. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Integrate and analyze knowledge of cross-sectional anatomy and sonographic assessment of the female nongravid pelvis and the gravid pelvis.

Course Objectives

- 1. Identify and describe anatomical features of the female reproductive tract
- 2. Identify and describe anatomical features of the embryo/ fetus
- 3. Demonstrate knowledge of normal sonographic findings of the embryo/fetus
- 4. Discuss and demonstrate knowledge of abnormal sonographic findings of the embryo/fetus
- 5. Discuss and demonstrate knowledge of the physiologic menstrual cycle.
- 6. Discuss and demonstrate knowledge of sonographic assessment of maternal complications of pregnancy.
- 7. Discuss and demonstrate knowledge of high-risk pregnancies and sonographic assessment
- 8. Demonstrate knowledge of sonographic protocols of the female nongravid and gravid pelvis
- 9. Identify and describe abnormalities of the fetus.
- 10. Discuss sonographic findings of pathologic processes of the non gravid pelvis

Lecture Content

Anatomic and Sonographic Assessment of the Normal Nongravid Pelvis A. Skeleton, ligaments, muscles B. Viscera 1. ovaries 2. uterus 3. urinary bladder 4. vagina C. Vascular anatomy D. Peritoneal recesses II. Normal and abnormal physiologic menstrual cycle including Doppler assessment III. Pathologic Processes of the non-gravid pelvis A. Benign B. Malignant C. Doppler assessment IV. Sonographic assessment and Doppler applications of pathologic conditions nbsp; A. Ovarian B. Uterine C. Adnexal 1. vasculature 2. tubal D. Peritoneal recesses D. Other 1. vagina 2. urinary bladder 3. musculature V. Anatomic and Sonographic Assessment of Reproduction A. Fertilization B. Implantation C. Embryology D. First trimester 1. Sonoembryology 2. Ultrasound-guided procedures 3. Pregnancy loss 4. Gestational trophoblastic disease 5. Ectopic pregnancy VI. Anatomic and Sonographic Assessment of Second and Third Trimester; Normal and Abnormal Development of the Fetus A. Central Nervous B. Cardiovascular C. Gastrointestinal D. Genitourinary E. Skeleton F. Face and Neck G. Lungs and Diaphragm H. Amniotic Fluid p; I. Placenta J. Cervix K. Umbilical Cord L. Multiple Gestation M. Fetal circulation VII. Sonographic Assessment of Maternal Complications of Pregnancy A. Gestational Diabetes Mellitus (GDM) B. Poor nutritional status 1. No prenatal care 2. Poor prenatal care 3. Teen pregnancy C. Pregnancy induced hypertension (PIH) D. Advanced maternal age (AMA) E. Pyleonephritis F. Coexisting pelvic masses G. Incompetent cervix (CX) p; H. Premature labor (PTL) or premature rupture of the membranes (PROM) I. Amniotic Fluid Embolism J. Doppler Assessment in Pregnancy K. Multiple Gestation - higher order multiples L. Reproductive Assistance VIII. Sonographic Assessment of Fetal Complications of Pregnancy A. Intrauterine growth restriction (IUGR) B. Intrauterine fetal death (IUFD) C. Erythroblastosis fetalis IX. Other Pregnancy-related topics A. Other Imaging Studies 1. MRI of the gravid pelvis 2. Radiology B. Amniocentesis C. Laboratory tests D. Sonographic approaches to pregnancy ; 1. Transabdominal 2. Transvaginal 3. Transperineal E. Portable scanning for the pregnant patient 1. Labor Delivery 2. OR 3. ER/Trauma

Lab Content

Not applicable

Method(s) of Instruction

- Lecture (02)
- DE Live Online Lecture (02S)

Instructional Techniques

Lecture with application of ideas, use of models, study groups and PowerPoint.

Reading Assignments

Student is required to read 5 hours per week from assigned text.

Writing Assignments

Students will demonstrate writing proficiency on exams through short answers and essays.

Out-of-class Assignments

A group project is required. This is 3 hours per week preparation.

Demonstration of Critical Thinking

Objective examinations Demonstration of critical thinking through class participation Writing skill evaluation and final examination

Eligible Disciplines

Diagnostic medical technology-diagnostic medical sonography, neurodiagnosti...: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience.