Advanced Seminar in Molecular Biology & Genetics

Biology 680 – Sec. 001
Spring 2018
UNC-Chapel Hill

Note that seminar courses totaling 3 credit hours may be combined to count for a single 400(+) level course for the Biology major; this course does not satisfy that requirement on its own because it is only 1 credit hour, but it may be combined with another 1- or 2-credit course.

Days and Times
Lectures Tu and/or Th 12:30 – 1:55 PM* 1377 Genome Sciences Building
*We will not meet every Tu/Th, as this is a 1 credit course, but students should keep this timeslot open. See course schedule for details.

Course Director
A. Gregory Matera, Ph.D. (matera@unc.edu)
Office: 3352 Genome Sciences
Office Hrs: by appointment

Course Target: BIOL 680 is a seminar course intended for advanced undergraduate students and graduate. Undergraduates may only enroll with permission of the instructor. Prerequisites are BIOL 202; BIOL 205 is strongly recommended, along with independent research experience.

Course Goals: The primary goal of this course is to develop skills in critically reading and analyzing published research articles. To facilitate this effort, Key Learning Objectives are to develop a deeper understanding of the methods that are currently employed in modern molecular genetics and genomics research. A second goal of the course is to become familiar with some of the literature in these fields.

Course Meetings: This course will meet at 12:30 in 1377 Genome Sciences Building. Certain Tuesday sessions (same time) will be held in G100 Bondurant, where students will attend the Biology seminar series.

Course Structure: The class will involve student-led discussion of the primary literature, guided by faculty. A mini-journal club type-presentation will also be required. We will also attend a subset of the Biology Dept seminars and will focus our in-class discussions on the research methods used by the seminar speakers. The seminars will be chosen during the organizational meeting on the first day of class.
Students will be evaluated on their participation in class and quality of their presentations. Everyone in the class will be expected to participate. This includes explaining figures and tables to the rest of the class, talking about issues raised in the publications, and asking questions.

**Honor Code:** The UNC Honor Code will be in effect in this class. Please read the code ([http://honor.unc.edu/honor/index.html](http://honor.unc.edu/honor/index.html)). Note: Students may read assigned articles together (indeed, this is encouraged).

**Grading** (for undergraduates):

- 40% participation in discussions
- 40% oral presentations
- 20% final exam

Graduate student grades (H/P/L) will be based on participation in discussions and oral presentations.

Presentations will be graded on content, understanding, development of background information and synthesis into current thinking.