COURSE DESCRIPTION:

Prerequisites: SUR 122 and SUR 123  
Corequisites: SUR 135 and SUR 137

This course provides a comprehensive study of intermediate and advanced surgical specialties that students are exposed to in the second clinical rotation. Emphasis is placed on related surgical anatomy, pathology, and procedures that enhance theoretical knowledge of patient care, instrumentation, supplies, and equipment. Upon completion, students should be able to correlate, integrate, and apply theoretical knowledge of the course topics to the clinical operative environment. Course Hours Per Week: Class, 5. Semester Hours Credit, 5.

LEARNING OUTCOMES:

After successful completion of this course the student will be able to:

a. Identify the types of surgical procedures performed by plastic/reconstruction surgeons and the anatomic structures involved.

b. The student will understand the basic pathology relating to the need for plastic/reconstruction surgical intervention. The student will be able to identify and describe the types of instrumentation, equipment, sutures, and supplies that are considered the armamentarium of the plastic/reconstruction surgeon.

c. Identify the types of surgical procedures performed by ophthalmologic surgeons and the basic anatomy of the eye.

d. The student will understand the basic pathology relating to the need for ophthalmologic intervention. The student will be able to identify and describe the types of instrumentation, equipment, sutures, and supplies that are considered the armamentarium of the ophthalmologic surgeon.

e. Identify the types of peripheral vascular surgical procedures performed and the anatomic structures involved.

f. The student will understand the basic pathology relating to the need for peripheral vascular surgical intervention. The student will be able to identify and describe the instrumentation, equipment, sutures, and supplies that are considered the armamentarium of the vascular surgeon.

g. Identify the types of surgical procedures performed in neurosurgery and the anatomic structures involved.

h. The student will understand the basic pathology relating to the need for neurosurgical intervention. The student will be able to identify and describe the instruments, equipment sutures, and supplies that are considered the armamentarium of the neurosurgeon.

i. Identify the types of surgical procedures performed by thoracic surgeons and the anatomic structures involved.

j. The student will understand the basic pathology relating to the need for thoracic surgical intervention. The student will be able to identify and describe the types of instrumentation, equipment, sutures, and supplies that are considered the armamentarium of the thoracic surgeons.

k. Identify the types of surgical procedures performed by cardiovascular surgeons and anatomic structures involved.

l. The student will understand the basic pathology relating to cardiovascular surgical intervention. The student will be able to identify and describe the type of instrumentation, equipment, sutures, and supplies that are considered the armamentarium of the cardiovascular surgeon.

m. The student will also have a basic understanding of endoscopic and/or minimally invasive procedures in, peripheral vascular, thoracic, and cardiovascular services used by surgeons today.

n. The student will incorporate this knowledge into clinical practice.
OUTLINE OF INSTRUCTION:

I. Plastic and reconstructive surgery
   A. Congenital anomalies
   B. Cosmetic surgeries
   C. Grafting procedures

II. Ophthalmology
   A. Extraocular procedure
   B. Intraocular procedures
   C. Cataract surgery
   D. Retinal surgery
   E. Vitrectomy
   F. Ophthalmologic trauma

III. Peripheral vascular surgery
   A. Angioplasty procedures
   B. Arterial bypass
   C. Endarterectomy
   D. Aneurysm surgery
   E. Thrombectomy/embolectomy
   F. Vascular access/dialysis procedures
   G. Shunt procedures

IV. Neurosurgical procedures
   A. Spinal procedures
   B. Peripheral nerve surgery
   C. Cranial surgery

V. Thoracic surgery
   A. Bronchoscopy/mediastinoscopy
   B. Thoracoscopy
   C. Thoracotomy
   D. Esophagectomy

VI. Cardiac surgery
   A. Non invasive procedures
   B. Cardio-pulmonary bypass
   C. Valvular surgery
   D. Coronary artery bypass surgery

REQUIRED TEXTBOOKS:

To be selected by the instructor.

STATEMENT FOR STUDENTS WITH DISABILITIES:

Students who require academic accommodations due to any physical, psychological, or learning disability are encouraged to request assistance from a disability services counselor within the first two weeks of class. Likewise, students who potentially require emergency medical attention due to any chronic health condition are encouraged to disclose this information to a disability services counselor within the first two weeks of class. Counselors can be contacted by calling 919-536-7207, ext. 1413 or by visiting the Student Development Office in the Phail Wynn Jr. Student Services Center, room 1209.