

CUMBERLAND COUNTY COLLEGE

Course: BI 208 Infectious Diseases

Credits: 3

Prerequisites: MA 094 and EN 060

Description:

An introductory course that includes a discussion of the bacteria, parasites, viruses, and other agents causing infectious diseases; the role of the health professional in infectious disease control; a study of incidence, distribution, and control of disease in populations and the emergence and reemergence of infectious diseases.

Learning Outcomes:

Upon successful completion of this course, students will be able to:

- Characterize the functional anatomy of prokaryotes, eukaryotes, viruses and prions.
- Compare and contrast the various treatments devised against microorganisms.
- Characterize the principles of disease and mechanisms of pathogenicity.
- Describe and explain the various components of innate immunity and adaptive immunity.
- Discuss the roles of vaccine and antimicrobial drugs in the prevention of infectious diseases.
- Characterize infectious diseases of the skin and eyes.
- Characterize infectious diseases of the nervous system.
- Characterize infectious diseases of the respiratory system.
- Characterize infectious diseases of the digestive system.
- Characterize infectious diseases of the urinary system.
- Apply epidemiologic methods to the context of infectious disease.
- Use the scientific method of inquiry, through the acquisition of scientific knowledge.
- Use computer systems or other appropriate forms of technology to achieve educational and personal goals.

Topical Outline:

- Identifying the Challenge
- The Microbial World
- Beneficial Aspects of Microbes
- Bacteria
- Viruses and Prions
- Bacterial Genetics
- Concepts of Microbial Disease
- Epidemiology and Cycle of Microbial Disease
- Bacterial Diseases
- Viral and Prion Diseases
- Protozoan, Helminthic, and Fungal Diseases
- The Immune Response

- Control of Microbial Diseases
- Partnerships in the Control of Infectious Diseases

Text:

Krasner, R., & Shors, T. (2014). *The Microbial Challenge* (3rd Ed.). Jones & Bartlett Learning.

Academic Integrity:

Plagiarism is cheating. Plagiarism is presenting in written work, in public speaking, and in oral reports the ideas or exact words of someone else without proper documentation.

Whether the act of plagiarism is deliberate or accidental [ignorance of the proper rules for handling material is no excuse], plagiarism is, indeed, a “criminal” offense.

As such, a plagiarized paper or report automatically receives a grade of **ZERO** and the student may receive a grade of **F** for the semester at the discretion of the instructor.

Tutoring & Project Assist:

If you are having difficulty with work in this class tutoring is available through the Center for Academic & Student Success. If you think that you might have a learning disability, contact Project Assist at 856.691.8600 x 1282 for information on assistance that can be provided to eligible students.

Before Withdrawing From This Course:

If a student experiences adverse circumstances while enrolled in this course and considers withdrawing, s/he should see an advisor (division or advisement center) BEFORE withdrawing from the class. A withdrawal may cause harmful repercussions to completion rate standards and overall GPA, which can limit or eliminate future financial aid in addition to causing academic suspension.