

SONOGRAPHY (SON)

SON1003L FUNDAMENTALS OF SONOGRAPHY LAB I (1.00 Credits)

This course incorporates an introduction to ultrasound scanning techniques using ultrasound equipment to practice the principles and protocols to the performance of adequate diagnostic sonographic imaging and Doppler procedures in a supervised setting.

Total Contact Hrs: 48.00

Lab Hrs: 48.00

Fees: LABORATORY FEE \$26.00

Complete all the courses in the following option:

- Option 1 - Prerequisite: SON1100L (minimum grade: C), Corequisite: SON1111

SON1100C PRINCIPLES AND PROTOCOLS OF SONOGRAPHIC IMAGING LAB (2.00 Credits)

An introduction to the basic approaches to sonographic scanning and scanning protocols for the abdomen and pelvis

Total Contact Hrs: 96.00

Lecture Hrs: 48.00

Lab Hrs: 48.00

Fees: LABORATORY FEE \$26.00

Complete all the courses in the following option:

- Pre or Corequisite: SON1170 (minimum grade: C)

SON1111 ABDOMINAL SONOGRAPHY I (2.00 Credits)

An introduction to the cross-sectional anatomy of the abdominal are and its recognition on sonographic visualization systems.

Total Contact Hrs: 32.00

Lecture Hrs: 32.00

Complete all the courses in the following option:

- Option 1 - Prerequisite: SON1170 (minimum grade: C), Corequisite: SON1121

SON1112 ABDOMINAL SONOGRAPHY II (2.00 Credits)

This course is an in-depth presentation of the abdomen stressing physiology, pathology, pertinent laboratory tests, as well as signs and symptoms related to disease processes of each organ and the studies to make a diagnostically acceptable study.

Total Contact Hrs: 32.00

Lecture Hrs: 32.00

Complete all the courses in the following option:

- Option 1 - Prerequisite: SON1111 (minimum grade: C), Corequisite: SON1122

SON1121 SONOGRAPHIC OB/GYN I (2.00 Credits)

An introduction to the cross-sectional anatomy of the female reproductive system with and without an existing pregnancy. The sonographic recognition of the normal throughout all terms of pregnancy is presented.

Total Contact Hrs: 32.00

Lecture Hrs: 32.00

Complete all the courses in the following option:

- Option 1 - Prerequisite: SON1170 (minimum grade: C), Corequisite: SON1111

SON1122 SONOGRAPHIC OB/GYN II (3.00 Credits)

This course is an in-depth presentation of gynecology and obstetrics stressing physiology, pathology, pertinent laboratory tests as well as signs and symptoms related to disease processes and what makes a diagnostically acceptable study for accurate diagnosis.

Total Contact Hrs: 48.00

Lecture Hrs: 48.00

Complete all the courses in the following option:

- Option 1 - Prerequisite: SON1121 (minimum grade: C), Corequisite: SON1112

SON1141 SMALL PARTS SONOGRAPHY (2.00 Credits)

A general introduction to the areas of carotid, thyroid, prostate, scrotum, breast and other superficial structures.

Total Contact Hrs: 32.00

Lecture Hrs: 32.00

Complete all the courses in the following option:

- Option 1 - Prerequisite: SON1212 (minimum grade: C), Corequisite: SON1824

SON1170 SONOGRAPHY OF THE CIRCULATORY SYSTEM (2.00 Credits)

An introduction to the hemodynamics of the circulatory systems and the sonographic imaging and Doppler assessment of the cardiac and vascular structures. Prerequisite: Program Admission.

Total Contact Hrs: 32.00

Lecture Hrs: 32.00

Complete all the courses in the following option:

- Pre or Corequisite: SON1100L (minimum grade: C)

SON1211 MEDICAL SONOGRAPHIC PHYSICS I (3.00 Credits)

A study of the principles of diagnostic ultrasound, the fundamental properties of ultrasonic physics, stressing tissue interactions, and interfaces. Focusing characteristics, methods, intensity, and power considerations are introduced along with system resolution considerations.

Total Contact Hrs: 48.00

Lecture Hrs: 48.00

Complete all the courses in one of the following options:

- Option 1 - Prerequisite: SON1100L (minimum grade: C), Corequisite: SON1111
- Option 2 - Prerequisite: SON1100 (minimum grade: C), Corequisite: SON1111

SON1212 MEDICAL SONOGRAPHIC PHYSICS II (3.00 Credits)

A continuation of the study of the properties of diagnostic ultrasound stressing the operation of diagnostic equipment, the display systems, biological effects and quality assurance methods. Current developments in ultrasound are reviewed, discussed, and evaluated.

Total Contact Hrs: 48.00

Lecture Hrs: 48.00

Complete all the courses in the following option:

- Option 1 - Prerequisite: SON1211 (minimum grade: C), Corequisite: SON1112

SON1214 PRACTICAL ASPECTS OF SONOGRAPHY I (2.00 Credits)

This course is a review of the principles of diagnostic ultrasound and practical aspects of scanning techniques, image identification, normal anatomy, law and ethics as applied to sonography, and patient care and handling as related to the normal sonographic examination. It stresses the review of normal abdominal and OBGYN anatomy and routine images obtained for each specific exam.

Total Contact Hrs: 32.00

Lecture Hrs: 32.00

Complete all the courses in the following option:

- Option 1 - Prerequisite: SON1111 (minimum grade: C), Corequisite: SON1112

SON1215 PRACTICAL ASPECTS OF SONOGRAPHY II (2.00 Credits)

This course is a review of the principles of diagnostic ultrasound and practical aspects of scanning techniques, image identification, abnormal anatomy, patient rapport, and medical ethics as applied to sonography. It stresses the review of abnormal abdominal and OBGYN anatomy and routine images obtained for each specific exam.

Total Contact Hrs: 32.00

Lecture Hrs: 32.00

Complete all the courses in the following option:

- Option 1 - Prerequisite: SON1111 (minimum grade: C), Corequisite: SON2834

SON1804 CLINIC A (3.00 Credits)

Clinical education requiring application of the knowledge learned. Professionalism and personal interaction are stressed along with technical abilities. As the student progresses he or she will be performing examinations with less and less supervision.

Total Contact Hrs: 384.00

Clinical Hrs: 384.00

Fees: EDU/ACCIDENT INSURANCE \$4.75, LIABILITY INSURANCE \$8.15

Complete all the courses in the following option:

- Option 1 - Prerequisite: SON1100L (minimum grade: C), Corequisite: SON1121

SON1814 CLINIC B (3.00 Credits)

A continuation of the learning by doing process where more responsibility in the form of decision making regarding anatomical areas and resultant imaging is assumed by the student being supervised.

Total Contact Hrs: 384.00

Clinical Hrs: 384.00

Fees: EDU/ACCIDENT INSURANCE \$4.75, LIABILITY INSURANCE \$8.15

Complete all the courses in the following option:

- Option 1 - Prerequisite: SON1804 (minimum grade: S), Corequisite: SON1112

SON1824 CLINIC C (3.00 Credits)

This clinical course is designed to provide students the opportunity to make judgmental decisions regarding technical aspects, to interact in a professional manner with those with whom he/she comes in contact with, and to generally progress to the point where, after successful testing, he/she may be accepted as a competent sonographer for general sonographic exams.

Total Contact Hrs: 384.00

Clinical Hrs: 384.00

Fees: EDU/ACCIDENT INSURANCE \$4.75, LIABILITY INSURANCE \$8.15

Complete all the courses in the following option:

- Prerequisite: SON1814 (minimum grade: S)

SON2013L FUNDAMENTALS OF SONOGRAPHY LAB II (1.00 Credits)

This course incorporates ultrasound scanning techniques using ultrasound equipment to practice the principles and protocols to the performance of adequate diagnostic sonographic imaging and Doppler procedures in a supervised setting.

Total Contact Hrs: 48.00

Lab Hrs: 48.00

Fees: LABORATORY FEE \$26.00

Complete all the courses in the following option:

- Option 1 - Prerequisite: SON1003L and SON1111, Corequisite: SON1112

SON2061 SEMINAR IN SONOGRAPHY (1.00 Credits)

A discussion and presentation seminar course on interpersonal skill refinement, employment techniques, and career development. The course also provides a comprehensive curriculum review of all aspects of Sonography and presents details on applying for licensure as students prepare for the transition to the work place.

Total Contact Hrs: 16.00

Lab Hrs: 16.00

Complete all the courses in the following option:

- Corequisite: SON2844

SON2400 INTRODUCTION TO ECHOCARDIOGRAPHY (3.00 Credits)

Anatomy of the heart and the procedures used in screening are introduced stressing recognition of the normal versus abnormal.

Total Contact Hrs: 48.00

Lecture Hrs: 48.00

Complete all the courses in the following option:

- Option 1 - Prerequisite: SON1141 (minimum grade: C), Corequisite: SON2400L

SON2400L INTRODUCTION TO ECHOCARDIOGRAPHY LAB (1.00 Credits)

Laboratory sessions for Introduction to Echocardiography Lab (SON 2401L) are designed to provide opportunities for the students to practice basic skills of sonographic scanning techniques of normal cardiac structures including real-time and Doppler scanning techniques. Performance of special tests will be practiced on a cardiac simulator. This course incorporates basic ultrasound scanning techniques using ultrasound equipment to practice the principles and protocols to the performance of basic Cardiac diagnostic sonographic imaging and Doppler procedures in a supervised setting.

Total Contact Hrs: 48.00

Lab Hrs: 48.00

Fees: LABORATORY FEE \$26.00

Complete all the courses in the following option:

- Prerequisite: SON1141 (minimum grade: C)

SON2401 ECHOCARDIOGRAPHY II (3.00 Credits)

An in-depth presentation of the intricacies of diagnostic ultrasound as it applies to the heart and the chest stressing its capabilities and its limitations related to both normal and abnormal states.

Total Contact Hrs: 48.00

Lecture Hrs: 48.00

Complete all the courses in the following option:

- Corequisite: SON2844

SON2401L ECHOCARDIOGRAPHY II LAB (1.00 Credits)

Laboratory sessions for Echocardiography II Lab (SON 2401L) are designed to provide opportunities for the students to practice advanced skills of sonographic scanning techniques of normal and abnormal cardiac structures including real-time and Doppler scanning techniques. Performance of special tests will be practiced on a cardiac simulator. This course incorporates advanced ultrasound scanning techniques using ultrasound equipment to practice the principles and protocols to the performance of entry-level Cardiac diagnostic sonographic imaging and Doppler procedures in a supervised setting.

Total Contact Hrs: 48.00

Lab Hrs: 48.00

Fees: LABORATORY FEE \$26.00

Complete all the courses in the following option:

- Prerequisite: SON2400L (minimum grade: C)

SON2834 CLINIC D (3.00 Credits)

A course designed to add additional clinical competencies to those gained in the specialties mastered in the first year. Emphasis on specialty of echocardiography with clinical application of classroom material presented. To continue to make judgment decisions regarding the technical aspects of diagnostic sonographic exams.

Total Contact Hrs: 384.00

Clinical Hrs: 384.00

Fees: EDU/ACCIDENT INSURANCE \$4.75, LIABILITY INSURANCE \$8.15

Complete all the courses in the following option:

- Option 1 - Prerequisite: SON1824 (minimum grade: S), Corequisite: SON2400

SON2844 CLINIC E (3.00 Credits)

Application of all the materials presented requiring the student to interact in a professional manner, to make judgment decisions regarding the technical aspects, and to generally progress to the point where he/she may be accepted as a competent sonographer. Further mastering of all skills gained, emphasizing echocardiography and cardiovascular examination techniques. Clinical application of classroom material presented.

Total Contact Hrs: 384.00

Clinical Hrs: 384.00

Fees: EDU/ACCIDENT INSURANCE \$4.75, LIABILITY INSURANCE \$8.15

Complete all the courses in the following option:

- Option 1 - Prerequisite: SON2834 (minimum grade: S), Corequisite: SON2401