Senior Seminar Syllabus
Chem 492
Spring 2019

Instructor: Dr. Riggs-Gelasco
Class Time: Section 1: Tuesday, 5:10-6:10pm, SSMB 327
           Section 2: Wednesday, 4:00-5:00pm, SSMB 327
           Section 3: Arranged, SSMB 324
Office: New Science Center, room 324 (Chemistry Main Office)
Phone: 953-7455
e-mail: gelascop@cofc.edu
Office Hours: Monday 10:30-11:30
              Tuesday 4:00-5:00
              Wednesday 3:00-4:00

492 Senior Seminar (1)
A weekly seminar to be taken during the calendar year in which a student is to graduate. Oral and written projects will be required as well as an exit examination. Seminar, one hour per week. Prerequisite: CHEM 341 and senior status. This course is required for the BA or BS in Chemistry and the BS in Biochemistry.

Pre-requisite/Co-requisite: Senior Status in your last full year at the College. You should be planning to graduate in the 2019 calendar year. You should not take this class “early”.

Text: There is no required text for this course.

Learning Outcomes
1. To illustrate how scientific knowledge is constructed by exploring the chemical literature.
2. To develop oral presentation skills.
3. To apply written communication skills to chemical topics.
4. To reflect about the contributions of chemists to society.
5. To assess your learning at the end of the college career.

<table>
<thead>
<tr>
<th>Grading Scheme</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Attendance/Deportment</td>
<td>5%</td>
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<tr>
<td>Written Projects</td>
<td>24%</td>
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<tr>
<td>Oral Projects</td>
<td>16%</td>
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<tr>
<td>Major Field Test</td>
<td>25%</td>
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<tr>
<td>Minor miscellaneous assignments</td>
<td>20%</td>
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<tr>
<td>Senior Survey</td>
<td>10%</td>
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Participation: Your participation is an important part of the course. Therefore, you are expected to attend each class period. Make every effort to attend every class and to be on time. An excused absence may be granted for planned events such as college-related events (presentations at professional meetings) or interviews for graduate or professional schools. These must be requested at least one week prior to the absence. Excuses for emergency absences must be requested within 48 hours of the missed class and will be granted only for severe medical or family emergencies. Upon the fourth absence (excused or unexcused) you will receive the grade of "WA", which is equivalent to an "F", being awarded. Each unexcused absence will result in lowering your attendance/deportment grade.

Written Work: Several written projects are required. They must be typed, double-spaced. Failure to submit written papers will result in the grade of Incomplete for the course.

Paper 1 (8%): Construction of an introduction to a topic to be announced that builds to the statement of the hypothesis using primary literature. Details will be provided.
Paper 2 (8%): Construction of results/discussion section of a scientific paper. Details will be provided.

Paper 3 (8%): Exploration of scientific claims in the popular media. Details will be provided.

**Other Minor Assignments (20%):** These include:
- Response paper to Naturally Obsessed
- Sentence fixes
- Article analysis
- Reference submission
- Self-reflection on oral presentations
- CV/resume
- Peer reviews of oral presentations
- Career session with the chair

**Oral Presentations (16%):** Each student will give two oral presentations. The ability to speak in front of a crowd and to give a coherent presentation is a vital skill for a scientist, regardless of your career choice. Failure to present your oral projects will result in the grade of Incomplete for the course. As part of your Peer Review Score, each student who is not presenting on a given day, will turn in critiques for each student who does present. Each student who is presenting must send PRG a copy of their Powerpoint file at least 2 hours prior to class.

**Presentation 1:** A 10-minute presentation that summarizes a research article of your choice. The presentation must include placing the research in context and it must describe several of the figures and the significance of those figures to the author’s conclusions. Your job is to convince the audience that this is the most important work being done in science. Your talk should recreate the argument in the paper. The focus of this assignment is to pay attention to how scientific arguments are made and to become more comfortable making one.

**Presentation 2:** A 10-minute presentation on a primary research article written by a Nobel laureate. The talk should place the work in context of the Nobel laureate’s achievements. Your classmates will again assist in evaluating your performance. Based on your feedback from your first talk, I want to notice an improvement in your delivery for the second talk. The purpose of this assignment is to familiarize yourself with Nobel winning scientific work while working to advance your level of public speaking.

**Major Field Test (25%):** The Major Field Test will be administered as part of your grade in the course. The Major Field test is a standardized test prepared by the Educational Testing Service. This will be taken online during one of several opportunities that will be announced. The test takes 2 hours. Failure to take the Major Field Test will result in the grade of Incomplete for the course. We will take the test in late March and signup times outside the normal class period will be available.

**Final Exam:** The MFT serves as your final exam.

**Senior Survey:** Each student must complete a senior survey. Failure to complete the senior survey will result in a grade of incomplete for the course.

**Grading Scale**

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<tr>
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<tbody>
<tr>
<td>92-100</td>
<td>A</td>
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<tr>
<td>90-92</td>
<td>A-</td>
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<tr>
<td>85-90</td>
<td>B+</td>
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<tr>
<td>80-85</td>
<td>B</td>
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<td>C+</td>
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<tr>
<td>72-76</td>
<td>C</td>
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<tr>
<td>70-72</td>
<td>D</td>
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<tr>
<td>Below 70</td>
<td>F</td>
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**Academic Integrity:** Students are expected to abide by the College of Charleston’s Honor Code and are referred to the Student Handbook to review this policy: [http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php](http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php).

The following description of cheating is from the student handbook:

“The actual giving or receiving of unauthorized, dishonest assistance that might give one student an unfair advantage over another in the performance of any assigned, graded academic work, inside or outside of the classroom, and by any means whatsoever, including but not limited to fraud, duress, deception, theft, talking, making signs, gestures, copying, electronic messaging, photography, unauthorized reuse of previously graded work, and unauthorized use or possession of study aids, memoranda, books, data, or other information. The term cheating includes engaging in any behavior specifically prohibited by a faculty member in the course syllabus or class discussion.”

For this course, entering formulas into a calculator to be used during an exam will be considered as an act of premeditated cheating.

Students that cheat and are then prosecuted through the Honor Board receive a grade of XF. This does not look good to all future employers and graduate programs. It is infinitely better to get an F than an XF.

**Disabilities:** If there is a student in this class who has a documented disability and has been approved to receive accommodations through SNAP Services, please feel free to come and discuss this with me. If you have been approved for additional testing time, that will need to be arranged in advance with the testing center and you must take the exam at the testing center.