

**Course Objectives/Course Outline**  
**Spokane Community College**

---

---

**Course Title:** Diagnostic Advanced Sonography

**Prefix and Course Number:** SONO 251

---

**Course Learning Outcomes:**

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

Advanced applications of ultrasound in the assessment of pathophysiology found within the abdominal scan, small parts and intraoperative scans, and OB/GYN scans are discussed. Emphasis is placed on the identification of anatomy and physiology as identified in the abnormal situation using ultrasound. Laboratory experience is provided using simulators to identify various pathological conditions.

- Describe associated pathologies and sequelae relative to hepatic disease, biliary disease, urinary disease, pancreatic disease, splenic disease, abdominal vascular pathology, gastrointestinal tract disease, abdominal wall and pelvic cavity disease.
- Describe sonographic appearances, sequelae associated with interventional procedures.
- Describe sonographic appearances, sequelae associated with organ transplants.
- Describe the sonographic techniques utilized with emerging technologies use to evaluate abdominal organs and female pelvis.
- Describe the sonographic findings associated with complicated 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> trimester OB.

**Course Outline:**

- I. Emerging technologies in the Diagnostic Medical Sonography arena
- II. Sonographer role in interventional procedures
- III. Pathophysiology and sonographic correlation of hepatic disease.
- IV. Pathophysiology and sonographic correlation of biliary disease.
- V. Pathophysiology and sonographic correlation of urinary system disease.
- VI. Pathophysiology and sonographic correlation of pancreatic disease.
- VII. Pathophysiology and sonographic correlation of splenic disease.
- VIII. Sonographic recognition of conditions associated with abnormal female pelvis.
- IX. Sonographic recognition of conditions associated with abnormal pregnancy.
- X. Sonographic recognition of conditions associated with organ transplants.
- XI.