

## Master Syllabus: BIO 107

### 1. Course Information

College: College of Science and Mathematics  
Department: Biological Sciences  
Course Title: Introductory Biology: Disease  
Course Designation and Number: BIO 107  
GE Area(s): Area V – Natural Sciences

Writing Intensive:  Yes  No

For WI Courses:  All sections  Selected Sections are WI.

Method(s) of Instruction:  Lecture  
 Discussion  
 Web-enhanced  
 Web-only  
 Other

Includes Lab:  Yes  No  
Three hours lecture, two hours lab.

Prerequisites: None

### 2. Objectives

#### GE Program Objectives:

Sharpen critical thinking, problem solving and communication skills.  
Learn about the aesthetic, ethical, moral, social, and cultural dimensions of human experience needed for participation in the human community.  
Increase knowledge and understanding of the past, of the world in which we live, and of how both past and present have an impact on the future.

#### GE Area Five Objectives:

Area Five courses emphasize scientific inquiry as a way to discover the natural world, and to explore fundamental issues of science and technology in human society.

#### Course Objectives and GE Learning Outcomes:

Biological principles applied to the study of disease: causes, controls, and natural defense against infection. Topics include microscopy, pathology, antibiotics, immunology, and epidemiology with historical perspectives and an emphasis on investigative techniques.

Understand the experimental basis of scientific inquiry  
Understand the importance of model building for understanding the natural world  
Understand the theoretical, practical, creative and cultural dimensions of scientific inquiry  
Discuss some of the fundamental theories underlying modern science  
Understand the dynamic interaction between society and the scientific enterprise  
Recognize appropriate ethical uses of knowledge in the natural sciences

#### For WI Courses: WAC Objectives

To improve students' writing proficiency – their ability to develop ideas and transmit information for an appropriate audience in an organized, coherent fashion while writing with appropriate style and correct grammar, usage, punctuation and spelling.  
To encourage students to use writing as a learning tool to explore and structure ideas, to articulate thoughts and questions, and to discover what they know and do not know, thereby empowering students to use writing as a tool of discovery, self-discipline, and thought.  
To demonstrate for students the ways in which writing is integral to all disciplines, essential to the learning and conveying of knowledge in all fields.

Two writing assignments totaling approximately 1500 words are submitted. The topics will be related to subjects covered in the course. Any paper receiving an 80% or below must be re-written and re-submitted.

### 3. Suggested Course Materials

Text: Mulvihill, ML, Zelman, M., Holdaway, P., Tompany, E., and Turchany, J. *Human Diseases: a systematic approach*, Prentice Hall, 2001. ISBN 0-8385-3930-0. [Text website](#).  
Lab: *Biology of Diseases Laboratory Manual*

### 4. Suggested Methods of Evaluation

Three tests and the collection of homework and/or quizzes are recommended.  
A cumulative final exam is required.

### 5. Grading Policy

All GE courses are graded A-F.

90-100% A  
80-89% B  
70-79% C  
60-69% D  
<60% F

WI component is graded Pass/Unsatisfactory.

### 6. Suggested Weekly Course Outline Including Typical Assignments

Week	Topic	Reading Assignment All reading in Mulvihill
1	Wellness, Disease, Nutrition	Chapter 1, 6, 20
2	Nutrition, Stress	Chapter 6, 19
3	Infectious disease, Sexually transmitted diseases (STDs),	Chapter 3, 15
4	Food poisoning, the common cold	Chapter 11, 13
5	Life-threatening infectious diseases	Chapter 16
6	Emerging infectious agents: both foreign & domestic Allergies & asthma	Chapter 2
7	Antibiotics & vaccines, Bioterrorism	
8	Diet & cancer, Lung cancer, Breast cancer, Genes and the environment	Review chapter 13, 15
9	Cancers of the reproductive tract, Skin cancer: Anemia	Chapter 18 Chapter 7 pages 101 - 109
10	Hemophilia, heart disease & stroke Depression & Suicide <b>Computer assignment "Cardiology Lab."</b> Select "Cardiology Lab" to begin the exercise.	Chapter 16, Chapter 7 pages 109 - 110, & Chapter 8 pages 120 - 130

### 7. Other

Syllabus distributed to students should employ the format approved by UCAPC and must include:

- Instructor name, office hours, and contact information
- Office of Disability Services information
- Information on how grades will be determined
- Attendance policy