BIOL 385: Senior Seminar in Biochemistry  
Spring 2018, Wed 10:30am-11:20am ISC 137

Instructor  
Travis Bailey  
Office: ISC 350  
Phone: 585-245-5437  
email: baileyt@geneseo.edu  
Office hours: Mon 10:30-11:30 am, Mon 1:45-2:45 pm, Wed 4:00-5:00 pm, or by appointment

Course Description  
(1 credit)  
Discussion of current literature, recent advances, perspectives, or selected topics in Biochemistry.  
Prerequisites: senior standing in Biology, Chemistry, or Biochemistry and CHEM 302 and CHEM 304.

Course Objectives  
By the end of this course you will be able to:  
(1) Find, understand, and analyze scientific literature from respectable sources, with an emphasis on current topics in biochemistry.

(2) Understand and interpret data from scientific articles, and explain how it relates to the main hypothesis of the article.

(3) Evaluate the strengths and weaknesses of a scientific article.

(4) Be able to communicate an original, written analysis of articles from the primary literature.

(5) Respond to feedback from reviewers of your work.

(6) Analyze and give thoughtful, constructive criticism to your peers.

Grading  
<table>
<thead>
<tr>
<th>Assignment</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly Participation</td>
<td>14 pts</td>
</tr>
<tr>
<td>Assignment 1 (article discussion questions)</td>
<td>6 pts</td>
</tr>
<tr>
<td>Assignment 2 (find three articles related to topic)</td>
<td>5 pts</td>
</tr>
<tr>
<td>Assignment 3 (proposal of paper topic)</td>
<td>5 pts</td>
</tr>
<tr>
<td>Assignment 4 (group article discussion)</td>
<td>10 pts</td>
</tr>
<tr>
<td>Assignment 5 (draft 1 of paper due, for peer review)</td>
<td>10 pts</td>
</tr>
<tr>
<td>Assignment 6 (peer review of term paper draft)</td>
<td>10 pts</td>
</tr>
<tr>
<td>Assignment 7 (presentation on topic)</td>
<td>20 pts</td>
</tr>
<tr>
<td>Assignment 8 (final version of paper)</td>
<td>20 pts</td>
</tr>
</tbody>
</table>

The following scale will be used to calculate final grades. Student point totals or grading scheme may be adjusted to reflect course difficulty at the instructor's discretion.  

A  (93-100%)  
A-  (90-92%)  
B+  (87-89%)  
B  (83-86%)  
B-  (80-82%)  
C+  (77-79%)  
C  (73-76%)  
C-  (70-72%)  
D  (60-69%)  
E  (<60%)

- Grade disputes must be initiated within one week from when the assignment was returned.
Attendance and Participation
Attendance for this class is mandatory. Missing class without permission of the instructor will result in a 2 pt deduction from your participation grade for each absence. For approved absences, students must make arrangements with the instructor to make up any missed assignments.

Participation makes up a significant portion of your grade. A seminar style class such as this one simply does not work well, and frankly is not any fun, if students don’t participate. The purpose of this course is not for me to lecture at you every week. Each week you can earn 1 pt for participation by speaking during class – it is expected that you ask a question, answer a question, or speak up during a discussion at least once during class every week (hopefully more!). I will be keeping track of participation, and will provide you with feedback midway through the semester on what your current participation grade is.

Turning in Assignments
Recent software updates at Geneseo allow for the upload of assignments that are due to Canvas. Assignments MUST be uploaded by the beginning of class, or you will not receive credit for the assignment. Since it is a digital upload you shouldn’t need to worry about not bringing it to class.

Students with Disabilities
SUNY Geneseo will make reasonable accommodations for persons with documented physical, emotional, or cognitive disabilities. Accommodations will be made for medical conditions related to pregnancy or parenting. Students should contact Dean Buggie-Hunt in the Office of Disability Services (tbuggieh@geneseo.edu or 585-245-5112) and their faculty (Dr. Bailey) to discuss needed accommodations as early as possible in the semester.

Academic Dishonesty & Plagiarism
Students are expected to adhere to the University’s policy on academic dishonesty and plagiarism, located in the student handbook. Academic dishonesty and plagiarism have serious consequences, and if you’re struggling in class, please ask for help rather than resort to academic dishonesty! Academic dishonesty will result in a zero on the assignment or exam. In addition, a report will be filed to the department chair and Dean of the College, and a record of academic dishonesty will be placed in the student’s file at the Dean of Students Office.

Tentative Schedule of Topics (subject to change at instructor’s discretion):

Jan 18  Topics:
Introduction, description of course assignments and requirements
Discussion about journals, the types of scientific articles, and how to find them
Form groups and choose paper discussion dates

Assignments for next week:
• Assignment 1: Read Paper #1 (by Wolfe-Simon et al.) and answer discussion questions. Upload answers to Canvas
• Begin to think about paper / presentation topic
• Begin to think about optimal date for individual presentation (see available dates on the syllabus)
Jan 24    Topics:
Assignment 1 due.
Discussion of paper by Wolfe-Simon, et al.
Selection of speaker dates for individual presentations

Assignments for next week:
• Read paper by Weissgerber, et al and answer discussion questions
• Assignment 2: Find at least three articles relating to your potential paper / presentation topic and write up citations for them.

Jan 31    Topics:
Assignment 2 due. Submit to Canvas
Discuss paper by by Weissgerber, et al.
For next week: science in the news, we’ll choose the topic as a class

Assignments for next week:
• Read news article and the scientific paper that the article covered
• Assignment 3: Choose a topic for your paper / presentation

Feb 7    Topics
Assignment 3 due. (paper topic).
Discussion of science in the news.

Assignments for next week:
Group 1 Assignment 4 – email me copy of paper you chose and discussion questions by Friday, Feb 9th

Feb 14    Topics
Group 1 – Assignment 4 (paper presentation and discussion questions)
Assignment 5 due - turn in draft of paper to Canvas, for peer review

Assignments for next week:
Group 2 Assignment 4 – email me copy of paper you chose and discussion questions by Friday, Feb 16th.

Feb 21    Topics
Group 2 – paper presentation and discussion questions

Assignments for next week:
Group 3 Assignment 4 – email me copy of paper you chose and discussion questions by Friday, Feb 23rd.
Feb 28  Topics  
Group 3 – paper presentation and discussion questions

Assignments for next week:  
Assignment 6 - comments back to peers on draft

Feb 28  Topics  
Group 3 – paper presentation and discussion questions

Assignments for next week:  
Assignment 6 - comments back to peers on draft

Mar 07  Topics  
Discussion: What makes a good presentation?  
Assignment 6 due: turn in comments/peer review on draft 1.

Assignments for next time  
The first draft of presentation will be Mar 28th. Work on your slides and the flow of your narrative. Be ready to share your draft.

Mar 14  Spring Break, no class

Mar 21  
Workshop and peer review, bring your current version of your slides to show to another student. View their slides. Give and take feedback

Assignments for next week  
First student presents next week Assignment 7.

Mar 28  Assignment 7 begins: (Student presentations) #1  
(Optional) Assignment 8 2nd draft submitted for random peer review:

Apr 04  Student presentation #2

Apr 11  Student presentation #3

Apr 18  Student presentation #4

Apr 25  Student presentation #5  
Assignment 8 final version due

May 5* (8-10:30 am)  Student presentation #6