

Biology 267: Experimental Cell Biology
Course Outline

Instructor: Harry Itagaki

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<u>Date</u>	<u>Laboratory</u>
8/29	Introduction
9/5	Cell Culture and Immunocytochemistry I
9/12	Cell Culture and Immunocytochemistry II
9/19	Cell membrane potentials and pharmacology I
9/26	Cell membrane potentials and pharmacology II
10/3	Nitric oxide synthase and Western Blots I
10/10	October Break
10/17	Nitric oxide synthase and Western Blots II
10/24	Class Project Planning Meeting
10/31	Class Project - Week I
11/7	Class Project - Week II
11/14	Class Project - Week III
11/21	Class Project - Week IV
11/28	Thanksgiving Break
12/5	Class Project - Week V
12/12	Wrap-Up Day
12/20	Final long written report due, 4:30pm

Biology 267 **Experimental Cell Biology: Course Description**

Instructor: Harry Itagaki, 108 Biology, x 5394

About the Laboratory: This laboratory course is designed to complement the lecture course offered in the same semester. Due to the small number of students enrolled, instead of the traditional lab course, we'll be doing a few two-week lab segments to introduce techniques followed by a group lab project on a topic of your interest. The goals of the semester are to learn some fundamental techniques of cell biology; to ask appropriate questions; to design experiments to test those questions; perform the experiments; and to get good data. Along the way, we will gain more facility in database searches, learn techniques that may be new to you, and get more practice in the oral and written presentation of your work.

Nuts and Bolts: The course requirements include 3 short lab papers, and a long final lab paper to cover all the progress we made during the semester. The lab papers (approx. 5 pages for the short; 15 pages for the final) must be written in the format of a scientific research paper, with an Introduction, Materials and Methods, Results, Discussion, and References using the Biol 109 Style Sheet. The shorter papers will be due a week after the end of the given laboratory segment, and the final paper will be due at the very end of the semester. There will also be short lab worksheets for all of the segments to be handed in the week after the lab segment. There will also be a short oral presentations at a few points during the semester and a final presentation at the end of the semester.

The final grade will depend on the quality of the lab papers, the laboratory notebook, lab worksheets and on the oral presentation and class participation. The weighting of the assignments are as follows:

Short Papers:	3x15%
Long Final Paper	30%
Lab Worksheets	5%
Lab Notebook:	10%
Class participation:	10%

There will be no final exam.

Lateness Penalty: In accordance with the departmental standards, I will assess a penalty of 1/3 grade point per day for late assignments. So, if an "A" paper/assignment is 1 day late, it will become an "A-". Two days late, it will become a "B+."

Attendance: Attendance is expected, and will be recorded. Look at your schedules (esp. athletes!) and let me know if you anticipate conflicts.

Text: The laboratory has no assigned text, but will draw upon materials that are found in the literature. The protocols for each preparation will be handed out before the start of a given segment. It is expected that students will read and be familiar with the protocols in the lab before they start. Over the course of the semester, there also will be assigned original papers that will complement the work being done in the laboratory.

Academic Honesty: Plagiarism and other forms of academic dishonesty **will not be tolerated**. Please make sure that you have read carefully the Academic Honesty Guidelines in the 2013-2014 Course of Study (<http://www.kenyon.edu/directories/offices-services/registrar/course-catalog-2/administrative-matters/academic-honesty-and-questions-of-plagiarism/>). If you have any questions, please see the instructor!

Disabilities: If you have a hidden or visible disability which may require classroom or test accommodations please see me as soon as possible during a scheduled office hour. If you have not already done so, you must register with the Coordinator of Disability Services (Erin Salva, salvae@kenyon.edu, x5145), who is the individual responsible for coordinating accommodations and services for students with disabilities. All information and documentation of disability are strictly confidential. No accommodations will be granted in this course without notification from the Office of Disability Services.