

SOUTHEAST COMMUNITY COLLEGE
HEALTH SCIENCES DIVISION
SURGICAL FIRST ASSIST
Revision Date: 11/2023

I. CATALOG DESCRIPTION

Course Number: SUFA 1040
Course Title: Bioscience
Prerequisite(s): Admission into the Surgical First Assist Program

Catalog Description: Introduction of hematological principles of surgery and disorders of hemostasis and coagulation; physiological chemistry including: electrolytes, fluid, and shock; pharmacology and anesthesia. Analyze infection control in the perioperative and assess the clinical signs of the surgical site infections including wound management.

Credit Hours: 2
Class Hours: 30
Total Contact Hours: 30

II. COURSE OBJECTIVES: *Course will:*

1. Summarize the physiological composition of body water and solutes
2. Consider the goals of anesthesia as it related to the perioperative patient in the surgical setting
3. Evaluate the methods for the prevention of SSIs
4. Summarize the specific uses for antibiotics
5. Evaluate the anatomy involved in wound healing and suturing

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

A. STUDENT LEARNING OUTCOMES: *Student will be able to:*

1. Demonstrate an understanding of evaluating diagnostic images as related to surgical anatomy
2. Interpret the physiological acid-base balance of the body
3. Analyze the principles of extracellular fluid distribution between plasma and interstitial lymphatic volumes
4. Assess the clinical signs of hypovolemic, septic, hemorrhagic, neurogenic, and cardiogenic shock
5. Analyze perioperative principles of patient assessment and how they relate to anesthesia
6. Assess the risks and adverse effects of anesthesia, conscious sedation, local anesthetic agents, and pain management in the surgical setting
7. Demonstrate an understanding of anesthesia, conscious sedation, local anesthetic agents, and pain management as it relates to the perioperative patient
8. Analyze the causes of surgical site infections (SSI)
9. Analyze the phases and techniques involved in wound closure, healing, and complications

B. GENERAL EDUCATION LEARNING OUTCOMES

GELO 3: Critical Thinking and Problem Solving

Outcome: Synthesize information to arrive at reasoned solutions to problems.

IV. CONTENT/TOPICAL OUTLINE (*course outline may provide more detailed information*)

1. Pharmacology and Anesthesia
2. Diagnostic Imaging
3. Infection Control and SSIs
4. Wound Management
5. Physiological Chemistry

V. INSTRUCTIONAL MATERIALS

A. Required Text(s):

Rothrock, Alexander's *Care of the Patient in Surgery* (current edition)

VI. METHODS OF PRESENTATION/INSTRUCTION

A. Methods of presentation typically include a combination of the following:

Lecture with Power Point slides, videos, demonstration, course objectives, class participation, assigned readings in textbooks.

VII. METHODS OF EVALUATION

SCC STANDARD GRADING SCALE POLICY:

A+	95-100	C+	75-79
A	90-94	C	70-74
B+	85-89	D+	65-69
B	80-84	D	60-64
		F	Below 60

VIII. SPECIFIC COURSE REQUIREMENTS

A grade of C+ is the minimum passing grade for Bioscience course. For specific course requirements see the Course Information Document (CID) and program handbook.