

Course discipline/number/title: ST 2110: Surgical Technology Medications and Microbiology

A. CATALOG DESCRIPTION

1. Credits: 3
2. Hours/Week: 3
3. Prerequisites (Course discipline/number): None
4. Other requirements: None
5. MnTC Goals (if any): NA

B. COURSE DESCRIPTION: This course is designed to provide comprehensive knowledge of many classifications of drugs, routes of administration, effects, and side effects of drugs used in surgery. This course also will provide an opportunity to learn about natural body defense mechanisms and of the methods by which infectious diseases are transmitted, recognized, prevented, and treated.

C. DATE LAST REVISED (Month, year): November, 2021

D. OUTLINE OF MAJOR CONTENT AREAS:

1. Introduction of Medications/Terms
2. Systems of Weights and Measures/Abbreviations
3. Drug Administration
4. Pre-Operative Medications
5. General Anesthetics
6. Muscle Relaxants
7. Local Anesthetics
8. Drugs Administered During Surgery
9. Cardiac and CPR Medications
10. Historical Development of Microbiology and Fields of Study
11. Cell Structure and Characteristics of Microorganisms
12. Indigenous Organisms
13. Standard Precautions
14. Pathogenic Microorganisms
15. Immunity
16. Wound Healing and Process of Infection

E. LEARNING OUTCOMES (GENERAL): The student will be able to:

1. Define general terms associated with drug use.
2. Identify actions, uses, routes of administration, side effects and contraindications of drugs used in surgery.
3. Demonstrate procedures for care and handling of medications.
4. Identify principles of drug use in the care of surgical patients.
5. Explain principles of anesthesia administration.
6. Discuss historical development of microbiology.
7. Identify structures and characteristics of different organisms.
8. Identify conditions that affect life and death of organisms.
9. Identify relationships between humans and microorganisms.
10. Identify general and immunological defense mechanisms.
11. Classify types of wound healing.

F. LEARNING OUTCOMES (MNTC): NA

G. METHODS FOR EVALUATION OF STUDENT LEARNING. Methods may include but are not limited to:

1. Testing
2. Worksheets
3. Oral Presentations



- H. RCTC CORE OUTCOME(S). This course contributes to meeting the following RCTC Core Outcome(s):
Critical Thinking. Students will think systematically and explore information thoroughly before accepting or formulating a position or conclusion.

Personal and Professional Accountability. Students will take responsibility as active learners for achieving their educational and personal goals.

- I. SPECIAL INFORMATION (if any):
1. Care and Handling of sharps
 2. Standard Precautions