### ST 102 Surgical Instrumentation, Equipment, and Supplies

Credit Hours: 3 HRS

### Scheduled hours per week:

Lecture: 3 HRs

Lab: 0 Other: 0

**Catalog Course Description**: This course is designed to introduce students to the different classifications of instrumentation, equipment, and supplies required to perform surgical procedures. Assembly of instrumentation will help refine students' manual dexterity and anticipatory skills.

Pre-requisites: Admission to the program

Pre/Co-requisites: ST 100, BIOL 109, MATH 120

#### **Course Learning Outcomes:**

- 1. Recognize aseptic and sterile technique while manipulating instrumentation and equipment in the sterile field.
- 2. Relate the proper surgical instrumentation, equipment, and supplies to the appropriate anatomy in given surgical specialties.
- 3. Discuss the role of the surgical technologist when trouble-shooting issues pertaining to instrumentation, equipment, or supplies.
- 4. Explain the communication techniques involved with obtaining the appropriate instrumentation, equipment, and supplies utilized throughout a surgical procedure.
- 5. Restate the importance of the AST Code of Ethics as it pertains to instrumentation, equipment, and supplies.

### Topics to be studied:

- 1. Classifications of instrumentation
- 2. Instrumentation and implants for surgical specialties
  - a. General
  - b. Laparoscopic
  - c. Ob/Gyn
  - d. Genitourinary
  - e. Orthopedic
  - f. Neurosurgery
  - g. EENT
  - h. Plastics
  - i. Vascular
  - j. Thoracic
- 3. Technological sciences and equipment
  - a. Electricity
  - b. Information technology
  - c. Robotics
  - d. Electrical surgical units
  - e. Lasers
  - f. Microscopes

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- g. Endoscopes
- h. Operating beds
- i. Positioning equipment
- j. Radiology
- 4. Disposable and nondisposable supplies utilized throughout surgery:
  - a. Drapes
  - b. Countable items
  - c. Medication administration supplies

## Relationship of course to program outcomes:

The course learning objectives for ST 102 are congruent with, and derived from, the five (5) program outcomes designated by the Surgical Technology Program.

Relationship of Course to General Education Learning Outcomes:	
<b>Composition and Rhetoric</b> Students illustrate a fundamental understanding of the best practices of communicating in English and meet the writing standards of their college or program-based communication requirements.	х
<b>Science &amp; Technology</b> Students successfully apply systematic methods of analysis to the natural and physical world, understand scientific knowledge as empirical, and refer to data as a basis for conclusions.	Х
<b>Mathematics &amp; Quantitative Skills</b> Students effectively use quantitative techniques and the practical application of numerical, symbolic, or spatial concepts.	
<b>Society, Diversity, &amp; Connections</b> Students demonstrate understanding of and a logical ability to successfully analyze human behavior, societal and political organization, or communication.	Х
Human Inquiry & the Past Students interpret historical events or philosophical perspectives by identifying patterns, applying analytical reasoning, employing methods of critical inquiry, or expanding problemsolving skills.	х
The Arts & Creativity Students successfully articulate and apply methods and principles of critical and creative inquiry to the production or analysis of works of art.	
5/3/2016	

# Special projects or requirements of the course:

- 1. Field trips to surgical facilities
- 2. Peri-operative case management
- 3 Computer and Internet access is required

#### **Additional Information:**

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