

SOUTHEAST COMMUNITY COLLEGE

HEALTH SCIENCES DIVISION

SURGICAL FIRST ASSIST

Revision Date: 11/2022

[Syllabus Statements](#)

I. CATALOG DESCRIPTION

Course Number: SUFA 1040
Course Title: Bioscience
Prerequisite(s): SUFA 1010, SUFA 1020, SUFA 1050

Catalog Description: This course is designed to promote an understanding of microbiology which precedes the understanding of disease transmission and or prevention, including standard precautions and infection control. The pharmacology section of the course is designed to promote an understanding of the effects of pre, post and operative drugs. The anesthesia portion of the course is designed to promote an understanding of general principles/techniques and drugs used by anesthesia and the effects on the patient. The course will also introduce the student to diagnostic testing such as radiology, laboratory and cardio graphics. Wound healing, trauma, preoperative nutrition, fluid and electrolyte balance and techniques in maintaining homeostasis will be reviewed.

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

II. COURSE OBJECTIVES: *Course will:*

1. Identify pharmacologic agents used in the operating room
2. Discuss anesthesia of the surgical patient
3. Discuss special considerations and care of the surgical patient
4. Identify surgical complications and appropriate actions
5. Discuss wounds and complications

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

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

1. Apply knowledge of normal and pathologic anatomy and physiology and of the actions of pharmacologic agents in order to individualize patient care.
2. Describe routine diagnostic testing as they relate to the surgical patient.
3. Demonstrate knowledge of microbial hazards and standard precaution in the operating room.
4. Discuss patient preparation and evaluation for general anesthesia.
5. Discuss wound 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. Unit One: Use terminology that is specific to Surgical Pharmacology.
2. Unit Two: Discuss diagnostic imaging and radiation therapy.
3. Unit Three: Discuss special populations of the surgical patient.
4. Unit Four: Discuss microbial organisms and asepsis in the operating room.
5. Unit Five: Discuss the risks of blood transmissible diseases in the surgical environment. Discuss the use of standard precautions in the operating room.
6. Unit Six: Discuss the evaluation and preparation of the perioperative patient by anesthesia personal. Differentiate surgical considerations of the agents most communally used in induction for general anesthesia.
7. Unit Seven: Describe the mechanisms of tissue and tissue injury to wound healing and possible complications.
8. Unit Eight: Demonstrate knowledge of system pharmacologic agents that are commonly used in the operating room.
9. Unit Nine: Demonstrate knowledge of physiological chemistry as it relates to electrolytes, fluid and shock.

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.