Course: SS: Advanced Ecology, Evolution, and Behavior, Biology 4984, CRN 88232 Fall 2014

Time: Tuesday & Thursday 330-445pm

Location: Tuesday: AA7

Thursday: Derring 4069

Professors: Dr. Lisa Belden

Belden Office: 4092C Derring Hall

Belden Phone: 231-2505

Belden Office hours: Wednesday 1030am-1pm, or by appointment

**Email:** belden@vt.edu [please type "EEB" in the subject so I know the message is class related]

## **Course overview:**

This capstone course is intended for junior and senior level students with an interest in ecology, evolution, and behavior (EEB). The course will be centered around the EEB seminar series that is sponsored by the Department of Biological Sciences. For this seminar series, biologists from around the nation are brought to Virginia Tech each week during the semester to present their research. The specific topics range broadly depending on the semester, but all are focused on ecology, evolution or behavior.

# **Course structure:**

## **Tuesdays**

On Tuesdays, we will discuss a scientific article relating to the Thursday seminar. During the article discussion, additional relevant material will be provided so that you have sufficient background information to understand the seminar, and you will provide questions and comments on the article to serve as discussion points (see "participation in class" below).

## **Thursdays**

Each week, you will attend the seminar on Thursday afternoon. You will write a one page, single-spaced summary of the seminar that will be submitted for grading (see "seminar summaries" below).

#### **Course evaluation:**

You will be evaluated in two areas:

(1) Participation in class (max. 121 points, ~37.7% of your grade)

Participation will be a key element of learning in this course, as the course will be largely based on discussions of the seminar content, the scientific literature and in-class writing. You will be expected to read the assigned article each week. You should bring to class one piece of paper that will be submitted for grading, which should contain: (1) three questions relating to the assigned paper, (2) a list of **scientific** concepts and vocabulary from the paper that you looked up, and (3) a citation and brief summary (<10 sentences) of one additional journal article relating to the topic that you read.

Total points possible- 121 points (11 seminar weeks x 11 points each).

Your worksheets for these days are worth 8 points each. Plus you can get an additional 3 points/week if you are an active participant in the discussion and in other in-class activities. You cannot earn the discussion points if you are not in class. There may be weeks (currently August 28<sup>th</sup>, October 9<sup>th</sup> and 23<sup>rd</sup>) when we don't have seminar and will meet in our regular classroom on Thursday. In-class activities on these days will also be worth 3 points and will be considered as "extra credit" days in case

you need to miss a Tuesday seminar discussion. Please note that you cannot earn more than 121 points for participation.

# (2) Seminar summaries (max. 200 points, ~62.3% of your grade)

You must submit summaries for a total of eight of the 11 seminars this semester. For three seminars, you will submit a one-page, single-spaced (1" margins, 12 pt. Times font) summary addressing: (1) the main points of the seminar, (2) where the research fits in the broad scope of biology and (3) your personal thoughts on whether it is an exciting field and whether the seminar was well-organized and interesting. The remaining five summaries will be: (1) a National Geographic type article for interested non-specialists, (2) a newspaper article for the general public, (3) short-fiction, (4) a poem and (5) a piece of art. You MUST submit a summary in each of these formats. The focus of all of these summaries, regardless of format, should be on conveying scientific knowledge. These summaries must be turned in first thing in class on Tuesday, following the Thursday seminar. The summaries will not be accepted late.

Total points possible- 200 points (8 seminars x 25 points each)

Each of these summaries will be worth 25 points (13 points- articulating scientific knowledge well in the appropriate format, 3 points- grammar, 3 points- spelling, 3 points- sentence structure, 3 points- paragraph structure and ease of reading. For the art project, all 25 points will be for articulating scientific knowledge well in the appropriate format).

You have the option to revise and resubmit two of your seminar summaries during the course of the semester. These revisions must be turned in within 7 days of the day they are handed back. Your score will increase a maximum of 5 points following revision, and will not exceed 25 points.

# Grade distribution:

A range  $\geq$ 288 points D range  $\geq$ 192 points

B range  $\geq$ 256 points F <191 points

C range ≥224 points

#### **Course Policies**

Students are expected to abide by the principles of the Virginia Tech Honors System. The Virginia Tech Honor Code can be found at: http://www.honorsystem.vt.edu/. You should consult with the instructor if you are not clear about your responsibilities or expected conduct during any assignment or activity in this course. All assigned work should be completed individually, unless explicitly noted by the instructor.

**Plagiarism will not be tolerated**. All writing must be in your own words- do not "borrow" words from the authors of the papers or from your classmates. If you need more clarification on this, please see me. All cases of plagiarism will be referred to the University Honor Court.

Any student who feels that he or she may need accommodation because of a disability (learning disability, attention deficit disorder, emotional, psychological, physical, etc.), please make an appointment to see Dr. Belden during office hours during the first two weeks of the course.

If you are interested in receiving honors credit for this course, please see Dr. Belden.