CREDIT HOURS: 4.00

CONTACT HOURS: 60.00

COURSE DESCRIPTION:
This course is designed to focus on the perspective care of the surgical patients during endoscopic, general, obstetric and gynecologic, genitourinary, ophthalmic, orthopedic, ENT, and peripheral vascular procedures. Students will become familiar with the diagnostic, procedural considerations, operative procedures and instrumentation for the specialties. Concentration will also be given to OR principles related to physics, surgical robotics, and electricity.

PREREQUISITES: Admission to the Surgical Technology Program, ENG 119, ENG 120, BIO 240, BIO 250, BIO 295, PSY 101, ALH 110

EXPECTED COMPETENCIES:
Upon successful completion of this course, the student will:

- Illustrate an understanding of the structures and functions in the regional anatomy of each surgical specialty presented in class.
- Display his/her comprehension of materials disseminated in class by accurately completing assignments and passing written examinations with 80 percent accuracy related to the following specialties areas:
  - General Surgery
  - Obstetric and Gynecologic Surgery
  - Eyes, Ears, Nose and Throat Surgery
  - Genitourinary Surgery
  - Orthopedic Surgery and plaster techniques
  - Peripheral Vascular Techniques
  - Endoscopy Procedures
- Understand the highlights and schemes of common surgical procedures
- Understand the perioperative care of the patient for these surgical procedures.
- Understand the preparation and care of the specialty surgical instruments, supplies and equipment.
- Illustrate an understanding of surgical applications of electricity.
- Illustrate an understanding of the basic principles of electricity and magnetic fields.
- Understand basic electrical terminology, such as current, volt, Ohm's law, power, and load.
- Demonstrate an understanding of mono-polar and bipolar electo-surgical units and major hazard of their use – electrical shock and burn.
- Demonstrate an understanding of medical and surgical applications of physics.
- Identify basic physics terminology and principles of mechanics, nuclear physics, energy and work, properties of matter, heat, light, waves, vibrations, and sound.
- Identify basic terminology related to surgical robotics and clinical applications.
- Identify the principles of decontamination and sterilization of robotic components.
ASSESSMENT METHODS:
Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

GRADING SCALE:
90%-100% = A
80%-89.9% = B
70%-79.9% = C
60%-69.9% = D
<60% = E