CHM U622: Principles of Chemical Biology for Chemists Laboratory
Fall 2008

Professor: Penny Beuning  Office: 006 Hurtig Hall  Phone: x2865
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Laboratory: Tuesdays, 8:00-11:30 AM  Location: 441 Hurtig
Office Hours: Wednesday 2:30-5:30 PM, other times by appointment
Course credit value: 1 SH
Laboratory U622: Co-registration for the lecture is required for students enrolled in U622.
Textbooks: There is no textbook. Experiments will be described in handouts, which will typically be posted on Blackboard.

Attendance at lab is required. Excused absences must be arranged in advance.
Adherence to all safety regulations in the safety agreement is required.

Useful Dates to Keep in Mind:
Last day to drop without a W grade – Sept 26
Last day to drop with a W grade – Nov 21
Final Exams– begin Dec 12

Grading:
See U621 syllabus for details.
For U621/U622 laboratory will be worth an additional 65 points

It is the Chemistry department's policy that incompletes may only be awarded to students who are seriously ill, passing at the time of illness, and who are unable to complete the coursework remaining at the time of illness. Incompletes can only be granted with an agreement to complete the work for the course signed by both instructor and student before final grades are submitted.

Laboratory Reports:
Laboratory reports should include:
(1) Heading, including: your name, title of experiment, course number and title of course, and the date
(2) Brief introduction that includes background information sufficient for understanding the report without consulting other sources.
(3) Materials and methods section that includes a list of materials and the protocol you used to conduct the work. You may reference the lab handouts, but then should also include a brief summary of the method.
(4) Results section that includes a description of what you observed. Include graphs, tables, photos of results (Petri dishes, gels, etc), sketches, or other representations of data.
(5) Discussion/conclusions that describe what you think your results mean. Why is this interesting and/or important?
(6) References List any sources you used (with appropriate in-text citation) in any standard ACS journal format.

All laboratory reports must include page numbers.
Academic Honesty:
Northeastern University is committed to the principles of intellectual honesty and integrity. All members of the Northeastern community are expected to maintain complete honesty in all academic work, presenting only that which is their own work in tests and assignments. Academic dishonesty is outlined at http://www.neu.edu/osccr/academichonesty.html and in the Undergraduate Student Handbook.

Students with Disabilities:
Students needing accommodations must register with the Disability Resource Center and open a file. The Disability Resource Center is located at 20 Dodge Hall, 617-373-2675.

Tentative Laboratory Schedule (no lab on Nov 11 or Nov 25):

September 16  Lab introduction

September 23  Lab 1: Pipetting and sterile technique, phenotypic screening

September 30  Lab 2: Protein quantification

October 7    Lab 3: Bioinformatics, modeling
             Lab 1 report due (10 pts)

October 14   Lab 4: Protein chemistry: labeling and Lab 3: Site-directed mutagenesis: PCR
             Lab 2 report due (10 pts)

October 21   Lab 3: Site-directed mutagenesis: DpnI digestion and bacterial transformation
             Lab 4 report due (10 pts)

October 28   Lab 3: Site-directed mutagenesis: plasmid purification and restriction digestion

November 4   Lab 3: Agarose gel electrophoresis

November 18  Lab 5: Enzyme kinetics

December 2   wrap-up and check-out
             Lab 3 report due (25 pts)

December 9   no lab
             Lab 5 report (10 pts) due