BIOLOGY 411: Senior Capstone  
Spring 2016

INSTRUCTOR:  
Dr. Holly Wichman  
Office: IRIC, Rm. 336  
Email: hwichman@uidaho.edu – Use subject line “BIOL 411: specific topic”

OFFICE HOURS:  
Thursday 2:00 – 3:00 or by appointment

PLACE AND TIME:  
Life Sciences South 163  
Tuesday, Thursday  
3:30 – 4:20 pm

COURSE OBJECTIVES:  
This course is offered to biology majors (and others who satisfy the prerequisites) as a "capstone" to your undergraduate studies. You have spent four or more years gaining knowledge of how science works, but have probably spent little time considering how this knowledge can be used to evaluate and address "real world" problems. The primary objective of the course is to provide you with an opportunity to do so. In this course you will critically read, consider, discuss, and write about specific critical issues facing the world today.

The major issues facing society today are complex, and conflicting data are not uncommon. Few of the decisions made by individuals or governments to address these problems are based on purely on scientific criteria. In fact, personal, political, ethical and economic considerations often play a greater role than scientific ones, and various preconceptions and the momentum of past practices may limit the solutions considered. The objectives of the course are to expose students to the complexity of a major issue facing society today, to provide an opportunity to see how the skills you have gained as an undergraduate can be used to inform you about these issues, and to help you decide if and how you will address them.

LEARNING OUTCOMES: Students who successfully complete this course will have improved their skills in:

- Finding scientific information and evaluating its reliability
- Exploring the interface between scientific training and real world issues
- Developing and supporting an opinion based on factual information
- Conveying opinions and information orally and in writing
- Engaging in rigorous and respectful debate

COURSE INFORMATION: Course information such as assignments and readings will be available on BbLearn.

READINGS:  
Assigned reading for this course will come from the primary literature, government publications, and the popular press.
ATTENDANCE and PARTICIPATION:

Attendance is required except when an absence is excused for medical reasons or when authorized by the University. Written confirmation is required for excused absences.

Students are required to complete the assigned reading before the scheduled class period and should be prepared to participate in class discussions.

Participation of students in classroom discussions will be judged by the instructor and will account for 20% of the final grade. Participation will be assessed by both the frequency and the quality of contributions to the discussion. Full credit will require: 1) regular attendance; 2) evidence that you read daily assignments as judged from your ability to answer questions from the assigned reading; 3) frequent and substantive contributions to the discussion; and 4) conduct in class respectful of others.

Class discussions may sometimes become heated because of differences of opinion. This is a good thing because it means we are grappling with important issues, but remember to be respectful. It is ok to disagree with an idea or fact, but do not attack the person presenting the idea. If you are offended by some aspect of the discussion, it is your responsibility to speak up or to notify the instructor.

ACADEMIC HONESTY: Academic honesty is governed by Article II of the University of Idaho’s Student Code of Conduct (http://www.webs.uidaho.edu/fsh/2300.html). Cheating on classroom or outside assignments, including plagiarism or presenting the work of others as your own, is a violation of this code. All incidents of academic dishonesty will be reported to the dean of students. Individuals guilty of academic dishonesty will receive a failing grade for the course.

PROJECTS:

Your major project will be a persuasive speech on an assigned topic. Each student will turn in a written paper summarizing the affirmative and negative arguments for their topic and then give a speech supporting one side. The side you support in your speech will be determined by a coin flip. The paper and speech will constitute 25% of your grade.

There will be other, smaller group and individual projects.

ESSAYS:

You will have three additional written assignments in this class consisting of short essays. Each essay will be turned in at the beginning of class on the due date as printed hard copy and as a text file (.doc or .rtf) uploaded to BbLearn. The time at which an assignment is uploaded to BbLearn will determine if the assignment is ‘on time.’ Late assignments will be penalized by 10% per day. You are responsible for backing up your work to an external site (e.g., Dropbox) or emailing it to yourself. Lost, stolen or broken computers do not constitute a valid excuse for a missing or late assignment.

Format: Detailed formats will be provided for each assignment. Format and page limits should be strictly adhered to in order to attain the maximum available points for the assignment. Grades for these essays will be based on both content and writing mechanics (i.e. spelling, grammar, flow of ideas, etc).

COURSE GRADE:

There will be no examinations in the course.

Grades will be based on the following:

- Class participation: 20%
- Persuasive speech and written arguments: 25%
- Other projects / quizzes: 25%
- Other essays: 30%