

BIO 596 Syllabus (Fall, 2011)

Critical Review of Scientific Literature

Class Dobo225 (M 3:00 to 3:50 PM)
Instructor Dr. Bongkeun Song
Office Center for Marine Science 1338
Tel 962-2326
Email songb@uncw.edu
Course website:
<http://people.uncw.edu/songb/bio596.htm>

Date	Lecture Topics	Speaker
8/29	No class	
9/5	Labor Day	
9/9	Class introduction	Song
9/16	Paper discussion and review	Song
9/19	Student paper discussion	
9/26	Student paper discussion	
10/3	Student paper discussion	
10/10	Fall break	
10/17	Student paper discussion	
10/24	Student paper discussion	
10/31	Student paper discussion	
11/7	Student paper discussion	
11/14	Student paper discussion	
11/21	Student paper discussion	
11/28	Student paper discussion	
12/5	Student paper discussion	

The department of Biology and Marine Biology strongly supports the academic honor code as stated in the student handbook and code of student life and will not tolerate academic dishonesty.

Course description:

This course is designed for graduate students to critique and review primary research articles in the fields of microbial ecology. The class materials will be based on the scientific papers. It is students' obligation to find and bring an appropriate article for class discussion.

Course goal:

By the end of this course, students will

- 1) Be able to competently critique scientific research articles.
- 2) Have the ability to understand experimental design and methods.
- 3) Be able to interpret scientific data and identify the importance of research articles.
- 4) Be able to write a critical review of research articles.

Paper selection:

Each student should discuss with Dr. Song to select research articles for class discussion. Each student should have two articles/papers be prepared to lead two class discussions on assigned dates during the semester. The first article for each student should be selected by the 16th of September.

Sources for articles/papers:

Applied and Environmental Microbiology, Environmental Microbiology, FEMS Microbiology Ecology, Microbial Ecology, Geomicrobiology Journal, Microbiology, Archives of Microbiology, Journal of Bacteriology, Aquatic Microbial Ecology, Research in Microbiology, PNAS, Nature, Science, ISME Journal, etc.

Attendance:

Attendance is mandatory for this class and missing classes will affect grades. If a student has to miss a class, the student should contact Dr. Song prior to the absence. In case of an emergency, students should notify the instructor as to the nature of the emergency. The instructor may excuse absences under appropriate circumstances.

Grades:

The course grades will be based on the reviews (100 points) and discussions of two papers (100 point each), and attendance and participation (100 points). Each student will lead two paper discussions during the class. Each student also needs to submit a written review of the selected article (100 points). The grade will be accounted based on the student's understanding and critique of the selected paper as well as ability to lead class discussion. All students should participate in the discussion, and will be graded based on class participation. Class participation is an important part of this course since each student will be assessed for their capability of evaluating the works of others.

Final letter grades

Paper discussions	= 200 points
Written review	= 100 points
Attendance and class participation	= <u>100 points</u>
Total	= 400 points

The scale used to assign final letter grades will be as follows:

A :	90%-100%
B+:	85%-89.9%
B :	80%-84.9%
C+:	75%-79.9%
C :	70%-74.9%
D+:	65%-69.9%
D :	60%-64.9%
F :	59.9% or below