# PSY:COG

Class Time: M 3:50-5:50pm in Olin 307 | Virtual Consultation Hours (booked via Calendly): M/W 12-1pm

#### Instructor

Dr. Justin Hulbert *e-mail*: jhulbert@bard.edu

Book a Zoom Consultation: calendly.com/just-hulbert

# **Course Materials**

Perusal Bisector brightspace bruzz

#### bardcollege.brightspace.com

# Prerequisites

This course typically requires a two-semester commitment or instructor permission.

## Assessment

- . . . .
- P/D/F @ midway
- Final grade calculated as:
  - Perusall: 30%
  - Lab work: **40%**
  - Presentation: 20%
  - Final reflection: 10%





# **Course Overview**

In this course, students will gain experience working in a cognitive neuroscience laboratory. Using controlled experiments and electrophysiological recordings, we will investigate the mechanisms that allow for dynamic control over memories. Students will participate in all phases of the research process including experiment design, stimulus development, programming, data collection, analysis, and presentation.

Scientific research is a process, one that requires creativity, attention to detail, a healthy dose of skepticism, and--importantly-perseverance. To get the most out of this experience, the course generally requires a two-semester commitment. This timeline mimics the Senior Project, with the goal of allowing you to contribute to each stage of the research process. The more you contribute along the way, the more you stand to gain. By taking the initiative and putting in extra time/energy, you may see doors open to additional opportunities like authorship on publications, paid research assistantships, graduate programs, and the likes. Gaining

#### **PSY COG**

#### Cognitive Psychology: Advanced Methodology



## **Learning Objectives**

Coming out of this twosemester sequence, you should have:

- Developed a more nuanced appreciation for the primary research methods and theories used to investigate the interplay between sleep and memory.
- An enhanced ability to read, synthesize, and contribute to the relevant psychological literature.
- First-hand experience designing, implementing, and analyzing a research protocol in a cognitive neuroscience laboratory.
- The necessary skills to program a basic experiment and begin to interpret EEG/ EKG data.
- Had opportunities to present your work to the scientific community.
- A better sense of the nuts and bolts of psychological research and how those skills can be applied to the Senior Project and beyond.

expertise with computer programming or particular pieces of equipment/methodologies may mean more possibilities for your Senior Project or independent study. That said, a *minimal commitment of 3 hours per week is required outside of times devoted to our scheduled meetings and assigned readings.* This may come in the form of "homework" (e.g., conducting a literature review online or in the library) or time working independently (or in groups) in the lab (e.g., programming experiments, testing equipment, scheduling participants, running the experiment, analyzing data, etc.).

# Joint Responsibilities

Achieving the broad aims of this course requires commitments from both me and you. Below you will find an outline of some of those responsibilities. Did I leave something out? Let me know-we can discuss additional responsibilities/group norms as a class.

- I (Justin) agree to...
  - a) Make myself available outside of class via email, Brightspace discussion boards, and during posted Zoom Consultation Hours (by appointment through <u>calendly.com/just-hulbert</u>) to answer questions, provide extra help, and discuss matters related to the course of study.
  - b) Respond in a timely fashion (typically by the end of the next school day) to email queries. In the event that more time is required to fully address the student query, I'll acknowledge receipt of the email and provide you with an estimated response time or suggest meeting in person.
  - c) Facilitate a thoughtful, considerate, and engaging learning environment.
  - d) Make available on Brightspace key materials forming the basis of synchronous activities for the purposes of review or catching up following absences.
  - e) Provide adequate time to complete assignments and notify students about any necessary changes to the course schedule/format as promptly as possible.
  - f) Provide comprehensive and fair assessments of

#### **PSY COG**



# Virtual Consultations

Staying connected during a time of social distancing can be challenging. But assistance is just a few clicks away.

- Other students probably share many of your questions/ concerns. Posting questions on Brightspace will allow everyone to benefit from (and contribute to) the exchange.
- For more personalized issues (or if my Consultation Hours don't work), send me an email. But don't wait until the last minute before a deadline. Give yourself (and me) sufficient time to respond thoughtfully.
- It's easy to arrange a Virtual Consultation. Think of it like dropping by my office. We can chat about life, classes, careers, and (of course) course content.
  - 1. Simply go to <u>calendly.com/</u> just-hulbert
  - 2. Select a meeting time & let me know how I can best prepare
  - 3. You'll get a Zoom link (and reminder) emailed to you

Writing/other academic help is available through <u>Bard Learning</u> <u>Commons (lc@bard.edu)</u>. materials presented or assigned. Assignments, with a level of feedback commensurate with the nature and aims of the task, will be returned to students in a timely fashion.

- g) Create and welcome opportunities for students to provide feedback on the course/teaching throughout the semester.
- You are responsible for...
  - a) Showing up to class (in whatever form it takes) regularly, on time, and prepared while carefully following the relevant health and safety guidelines. I will take attendance when we are in person in order to facilitate contact tracing (and encourage students to use the same seat throughout the semester); however, you will *not* be penalized for absences owing to the pandemic. If you are sick or feel ill, please do *not* attend class. Your classmates and I will work to provide notes and answer questions to help you catch up again.
  - b) Checking your Bard email and Brightspace regularly for important announcements about the course.
    Adapting to the pandemic has made keeping in regular contact more important than ever. By clicking "Announcements" and then "Notifications" on the Brightspace landing page, you can request text and/or email alerts to be sent to you for a variety of course-related happenings.
  - c) Keeping up with the assignments and readings. As the required text is now completely digital, you can access the material on your computer or smart device from anywhere. But keep in mind that there is no substitute for a deep and focused consideration of the material, spaced out over time and viewed interactively through multiple lenses.
  - d) Substantively participating in course discussions (in class and/or online). Note that a top-notch level of participation *does not necessitate responding to every question* raised in class or online; active or

passive efforts to welcome contributions from everyone in the class are also looked upon favorably. Though you are welcome to challenge your fellow students' and my thoughts/conclusions, please do so in a fashion that is respectful. Challenge ideas, not the person raising them.

- e) Maintaining connectivity. There are many benefits to taking handwritten notes. However, the need for social distancing and masks, along with the need to host more activities online, requires access to an internet-connected device during and between class meetings. As such, it is strongly recommended that you bring a fully charged laptop or tablet with you to class. Smartphones are another option, though some features may be limited on such a device.
- f) Submitting assignments digitally via Brightspace (unless prior arrangements have been made with me). If circumstances (e.g., illness) are likely to prevent you from turning in an assignment on time, please be proactive and inform me privately (over email or Zoom Consultation) as soon as possible.
  Students requiring alternative course accommodations (including extended time/flexibility on assignments due to disability) should contact me privately as early as possible after the first class meeting.
- g) Upholding academic integrity. Plagiarism (e.g., copying other's words or ideas without proper citation) will not be tolerated. You are expected to work independently on each graded assignment, unless explicitly instructed otherwise. When in doubt as to what constitutes plagiarism within the confines of this course, you are encouraged both to consult the student handbook (http://www.bard.edu/dosa/handbook/index.php?aid=1201&sid=705) and to contact me for further guidance. There is absolutely no penalty for asking for clarification; however,



failing to abide by Bard's standards for academic integrity can result in failing the course.

#### Assessment Details

- **Perusall Annotations** (30% of course grade)
  - I've heard a shocking rumor: Many college students regularly don't read the assigned materials or give them more than a quick skim! The reasons for this are likely manifold. The materials may be too costly, too dry, too plentiful, too heavy to lug around in the form of a physical textbook. As an instructor, I attempt to balance these legitimate criticisms with the imperative to expose students to the necessary background material to spark insight and discussion. To this end, I have decided to adopt Perusall. Throughout the semester, you will be required to read and annotate certain course materials using this collaborative e-reader with sophisticated data analytics.
  - Perusall helps you learn faster by collaboratively annotating the readings and communicating with your classmates. Collaboration gets you help whenever you need it, makes learning more fun, enables you to help others (which research shows is also a great way for you to learn), and helps me make class better by emphasizing information that you need. Perusall also can read the assigned materials aloud and allow you to take notes (just for yourself-though you can easily share them with other students)!
  - If you have a question or information to share about a passage in the readings, highlight the text and type in a comment as an annotation. You can also respond to a classmate's annotation in threads in real time or upvote questions you find helpful. Simply click the question mark to indicate "I have the same question" or the green checkmark to indicate "this answer helped my understanding." Good annotations contribute to the class by stimulating discussion, explaining your thought processes, helping others, and drawing attention to good points. If a particular classmate's point is relevant, you can explicitly "mention" them and they will be immediately notified, even if not presently signed on. I'd encourage everyone to check in on the Perusall discussion again after doing a first pass on a reading and respond to comments and questions or possibly add new commentary based on newfound understanding. Remember that annotations will be visible to other students, as well as to me (though I will not annotate directly—it is your space).
  - Research shows that the following behaviors on Perusall predict higher end-of-semester grades and long term mastery of the subject. Accordingly, I will consider these factors in calculating your Perusall score:
    - Contributing thoughtful questions and comments to the class discussion, spread throughout the entire reading (some examples: <u>https://perusall.com/</u> <u>downloads/scoring-examples.pdf</u>)

- Starting the reading early
- Breaking the reading into chunks (instead of trying to do it all at once)
- Reading all the way to the end of the assigned reading
- Posing thoughtful questions and comments that elicit responses from classmates
- Answering questions from others
- Upvoting thoughtful questions and helpful answers
- Based on the overall body of your annotations, you will receive a score for each assignment that generally follows the benchmarks listed in the rubric below.

| Score | Characteristics  |
|-------|--|
| 3     | Your contributions demonstrate <i>exceptionally</i> thoughtful and<br>thorough reading of the assignment; you provided exceedingly<br>helpful answers and/or insightful commentary. It is likely that this high<br>score will be rarely given.   |
| 2     | Your contributions meet expectations by demonstrating thoughtful<br>and thorough reading of the assignment. You asked good questions,<br>provided helpful answers, and/or otherwise interacted with your fellow<br>students in a helpful way. You should aim for at least this score. Learn<br>from your past scores to improve the quality of your future<br>annotations. |
| 1     | Your contributions fell below expectations, demonstrating only superficial reading or limited coverage.  |
| 0     | You did not make the required contributions by the deadline or they demonstrated reading of only part of the assignment that was merely superficial.   |

- In some cases, we will use Perusall during our class time together. Other annotated
  reading assignments will be done outside of our synchronous meetings. Students'
  reactions to the course readings prior to class will be used to guide the use of our
  synchronous class time. Thus, it is important that you complete these annotated reading
  assignments by the deadline given. The regular deadlines can be found in the below
  schedule, as well as on Perusall. That will give me the necessary time to prepare
  accordingly in time for our next synchronous class together.
- To get started with Perusall:
  - 1. Log on to <u>Brightspace</u> and navigate to this course.
  - 2. Navigate to the "Course Introduction" module.
  - 3. Click "Perusall, External Learning Tool" at the top of the page.
  - 4. Because the accounts are now linked, use the Perusall link in Brightspace whenever you want to use Perusall for this course (e.g., to complete an assignment) rather than trying to sign in to Perusall's website directly.

- 5. You will have to purchase the book through Perusall to access the reading assignments. Do *not* attempt to purchase the book in some other manner (e.g., a printed copy or some other edition), as you won't be prepared to do the assignments. Instead, wait until the first time you click on the book or a reading assignment from the textbook in Perusall. At that point, you will be prompted to purchase the required textbook. (Note: our first activity will involve annotating the syllabus in Perusall; you will not have to purchase the textbook for this activity, should you still be deciding whether you want to remain in the course.)
  - A 180-day Perusall e-rental for our textbook "Building Experiments in PsychoPy" by Peirce & MacAskill is currently is priced at \$35.00 through Perusall.
- The help feature in Perusall can be quite, well, helpful in answering your questions. You can also find a Perusall FAQ here or submit a support request here: <u>https://</u>support.perusall.com/hc/en-us/categories/360002173133-Students.
- Lab work (40% of course grade) will account for a good chunk of your time devoted to the course and, consequently, your grade. The nature of this work will vary from week to week, but it may include activities like conducting literature searches, learning how to use lab equipment/ software/statistical procedures, programming experiments, recruiting/scheduling participants, running experiments, cleaning up after experiments, and analyzing data. As mentioned above, it is fully expected that different people will bring/develop different skill sets to the lab and some division of labor will logically follow. Still, you are encouraged to give everything you attempt your best shot–you may even find you have surprising interests or skills!
  - You are required to keep an accurate record of your time on task with various aspects of lab work. This *spreadsheet will be submitted via Brightspace by <u>6:00pm each Friday</u> we meet, starting the first week of class (no reports are due the week of Thanksgiving or during Completion Week). Regular failures to submit the spreadsheet on time will result in a grade penalty. While this log must, at a minimum, contain dates, duration of work, and brief description of activities performed (e.g., programming experiment, scheduling participants, etc.), you should use additional fields for notes/revelations that came up along the way [e.g., "discovered a bug in the code (line #36-67 of first\_phase.m) due to an unclosed for-loop; fixed bug, but this affected the first 5 participants' data, which should be excluded"]. Ideally, this record should be useful to you, as well as a way for your instructor to check in on your progress. Your log should reflect at least 3 hours per week (on average--some weeks may require more, some less) of productive lab work, NOT including our scheduled meetings and time devoted to reading assigned materials. Again, more you contribute along the way, the more you stand to gain.*
- **Presenting a research article** (20% of course grade) affords you an excellent opportunity to practice effectively summarizing and critiquing published experimental work. To this end, you

will first be asked to identify (or otherwise assigned) an article and then prepare a 15-to-20minute PowerPoint/Keynote/Google Slides presentation for the group. Your presentation should provide a brief overview of the relevant background and aims of the research, a concise description of the methods, the main findings, and the important conclusions. You should plan on explaining the main figure(s) thoroughly. Importantly, you must also provide your own critical evaluation of the research. Note that adequate preparation for your presentation may mean reading additional background materials, so as to ensure that you have the relevant conceptual grounding. During/after your formal presentation, you are expected to take questions from your audience. Audience members could (and should) ask you anything from questions of clarification to deep conceptual ones. To the extent possible, you should first attempt to answer these questions from a position of authority. After that, you are welcome to open up the floor so that we can work through some of the thornier issues together.

Final Reflection (10% of course grade) provides a thoughtful reflection of what you learned in this course. Your reflection should be organized, go beyond simply parroting back course material verbatim, and include how some of the big lessons from this course could be applied to your education, personal life, and/or career going forward. While your submission should be a polished product, having been fine-turned through careful editing, you are welcome to adopt a format that reflects your own preferred style. You could, of course, format this as a standard written term paper, but you could instead produce a video, animation, comic book, podcast, website, or interpretive dance... OK, maybe not an interpretive dance. But you do have pretty wide latitude here. If you're unsure as to whether your plan is appropriate, check with me. To give you a general guideline, your submission should be roughly equivalent to a 3-to-4-page (double-spaced, 11-or 12-point font) paper with reasonable margins. This reflection will take the place of a standard final exam (and will be graded as such). So take it seriously and commit the necessary time to producing it. Your reflection is due (via Brightspace) by 12/14 at 11:55pm. It is OK to submit a link to your reflection (if, e.g., you posted a video to Youtube or created a website); however, you should not continue to edit the material after the deadline (at least until I've had a chance to grade it).

### Additional Resources

There are treasure troves of information about psychology sprinkled around the internet–much of it can be accessed for free. If you find yourself struggling to understand a concept (or are looking for resources to help build your own experiment), I'd encourage you to search around, carefully evaluate the quality of the sources, and share useful finds with the rest of the class (email it or, even better, post it to Brightspace). Below are some resources I have identified:

- Baddeley, Eysenck & Anderson's <u>Memory</u> (3rd Edition)
  - I highly recommend this text as a supplemental reading. Even if you don't get a hold of a copy, the publishers offer some really useful, free online resources. They include:

- Practice questions, web links/videos, and biographies: <u>https://</u> routledgetextbooks.com/textbooks/9781138326095/student.php
- Simulations of memory experiments: <u>https://routledgetextbooks.com/</u> textbooks/9781138326095/simulation-experiments.php
- Glossary of memory terms: <u>https://routledgetextbooks.com/textbooks/</u>
  9781138326095/glossary.php
- Reference materials:
  - APA Dictionary of Psychology: <u>https://dictionary.apa.org</u>
  - The Human Memory: <a href="https://human-memory.net">https://human-memory.net</a>
- Searchable databases:
  - Library: <u>https://www.bard.edu/library/databases.php?searchtype=sub&subject=psyc</u>
  - Google Scholar: <u>https://scholar.google.com</u>
- Free textbooks & related resources:
  - Neuroscience Online: https://nba.uth.tmc.edu/neuroscience/toc.htm
  - Brain Facts: <u>https://www.brainfacts.org/the-brain-facts-book</u>
  - Neuroscience Open Text: <u>http://neuroscience.openetext.utoronto.ca</u>
  - Computational Cognitive Neuroscience: <a href="https://github.com/CompCogNeuro/ed4">https://github.com/CompCogNeuro/ed4</a>
  - Open Textbook Library: <u>https://libguides.humboldt.edu/openedu/psyc</u>
  - NOBA Project: <u>http://noba.to/d95jpvm7</u>
  - Simply Psychology: <u>https://www.simplypsychology.org</u>
  - Project Gutenberg: <u>https://www.gutenberg.org/wiki/Psychology\_(Bookshelf)</u>
  - MERLOT Project: <u>https://www.merlot.org/merlot/Psychology.htm</u> (or to search more widely <u>https://www.merlot.org/merlot/searchMaterials.htm</u>)
  - **DevPsy Directory:** <u>http://www.devpsy.org/links/open\_source\_textbooks</u>
- Memory/neuroscience activities (some designed for younger audiences):
  - Society for Neuroscience: <u>https://www.sfn.org/sitecore/content/home/brainfacts2/for-educators</u>
  - APA High School: <a href="https://www.apa.org/ed/precollege/topss/lessons/memory.pdf">https://www.apa.org/ed/precollege/topss/lessons/memory.pdf</a>
  - **Neuroscience for Kids:** https://faculty.washington.edu/chudler/chmemory.html
- Videos:
  - Khan Academy: https://www.khanacademy.org/test-prep/mcat/behavior#concept-intro
- Techniques:
  - Functional Neuroimaging: <u>https://imaging.mrc-cbu.cam.ac.uk/imaging/Cbulmaging</u>
- Stimuli and experiment software/code:
  - Kahana Lab: <u>http://memory.psych.upenn.edu/Word\_Pools</u>
  - Tarr Lab: https://www.cmu.edu/dietrich/psychology/tarrlab/stimuli/index.html
  - PsychoPy: <u>https://www.psychopy.org</u>
- Use as an entry point (with caution):

- Wikipedia: <u>https://www.wikipedia.org</u>
- Youtube: <u>https://www.youtube.com</u>

## **Diversity and Access**

Students in our courses come from a variety of backgrounds and viewpoints. It is very exciting to be able to benefit from these differences, and I anticipate a learning environment in which all approaches and backgrounds are respected and challenged in a way that promotes personal growth. To this end, I expect all members of the class to foster a climate of intellectual curiosity and enthusiasm by: (1) actively engaging in our activities and discussions; (2) being prepared to recognize the impact of bias, privilege, and histories of inequity; (3) and voicing opinions in a way that respects others. As a rule of thumb to encourage more voices to be heard, after you've contributed to a conversation in class, wait for three other people to speak before sharing more. You may notice that I pause between asking a question and accepting responses from the class. This is for a similar purpose.

Bard College is committed to providing equal access to all students. If you anticipate issues related to the format or requirements of this course, please schedule a consultation with me, as I would like us to discuss ways to ensure your full participation in the course. Together, we can plan how best to support your learning and coordinate your accommodations. Students who have already been approved to receive academic accommodations through Disability Services should share their accommodation letter and make arrangements to meet as soon as possible (within the first two weeks of the semester, if at all possible).

Have a learning difference or disability–including mental health, medical, or physical impairment–and are not yet registered? Please contact Disability Support Services at <u>disabilityservices@bard.edu</u>. The Director of Disability Resources and Accessibility, Erika van der Velden (<u>evandervelden@bard.edu</u>), will confidentially discuss the process to establish reasonable accommodations. Please note that accommodations are not retroactive and require advance notice to implement.

Whether course material brings up challenging issues or you are facing another type of challenge, the Bard Counseling Service may be able to help. For more information, see : <u>https://www.bard.edu/counseling/</u>.

# COVID-19 Adaptations

In this unusual semester, as we all work as students, faculty, staff in a time of COVID, community responsibility will become an even bigger part of our daily lives. We all have a role to play in helping to keep others as safe as possible. Of course, no choices are risk free, but we can make choices that reduce risk for ourselves and others. To this end, there are a few additional rules and behaviors that we will all need to abide by:



- You must complete the daily check in, on the Involvio app in order to receive your daily green pass.
- We will all need to "foam in" as we enter the space, and wipe down tables and chairs. We will do the same (wipe and "foam out") when we are leaving the classroom.
- In class we will remain physically distant (>6 feet) and wear masks at all times. If you forget a mask, please get one at the nearest mask dispenser before you enter the building.
- We can't eat or drink in class, due to masking.
- Across campus, distancing and masking should happen at all times, even in dorms, Kline or campus paths. The more we all adhere to these safety measures, the safer we will be.

The College has established the "Bard Cares Team" to address instances where students or employees are having difficulty abiding by the community norms of behavior regarding the College's established COVID-19 protocol. The Team has developed a clear set of steps based in restorative practices to ensure compliance with health and safety measures on campus. If you see something that you are not comfortable addressing in the moment, you can send an email to <u>cares@bard.edu</u>.

Please do not attend class if you are sick, feel ill, know you may have been exposed to the novel coronavirus, or have any of the symptoms listed on the Involvio app. You are expected to complete the daily health screening using the app *before* showing up to class in a mask and having "foamed in." Short outdoor mask respites will be offered throughout the semester, weather permitting. Again, you will *not* be penalized for absences due to illness or quarantine. This course and the community we build around it will accommodate the realities of the pandemic with the flexibility they demand.

Given the above, we should expect, and plan for, occasional absences throughout the semester. We'll implement a system of note-taking, stay in close touch with each other, and utilize tools on the Brightspace course site to manage these disruptions. Please email me (or schedule a consultation) should you envision a significant disruption to your ability to meet the course requirements/deadlines. I will do my best to work with you (and other resources to which you have access at Bard) to support you. It is important that we minimize unnecessary disruptions in the face of the pandemic. As such, please take the time now to review the course schedule below and transfer deadlines to your personal calendar. Doing so will help you avoid scheduling conflicts and allow you to carve out the necessary time to perform your best.

Remember that the College-wide policy for grading this semester is that any student can request to take any class P/D/F at any point, even after they have received a final letter grade, all the way up to the start of the spring 2021 semester.

Occasionally (even when we meet in the classroom, face-to-face), we will make use of Zoom (so we can work collaboratively from a safe distance). Rather than sending everyone countless Zoom links, we will be making

use of the Zoom integration in Brightspace. In Brightspace's "Course Introduction" module, you will find our permanent Zoom link. Simply click "Zoom Integration" to get started at the appointed time.

The pandemic has further exposed and exacerbated existing inequalities, including differing levels of access to technology (e.g., high-speed internet and personal computing devices) and other resources (e.g., quiet workspaces, as well as funds for textbooks and supplementary course materials) that facilitate learning at a distance. So, while this course will make heavy use of Zoom videoconferencing (in and out of the classroom), classroom activities that require internet-connected devices (smartphones, tablets, and/or tablets), and online subscription services (e.g., for digital access), I am committed to working collaboratively to facilitate access. Should you not have access to a a portable, internet-connected device in class, please contact the Dean of Inclusive Excellence, Kahan Sablo (ksablo@bard.edu) or let me know so that we can strategize. The Scale Project is a student-led organization committed to increasing equity and access for lower-income students at Bard. They have produced a document entitled, <u>"Being Not-Rich at Bard College"</u> that provides additional tips for navigating some of these challenges. The Scale Project and I both welcome additional suggestions and other feedback

When the class meets remotely via Zoom, we all have to work a bit harder to stay engaged and focused. I recommend removing as many distractions as possible, even if it means something as simple as closing other open windows on your device or moving some unnecessary books of your desk. Of course, I understand that we don't have the ability to control every aspect of our environments. So, while I encourage everyone to have the camera turned on while we are together on Zoom, I recognize and respect that this may not always be possible for a variety of reasons.

#### **Possible Activities**

- Workshop grad school application process (from finding programs/labs to interviewing)
- Analyze HeartSpace data [TNT, HRV (BIOPAC + Polar bands), SSRT]-create analysis pipeline
- Determine feasibility of adapting HeartSpace to social distancing
- Revise existing IRB protocols (add newcomers)
- Recruit/screen participants for re-launch of subject running
- Explore grant opportunities to help to COVID-era transition
- Learn PsychoPy programming (begin converting existing MATLAB code to Python?)
- Literature review of online cognitive control experiments
- Develop online memory control battery (from concept to programming/implementation)
- Practice peer review
- Streamline Z3scoring process (see about license extension)
- Validate Dreem headband coding using Z3score
- Draft sections of Dreem write-up
- TDCS follow-up study

- Build DFcent follow-up experiment? Time estimation study?
- Develop individualized miniature experiments (seeds for Senior Project)?
- Continue developing lab training materials (sleep scoring, TNT, directed forgetting, etc.) and organizing Team Drive
- Later in the semester, we will be treated to a virtual lecture presented by <u>Valeria Gershkovich</u>, associate professor of cognitive psychology at the Bard-affiliated Smolny College in St.
   Petersburg. This virtual lecture on memory will take place at a to-be-determined date/time this semester (likely outside of our scheduled class time, to accommodate the time difference). The lecture will be recorded for those who cannot attend.
  - Also of note, Prof. Gershkovich and I plan on inaugurating a **virtual journal club** this semester, in which we will meet semi-regularly to discuss memory-related research and develop a student-driven online experiment. Stay tuned for more information about how to get involved.

# Tentative Course Schedule

| Week | Date (day) | Торіс   |
|------|------------|---|
| 1    | 8/31 (m)   | <ul> <li>GETTING TO KNOW YOU</li> <li>P"Getting to Know You" survey (Brightspace, abbreviated "BS")</li> <li>Discussion: What will experimental research look like in the COVID era?</li> <li>Annotate the Syllabus (Perusall, abbreviated "PS")</li> <li>P"Semester Goals" survey (BS)</li> <li>Workshop: Grad school bound?</li> <li>→Homework (before next class meeting on 9/7): <ul> <li>Submit short bio and picture for lab website (BS)</li> <li>Annotate Mind Science grant proposal &amp; video (PS)</li> <li>CITI training (https://www.bard.edu/irb/training/, upload certificate to BS)</li> <li>First time sheet due Friday @ 6pm (BS)</li> </ul> </li> </ul> |
| 2    | 9/7 (m)    | <ul> <li>GETTING SITUATED</li> <li>Discuss Mind Science grant and possible future directions</li> <li>Annotate Mind Science 6-month progress report &amp; addendum (PS)</li> <li>Decide on future Perusall readings (grants, papers, PsychoPy book)</li> <li>Create a running to-do list (Google Doc)</li> <li>⇒Time sheet due Friday @ 6pm (BS)</li> </ul>   |
| 3    | 9/14 (m)   | ➡Time sheet due Friday @ 6pm (BS)   |
| 4    | 9/21 (m)   | ➡Time sheet due Friday @ 6pm (BS)   |
| 5    | 9/28 (m)   | ➡Time sheet due Friday @ 6pm (BS)   |
| 6    | 10/5 (m)   | ➡Time sheet due Friday @ 6pm (BS)   |
| 7    | 10/12 (m)  | ➡Time sheet due Friday @ 6pm (BS)   |
| 8    | 10/19 (m)  | ➡Time sheet due Friday @ 6pm (BS)   |
| 9    | 10/26 (m)  | ➡Time sheet due Friday @ 6pm (BS)   |
| 10   | 11/2 (m)   | ➡Time sheet due Friday @ 6pm (BS)   |
| 11   | 11/9 (m)   | ➡Time sheet due Friday @ 6pm (BS)   |
| 12   | 11/16 (m)  | ➡Time sheet due Friday @ 6pm (BS)   |
| 13   | 11/23 (m)  | NO CLASS - THANKSGIVING RECESS<br>(all class meetings after Thanksgiving Recess will be entirely <b>virtual</b> )   |
| 14   | 11/30 (m)  | ➡Time sheet due Friday @ 6pm (BS)   |
| 15   | 12/7 (m)   | ➡Time sheet due Friday @ 6pm (BS)   |

| Week | Date (day) | Торіс  |
|------|------------|--|
| 16   | 12/14 (m)  | NO CLASS - COMPLETION WEEK   |
|      |            | <ul> <li>★ Due (by 11:55pm Tuesday):</li> <li>- Final Reflection (individual submission via BS)</li> </ul> |

Schedule is subject to change to improve pacing and/or accommodate unforeseen events (e.g., severe weather, pandemic, alien abduction). Check announcements on Brightspace/over email.