## Common Course Outline BIOL 245

### Microbiology for Mortuary Science 3 Semester Hours

# **Community College of Baltimore County**

#### **Description**

**BIOL 245 - Microbiology for Mortuary Science** Introduces basic concepts and techniques of microbiology with special emphasis on the pathogenicity and control of infectious disease as related to the embalmer and the embalming process; emphasizes the danger associated with infectious disease.

3 credits - NOTE: A student cannot receive credit for both BIOL 230 and BIOL 245.

Prerequisite: ACLT 052 or ACLT 053, MATH 081

#### **Overall Course Objectives**

Upon satisfactory completion of this course, the student will be able to:

- 1. Explain basic microbial morphology and physiology.
- 2. Demonstrate an understanding of host-parasite relationships and interactions, and the requirements of successful parasitism.
- Describe and demonstrate knowledge of personal and environmental disinfection and decontamination procedures; by proper use of chemical disinfection and sterilization procedures.
- 4. Describe the fundamentals of the infectious processes and specific and non-specific defense mechanisms against disease.
- 5. Explain the methods of transmission of infectious diseases and describe the control procedure of these diseases with special emphasis on protection to the embalmer, the funeral director and the public.
- 6. Differentiate between the indigenous microorganisms and pathogens and/or opportunists causing disease commonly associated with the human host and dead human remains.

#### **Major Topics**

- 1. Introduction
- 2. Anatomy of Bacteria
- 3. Physiology of bacteria
- 4. Control of Microorganisms
- 5. Microorganisms and disease
- 6. Immunology

- 7. Bacteria
- 8. Mycoplasma pneumoniae
- 9. Rickettsia
- 10. Chlamydia
- 11. Viruses
- 12. Fungi
- 13. Protozoa
- 14. Prion

#### **Course Requirements**

Prerequisites MATH 081

<u>Grading/Exams</u> Grading procedures will be determined by the individual faculty

member and will be based on several unit exams and a comprehensive

final exam.

#### **Other Course Information**

This course is a requirement for an Associate in Applied Science Degree in the Mortuary Science Curriculum, which, in the State of Maryland, is required to sit for the National Board Examination (NBE). The NBE is implemented by the International Conference of Funeral Service Examining Boards. The Mortuary Science Program is statewide designated by the Maryland State Board of Higher Education and is nationally accredited by the American Board of Funeral Service Education.

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