



### **Course Description**

#### **SON1001L | Introduction to Sonography 2 | 1.00 Credits**

This second introductory course will cover the past present and future of sonography. After the historical landmarks are identified, the focus will be on the current diversity of applications of diagnostic medical sonography. Students will also discover future trends and developments on the technology horizon of the profession. Prerequisite: SON1000L.

### **Course Competencies:**

**Competency 1:** The student will demonstrate knowledge and comprehension of the diversity of ultrasound specialties by:

1. Explaining the indications and scanning protocol of abdominal sonography.
2. Explaining the indications and scanning protocol of renal sonography.
3. Explaining the indications and scanning protocol of obstetrical sonography.
4. Explaining the indications and scanning protocol of gynecological sonography.
5. Explaining the indications and scanning protocol of small parts sonography.
6. Explaining the indications and scanning protocol of Neurosonography.
7. Explaining the indications and scanning protocol of vascular ultrasound.
8. Explaining one invasive ultrasound-assisted procedure from each ultrasound specialty.
9. Discussing ocular ultrasound.
10. Discussing modalities used in ultrasound scanning (i.e., Elastography, 3D, 4D).
11. Discussing the profession of sonography practitioner.

### **Learning Outcomes:**

1. Communication
2. Critical Thinking

**Competency 2:** The student will demonstrate knowledge and comprehension of the basic diagnostic medical sonography profession by:

1. Defining at least five new terms from each ultrasound specialty.
2. Listing abbreviations from each ultrasound specialty and explaining what they mean.
3. Visualizing the sonographic appearance of four diseases/anomalies from each ultrasound specialty.
4. Explaining two scanning tips from each ultrasound specialty.
5. Explaining one invasive ultrasound-assisted procedure from each ultrasound specialty
6. Discussing protocols of ultrasound guidance in interventional procedures and surgery.

### **Learning Outcomes:**

1. Communication
2. Critical Thinking

**Competency 3:** The student will demonstrate knowledge and comprehension of the past and present field of DMS by:

1. Discussing historical highlights of ultrasound.
2. Discussing future trends in ultrasound,
3. Identifying invasive scanning specialties.
4. Discussing ultrasound guided procedures.
5. Discussing image storage and review.

6. Discussing ultrasound machines from different manufacturers
7. Discussing portable ultrasound machines and handheld devices
8. Applying current trends in sonographic technology and techniques.

**Learning Outcomes:**

1. Communication
2. Critical Thinking