CHEM 183L
Chemistry and Biochemistry Major Research Rotation
Fall Semester 2018
Fridays, 2-5pm

Pre-requisites: Chem 111/Chem 112; Chemistry or Biochemistry major

Course Coordinator: Dr. Marcello Forconi
SSMB 302, 953-3616, forconim@cofc.edu
Office Hours: T 10-11 am; W 1-2 pm; R 2-3 pm; or by appointment

The location of the course changes weekly. All labs are in SSMB. Meet the faculty member outside of their lab.

Research Faculty for this rotation:
Dr. Stephanie Boussert  boussertsm@cofc.edu  Lab = SSMB 319
Dr. Marcello Forconi  forconim@cofc.edu  Lab= SSMB 307
Dr. Michael Giuliano  giulianomw@cofc.edu  Lab = SSMB 334
Dr. Kristin Krantzman  krantzmank@cofc.edu  Lab = SSMB 325
Dr. Kate Mullough  mullahgkm@cofc.edu  Lab = SSMB 345
Dr. Neal Tonks  tonksn@cofc.edu  Lab = SSMB 343

Learning Outcomes:
Students will:
• Compare and contrast techniques used in chemistry and biology research at the College of Charleston
• Participate in framing research questions
• Collaborate in collecting data relevant to framed research questions
• Describe “big picture” of research projects in participating labs

Format of the Course:
Every two weeks, your section will rotate to a different Chemistry faculty member’s lab to learn about the research problems being addressed in that lab and to get exposure to the types of techniques used to address the problems.

Attendance:
Attendance is critical in this course. Each of the 11 research sessions is worth 4% of your grade. Absence due to illness or other emergency can be excused at the discretion of the instructor in that session. Documentation of the illness will be required. A student who misses a three lab periods will receive a grade of WA.

Lab Notebook:
Please bring a bound lab notebook to class each week to record your notes and data taken during the sessions. At the end of the term, lab notebooks will be collected and evaluated for organization, completeness and proper record keeping.

Grading:
At the conclusion of the semester, your grade will be calculated according to the following formula:
**Participation:** The learning in this course comes from the process of doing, rather than from passive reading or lecturing. You are expected to participate in each session by carrying out assigned lab tasks related to the research project. Each session is worth 4% of your grade, for a total of 44%.

**Summary Paragraphs:** You are responsible for writing a well-written paragraph that summarizes in your own words the focus of research in each faculty member’s lab. You will turn these in on a drop box on Oaks. Each paragraph is worth 1% of your grade, for a total of 6%.

**Lab Notebook:** Each student will keep a bound laboratory notebook of their notes and data that will be evaluated for proper lab notebook technique. The lab notebook is 5% of your grade.

**Lab Assignments:** After each two-week session, each faculty member will design an assignment that reinforces the techniques and topic of the research conducted. The instructor for that session will grade this assignment. Be sure to take careful note of due dates and instructions for each assignment. Each module’s assignment is 5% for each module of your grade (total 30%)

**Final Exam:** The final exam in the course will count as 15% of your final grade.

**Final Exam:**
The final exam is Friday, November 30 during the normal class period. It will be a multiple choice, open notebook test with questions drawn from each of your rotations.

| Safety     | August 24 | Lab 1          | August 31  
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<td>October 5</td>
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**College of Charleston Honor Code and Academic Integrity**
Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each incident will be examined to determine the degree of deception involved.
Incidents where the instructor determines the student’s actions are related more to a misunderstanding will be handled by the instructor. A written intervention designed to help prevent the student from repeating the error will be given to the student. The intervention, submitted by form and signed both by the instructor and the student, will be forwarded to the Dean of Students and placed in the student’s file.

Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XXF in the course, indicating failure of the course due to academic dishonesty. This grade will appear on the student’s transcript for two years after which the student may petition for the XX to be expunged. The F is permanent. The student may also be placed on disciplinary probation, suspended (temporary removal) or expelled (permanent removal) from the College by the Honor Board.

Students should be aware that unauthorized collaboration—working together without permission—is a form of cheating. Unless the instructor specifies that students can work together on an assignment, quiz and/or test, no collaboration during the completion of the assignment is permitted. Other forms of cheating include possessing or using an unauthorized study aid (which could include accessing information via a cell phone or computer), copying from others’ exams, fabricating data, and giving unauthorized assistance.

Research conducted and/or papers written for other classes cannot be used in whole or in part for any assignment in this class without obtaining prior permission from the instructor.

Students can find the complete Honor Code and all related processes in the Student Handbook at http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php.

Disability Accommodation

1. Any student eligible for and needing accommodations because of a disability is requested to speak with the professor during the first two weeks of class or as soon as the student has been approved for services so that reasonable accommodations can be arranged.

2. The College will make reasonable accommodations for persons with documented disabilities. Students should apply for services at the Center for Disability Services/SNAP located on the first floor of the Lightsey Center, Suite 104. Students approved for accommodations are responsible for notifying me as soon as possible and for contacting me one week before accommodation is needed.

3. This College abides by Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act. If you have a documented disability
that may have some impact on your work in this class and for which you may require accommodations, please see an administrator at the Center of Disability Services/SNAP, (843) 953-1431) or me so that such accommodation may be arranged