edit prerequisite to remove BIOL 100 since it is no longer offered.) 2016

COURSE INFORMATION FORM

DISCIPLINE: Surgical Technology
COURSE TITLE: Pharmacology for the Surgical Technologist

CR.HR 2 LECT HR. 2 LAB HR. CLIN/INTERN HR. CLOCK HR.

CATALOG DESCRIPTION
This course focuses on the use and stages of anesthesia. Preparation and calculation of drugs and solutions commonly used during surgical procedures will also be discussed.

PREREQUISITES
CHEM 105, BIOL 109 or BIOL 110 & 210, BIOL 208, & formal acceptance into the Surgical Technology program

EXPECTED STUDENT OUTCOMES IN THE COURSE (ESO)
Upon completion of this course, the student will be able to:

1. Apply general terminology to medication use.
2. Calculate medication conversions and dosages.
3. Prepare and manage medications and solutions.
4. Demonstrate proper medication use and administration during surgical procedures.
5. Explain the necessity of each component of anesthesia preparation of the surgical patient.
6. Analyze the principles of anesthesia administration.
7. Correlate anesthesia monitoring devices with patient homeostasis.
8. Explain anesthesia complications and interventions.

GENERAL EDUCATION OUTCOMES (ESO)
Specify which general education outcomes, if any, are substantially addressed by the course. Numbers in parentheses identify the Expected Student Outcomes linked to the specific General Education Outcome.

Outcomes ESO
PROGRAM-LEVEL OUTCOMES

CAREER AND TECHNICAL EDUCATION PROGRAM OUTCOMES
Specify which Career and Technical program outcomes, if any, are substantially addressed by the course by completing the “Career and Technical Education template” to show the relationship between course and program outcomes to assessment measures.

Outcome 2:
The curriculum design, course content and faculty will prepare students to function as entry level surgical technologists.

CLASS-LEVEL ASSESSMENT MEASURES
Student accomplishment of expected student outcomes may be assessed using the following measures. (Identify which measures are used to assess which outcomes.)
1. Assignments (1,2,3,4,5,6,7,8)
2. Written Examinations (1,2,3,4,5,6,7,8)
3. Skill Assessments (3,4)
Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An *asterisk can be used to mark an item as optional.

I. Medication Terminology, General Definitions
   A. Basic terminology
   B. Practice of calculation
   C. Dosage calculations
   D. Mixing medications

II. Medication Measurements
   A. Conversion and equivalent tables
   B. Basic mathematics
   C. Dosage calculations
   D. Mixing medications

III. Medications
   A. Medication nomenclature
   B. Medication classifications
   C. Medication/solution violations
   D. Laws, policies, and procedures
   E. Sources of medications
   F. Drug forms
   G. Routes of admistration
   H. Care and handling of medications and solutions

IV. Medications Commonly Used In Surgery: Classifications of Agents

V. Definition and Types of Anesthesia

VI. Assessment to Determine Anesthesia Choice
   A. Patient factors
   B. Surgeon’s preference
   C. Patient’s preference
   D. Choices of anesthesia administration

VII. Surgical Team Roles During Administration
   A. Healthcare facility policies
   B. Assisting anesthesia personnel
   C. Monitoring
   D. Documentation

VIII. Preoperative Medication of the Patient
   A. Sedative-hypnotic agents
   B. Analgesics
   C. Anti-cholinergics
   D. Antiemetics

IX. General Anesthesia
   A. Patient position for induction
   B. Patient monitoring devices
   C. Anesthesia machine
   D. Phases of general anesthesia
   E. Stages of anesthesia

X. Local Anesthesia
   A. Delivery methods
   B. Local and topical agents

XI. Complications and Emergency Interventions Specific to Anesthesia
   A. Allergic reaction
   B. Aspiration