BCS 310/311: Senior Seminar, Spring 2026
Mon/Wed 9-10:15 AM (Meliora 224)

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Course Description & Objectives

This course is required for all senior BCS majors. The main purpose of the course is to provide students with experience in reading, evaluating, presenting, and discussing primary research in BCS. You will be expected to do the following:

1. **Read**: You will choose a topic of interest, gain familiarity with the literature on that topic, and select <u>1 classic research article</u> on that topic and <u>1 recent research article</u> that has cited the classic article.

2. **Present:** You will give a presentation on your chosen articles. The purpose of this assignment is: (1) to consider where the relevant field began and where it is now; (2) to present the materials in a way that highlights why the work you've chosen is of interest to cognitive scientists (and yourself); and (3) to learn how to give an academic presentation.

3. **Discuss:** Following your presentation, you will guide a seminar-style class discussion focused on your papers and your topic. The class will have read your articles and will participate in the discussion.

4. **Review:** Before your presentation, you will submit a written evaluation of <u>ONE</u> of your two articles, as though you were providing a formal peer review for a journal.

5. **Review-the-Review:** The instructor and one other student will provide written comments on your review.

6. **Rewrite your Review:** Upon receiving review feedback, you will rewrite your review to incorporate the comments.

7. **Participate:** When you are not presenting, you are expected to be an active participant by reading other students' chosen articles, thinking critically about them, and contributing to class discussion. In addition, before each class discussion, <u>everyone other than the presenter must post at least ONE discussion question about one or both of the assigned articles on Slack</u>. Before coming to class on discussion day, make sure to read the posted questions and think about some answers. You are expected to contribute to the discussion.

Course Requirements

Each student will work individually on items 1-6 below. During the first couple of weeks of the course, each student will be assigned to a specific date on which their presentation and class discussion will take place (see Schedule at the end of this document). All documents described below can be found in the "Learning Modules → Course Basics" folder on Blackboard.

1. *Read*: Guidelines for choosing your TWO ARTICLES (one classic and one recent) are posted to Blackboard in the document "Articles: How to Find Them". Within the first few weeks of class, you must **obtain approval from the instructor** concerning your articles to ensure that they are (a) in the field, (b) substantial and in a "good" journal, and (c) comprised of one "classic" that has stood the test of time and one recent "hot topic" article that has generated recent interest. Paper selection is first-come, first-served, so please do not wait until the last moment to select your papers! PDF copies of classic papers will be posted on Blackboard in "Learning Modules → Journal Articles → Classic Articles to Choose From".

2. *Present*: Your presentation should last ~ **30 mins** and ideally make use of slides (Powerpoint, Keynote, Google Slides, etc.) See the section "Presentation" in the Review-Present-Discuss document on Blackboard for more info.

3. *Discuss*: The class discussion immediately following your presentation should last ~ **45 mins**. You will be responsible for guiding the flow of the discussion and for prompting participation from other students by providing discussion points. See the section "Discussion" in the Review-Present-Discuss on Blackboard for more info.

4. *Review*: Pick ONE of your two articles to review (either classic or recent). Guidelines for writing the review can be found in the section "Review: How to Write and Review It" in the Review-Present-Discuss document on Blackboard. **Your review is due BEFORE your presentation** (Mon or Wed at 9 AM). **E-mail the review to the instructor**.

5. *Review-the-Review*: At some point during the semester, you will be sent one other student's review to review. Within **one week** of receiving it, **e-mail your review-of-the-review to the instructor** (*not* to the student writer). It will then

be forwarded back to the original writer. More details on how to do this can be found in the section "Review: How to Write and Review It" in the Review-Present-Discuss document on Bb.

6. **Rewrite the Review:** Within **one week** of receiving the instructor's feedback and the other student's review-of-the-review, **rewrite your review**. Your rewrite will be assessed based on how thoroughly you addressed the comments of the instructor and student reviewer. E-mail this to the instructor.

7. **Participate:** Participate actively in class discussions, even when you are not the presenter. You are expected to have read the papers in advance, and you should be prepared to **raise questions, comments or concerns regarding the papers being discussed**. Although you may feel that you have little to say about any given paper, if you ask yourself why you have nothing to say, you might discover questions or opinions that you didn't know you had. You are expected to bring a copy of the paper being discussed to class (or view an electronic version on a laptop). Presenters should expect everyone in the audience to be able to look at tables or figures in the paper, in addition to theirs being projected on screen.

The evening before each presentation day (**Sun/Tues by 5 PM**), you are required to post at **least ONE discussion question** or clarification question to Slack. Please see the section "Discussion" in the Review-Present-Discuss document on Blackboard for more information. Make sure to read others' posted questions and think about some answers.

Your participation will be determined by your preparedness (i.e., ability to ask and answer questions and provide comments about the articles), your Slack discussion question posts, your review-of-the-review, and your attendance. **If you find yourself unable to voice your opinions during class, you should email me your thoughts on a particular topic before the end of the day in order to earn participation points**.

Evaluation

1. Presentation/leading the class discussion of your article: **30%** (i.e., 30 points). See the sections "Presentation" and "Discussion" in the Review-Present-Discuss document on Bb for more info.
2. Written review of your article: **20%**
3. Revision of the written review of your article: **10%**
4. Participation: **40%**. Since this is a "seminar" class, it is run in the style of a journal club, and participation is the most crucial component. The goal of this class is to analyze and think critically about some classic and hot topics in the field. Even if you don't plan on continuing in the field of cognitive science, this class utilizes skills that are important for every productive member of society: critical thinking, analyzing arguments, talking coherently about your ideas on a topic, and presenting your thoughts logically in writing. Your participation grade is based on 3 major components, each of which demonstrates that you thought critically about the articles and the reviews written by your peers:
   - up to **10** points can be earned for the required Slack discussion posts across the semester. Late posts don't count.
   - up to **10** points can be earned for your review-of-the-review.
   - up to **20** points can be earned for "in-class" participation. Here, I will count any substantive participation during class, e-mail discussions, after-class discussions, or any other interaction regarding the course material.

   Please keep in mind that just showing up is NOT enough to earn participation credit, and not showing up (or showing up late) results in losing points. Details of what counts as "participation" will be covered during the first day of class, and are also included in the Review-Present-Discuss document on Bb.

Late policy: Due to the nature of the course, late assignments will be heavily penalized. Failure to do your presentation on the scheduled day without an excuse will lead to you receiving a zero for the assignment. Turning in written assignments late will result in a 25% grade reduction per 24-hour period after the assignment is due.

Attendance is required for this class. If you know that you cannot make it to class or if you become ill, let the instructor know BEFORE class and, if appropriate, to arrange a makeup assignment. Additionally, it is disruptive to class if you come late. For each time you are more than 5 minutes late, you will lose 1 point from your participation grade. If you miss class entirely without a medical or university excuse, you will lose 5 points from your participation grade.

Academic Honesty: You are expected to uphold the highest standards of academic honesty. Don't cheat; don't plagiarize; don't expect others to do your work for you. Cases of suspected misconduct will be immediately referred to the College Board on Academic Honesty. The University of Rochester's policy on academic honesty is described in detail at: http://www.rochester.edu/College/honesty/. See the "Generative AI Policy" document on Bb for guidelines regarding AI.

For BCS 311

For BCS 311, you will adhere to all requirements listed for BCS 310 (above). However, the following will be different:

1. Your presentation and review must be related to the work of your honors thesis. You will pick a classic paper related to your research. You do not need to pick a recent research article (your undergraduate research serves that purpose). I will need to approve your choice of a classic article.

2. You will review the classic article (as described above).

3. Although your research may not be completed when you give your presentation, you should still follow the format for presentations given for BCS 310. You will be able to give a good background and methodology for your work. If you do not have any results, you should give your presentation with predicted results and discuss the possible pitfalls that may lead to alternative results. You should also discuss the relevance of your work and possible future studies.

Schedule

(Order of classes/topics may be subject to (minor) change. Cells marked with * will be updated with article readings as students choose them)

Date	Topic(s)	Readings
Jan 21	Lecture/discussion: Course overview + expectations	
Jan 23	Lecture/discussion: Giving an effective presentation	
Jan 26	Lecture/discussion: Research ethics + AI in cognitive science	
Jan 28	Lecture/discussion: "Replication crisis" and solutions; real-world applications of BCS	*
Feb 2	**BCS310-01**: Presentation + discussion (Student Group 1)	*
Feb 4	**BCS310-02**: Presentation + discussion (Student Group 2)	*
Feb 9	**No class** (Dr. Piazza away giving a talk)	
Feb 11	**No class** (Dr. Piazza away giving a talk)	
Feb 16	**BCS310-03**: Presentation + discussion (Student Group 3)	
Feb 18	**BCS310-04**: Presentation + discussion (Student Group 4)	
Feb 23	**BCS310-05**: Presentation + discussion (Student Group 5)	
Feb 25	No class (Dr. Piazza away giving a talk)	
March 2	**BCS310-06**: Presentation + discussion (Student Group 6)	
March 4	**BCS310-07**: Presentation + discussion (Student Group 7)	
March 9	**No class** (spring break)	
March 11	**No class** (spring break)	
March 16	…	
March 18		
March 23	**BCS311-01**: Presentation + discussion (Student names)	
March 25		
March 30		
April 1		
April 6		

April 8		
April 13		
April 15		
April 20		
April 22		
April 27		
April 29	Wrap-up	