BIO 664 Syllabus
Honor Research
Spring 2019

Instructor: Kristen M. Amick  e-mail: amickkm@westminster.edu
Office: HSC 221  Office Hours: T/Th 3:30-5:00pm

Course Description: An experience planned cooperatively between an Honors Scholar, their biology Honors faculty advisor, and their Honors Board. The biology faculty member serves as the primary supervisor for the Honors Scholar's research project. The student is expected to pilot their research and write their honors proposal during this portion of the Honors experience. The research is expected to contribute to some type of novel discovery or understanding within the Honors Scholars selected field of study. Honors status will be assessed and reviewed at various points during the Honors research project by an Honors Committee and select members of the biology department (see below).

Prerequisite: Successful completion of BIO 201, 202, 203, 206, HON 201, and a minimum GPA of 3.500 (total GPA, and GPA of courses in the major) are required to be considered for Honors Research.

Course Objectives: The outcomes of the biology honors research are achieved in students who:

- demonstrate an ability to apply biological concepts and principles learned from Westminster courses in an independent and productive manner;
- utilize observational, investigational, and critical-thinking skills, including the ability to evaluate, interpret, and assess information and data with minimal guidance from the Honors faculty advisor;
- acquire and utilize knowledge and skills that enhance future success within the corresponding field;
- demonstrate initiative, responsibility, and accountability;
- demonstrate a capacity for decision-making;
- communicate their experience by creating a detailed honors proposal

Course Assignments: In accordance with the listed course objectives students must complete the following assignments

- **Capstone Assignments:** The Honors student must attend, participate in, and complete all BIO 601 course assignments, with the exception of assignments that relate directly to the writing of the capstone proposal.
- **Honors Proposal:** Following the guidelines provided by the Honors Program the student will develop and write a proposal describing their research question, background information, methods and potential outcomes.
- **Honors Committee Meeting:** The student is expected to meet at least once during the semester with their Honors committee during which they will provide a formal presentation of their research proposal. Additional meetings with the committee are recommended but not required. Organization of the time and place of these meetings are the responsibility of the student.
- **Laboratory Notebook:** The student is expected to maintain a detailed log of all research performed in the laboratory for their pilot experiments. This log should be created using a composition style notebook.
• **Work Log:** The student is expected to maintain a weekly log of hours spent working on their proposal and in the laboratory. This log should be kept in the back or front of their laboratory notebook.

• **Status Meetings with Honors Advisor:** The student will meet with their Honors Advisor on a weekly or bi-weekly schedule as deemed appropriate. These meetings will be used to update the advisor on research and writing progress in order to troubleshoot and improve student work. The student is expected to come prepared with an organized powerpoint if presenting data or other relevant documentation and materials as appropriate to the topic of the meeting.

**Course Grade:** A grade will be earned for each completed semester of Honors research and will be determined by the Honors Advisor and Honors Board members. Each of the course assignments will contribute to a percentage of the student’s grade. General grading criteria are noted for each assignment.

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<thead>
<tr>
<th>Assignments</th>
<th>Percentage of Grade</th>
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<tbody>
<tr>
<td>Honors Proposal - (Quality of content, writing and research, will include feedback from committee)</td>
<td>50%</td>
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<tr>
<td>Capstone Assignments - (As determined by capstone instructors)</td>
<td>20%</td>
</tr>
<tr>
<td>Honors Committee Meeting - (Preparation, quality of presentation style and content, will include feedback from committee)</td>
<td>10%</td>
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<tr>
<td>Lab Notebook and Work Log - (Completeness and quality, completion of requisite hours)</td>
<td>10%</td>
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<tr>
<td>Status Meetings - (Preparation and effort)</td>
<td>10%</td>
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