

Spring 2023
RUTGERS UNIVERSITY
Ryan Rhodes
Online @ Canvas

UNDERGRADUATE SEMINAR IN COGNITIVE SCIENCE

01:185:411

Class: Tuesday and Thursday 3:50-5:10pm, TIL-257 (LIV)

Recitation 01: Wednesday 5:55-6:50pm, BE-013 (LIV)

Recitation 02: Wednesday 2:15-3:10pm, TIL-242 (LIV)

Recitation 03: Wednesday 12:25-1:20pm, TIL-103D (LIV)

Recitation 04: Wednesday 10:35-11:30am, TIL-103D (LIV)

Recitation 05: Wednesday 8:45-9:40am, TIL-103D (LIV)

Format: In-Person

Faculty Organizer: Ryan Rhodes

Email: ryan.rhodes@rutgers.edu

Office Hours: TBD; Psych A111

Section Instructor: Shannon Bryant

Email: sgb103@ruccs.rutgers.edu

Office Hours: TBD; Psych A106

Course Site: Canvas

Course Materials

This course has no textbook. We will be reading scientific articles published in peer-reviewed journals, which will be available on canvas.

All relevant materials can be found on the course canvas site (see above).

Course Description

This course is a capstone course for the cognitive science major. To capture the interdisciplinary nature of this field, we will address a range of topics and research programs from a variety of disciplines, including philosophy, computer science, cognitive psychology, behavioral economics, and linguistics.

Each module features a new speaker from the Center for Cognitive Science. The last page of the syllabus provides a schedule.

The goals of this course are to introduce you to the foundations of Cognitive Science, help you appreciate the development of this field over the years, and allow you to explore the investigations and lively debates that have taken place within and across the disciplines that make up the field.

The pre-requisite is 185:201 or a permission number. This course counts for 4 credits.

Course Learning Outcomes

Upon successful completion of the course, students will:

- learn in more detail what Cognitive Science is as a discipline.
- be able to critically review a research article and use this skill to keep up with current information and to read critically other material as well.
- become familiar with Rutgers faculty and their research, and to use that as a foundation for doing undergraduate research and/or an individualized major.
- learn to extrapolate from and expand upon information learned in the class in order to apply it to other areas in Cognitive Science and science in general.
- be able to read and discuss research papers from multiple disciplines.

Required Readings

There is no textbook for this course. The required readings will be posted in the Resources Section on the Canvas website for this course by the date and speaker. You will receive an email from Canvas once the readings are posted. Please be sure to check your email! Most listed readings will be articles by the faculty who will give the lecture for a given date. You are required to read the paper(s) before class and then re-read it after the lecture in time for recitation on Thursday of the same week. You will receive a set of Discussion Questions based on the readings for each lecture that will be used for discussion during recitation. Please come to recitation prepared to discuss these questions.

Assignments

There will be a total of 1000 points possible in this course.

- **Weekly Responses (40%):**

Each week there will be a prompt related to the topic that week. You will write a short response—a few paragraphs or about a page—addressing the prompt from you learned from the readings and guest lecture.

These will be due the Sunday after that topic is introduced.

There will be 12 responses assigned, but you are only required to complete 6. If you complete more than 6, we will count the best 6 towards your grade. If you complete all 12, you will get 2% extra credit to your final grade.

Note: When you respond to questions based on the readings, do not copy and paste sentences from the readings themselves. This is plagiarism! Also, when you paraphrase, you **MUST** do more than substitute one or two words from the original text. If you do not this is still plagiarism. Practice conveying the information in your own words in these assignments. Points will be deducted for plagiarism and poor paraphrasing. Please do not quote directly from the text—we want to hear your thoughts!

- **Group Presentations (20%):**

Each week, we will hear a guest lecture on Tuesday. On Thursday, two groups of students will present a published research paper selected by our guest lecturer. It will be your job to guide the rest of the class through the selected paper, giving us an overview of the following:

- Research question
- Background necessary to understand the paper
- Experiment or argument presented to answer the research question
- Findings or conclusion

There will be two presentations each Thursday by two groups of students. Each presentation must be no longer than 25 minutes to allow time for questions and class discussion.

Your job will be to ensure the class understands this paper and to lead a class discussion. This is a group assignment, so you will present as a group, and every member of the group is expected to contribute to the presentation and discussion.

- **Paper (30%):**

A paper is required for this course. I have a set of broad topics from which you will choose. You will need to choose a topic by March 11.

On March 8 Dr. Blackwell from the Learning Centers will present information on how to conduct a literature review. The aim is for you to conduct a research

question within the topic and conduct a thorough literature review on that topic using a reasonable selection of research articles (8-20 sources). On April 8, you must have a list of sources assembled (but you do not have to write the paper yet!).

The paper should be 10-15 pages in length, double-spaced, 12-point font. The final draft is due on the last day of finals—May 10.

- Participation (10%):
You are required to attend recitation sections and participate in discussion! In recitation, we will record attendance/participation, which will be 10% of your course grade.

- Extra Credit Options (9 possible points):
 - (1) Complete all of the DQs this semester and you will earn an extra 2% to your final grade.
 - (2) A number of researchers in RuCCS conduct experiments. You have the opportunity to participate in at most 3 experiments for 1% each added to your final grade.

Class Policies

Attendance

This is a synchronous, in-person lecture-and-discussion class. If you can't make the lecture, feel free to email me any time or come to office hours to find out what you missed.

I love class participation! This class consists of both lecture and discussion, and I'd like to have the liveliest discussion possible. I want to hear your thoughts and insights! So please come to the live lecture sessions and feel free to participate!

I want our class to be an open forum and a safe space to engage in discussion and speculation on topics related to language and the brain. We will engage in discussion in a positive and non-judgmental way while we explore interesting new ideas. Everyone's diverse backgrounds and knowledge will give unique insights that may benefit all of us!

Collaboration

Collaboration is at the heart of good science! I encourage you to collaborate with each other - but every student must always turn in their own work. Your work must be written solely by you!

Academic Integrity

Cheating or plagiarism of any kind will not be tolerated. University policies on academic dishonesty are draconian – please don't put me in a position where I have to enforce them. If you are not familiar with Rutgers's academic integrity policies, you can find them here: <http://academicintegrity.rutgers.edu/academic-integrity-policy/>.

Student Resources

Accommodation of Disabilities

I am very happy to offer any kind of accommodation you may need. Please let me know if you have any special needs by coordinating with me and ODS: <https://ods.rutgers.edu/students/registering-for-services>

Student wellbeing

Your mental health, comfort, and wellbeing are important! Please be aware and if needed avail yourselves of the counseling, psychiatric services, and crisis intervention resources Rutgers makes available for students.

Mental health services: <http://health.rutgers.edu/medical-counseling-services/counseling/>

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Crisis intervention: <http://health.rutgers.edu/medical-counseling-services/counseling/crisis-intervention/>

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

Violence prevention and victim assistance: www.vpva.rutgers.edu/

Name & Contact Info of 4 Students

Use the space below to exchange names and contact information of 4 students to contact and that can contact you with questions about the course.

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Schedule

| Week | Date | Lecturer | Topic | Due |
|-------------|--------------|-----------------|--------------|-----------------------------------|
| 1 | 1/17 1/19 | Ryan Rhodes | Overview | Group sign-up |
| 2 | 1/24 1/26 | TBD | TBD | Response 1 |
| 3 | 1/31 2/2 | TBD | TBD | Response 2 |
| 4 | 2/7 2/9 | TBD | TBD | Response 3 |
| 5 | 2/14 2/16 | TBD | TBD | Response 4 |
| 6 | 2/21 2/23 | TBD | TBD | Response 5 |
| 7 | 2/28 3/3 | TBD | TBD | Response 6 |
| 8 | 3/7 3/9 | TBD | TBD | Final Paper Topic |
| 9 | 3/14 3/16 | SPRING BREAK | | |
| 10 | 3/21 3/23 | TBD | TBD | Response 7 |
| 11 | 3/28 3/30 | TBD | TBD | Response 8 |
| 12 | 4/4 4/6 | TBD | TBD | Response 9 Final Paper Sources |
| 13 | 4/11 4/13 | TBD | TBD | Response 10 |
| 14 | 4/18 4/20 | TBD | TBD | Response 11 |
| 15 | 4/25 4/27 | TBD | TBD | Response 12 |