Master Syllabus: BIO 106

1. Course Information
   College: College of Science and Mathematics
   Department: Biological Sciences
   Course Title: Introductory Biology: Biodiversity
   Course Designation and Number: BIO 106
   GE Area(s): Area V – Natural Sciences

   Writing Intensive: _X__Yes  __No

   For WI Courses: ___All sections    _X__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 and processes applied to the origin, interaction, and extinction of species.
   Laboratory and lab topics include paleobiology, speciation, macroevolution, adaptive radiation,
   symbiosis, biogeography, and the scientific management of modern biological resources.

   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:  *Select Materials from Biology: Concepts & Applications 5e*
   Lab:   *Biodiversity 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>LECTURE TOPICS</th>
<th>READING ASSIGNMENT (Chapter)</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Course Introduction &amp; Microevolution</td>
<td>16</td>
</tr>
<tr>
<td>2</td>
<td>Speciation</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>Macroevolution</td>
<td>18</td>
</tr>
<tr>
<td>4</td>
<td>Origin &amp; Evolution of Life</td>
<td>19</td>
</tr>
<tr>
<td>5</td>
<td>Biodiversity</td>
<td>25</td>
</tr>
<tr>
<td>6</td>
<td>Population Ecology</td>
<td>40</td>
</tr>
<tr>
<td>7</td>
<td>Social &amp; Community Interactions</td>
<td>41 &amp; 42</td>
</tr>
<tr>
<td>8</td>
<td>Ecosystems</td>
<td>43</td>
</tr>
<tr>
<td>9</td>
<td>Biosphere</td>
<td>44</td>
</tr>
<tr>
<td>10</td>
<td>Human Impact on the Biosphere</td>
<td>45</td>
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7. **Other**

   Syllabus distributed to students should employ the format approved by UCAP and must include:
   - Instructor name, office hours, and contact information
   - Office of Disability Services information
   - Information on how grades will be determined
   - Attendance policy