

COURSE SYLLABUS

LAST REVIEW	Spring 2021
COURSE TITLE	Mortuary Microbiology
COURSE NUMBER	MTSC 0160
DIVISION	Health Professions
DEPARTMENT	Mortuary Science
CIP CODE	12.0301
CREDIT HOURS	3
CONTACT HOURS/WEEK	Class: 3
PREREQUISITES	None
COURSE PLACEMENT	This course is part of a selective admission program. Students must be admitted to the Mortuary Science program to enroll in this course.

COURSE DESCRIPTION

This course encourages a survey of the basic principles of microbiology. It relates these principles to Funeral Service Education especially as they pertain to sanitation, disinfection, public health, and embalming practice. The development and use of personal, professional and community hygiene and sanitation are discussed.

PROGRAM LEARNING OUTCOMES

1. Explain the importance of funeral service professionals in developing relationships with families and communities they serve.
2. Identify standards of ethical conduct in funeral service practice.
3. Interpret how federal, state, and local laws apply to funeral service in order to ensure compliance.
4. Apply principals of public health and safety in handling and preparation of human remains.
5. Demonstrate technical skills in embalming and restorative art that are necessary for the preparation and handling of human remains.
6. Demonstrate skills required for conducting arrangements conferences, visitations, services, and ceremonies.
7. Describe the requirements and procedures for burial, cremation, and other accepted forms of final disposition of human remains.
8. Describe methods to address the grief-related needs of the bereaved.
9. Explain management skills associated with operating a funeral establishment.
10. Demonstrate verbal and written communication skills and research skills needed for funeral service practice.

TEXTBOOKS

<http://kckccbookstore.com/>

METHODS OF INSTRUCTION

A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE

- I. Introduction
 - A. Microbiology
 - B. Divisions of Microbiology
 - C. Microorganisms and other infectious agents

- II. Anatomy of bacteria
 - A. Morphology of bacteria
 - B. Structure and function of bacteria

- III. Physiology of bacteria
 - A. Bacterial reproduction
 - B. Bacterial colony
 - C. Conditions affecting bacterial growth
 - D. Biological associations

- IV. Control of microorganisms
 - A. Levels of control
 - B. Methods of control

- V. Microorganisms and disease
 - A. Introduction terminology
 - B. Types of infection
 - C. Factors influencing virulence
 - D. Sources of infection
 - E. Modes of transmission of infections
 - F. Portals of entry and exit of pathogens
 - G. Vehicles of exit of pathogens
 - H. factors influencing the occurrences of infection
 - I. Defenses of the body against infection

- VI. Immunology
 - A. Antigens
 - B. Antibodies
 - C. Characteristics of antigen/antibody reactions

- D. Kinds of immunity
- E. Hypersensitivity
- VII. Bacteria
 - A. Staphylococcus aureus
 - B. Streptococcus pyogenes
 - C. Streptococcus pneumoniae
 - D. Neisseria gonorrhoea
 - E. Neisseria meningitides
 - F. Clostridium tetani
 - G. Clostridium perfringens
 - H. Corynebacterium diphtheria
 - I. Salmonella typhi
 - J. Francisella tularensis
 - K. Mycobacterium tuberculosis
 - L. Mycobacterium avium
 - M. Treponema pallidum
 - N. Borrelia burgdorferi
 - O. Medically important bacteria of unique morphology and biology
 - P. Other bacteria and diseases
- VIII. Viruses
 - A. Dermatropic diseases
 - B. Pneumotropic diseases
 - C. Neurotropic diseases
 - D. Viscerotropic diseases
 - E. Immunological
- IX. Fungi
- X. Protozoa
- XI. Prion
- XII. Occupational Exposure in Embalming

COURSE LEARNING OUTCOMES

Upon successful completion of this course, the student will:

- A. Define microbiology.
- B. Interpret post-parasitic relationships and interactions, and the requirements of successful parasitism.
- C. Understand the control of microorganisms.
- D. Identify the types of diseases caused by microorganisms.
- E. Recognize the methods of transmission of infectious disease and the control procedure of these diseases with special emphasis on protection to the embalmer, the funeral director and the public.
- F. Determine the factors influencing the occurrence of an infection of pathogens.

- G. Define antigen.
- H. Define antibody.
- I. Compare natural and acquired kinds of immunity.

ASSESSMENT OF COURSE LEARNING OUTCOMES

Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

COLLEGE POLICIES AND PROCEDURES

Student Handbook

<https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf>

College Catalog

<https://www.kckcc.edu/academics/catalog/index.html>

College Policies and Statements

<https://www.kckcc.edu/about/policies-statements/index.html>

Accessibility and Accommodations

<https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html>.