

Course Objectives/Course Outline
Spokane Community College

Course Title: Diagnostic Ultrasound IV

Prefix and Course Number: SONO 141

Course Learning Outcomes:

By the end of this course, a student should be able to:

Ultrasonic procedures and techniques utilized within the OB/GYN specialty are discussed. Scanning techniques, pathology and ethical issues are also included. Laboratory experience is provided using ultrasound simulation to develop normal and abnormal anatomy identification.

- Demonstrate a comprehensive knowledge of the anatomy, physiology, pathophysiology, and sonographic appearances of the female reproductive system, fetal and extra fetal anatomy throughout the gestational period.
- Discuss the fertilization process, clinical indications for obstetrical sonograms and sonographic characteristics of normal and abnormal gravida uterine anatomy specific to each trimester as it applies to the performance of high quality examinations.
- Discuss the embryologic development, pre-menarchal, menarchal, and postmenopausal female reproductive system as it applies to the performance of high quality examinations.
- Sonographers will minimize exposure to medical legal consequences as it relates to their professional scope of practice through education in legal process, principles of decision making, ethical dilemmas, HIPAA (Health Insurance Portability and Accountability Act), and coding and reimbursement.
- Sonographers will use proactive techniques and proper ergonomics to minimized and/or prevent short and long-term consequences of scanning [work-related musculoskeletal disorders] to achieve career longevity.
- Sonographers will communicate effectively with patients, the public, and the healthcare team through oral and written methods using proper grammar and sentence. Communication skills are important in insuring that the patient will receive appropriate care.

Course Outline:

- I. Female pelvis – Anatomy, Pathophysiology and Sonographic Appearance
 - A. Embryo development female genital system
 - B. OB/GYN Scanning
 - C. Endovaginal Scanning
 - D. Cong anomalies female pelvis
 - E. Benign Disease Female Pelvis
 - F. Pelvic Inflammatory Disease
 - G. Ovarian Mass
 - H. Malignant Diseases
 - I. Uterus, Ovaries, Cervix
- II. Sonography in Pregnancy
 - A. 1st Trimester
 - B. Ectopic Pregnancy
 - C. Fetal age, size
 - D. 2nd and 3rd Trimester
 1. Fetal head, neck, spine
 2. Fetal Chest, Abdomen, Pelvis
 3. Fetal Echo
 4. Fetal Limbs

5. Fetal Doppler
6. Placenta, Umbilical Cord
7. Maturation
8. Multiple Gestations
9. IURG
10. Neonatal Neurology

III. Maternal Disease

- A. Gestational Disease
- B. Postpartum
- C. Infertility
- D. Contraception

IV. Ethical Issues

- A. Amniocentesis
- B. Controversies