From Lab to Life: How Cognition Research Affects Everything You Do
PSYC UN3211 (4 points)
Syllabus for Fall 2023

Course Information

Day: Thursdays
Time: 2:10-4:00 pm
Location: Schermerhorn, Rm 405

Instructor Information

Name: Manasi Jayakumar
Pronouns: she/her/hers
Email: manasi.jayakumar@columbia.edu
(see Email Policy)
Student Drop-in Hours: Thurs, 4-6 pm
(or Office Hours)

Course Description

How do we study smarter and not harder? How can we learn from our mistakes? How does stress affect our attention, learning, and memory? Is it a good thing to be scrolling on TikTok while watching a lecture video? What does stress do to our cognition and the brain? Do brain training apps really work? These are the kinds of questions we aim to answer in the class **UN3211- From Lab to Life: How Cognition Research Affects Everything You Do.**

The goal of the class is twofold: to understand 1) how laboratory research in cognitive psychology and neuroscience can be applied to everyday life, and 2) how observations and research from an applied setting can contribute to our understanding of cognitive processes.

Given the applied and interdisciplinary nature of this content, this seminar course will be heavily discussion-based. We will discuss primary literature on various topics of cognition and bring it into the real world with applied research. Topics will include the application of research on perception, attention, memory, learning, and metacognition to real-world settings such as education, driving, health and well-being, law, media, and society.

Prerequisites

This is a seminar course in the Psychology Department directed toward upper-level undergraduate students. Prerequisites include Science of Psychology (PSYC UN1001) and **one of** Cognitive Neuroscience (PSYC UN2430), Cognition: Basic Processes (PSYC UN2210), Cognition: Memory & Stress (UN2220), or equivalent introductory courses in psychology and cognitive neuroscience, and the instructor's permission. Students with other backgrounds, who think they have the appropriate preparation and motivation are asked to reach out to the instructor for permission to register.

Role in the Psychology Curriculum

The course is designed to give advanced undergraduates in the Department of Psychology a deeper understanding of current applied research in cognitive psychology and neuroscience. It fulfills the following degree requirements.

- For the Psychology major in Columbia College and in the School of General Studies, this class will meet the **Group I** requirement and/or the **seminar** requirement.
- For the Psychology concentration in Columbia College and in the School of General Studies, this class will fulfill the **Group 1** requirement.
- For the Psychology Post-Baccalaureate Certificate program, this class will meet the **Group I** requirement.
- For the Neuroscience and Behavior joint major, this class will fulfill the **P5** requirement.

Course Objectives

Through this course, you will be able to:
- interpret and summarize applied research in cognitive psychology and neuroscience by reading assigned empirical and review papers;
- evaluate and synthesize information from multiple sources and communicate this to your peers;
- plan, conduct, and organize an in-depth literature review for a topic of interest in applied cognitive psychology and neuroscience.

Course Readings:

There is no textbook required for this course.

Every week, students will be assigned 2-3 readings relevant to the topic of the week. Readings will comprise empirical articles, literature reviews, or commentaries in the fields of cognitive psychology and/or cognitive neuroscience. The tentative readings are listed at the end of the syllabus. All readings will be posted in PDF form on Canvas. Course readings are subject to change pending new research.

Grading Criteria

Course Component	Assessment	Grading (points)	Deadlines
Reading Completion	Reading Response	20	Submit by 10 p.m. the day before the class for every class period. You will submit 10 such reading responses (each worth 2 pts; see pg 5-6 for further details) *Exception: You do not have to submit a reading response for Week 1 and before your assigned presentations*
Preparation and Effective Engagement	Week 4 Check-In	1	Self-reflection due Week 4 (Sept 29; pg 7)
	Midterm Check-In	3	No Dues (Instructor-provided; pg7)
	Week 9 Check-In	6	Self-reflection due Week 9 (Nov 2; pg 8)
	Final Grade	10	No Dues (Instructor-provided; pg 8)
Student Presentations	First (short) presentation	5	During the assigned class period in Weeks 2 through 7 (see pg 7)
	Pre-meeting for 2nd presentation	5	<u>At least 1 week</u> before the assigned second presentation (see pg 8)
	Second (long) Presentation	20	During the assigned class period from Week 8 onwards (see pg 8)
Writing Assessment	Proposal	3	Due Week 5 (Oct 6; see pg 10)
	Road Map	4	Due Week 8 (Oct 26; see pg 10)
	Draft of a section	5	Due Week 11 (Nov 17; see pg 10-11)
	Final paper	18	Due the last day of reading period (Dec 14; see pg 10-11)
	Total points	**100**	

Assignment Descriptions

Pre-course survey (ungraded; 0 pts)

In the first class session, you (the students) will be asked to fill out a pre-course survey. The survey will contain questions about your educational background, courses you have taken in psychology and neuroscience, your familiarity with reading research articles, and any prior experience or exposure to research on cognition. This survey is ungraded.

> *Why am I doing this?*
>
> Even though this survey is ungraded, it is extremely helpful for me if you fill it out. It will help me understand the range of experiences and backgrounds you have coming into the classroom. Thus, I can then structure content, discussions, and assessments to reflect the range of perspectives and experiences being brought into this classroom.

Reading Response (total = 20 pts)

Your 20 pts consists of 10 reading responses each worth 2 points. The reading responses need to be submitted to CourseWorks by 10 p.m. the night before every class period. The 10 reading responses are structured so that you will submit:
          5 between Weeks 2 through Week 7 before the midterms, and
          5 after the midterms (Week 8 through the last class period of the semester)

Note: You do not have to submit reading responses if you are presenting the next day in class.

Reading Responses:
- They are short (300-500 words) responses.
- They should demonstrate a thorough reading and understanding of the week's papers. It should show you are thinking carefully about the topics at hand. Remember, some papers may be more difficult to understand than others, and you might have to read them again to understand them.
- Although they don't need to be perfectly crafted examples of scientific prose, they should be clearly written, with appropriate attention to grammar, spelling, etc. Once you write a draft, please read back through what you've written before submitting it to CourseWorks.

The content and focus of your posts can vary quite widely, but should be atleast one of the following:
- You can discuss something you found interesting in the readings;
- You can ask any theoretical or empirical questions that arose during your readings;

- You can identify a connection between a theory or method discussed in the current paper and one used in another reading or another week;
- You can offer a substantive critique of a paper's methods or its interpretations of the result.

If the focus of your reading response is different from the types of content mentioned above, please talk to me so we can discuss if it is appropriate.

Grading Criteria

Reading responses will be graded on a complete/incomplete basis. Each reading response will receive points based on these criteria:

2pts = Completed before 10 pm the night before class
1pt = Completed after the deadline, but before class,
0pt = Incomplete as of the beginning of class

Why am I doing this?

The goal of these reading responses is to help you keep current on course topics. The reading responses will also help me to understand where students may have had difficulty with the readings and which topics students were most intrigued by and, therefore, help me guide discussions during class time.

Preparation and Engagement (total = 20 pts)

As a seminar course, this class relies heavily on discussions. In the first class of the semester, we will discuss what participation can look like and create community guidelines for discussion. Once this is agreed upon by all participants, I will add this to our syllabus. We will remind ourselves of these guidelines throughout the semester. While we all aim to support and participate in constructive ways, there may be times when we (me included) make mistakes. In such situations, we will call back to our community guidelines.

To ensure that everyone is accountable for thoroughly engaging with the readings and presentations (and for skill-building for future seminars or professional meetings!), your active engagement and participation during class will contribute to your final grade. There are different ways of participating and engaging constructively in classroom discussions. You will typically find that there are no clear right or wrong answers - just different ways of making arguments for/against a finding. Generally speaking, effective engagement could include:

- Asking clarifying questions;
- Connecting the reading to other readings you've done either for this course or for any other purposes;
- Drawing parallels and/or contrasts between findings from different readings;

- Offering thoughtful critiques of the research methodology and/or interpretation and providing suggestions for how it might be improved;
- Bringing in outside sources that contribute to the findings, or the way they are interpreted and applied;
- Actively listening to classmates and responding to their ideas
- Summarizing your thoughts on the notecards at the end of the class
- Attending drop-in hours and engaging in discussions about any lingering thoughts you had or have after the class (Note: You cannot get full engagement points by solely using this to show your engagement, but it can add to your points from using other ways).

There may be some of you who find it difficult to participate regularly in class discussions. If you are concerned about your ability to contribute to class discussions or if your style of participation doesn't match the above, please see me during drop-in hours by Week 2 (i.e. by Sept 14, 2023). We can come up with other peer-to-peer engagement strategies, but I need to approve this by email before it can count towards your engagement points.

Engagement and participation is an essential component of this course and of your grade, and you are expected to attend and actively engage in each class period. There are no points for attendance, but unexcused absences will count against your participation grade (please see Excused Absence under Class Attendance on pg 10 for more details). You can find a rubric for how I will assess participation and engagement in **Appendix A**.

Self-Reflection (1 pt)

You will complete a quick self-reflection and set goals for your participation in Week 4 of the semester (by Sept 29th, 11:59 p.m.; **see Appendix A** for the rubric and self-reflection prompts). I will read your reflection, and provide my feedback on whether you meet the participation criteria and if there are ways for you to better engage in the class discussions. This will be graded on a complete/incomplete basis: if you have completed an honest and thoughtful self-reflection, you can expect to get the 1 pt.

Midterm Check-In (3 pts)

I will provide midterm check-in points (3 pts) based on your preparation and engagement during Weeks 1-7 (before midterm). Importantly, the grades will be based on whether you have incorporated the feedback I provided during the self-reflection in Week 4 and whether you have begun working towards the goals you set. I will also provide further feedback here on whether you are on the right track or whether you need to change how you are engaging.

Week 9 Check-In (6 pts)

You will complete another self-reflection and answer some prompts about your own engagement and participation skill-building journey. Completing an honest and thoughtful self-reflection will get you 2 pts. The rest of the 4 pts will be based on your participation from Weeks 1-9 of the semester. I will weigh the later weeks more strongly if you have improved your engagement in response to my feedback and if you're on track to meet your goals by the end of the semester.

Final Grade (10 pts)

I will grade your engagement throughout the entire semester (Weeks 1-14) for this final grade. If you improve your participation and engagement in response to my feedback at the self-reflection and check-ins, I will weigh that more strongly in your final grade. Meeting the engagement goals set by you in Week 4 of the semester will also factor into this grade.

Why am I doing this?

Effective engagement and participation is a skill that takes time and effort to build. Regardless of the career you choose to pursue, you will need to effectively communicate and engage with your colleagues and peers. All of you have different strengths, but also different areas with room for improvement. Thus, the preparation and engagement assessment is structured to help you improve your skills through self-reflection with instructor feedback at regular intervals.

Student presentations (total = 30 pts)

Each one of you will be responsible for 2 presentations and 1 meeting with me as part of the process.

You will be assigned to present once in the first half of the semester (between Week 2 through Week 7) and a second presentation in the second half of the semester (between Week 8 through the end of the semester). The first, short presentation is designed to prepare you for the second, long presentation.

Prior to the 2nd presentation, you must meet with me (at least 1 week prior) to discuss your understanding of the paper and your approach. This pre-meeting is required and counts as part of your grade. A meeting before the first presentation is not required: however, you are encouraged to meet with me at least 1 week prior. Further details are given below for each of the components.

First presentation

You will be assigned to present one of the empirical papers from the reading list on the syllabus for that week (in Weeks 2 through 7). Through the first

presentation, you will be able to learn to interpret and summarize a research paper.

You should prepare to give a short 5-minute presentation on the article. This will briefly cover the research question, the primary methods used in the study, the primary findings, and how it relates to the research question. Detailed requirements for the presentation will be discussed during the first class meeting. These can also be found in **Appendix B.**

You are encouraged to meet with me atleast one week prior to your presentation (along with any slides you have). However, this meeting is completely optional (not mandatory) and there will be no grades assigned to this meeting.

Pre-meeting for the Second Presentation

You will share your slides and meet with me at least one week prior to your second presentation. I will provide feedback on the presentation and can help with any questions you may have. This will help you in your preparation for the second presentation so that you can lead the discussion, and answer any of your peers' questions in class.

For this meeting with me, you will create slides for the second presentation based on your assigned article. Since this pre-meeting is for you to be well-prepared for your second presentation, you will be assessed for the completion of slides based on the guidelines for the second "long" presentation, but not on the aesthetics or professionalism. **Appendix B** contains more information about the grading criteria for the pre-meeting.

Second Presentation

You will be assigned to present one of the empirical papers from the reading list on the syllabus in Weeks 8 through the last day of class and lead the discussion. Through the second presentation, you will learn to evaluate and synthesize information from multiple sources (e.g., relating the empirical paper to the review paper, or to other course readings), and communicate this to your peers.

You should prepare to give a 10-to-15-minute presentation where you'll walk us through your assigned article, describe the methods and results, highlight any strengths or weaknesses of the study design, and give your thoughts on the meaning and importance of the findings. You should also include 2-3 questions that can spark discussion and compare and contrast the paper with other course readings for the week. **Appendix B** contains more details about the second presentation.

Why am I doing this?

Presenting information clearly and effectively is a key skill today in almost every field or profession. Regardless of the job you choose to do, you will have to learn to communicate effectively, within a time limit, and in an engaging manner. Developing this skill takes time and practice. That is why there are two presentations built into the structure of the class. The first presentation is a low-stakes way for you to get your feet wet, and the second one (with the pre-meeting) will help you further develop your skills.

Final Paper (total = 30 pts)

The Final Paper will be the primary writing assessment for this class. The final paper will be approximately 8-10 double-spaced pages in length (excluding references) and will be on a topic of your choice. The paper should integrate and synthesize information from multiple domains of cognition research in everyday life. Your paper can take one of these two forms: 1) how three different cognitive processes can be applied to one area of application, or 2) how one cognitive process can be applied to three different areas of application (more information given below). Through this paper, you will learn to plan, conduct, and organize an in-depth literature review on a topic of your choice. For some of you, this may be your first time writing this type of a scientific paper. Thus, to provide a scaffold through the early stages of planning, there will be three other assessments: a Writing Sample, a Proposal, and a Road Map (described below).

I will discuss the assignments and guidelines for each in the first class. Detailed requirements are described in **Appendix C**.

Proposal (3 pts):

By Week 5 (Oct 6th, 11:59 p.m.), you will be asked to submit a short paragraph about your intended topic for the final paper, with at least 3 relevant references you plan to use. I will provide feedback on your proposal regarding the scope of the topic, potential details you can focus on, and other sources you could use, etc. For grading rubric, please refer to **Appendix C**.

Road Map (4 pts):

By Week 8 of the semester (Oct 27th, 11:59 p.m.), you will be asked to submit a Road Map assignment. This can be in any format and at any level of detail that works best for your writing process. Some examples of this could be

- A sparse outline of the final paper with some section headings and a broad overview of key ideas or themes you plan to cover in each section (including relevant references).

- A more detailed outline with section headings, and a bulleted list of points you plan to cover (including relevant references).
- A plan of how you intend to tackle each section of your paper (for e.g. I plan to work on Topic 1 by Week 7, Topic 2 by Week 8, etc. including references)

For the grading rubric, please refer to **Appendix C**.

Section Draft (5 pts):

By Week 11 of the semester (Nov 17th, 11:59 p.m.), you will be asked to submit a section draft. This is a 2-3 page (double spaced) paper that should cover one of the three topics/sections you plan to write about in your final paper. For example, it could be one of following:

- Your chosen cognitive process and how it can be applied to one of your three chosen fields
- One of your chosen cognitive processes and how it can be applied to your chosen field.

Once again, I will give feedback on your draft. Importantly, here, I will be giving feedback on your scientific writing skills, in addition to the appropriateness of the content and the references.

For the grading rubric, please refer to **Appendix C**.

Final Paper (18 pts):

As mentioned above, the final paper, due the last day of the reading period, can be in one of these two forms:

1. A paper integrating research on three different cognitive processes to one applied field. For e.g., How can research on attention, learning, and memory be applied to education?
2. A paper integrating research in three applied fields for one cognitive process. For e.g., How does memory research apply to education, law, and clinical psychology?

You may choose any of the cognitive processes and applications. Cognitive processes can include attention, learning, memory, language, problem-solving, curiosity, etc. Applications can be those discussed in class or any other application in everyday life. However, your paper must go beyond what was covered in the assigned readings.

Detailed requirements for the final paper with the rubric are described in **Appendix C**.

Why am I doing this?

Graduating with a major (or a minor) in Psychology/Neuroscience means that you have learnt basic scientific literacy and science writing skills. These include the ability to research on a scientific topic, read journal articles and summarize them, evaluate and synthesize information from different sources, and write a well-organized, precise, and logical scientific paper. To accomplish these goals, we have the final paper in the form of a literature review. Of course, you will be guided through the process of writing it throughout the semester and will have feedback to improve your skills.

Course schedule

Week	Topic	Reading Response	Preparation and Engagement	Final Paper	Student Presentations
Sept 7 (Week 1)	Introduction How to read papers	Ungraded Pre-Course Survey *(no assigned reading or reading responses due)*			
Sept 14 (Week 2)	Memory encoding and retrieval in education	**Submit 5 reading responses.** Due by 10pm the night before the class *Note: You do not have to submit a reading response, the night before your first "short" presentation.*	Come prepared to class and actively engage in discussions.		**Present on an empirical research paper during one class period (~5 min "short" presentation)**
Sept 21 (Week 3)	Metacognition and learning in education		Come prepared to class and actively engage in discussions.		
Sept 28 (Week 4)	Mind-wandering in the classroom		Come prepared to class and actively engage in discussions. **Complete a quick self-reflection and set goals for your participation. Due by Sept 29th, 11:59 p.m.**		
Oct 5 (Week 5)	Media-multitasking and its effect on cognition		Come prepared to class and actively engage in discussions.	**Submit a proposal for the final paper.** Due by Oct 6th, 11:59	

Week	Topic	Reading Response	Preparation and Engagement	Final Paper	Student Presentations
				p.m.	
Oct 12 (Week 6)	Driving: interaction between various cognitive processes		Come prepared to class and actively engage in discussions.		
Oct 19 (Week 7)	Stress and Cognition		Come prepared to class and actively engage in discussions.		
Midterm grades with feedback released					
Oct 26 (Week 8)	Depression and Cognition	**Submit 5 reading responses.** Due by 10pm the night before the class *Note: You do not have to submit a reading response, the night before your second"short" presentation.*	Come prepared to class and actively engage in discussions.	**Submit a road map for the final paper.** Due by Oct 27th, 11:59 p.m.	**Present on one empirical research paper (10-15 mins "long" presentation) and lead the discussion for that class period** **Share your slides and meet with me <u>at least one week</u> prior to your second "long" presentation**
Nov 2 (Week 9)	Cognition in the aging adult		Come prepared to class and actively engage in discussions.		
Nov 9 (Week 10)	Memory and the law		Come prepared to class and actively engage in discussions. Complete a quick self-reflection and set		

Week	Topic	Reading Response	Preparation and Engagement	Final Paper	Student Presentations
			goals for your participation. Due by Sept 29th, 11:59 p.m.		
Nov 16 (Week 11)	Enhancing cognition: brain training and brain stimulation		Come prepared to class and actively engage in discussions.	**Submit a section draft for the final paper.** Due by Nov 17th, 11:59 p.m.	
Nov 23 (Week 12)	*No class (Thanksgiving break)* *No reading response due*				
Nov 30 (Week 13)	Memory for Salient Events	**Submit the remaining of your 5 reading responses** (By 10pm the night before the class.) *Note: No reading response due the night before your second presentation.*	Come prepared to class and actively engage in discussions.		
Dec 7 (Week 14)	Music, Movies, & Cognition		Come prepared to class and actively engage in discussions.		
Each student will submit a final paper (8-10 pages) by the last day of the reading period (Dec 14)					

Course Policies

Class attendance

Attendance is expected for every class period. You cannot get full points for engagement without attendance.

<u>Excused Absence:</u>
In order to have an excused absence (e.g. if you are sick or have a personal emergency), please <u>email me before 10 a.m. the day of the class you will miss</u>.

Late submission and extensions

<u>Reading responses</u>: No submissions will be accepted for reading responses once the class has begun, as the reading responses will be used to guide discussions in class. Points for reading responses for that class period will be awarded 0. The only exception is a 48-hour extension for excused absences (see **Class Attendance** for more details).

<u>Student presentations</u>: It's generally not possible to offer extensions on student presentations, since the class meeting in question is built around that presentation. But if you know <u>at least two weeks in advance</u> that your scheduled day for presenting is going to pose some problems, please get in touch with me ASAP. With enough advance notice, we can usually find another student willing to switch weeks, but we do need to know far enough out for that student to have enough time to prepare and to update everyone about the change in readings.

<u>Student preparation and engagement:</u> Class attendance and participation are expected for every class period. Without prior approval before the class, class engagement points for the missed class will be marked as 0 (see **Class Attendance** for more details).

<u>Proposal and Road Map for Final Paper</u>: Late submissions for the proposal and the road map will be graded per the criteria mentioned in **Appendix C**. However, if you know <u>in advance</u> that you might need an extension for the proposal and the road map, please contact me and we can likely work out an extension.

<u>Final Paper:</u> For the final paper, **late submissions will be awarded a 10% reduction in grade for each day that it is late (counted as 24 hours from the time of the deadline)**. If your final exam schedule would make it particularly difficult to submit your paper by this due date, please contact me <u>at least two weeks beforehand</u> to discuss an extension. I am generally happy to arrange

extensions, but only for those who consult with me before the due date, so plan ahead! <u>Any requests for extensions after the deadline has passed will not be entertained.</u>

Extra Credit

There is **no extra credit** for this course.

Commitment to inclusive teaching practices

My primary aim in this course is to co-create an inclusive learning environment with you all to support a diversity of perspectives, opinions, and experiences. The diversity of perspectives and experiences that participants bring into the classroom will be foundational to our classroom discussions. Therefore, I aim to create a safe space where every participant can openly share their thoughts, push their own boundaries, challenge themselves, and grow as individuals.

The readings in this course were also chosen to reflect the views of authors with diverse perspectives and backgrounds. Similarly, the course structure and assessments were created keeping in mind the possibility of students coming in with diverse educational experiences in the past. I invite you all to also think about this diversity as you choose papers for your own reading or the final essay.

While I intend to do the best I can to ensure a safe and inclusive learning environment, I recognize that I am human with my own biases and flaws. I am open to feedback, and I commit to understanding and working on my own biases and prejudices to prevent these from jeopardizing our inclusive and safe environment. Please reach out to me with any concerns or suggestions you may have to better address the diverse needs of the classroom.

Email Policy

You are welcome to email at manasi.jayakumar@columbia.edu with any questions or concerns or to set up appointments if you cannot make it to the Student Drop-In Hours (see below). You can address me by my first name in your emails (i.e. Manasi). Be sure to include either the name of the class or the course number in your subject line so I don't miss your email.

I aim to respond to emails within 24-48 hours on weekdays (Monday-Friday, 10 am-6 pm).

Please note that for any emails I receive over the weekends or university holidays, I will respond to them within 24-48 hours from the beginning of the next working day. This means that any email received on Friday after 6 p.m. will be answered only on Tuesday.

Student Drop-In Hours

I encourage all of you to join the "Student Drop-In Hours" (aka Office Hours) as often as you can. This can be a great way to clarify any questions you have about the content or assessments. You can attend the drop-in hours even if you do not have a question. Stop by to just say hello, talk about careers, ask questions about research and academia, or just vent about the weather!

If you would like to set up an appointment with me outside of these Drop-In hours, please email me at manasi.jayakumar@columbia.edu (see email policy above).

Class Etiquette and Conduct

Please turn off or silence your cell phones during class. Laptops are fine to use, but please respect your classmates and instructor by refraining from non-class-related activities. Please refrain from multi-tasking during class (we will explore the negative effects of multitasking in Weeks 5 and 6).

Academic Integrity

Academic integrity means presenting only your own work for your presentations and assignment(s). This means that all of your work, including your class presentation, must be in your own words. You cannot copy and paste text from articles, book chapters, or AI-generated passages into your presentation or your written assignments. Everything you present or write must be in your own words (with appropriate citations).

Taking credit for the work of others is a serious violation of the academic community, and this will result in cheating or plagiarizing. If this is the case, the student will receive a zero for that assignment and will be reported to the University. Detailed Information on what constitutes a violation of academic integrity (along with examples) can be found in Columbia's Undergraduate Guide to Academic Integrity: http://www.college.columbia.edu/academics/academicintegrity

That said, if you have any questions about how to appropriately cite another's work or build upon someone else's ideas, please feel free to contact me. This can sometimes be challenging when you haven't yet had a lot of experience with it. I am happy to help in advance of a deadline to ensure that you are abiding by the principles of academic integrity.

Academic Support Services

There are many resources available to help and support you in your academic journey.

For those enrolled in Columbia College and/or SEAS, the Writing Center is a great place to start if you need some assistance with writing the final paper: https://www.college.columbia.edu/core/uwp/writing-center

For those enrolled in the School of General Studies, please check the Academic Resource Center for academic support:
https://www.gs.columbia.edu/content/academic-resource-center

Additionally, the Columbia Libraries can help all students find academic sources, or help with reference management, etc:
https://library.columbia.edu/index.html

Accommodations for students with disabilities

Students with special needs who may require classroom/assignment accommodations should make an appointment to see me as soon as possible, at least by the end of the second week of class. If you have not already done so, stop by the Office of Disability Services (ODS) on the 7th floor of Lerner Hall to register for support services. ODS often requires two weeks to process an application, so please contact them as soon as you can, preferably before the course begins. The procedures for registering with ODS can be found at https://www.health.columbia.edu/services/ods.

Wellness

Life can sometimes be difficult. Many of us have periods in which our mental and/or physical health and well-being suffer, especially during these difficult and uncertain times. I urge each of you to take care of yourself, and each other in the classroom and beyond. Please prioritize your health and well-being (both mental and physical), and know that there are many resources available to you throughout the university (detailed below).

https://www.health.columbia.edu/content/counseling-and-psychological-services
https://blogs.cuit.columbia.edu/nightline/
https://universitylife.columbia.edu/student-resources-directory#!#health

If there is anything I can do to help, please do not hesitate to reach out. If you see others struggling, please point them to these resources, or encourage them to reach out for help.

Appendix A
Preparation and Engagement Grading Rubric

Self-Reflection on Preparation and Engagement: *Select the column that you think describes you best for each of the components of participation mentioned in the first column.*

	Engagement Rubric		
	Preparation and Engagement Final Grade (10 pts) will be based on 1) whether you met the goals you set at the Week 4 Check-In, and 2) whether you incorporated all my feedback throughout the semester. Details of the grading criteria for the different check-ins can be found on pg 6-8.		
	100% pts —---------------------------------- 50% pts —---------------------------------- 0% pts		
Component	**Excellent**	**Good**	**Needs Improvement**
Preparation	I am always prepared for class. I have carefully read and understood the readings as evidenced by oral contributions in the group discussion, or through demonstrated alternative engagement. I am familiar with the main ideas, supporting evidence, and secondary points. I always come to class prepared with questions and critiques of the readings.	I am usually prepared for class. I have read and understood the readings as evidenced by oral contributions in the group discussions, or through demonstrated alternative engagement. I demonstrate a grasp of the main ideas and evidence but sometimes interpretations are questionable. I sometimes come prepared with questions.	I am rarely prepared for class. I have read the material, but comments often indicate that I didn't read or think carefully about it, or misunderstood or forgot many points. My class conduct suggests an inconsistent commitment to preparation.
Conduct	I show respect for members of the class, both in speech and manner. I never dominate discussions. I always challenge ideas respectfully and encourage and support others to do the same.	I show respect for members of the class, both in speech and manner. I sometimes dominate discussions. I participate regularly in the discussion but occasionally have difficulty accepting challenges to my ideas or maintaining a respectful attitude when challenging others' ideas.	I show little respect for the class or the process as evidenced by speech and manner (e.g. repeatedly coming late to class, playing on the phone/laptop). I regularly dominate the discussion or simply disengage from the process. When contributing, I can be argumentative or dismissive of others' ideas.

Engagement Rubric		
Preparation and Engagement Final Grade (10 pts) will be based on 1) whether you met the goals you set at the Week 4 Check-In, and 2) whether you incorporated all my feedback throughout the semester. Details of the grading criteria for the different check-ins can be found on pg 6-8.		
Active Listening	I always actively attend to what others say, and then build on, clarify, or respond to my classmates' comments. At least once a class, I remind the group members of comments made by someone earlier in the discussion.	I usually listen well and take steps to check comprehension by asking clarifying and probing questions and making connections to earlier comments. I respond to ideas and questions offered by others.	I do not regularly listen well, tune out or fail to truly pay attention to the discussion. I have regularly asked a question about something that was already discussed earlier. I have regularly commented about tangents/off-task activities.
Reasoning	My arguments, positions, or interpretations are reasonable and supported by evidence from the readings. At least once every other class period, I deepen the conversation by going beyond the readings or recognizing implications and extensions of the readings. At least once every other class period, I provide analyses of complex ideas that help deepen my peers' understanding and further the conversation.	My arguments, positions, or interpretations are typically reasonable and mostly supported by evidence from the readings. In general, my comments and ideas contribute to the group's understanding of the material and concepts, but rarely deepen the discussion (i.e. I do this less frequently than every other class period).	My contributions to the discussion are more often based on opinions or unclear views than on reasoned arguments or positions based on the readings. My arguments or comments are convoluted and difficult for my classmates to follow. I rarely contribute helpful comments, interpretations or analyses of the readings under discussion.
Leadership/ Ownership	At least once every class period, I initiate contributions by proactively offering ideas and asking questions. At least once every class period, I take responsibility for maintaining the flow and quality of the discussion whenever needed. I provide constructive feedback and support to others. I help to redirect or refocus discussion when it becomes sidetracked or unproductive.	I initiate contributions *sometimes* by proactively offering ideas and asking questions. I take on responsibility for maintaining the flow and quality of discussion and encouraging others to participate but either it is not always effective or not regular (i.e. not every class period).	I do not initiate contributions and rarely offer ideas or ask questions. I do not play an active role in maintaining the flow of discussion. I undermine the efforts of others who are trying to facilitate discussion.

Week 4 Check-In - Goal setting Prompt:

Choose two goals for how you would like to improve your participation and engagement this semester. You can choose along any of the following dimensions: active listening, leadership/ownership, or reasoning. Think about things that are concrete enough that you can tell if you can achieve them but that push you to improve beyond what your typical participation is. Choose goals based on what is feasible your circumstance, your mental health, and the format of this class. Think about skills that you would like to develop this semester that will help you throughout the rest of college and/or later in life and use this class as an opportunity to work on developing those skills. In order to get a high participation grade in this class, you will be primarily assessed on meeting your goals, though also on the objective criteria areas above.

Goal 1:

Goal 2:

Plan for how I will achieve each goal (100-200 words):

Week 9 Check-In Prompt (2 pts):

Name the two goals you chose from the beginning of the semester. Then, reflect on how well you're doing with your participation in the course and how you're doing toward each goal. What steps do you need to take to improve your participation to be on track to get the participation grade that you would like to get?

Note: Completing an honest and thoughtful reflection will give you 2 pts on your Week 9 Check-In (out of a total of 6 pts). The rest of the 4 pts will be based on your participation from Weeks 1-9 of the semester. I will weigh the later weeks more strongly if you have improved your engagement in response to my feedback and if you're on track to meet your goals by the end of the semester.
Goal 1:

Goal 2:

Reflection:

Appendix B
Detailed Requirements for the Presentation

Each student will briefly present twice during the semester. The first shorter presentation is designed to help you prepare for the second, long presentation.

First Presentation

You will be assigned to present one of the empirical papers from the reading list in Weeks 2 through 7. There may be two students presenting per class period.

You should prepare to give a short 5-minute presentation on the article. Your job is to just explain the overall takeaways from the paper, with some additional information for discussion.

Your 5-minute presentation should cover:
- What is the main question the researchers are trying to answer?
- What is the main method they use? Include a figure from the paper if there is one.
- What do they find? Include the main figure of results from the paper. What does it mean for their question?

You should use only 3 slides for this (excluding the title slide). The title slide should include the name of the paper, the name(s) of the author(s), and the year of publication.

Your slides should add to, not distract from, your presentation. That means you should avoid big blocks of text unless there's something with precise wording that it's important we all see (e.g., task instructions given if it's relevant to the findings). You should know the material you're presenting well enough that you aren't reading verbatim off of your slides, though it's of course fine to refer to the slides to stay on track. And you should proofread your slides just as you would for the final paper.

Grading Rubric for First (Short) Presentation

100% pts —-- 0% pts

Component	Excellent	Good	Needs Improvement
Content (1.5 pts)	Completed slides covering **all three points accurately**: ● What is the main question the researchers are trying to answer? ● What is the main method they use? Include a figure from the paper if there is one. ● What do they find? Include the main figure of results from the paper. What does it mean for their question?	Slides cover 1 or 2 of the three points OR slides cover all three points, but there are inaccuracies or incorrect content.	Slides do not cover any of three points accurately.
Aesthetics (1 pts)	No (or few) typos or mistakes, no big blocks of text, clear to the audience, and includes relevant figures	Some typos and mistakes; or text is not clear (too big or too small); or there are big blocks of text	All slides are unclear, cluttered, distracting or incorrect.
Presentation (1.5 pt)	Well-prepared presentation with few or no mistakes. Clear description of the research question from the reading. Clear explanation of the methods used. Accurate and understandable interpretation of findings with accurate description of the figure.	Presentation was not well-prepared and contained some/many mistakes; or Unclear description of the research question; or Unclear explanation of the methods; or Unclear or inaccurate interpretation/ description of findings and figures	No preparation for the presentation. Unclear description or explanation for the research question, methods, findings, and figures.
Q & A (1 pt)	Able to answer any/all questions about the reading	Able to answer some questions about the reading	Able to answer none of the questions about the reading

Second Presentation

You will be assigned to present one of the empirical papers from the reading list in Week 8 through the last day of class. There may be two students per class period.

In addition to presenting on the paper, your job as presenters is to be our "resident expert" on the readings for this week, so while you can assume everyone has read the paper, your presentation should help to clarify any particularly tricky methods or results from the paper and address any questions that your fellow students have. I'll be there to help you with this both as you prepare your presentation and during class, but it's your show!

Your 10-to-15-minute presentation should briefly cover:
1. The question being asked
2. A recap of the study's methods and results (including any relevant figures like for the first presentation)
3. The interpretation and the importance of the findings
4. A critical assessment of the work in the context of other course materials
5. Questions to spark our discussion

Note that you did points 1 and 2 above as part of your first presentation. Now, it is your turn to lead the discussion (with points 3-5) as you've seen me do through the first half of the semester. Please also read the pre-meeting section below for a more detailed run-through of what each of these means.

Aim to have 10 or 15 minutes of material, but expect lots of interruptions throughout (e.g., clarifying questions, the group making connections to other readings, etc.). With these interruptions and the early discussion they spark, the presentation tends to take approximately the first hour of class, with more general discussion following.

Unlike the first presentation, this second presentation is not meant to be just a series of summaries or a step through each figure in a paper. You must discuss the article(s), of course, but this discussion should be in the service of putting together a coherent presentation around the topic for that week. Do not just jump from figure to figure. Make sure that there is a narrative in your presentation. Think about how to transition from topic to topic to help lead the class through the 'story' you want to tell. That means you must make sure to set up the big questions, why that research or that finding is important, what the results mean, and their bigger implications.

Your presentation should involve slides both to structure the presentation and to provide visual aids for the group. I'll assume that you plan to run the slides off of your own laptop unless you let me know otherwise (I'm happy to provide my laptop for presentations if you need it).

Your presentation should include atleast the following:
- Title slide
- Introduction slide(s) (which introduces the narrative of the research question)
- Methods slide(s): an overview of the main methods in the paper including the most important figure
- Results slide(s): The main results from the paper including figures from the results.
- Interpretation and importance of the finding: What does the result mean 1) in terms of the research question? and 2) in terms of the field as a whole. Why is it important?
- Discussion slide(s): How does it relate to the review paper or book chapter from the course readings? Questions and comments that can spark our discussion.

With respect to discussion questions in your presentation: go for questions aimed at getting students' thoughts, opinions, criticisms, concerns, or interpretations of specific issues discussed in the papers. Asking questions relating the paper to topics we covered in other weeks can also be a good starting point for engaging in discussions. What doesn't work well is just putting up a figure and asking the class if someone can explain it; that is your job as a presenter. The goal of class discussion is to get other students' thoughts, feelings, criticisms, and so on, not to ask them to present basic concepts. In other words, it is your job to explain the basic concepts in order to set up discussion questions for the class, and the goal of the discussion questions is to gather opinions, criticisms, and so on. Also, more targeted questions are better at eliciting answers than more vague ones

Grading Rubric for Second (Long) Presentation

100% pts -- **0% pts**

Component		Excellent	Good	Needs Improvement
Content (12 pts)	Introduction[+] (2 pts)	Includes all of the following: ● Introducing the narrative of the research question (for e.g. start with the general research area and then lead to the specific research question. You can also use real-world examples to set the narrative) ● Recap of important background research in the area	Includes some of the following: ● Introducing the narrative of the research question ● Recap of important background research in the area However, content is either inaccurate or presentation is unclear and not understood by audience	Includes none of the following: ● Introducing the narrative of the research question ● Recap of important background research in the area
	Methods[+] (3 pts)	Includes all of the following: ● Participant population ● Procedures or tasks completed by participants (with figures if they are part of the paper) ● Methodology (e.g. behavioral, EEG, fMRI, eye-tracking) ● Experimental, correlational, quasi-experimental ● Design (within subjects, or between subjects)	Includes some of the required points from the "Excellent" level. However, the content is inaccurate; or the presentation is unclear and not understood by the audience	Includes none of the required points from the "Excellent" level

		100% pts ——— 0% pts		
Component		**Excellent**	**Good**	**Needs Improvement**
		• Relevant inclusion/exclusion criteria		
	Hypotheses[+] **(1 pt)**	Directional hypothesis from the paper (what are their predictions?)	Includes the hypothesis, but does not state direction; or incorrect hypothesis	Includes no hypothesis slide.
	Results[+] (2 pts)	Includes: • Primary finding: What did they find? • Statistics for the primary finding • Figure for the primary finding • Secondary findings (if any) • Statistics and figures for the secondary finding (if any)	Includes some of the required points from the "Excellent" level. However, the content is inaccurate; or the presentation is unclear and not understood by the audience. (Exception: some readings may not have secondary findings, or associated statistics & figures. You will not be penalized for such cases.)	Includes none of the required points from the "Excellent" level.
	Implication[+] (2 pts)	Includes all of the following: • What is the interpretation of the finding? (i.e. what does the finding or result mean?) • What are the implications of the finding? (i.e. Why is it important to the field, and discipline)	Includes either interpretation or implication of the finding, but not both; Or includes both, but there are some inaccuracies in the content, or the presentation is unclear.	Includes neither interpretation nor implication of the findings.
	[+] : For full points (or the Excellent category of the rubric), content should be accurate and the presentation should be clear.			

The title row above the table reads: **Grading Rubric for Second (Long) Presentation**

Grading Rubric for Second (Long) Presentation

		100% pts -- 0% pts		
Component		**Excellent**	**Good**	**Needs Improvement**
	Discussion (2 pts)	Includes <u>all</u> of the following: ● How does this reading relate to the review paper or theoretical paper from the course readings. ● Comments and questions to spark discussions	Includes one of the points from the "Excellent" level, but not both; Or includes both, but there are some inaccuracies in the content or the presentation is unclear.	Does not include either point from the "Excellent" level. You are also unable to answer any questions about how the reading relates to the review paper or the theoretical paper.
Facilitating/ Leading the discussion (3 pts)		Able to relate the reading in the presentation to the others from that class period (or other class period) and articulate it Prepared with questions and comments to facilitate a discussion Able to answer any/all questions about the reading Actively attends to what others say, and then builds on, clarifies, or respond to classmates' comments Takes responsibility for maintaining the flow and quality of the discussion whenever needed Redirects or refocuses discussion when it becomes sidetracked or unproductive	Able to relate the reading in the presentation to the others from that class period (or other class period) and articulate it Prepared with questions and comments to facilitate a discussion Able to answer some questions about the reading, but not all Takes on responsibility for maintaining the flow and quality of discussion and encouraging others to participate, but it not always effective Typially listen well and take steps to check comprehension by asking clarifying and probing questions and making connections to earlier comments	Unable to relate the reading in the presentation to the others Not prepared with questions or comments to facilitate a discussion Able to answer none of the questions about the reading Does not actively listen to others Does not play an active role in maintaining the flow of discussion.

Grading Rubric for Second (Long) Presentation			
		100% pts —-- **0% pts**		
Component	**Excellent**	**Good**	**Needs Improvement**
Aesthetics (2 pts)	No (or few) typos or mistakes, no big blocks of text, clear to the audience, and includes relevant figures	Some typos and mistakes; or text is not clear (too big or too small); or there are big blocks of text	All slides are unclear, cluttered, distracting or incorrect.
General Presentation (2 pts)	Well-prepared presentation with few or no mistakes. Clear, confident and well-paced delivery of presentation. Well-organized in a logical sequence with smooth transitions between slides. Contained appropriate citations and references throughout the presentation.	Presentation was not well-prepared and contained some/many mistakes; or Unclear description of the research question; or Unclear explanation of the methods; or Unclear or inaccurate interpretation/description of findings and figures	No preparation for the presentation. Unclear description or explanation for the research question, methods, findings, and figures.
Incorporated feedback from the pre-meeting (1 pts)	All feedback from the pre-meeting was incorporated and integrated into the final presentation.	Some, but not all, feedback from the pre-meeting was incorporated and integrated into the final presentation.	No feedback from the pre-meeting was incorporated into the final presentation.

Pre-meeting for the Second Presentation

Schedule a meeting with me for <u>at least one week before</u> your class presentation. Before this meeting, you will share your slides with me. During the meeting, I will provide feedback on the presentation and can help you with any difficulties you are having.

<u>Note</u>: Drop-in Hours a week before the presentation counts as at least 1 week before the presentation. However, please share your slides with me before you come to class.

This pre-meeting will help you prepare for your second presentation so that you can lead the discussion, and answer any of your peers' questions in class. For this meeting with me, you will create slides on your assigned article following the guidelines for the second presentation (as given below).

Since this is being assessed on the completion of slides (not the aesthetics or professionalism), you should atleast aim to have all the content for the 2nd presentation completed as per the guidelines above.

Rubric for the Pre-Presentation Meeting: Your pre-meeting will be graded based on a complete/incomplete basis per the rubric below, but not the aesthetics, presentation, or professionalism.		
Component	**Completed**	**Incomplete**
Content of the slides (4 pts)	Slides will only be graded on a complete/incomplete basis, and will not be checked for accuracy or correctness.	
	Should contain slides for all of the following with appropriate content as per the rubric for the second presentation (i.e. slide cannot be empty with just the title): - Introduction (0.5 pt) - Methods (1 pt) - Hypotheses (0.5 pt) - Results (0.5 pt) - Implication (0.75 pt) - Discussion (0.75 pt)	Points will be taken off depending on the content that is missing (see **Completed** column).
Meeting date (1 pt)	Atleast one week before your second ("long") presentation	1-6 days before your second ("long") presentation

Appendix C
Detailed Requirements for the Writing Assessment

Topic:

The final paper can be in one of these two forms:
1. A paper integrating research on three different cognitive processes to one applied field (for e.g., How can research on attention, learning, and memory be applied to education?)
2. A paper integrating research on one cognitive process across three applied fields (for e.g., How does memory research apply to education, law, and clinical psychology)

You may choose any of the cognitive processes including (but not limited to) attention, learning, memory, language, problem-solving, curiosity, etc. Applications can be those discussed in class. However, <u>your paper must go beyond what was covered in the assigned readings.</u>

Readings and References:

To do a good job on the final paper, you must do research beyond the papers discussed in class: find new peer-reviewed articles that touch on the same topic (if you're stuck, a good place to look is in the references of articles that you read, or use Google Scholar to find articles that cited your article). Because this paper is about whole areas of research, you should read several articles carefully, and make sure to cite them: the expectation is to read and cite at least 10 articles, <u>at least 5 of which must be articles that were not on the syllabus</u>.

For a free, online version of APA 7 formatting guidelines, you can use the Purdue Online Writing Lab (OWL) website:
https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html

Proposal Requirements (3 pts):

This assignment will be graded on a complete/incomplete basis per the rubric below.

Submit a short paragraph (approximately 300 words) about your intended topic for the final paper, with at least 3 relevant references you plan to use.

Road Map Requirements (4 pts):

This assignment will be graded on a complete/incomplete basis per the rubric below.

The road map can be in any format, and at any level of detail that works best for your writing process. <u>The only requirement for the road map is that you include atleast 6 relevant references</u>, only 3 of which can be from the class readings. The other 3 must

come from readings that you have been researching specifically for the paper (see the Readings and References section above).
Some examples of this could be:

- A sparse outline of the final paper with some section headings and a broad overview of what key ideas or themes you plan to cover in each section (including relevant references).
- A more detailed outline with section headings, and a bulleted list of points you plan to cover (including relevant references).
- A plan of how you intend to tackle each section of your paper (for e.g. I plan to work on Topic 1 by Week 7, Topic 2 by Week 8, etc.). Make sure to include relevant references.

However, this submission <u>cannot be limited</u> to just what was presented in the proposal (or an abstract of similar length). The idea is to make sure you have thought carefully about your topic well in advance of the deadline. Again, I will give some suggestions and feedback on the road map so that it can help you write a good final paper.

Section Draft Requirements (5 pts):

The section draft should cover one of the three topics/sections you plan to write in your final paper. For example, it could be one of following:

- Your chosen cognitive process and how it can be applied to one of your three chosen fields
- One of your chosen cognitive processes and how it can be applied to your chosen field.

Formatting requirements are as follows:

- 8.5" by 11" paper, 1" margins, 11- or 12-point font, double-spaced
- 2-3 pages in length (excluding references)

Final Paper Requirements (18 pts):

The final paper, due the last day of the reading period, can be in one of these two forms:

- A paper integrating research on three different cognitive processes to one applied field. For e.g., How can research on attention, learning, and memory be applied to education?
- A paper integrating research in three applied fields for one cognitive process. For e.g., How does memory research apply to education, law, and clinical psychology?

You may choose any of the cognitive processes and applications. Cognitive processes can include attention, learning, memory, language, problem-solving, curiosity, etc.

Applications can be those discussed in class or any other application in everyday life. However, your paper must go beyond what was covered in the assigned readings.

Formatting requirements are as follows:

- 8.5" by 11" paper, 1" margins, 11- or 12-point font, double-spaced
- 8-10 pages in length (excluding title page, and references)
- Follow APA 7 formatting guidelines for references and in-text citations.
- Include a title page as per APA 7 formatting

Rubric for the Proposal		
Component	**Completed**	**Incomplete**
Topic (1.5 pts)	Meets requirement for the final paper topic (i.e. 3 cognitive processes applied to one field or one cognitive process applied to three fields)	Does not meet requirements for the final paper topic (points will be taken off based on the requirements that are not met)
References (0.75 pts)	Includes atleast 3 references (one for each of the three sections; each section is one cognitive process applied to one real-world domain)	Does not include all 3 references (points will be taken off based on how many references are missing)
Submission (0.75 pts)	Completed by the deadline	Incomplete after deadline

Rubric for the Road Map		
Component	**Completed**	**Incomplete**
Content (1 pts)	Must extend on the proposal and contain more relevant content than the proposal (e.g. outline with sections and themes, detailed outline with points in each section, plan for tackling the paper by section)	Does not extend on the proposal, or is an abstract/proposal of similar length
References (1 pts)	Includes at least 6 relevant references, three of which are not specified in the reading list/syllabus.	Does not include all 6 references OR Includes at least 6 references, but 4 or more of the references are from the reading list/syllabus.
Submission (1 pts)	Completed and submitted by the deadline	Incomplete after deadline
Feedback (1 pts)	Incorporates and integrates all feedback from the proposal stage.	Does not incorporate or integrate some of the feedback from the proposal stage (0.5 pts). Or Does not incorporate any feedback from the proposal.

	Rubric for the Section Draft		
	100% pts —-- 0% pts		
Component	**Excellent**	**Good**	**Needs Improvement**
Content⁺ (2 pts)	Includes <u>all</u> of the following: ● Evidence: The evidence/data that is used to support your thesis should be the best available to strongly support your claims and include precise and well-cited evidence. ● Analysis: Takes the evidence beyond description or reporting, and thoughtfully consolidates all the evidence to push the paper's claim (i.e. together, what does all this evidence imply about this topic? Are there still any gaps in our knowledge on this topic?) Content is accurate.	Includes evidence, but does not include any analysis that thoughtfully consolidates all the evidence. Or Some analysis and evidence is accurate, while the others are inaccurate or make overstretched claims.	Does not include any evidence or analysis of such evidence. Contains statements that are not supported by references.
References (1 pts)	Included both: ● In-text citations (in APA 7 in-text citations style) ● References at the end of the paper (in APA 7 style). No citations or references were missing. (Note: References are not included in the page limit.)	Included only the in-text citations (in APA 7 style) or only the references at the end of the paper (in APA 7 style) or Some citations and references were included, but not others.	No citations or references were included in the paper.
Submission (0.5 pts)	Completed and submitted by the deadline	— Not Applicable –	Incomplete after the deadline
Feedback (1.5 pts)	You incorporated feedback throughout the semester including from the proposal and road map, and any other discussions you had with the instructor.	Some, but not all, feedback from the different stages (proposal, road map) or discussions with the instructor was incorporated into the final paper.	You did not integrate or incorporate any of the feedback from the instructor including on the proposal, road map, or from any discussions.

Grading Rubric for the Final Paper			
	100% pts —-- **0% pts**		
Component	**Excellent**	**Good**	**Needs Improvement**
Content (12 pts) — Introduction⁺ (2 pts)	Includes <u>all</u> of the following: • Thesis: Paper's main arguments are presented clearly and evolve through the introduction • Motive: Provides the motivation behind the paper (i.e., why are the paper's key question(s) and thesis important and interesting) • Introduce the three sections: State and explain the topics that will be covered in the next few sections of the paper, and why/how it relates to the main thesis in the paper.	Includes one or two of the following: • Thesis • Motive • Introducing the three sections Or Some of the content is inaccurate	Does not include any of the following: • Thesis • Motive • Introducing the three sections Or Content is completely inaccurate
Topic 1⁺ (2 pts; this is the topic that you submitted a section draft on)	Includes <u>all</u> of the following: • Evidence: The evidence/data that is used to support your thesis should be the best available to strongly support your claims and include precise and well-cited evidence. • Analysis: Takes the evidence beyond description or reporting, and thoughtfully consolidates all the evidence to push the paper's claim (i.e. together, what does all this evidence imply about this topic? Are there still any gaps in our knowledge on this topic?)	Includes evidence, but does not include any analysis that thoughtfully consolidates all the evidence. Or Some analysis and evidence is accurate, while the others are inaccurate or make overstretched claims.	Does not include any evidence or analysis of such evidence. Contains statements that are not supported by references.

		Excellent	Good	Needs Improvement
Grading Rubric for the Final Paper				
		100% pts —--- **0% pts**		
Component		**Excellent**	**Good**	**Needs Improvement**
	Topic 2[+] (3 pt)	Same as Topic 1	Same as Topic 1	Same as Topic 1
	Topic 3[+] (3 pts)	Same as Topic 1	Same as Topic 1	Same as Topic 1
	Conclusion[+] (2 pts)	Includes <u>all</u> of the following: ● Restates the paper's central question and thesis statement ● Summarizes the main points of evidence and analysis presented throughout the different sections of the paper. ● Explains the significance of these findings, and the implications for the field and future research (including any gaps in knowledge or future directions for research).	Paper restates the central question and thesis statement, and does one or both of the following: ● Summarizes the main points of evidence and analysis poorly ● Fails to explain the significance of these findings, and the implications for the field and future research	Paper fails to restate the central question and thesis. Paper does not or poorly summarizes the main points across topics. Paper does not explain the significance or implications of the findings.
	[+] : For full points (or the Excellent category of the rubric), content should be accurate.			
Overall writing style and structure (2 pts)		Organization and logic of the paper was clear (including introduction, appropriate transitions in the body paragraphs, and conclusion). There were no or few errors in grammar, spelling, punctuations, etc. Your writing was clear, and easily understandable.	Organization and logic of the paper was clear for the most part, but there were issues with clarity in some areas/sections. There were many errors in grammar, spelling, punctuation etc. Writing was not clear, or easily understandable to the reader.	There was no organization or logic in the structure of the paper. Every sentence had multiple errors in grammar, spelling, punctuation, etc.

	Grading Rubric for the Final Paper		
	100% pts —-- **0% pts**		
Component	**Excellent**	**Good**	**Needs Improvement**
References (2 pts)	Included both: ● In-text citations (in APA 7 in-text citations style) ● References at the end of the paper (in APA 7 style). References are not included in the page limit. No citations or references were missing.	Included either the in-text citations (in APA 7 style) or the references at the end of the paper (in APA 7 style) or Some citations and references were included, but not others.	No citations or references were included in the paper.
Incorporated feedback (2 pts)	You incorporated feedback throughout the semester including from the different stages of the final paper, and any other discussions you had with the instructor.	Some, but not all, feedback from the different stages or discussions with the instructor was incorporated into the final paper.	You did not integrate or incorporate any of the feedback from the instructor including on the proposal, road map, section draft, or from any discussions.