<table>
<thead>
<tr>
<th>Course Number</th>
<th>BIOL 203 ECOLOGY AND EVOLUTION</th>
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<tbody>
<tr>
<td>Credit Value</td>
<td>3 Theory</td>
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<td>Catalog Course Description</td>
<td>You will study the principles of evolution on the origin of the biosphere and the diversifications of life; the processes of natural selection and the origin of species, and the evolution of populations; evolutionary ecology with emphasis on behavioral, population, and community ecology, along with the impacts on the ecosystem, ecology, and conservation biology.</td>
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| Student Learning Outcomes/Objectives/Competencies of the Course | 1. Understand the scientific method and apply it to biological topics of genetics, evolution, ecology, and biodiversity.  
2. Apply quantitative reasoning and scientific thinking to real world problems.  
3. Identify and describe the basic principles of evolution.  
4. Analyze the relationships between the genetics of populations and evolution.  
5. Analyze the processes of speciation.  
6. Describe how the hierarchical classification scheme is used to categorize organisms.  
7. Describe how DNA research has modernized bio systematics.  
8. Compare and contrast the general characteristics of each of the living domains and kingdoms.  
9. Relate the structure of organisms to the way they function.  
10. Explain how the life histories of organisms are adapted for different environments.  
11. Relate the complexity of behavior to the overall complexity of an organism.  
12. Describe the ecological roles played by organisms in each kingdom.  
13. Compare basic ecological principles at the population and community levels of organization.  
14. Describe and compare energy relationships and the cycling of materials in ecosystems. |
| College-Wide Student Learning Outcomes | 1. Information Literacy  
*Information Literacy will be assessed by semester project that will involve research of academic literature.* |