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: X Yes __No
   For WI Courses: ___All sections ___Selected Sections are WI.

   Method(s) of Instruction: _ X Lecture
   _ X Discussion
   _ X Web-enhanced
   ___Web-only
   ___Other

   Includes Lab: _ X 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**


   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**

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Reading Assignment</th>
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<tbody>
<tr>
<td>1</td>
<td>Wellness, Disease, Nutrition</td>
<td>Chapter 1, 6, 20</td>
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<tr>
<td>2</td>
<td>Nutrition, Stress</td>
<td>Chapter 6, 19</td>
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<td>3</td>
<td>Infectious disease, Sexually transmitted diseases (STDs)</td>
<td>Chapter 3, 15</td>
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<td>4</td>
<td>Food poisoning, the common cold</td>
<td>Chapter 11, 13</td>
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<td>5</td>
<td>Life-threatening infectious diseases</td>
<td>Chapter 16</td>
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<td>6</td>
<td>Emerging infectious agents: both foreign &amp; domestic Allergies &amp; asthma</td>
<td>Chapter 2</td>
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<td>7</td>
<td>Antibiotics &amp; vaccines, Bioterrorism</td>
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<td>8</td>
<td>Diet &amp; cancer, Lung cancer, Breast cancer, Genes and the environment</td>
<td>Review chapter 13, 15</td>
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<td>9</td>
<td>Cancers of the reproductive tract, Skin cancer: Anemia</td>
<td>Chapter 18</td>
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<td>Chapter 7 pages 101 - 109</td>
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<td>10</td>
<td>Hemophilia, heart disease &amp; stroke</td>
<td>Chapter 16, Chapter 7 pages 109 - 110, &amp; Chapter 8 pages 120 - 130</td>
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<td>Depression &amp; Suicide</td>
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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