

# MBB SEMINAR

**Class Time:** W 3:10-4:30pm in RKC 101 | **Justin's Office Hours:** M 1:30-2:30pm/W 9:30-10:30am/by appointment  
**Sven's Office Hours:** [cognlp.org/sven/Schedule.html](http://cognlp.org/sven/Schedule.html)

## Faculty Moderators

Dr. Sven Anderson  
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Dr. Justin Hulbert  
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## Course Materials

Course materials will be posted on **Moodle** (see footer for URL & access code).

## Prerequisites

This course is open to moderated students who are planning on graduating with the MBB concentration or have the faculty moderators' permission.

## Assessment

- Moodle posts: **20%**
- Class participation: **20%**
- Article presentation: **20%**
- "SProj" presentations: **10%**
  - 2 x 5%
- Final paper: **30%**
  - 15% for rough
  - 15% for final draft

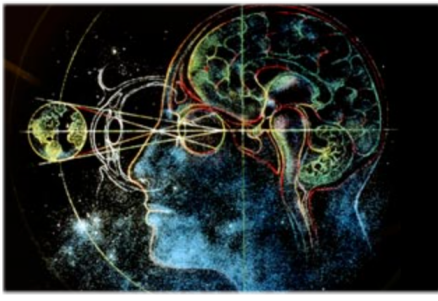


## Course Overview

The mind can be examined through numerous lenses, each of which illuminates important aspects of how information is processed, organized, and transferred within and across individuals. Operating under the assumption that the whole can be greater than the sum of its parts, this seminar aims to facilitate an interdisciplinary approach to the study of the mind. Towards this end, students will be encouraged to engage with concepts, literature, and peers with backgrounds in cognitive psychology, neuroscience, computer science, philosophy, linguistics, and music cognition, amongst other disciplines. While much of the course material will be organized around the broad topic of "mind reading," students will be prompted to exploit these diverse perspectives as they seek to address their own research questions in the form of the Senior Project.

## Joint Responsibilities

Achieving the broad aims of this course requires commitments



## Learning Objectives

Coming out of this course, you should have:

- Developed an appreciation for the benefits and limitations associated with a variety of approaches to examining “mind reading,” along with concrete ideas for how these perspectives could be advantageously integrated.
- The capacity to assume the perspectives of thinkers from disciplines to which you may have had relatively little previous exposure.
- Amassed a good deal of practice reading challenging texts filled with jargon and notions not associated with your home discipline/major.
- Refined your capacity to effectively and efficiently summarize, discuss, and present research.
- The ability to extend your growing expertise and broadened perspective to research questions of particular interest to you.

from the faculty moderators and students alike. Below you will find an outline of some of those responsibilities.

- **Your faculty moderators agree to...**
  - a) Make themselves available outside of class during posted office hours (and by appointment, as necessary) 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, the faculty moderators will acknowledge receipt of the email and provide the student with an estimated response time or suggest meeting in person.
  - c) Facilitate a thoughtful, considerate, and engaging learning environment.
  - d) Provide adequate time to complete assignments, minimize changes to the published schedule/ assignments, and immediately notify students about any such changes.
  - e) Provide comprehensive and fair assessments of 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.
  - f) 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 regularly, on time, and prepared. Please bring a printed or digital copy of your annotated readings to class meetings.
  - b) Checking your college email regularly for important messages about the course.
  - c) Keeping up with the assignments and readings. You should aim to complete the readings well in advance of class meetings, allowing yourself adequate time to wrestle with the content, coming at



## Best Practices

To make the most of office hours, it is recommended that you:

- Avoid waiting until the last minute (before a due date) to attend. Seeking extra help or clarification well in advance of deadlines will leave plenty of time to act on advice.
- Email the faculty moderator(s) in advance or bring with you a concise list of topics/questions you wish to discuss, if possible. Itemizing in this way helps ensure all your questions are addressed and saves you time in the long run. That said, *dropping by for a spontaneous, broader chat is also most welcome.*

When emailing the faculty moderator, keep in mind that:

- Taking the time to draft a concise message with proper spelling/punctuation is expected and will be met with a similarly considered reply.

Writing/other academic help is available through [Bard Learning Commons](http://www.bard.edu/dosa/handbook/index.php?aid=1201&sid=705) ([lc@bard.edu](mailto:lc@bard.edu)).

it from different perspectives. It may take multiple readings (and independent research online or in the library) to get a firm grasp on the material.

- d) Substantively participating in class discussions. 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.
- e) Keeping distractions to a minimum in class. Phones should be turned off or set on vibrate (and kept out of sight unless explicitly required for a class activity).
- f) Submitting assignments on time, digitally via Moodle (unless prior arrangements have been made with the faculty moderator). *Late assignments will NOT be accepted. The only extensions that will be granted involve documented cases of medical or family emergency. Students requiring alternative testing or course accommodations (e.g., due to disability) should contact the faculty moderators 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 the faculty moderators 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.

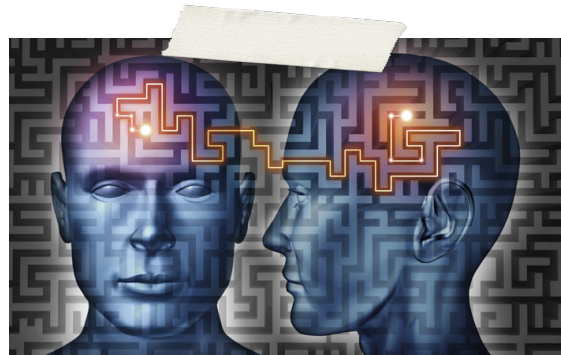
## Assessment Details

- Moodle posts** (20% of your final course grade) are expected from all students not designated as a Presenter each week that a student-selected article is assigned. Specifically, one student will be designated as a Discussant. It is the Discussant's job to read the assigned target article and then generate/seek out a relevant **counterpoint**. For instance, the counterpoint might adopt a different level of analysis, a competing theoretical perspective, or arise from another MBB-related discipline. It is likely that the process of identifying a counterpoint will necessitate scanning the broader literature surrounding the topic of presentation. The Discussant will be responsible for summarizing the counterpoint and pressing the Presenter to reconcile the different lines of argument (see below). Prior to this, though, the Discussant should generate at least one **thought-provoking discussion question** about the assigned target article and post it the course's Moodle discussion forum for the week. The post should inspire discussion online prior to the presentation, as well as set the stage for the post-presentation discussion in class. In order to provide sufficient time for the class to consider (and respond) to the Moodle post, the Discussant is required to post their discussion question by 8pm the Monday before the reading is to be discussed. All other students in the class (i.e., those not named as a Presenter or Discussant for the week) then have until 12pm on the day of the class meeting to contribute their own Moodle post. A good post might answer questions raised, consider the implications of the reading/previous posts, highlight potential methodological flaws or logical weaknesses, identify areas of unresolved confusion, or suggest reasonable next steps in advancing the work. In general, they should demonstrate that poster has read and thought critically about the assigned material and the ongoing exchange of ideas online.
  - Moodle posts will be graded on a scale from  $\sqrt{-}$  to  $\sqrt{+}$  (the high end of the scale is reserved for truly exceptional submissions). If you fail to submit a post on time (even if it's only a few minutes late according to the timestamp on Moodle), it will receive a 0.
  - You are encouraged (though not required) to respond to each others' posts on Moodle before and after class. The more you engage with each other and the material, the more you'll get out of the course.
- Class participation & preparation** (20% of your final course grade) are critical for enabling quality class discussions and learning throughout the semester. What's more, your thoughts, questions, and responses may simultaneously benefit your peers' understanding and the moderators' ability to identify topics that require additional attention. These are just some of the



reasons why it is so important that you to regularly attend class eager and ready to participate, having done all of the readings and assignments with due care and consideration. You should aim to contribute each and every class meeting. Your contributions to class discussions will be evaluated in terms of both quality and quantity (remember: all students should be given both the opportunity to contribute and respectful consideration of their questions/comments). You should plan to **bring either a digital or physical printout** (color, if possible) of the required readings to each class, as we will be scrutinizing figures and text. Throughout the semester, the faculty moderators reserve the right to assign in-class exercises and short take-home assignments to facilitate your understanding of course content. This work will also count towards your participation grade.

- **Presenting a target article** (20% of your final course grade) affords you an excellent opportunity to practice summarizing and critiquing published works for an audience representing a diverse array of backgrounds within the cognitive sciences. To this end, you will first work with the faculty moderators to identify a suitable target article that would be of interest and accessible to fellow students pursuing the Mind, Brain, and Behavior concentration. Ideally, this target article would also relate to your planned Senior Project. Once established, you should then prepare a ~20-minute slideshow presentation for the class. Both your presentation **slides** and accompanying **handout** should be submitted to Moodle before the scheduled class begins (please convert both to .pdf prior to submitting). On the day of your presentation, please also bring sufficient hardcopies of the handout for the entire class. Your presentation should be dedicated to: (1) a summary of the **target article's** aims, methods, and conclusions; (2) a detailed explanation of at least one important figure/table contained in the target article, unless the article does not contain any figures/tables; (3) a description of how the target article relates to the MBB constellation; (4) a thoughtful evaluation of the value of the perspective offered in the target article, along with at least one potentially worthwhile direction for future work. Note that adequate preparation for your presentation may mean identifying and reading additional background articles, so as to ensure that you have the relevant conceptual grounding.
  - After each 30-minute presentation:
    - Critically, the Discussant will be responsible for **respectfully challenging** the presented material during this interchange. The Presenter should then respond by argue whether you believe the two views can be brought into alignment (and, if so, how) or whether the weight of the evidence favors one view over the other (and why). The rest of the class is invited to join in this interchange.





- The Presenter is also expected to take general *questions from the class*. Non-presenting students could (and should) ask anything from questions of clarification to deep conceptual ones. To the extent possible, the Presenter should first attempt to answer these questions from a position of authority before opening it up to broader classroom consideration.
- Finally, all students will be asked to write a **5-minute reflection** in which they summarize arguments made, weigh the evidence, and make connections to additional topics of interest. This is also an opportunity to offer constructive criticism. These reflections will be turned in and count towards participation, using a scale from  $\sqrt{-}$  to  $\sqrt{+}$  (the high end of the scale is reserved for truly exceptional submissions). Missing reflections will receive a 0.
- **Research ("SProj") presentations** (to presentations, each worth 10% of your final course grade) will take place at the beginning and end of the semester, so that students may see how their senior project (or, for non-seniors, preliminary project ideas) have come to benefit from the broad array of perspectives introduced during the MBB seminar. Each presentation should use appropriate media to facilitate comprehension and should last ~10 minutes, leaving 5 minutes for questions from the class. For seniors, the first presentation should include relevant background, a methods overview, predicted results (if relevant), and some discussion of how the project fits under the MBB umbrella. The presentation at the end of the semester should follow the same format and include final results (if relevant), as well as a general conclusion. Non-seniors are welcome to attempt a first presentation that lays out their proposed project in the same format as is required for seniors; however, this level of detail is not at all expected. Instead, non-seniors are more reasonably expected to use the first 10-minute presentation to lay out one or more broad topics of interest and some relevant background. The second presentation should then reflect a more fully formed project proposal that has benefitted from the semester's discussions. Prior to your presentations, you should upload your slides (converted to .pdf) to Moodle.
- **Final paper** (30% of your final course grade) should be 10-12 pages of double-spaced text. Your task first involves identifying a target article (not one assigned or presented for this or another class) and summarizing the author's main points. Then, in the style of the open commentary that accompany Behavioral and Brain Sciences target articles, you will be asked to assume two other perspectives from MBB-related fields distinct from that of the target article's author. Make up a commentator name and institutional/department affiliation for each of the two new perspectives. Then, using their writing voices, comment on the target article, point out areas of connection and things it may not have considered. The target article need not be about mind reading; it can be related to your planned/in-progress senior project work, but there should be no "double-dipping." That is, you can't base it on a paper you've already written. *If you plan to*

*use any/all of the contents you produce for this paper in your eventual senior project, be sure to clear that with your senior project advisor first to avoid any appearance of plagiarism.*

- Note that a rough draft of the paper will be submitted for the faculty moderators' feedback in advance of the final due date. Please plan your work around other assignments/responsibilities (e.g., Senior Project deadlines) accordingly. Your rough draft will be worth the same amount as your final paper, so it is important that you put sufficient effort into the draft. This will serve you well down the line, as you'll garner more substantive feedback from a fuller draft and have less work to do as you confront the many obligations that go along with the end of the semester. To this end, students will be invited to peer-review each other's papers during a class meeting before the final due date, though this won't be graded separately.
- Please upload your both your rough draft and final paper to Moodle as .pdfs.

## Accessibility

Bard College is committed to providing equal access to all students. If you anticipate issues related to the format or requirements of this course, we invite you to meet with 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 as soon as 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 [disabilityservices@bard.edu](mailto:disabilityservices@bard.edu). The coordinator will confidentially discuss the process to establish reasonable accommodations. Please note that accommodations are not retroactive and require advance notice to implement.

## Tentative Course Schedule

Date (day)	#	Topics for Class   Assignments
1/29 (w)	1	<b>INTRODUCTIONS: A MEETING OF MINDS</b> <ul style="list-style-type: none"> <li>▶ Assign Presenters &amp; Discussants for future classes</li> <li>▶ Work on finalizing article selections</li> </ul>
2/5 (w)	2	<b>RESEARCH PRESENTATIONS v1.0</b> <ul style="list-style-type: none"> <li>▶ 10-minute presentations + 5 minutes for Q&amp;A <ul style="list-style-type: none"> <li>- Seniors may expand on presentations given to their home programs, if applicable</li> <li>- Non-seniors should discuss an early project ideas relevant to MBB (it's expected that this will very much be a work in progress at this early stage)</li> </ul> </li> </ul>
2/12 (w)	3	<b>MIRROR, MIRROR NEURONS ON THE WALL...</b> <ul style="list-style-type: none"> <li>• Cook et al. (2014, Behavioral and Brain Sciences): <i>target article</i>, pp. 177-192</li> <li>▶ In-class paraphrasing exercise</li> </ul>
2/19 (w)	4	<b>NEURAL CROSSTALK: OPEN PEER COMMENTARY IN BBS</b> <ul style="list-style-type: none"> <li>• Skim the commentary (reading the abstracts) &amp; carefully read authors' response from Cook et al. (2014, BBS): pp. 192-229</li> <li>▶ Selected commentary will be assigned in class &amp; discussed/debated</li> </ul>
2/26 (w)	5	<b>CAN COMPUTERS THINK?</b> <ul style="list-style-type: none"> <li>• AUTHOR (YEAR, JOURNAL) <ul style="list-style-type: none"> <li>- Presenter: Rayo Verweij</li> <li>- Discussant: _____</li> </ul> </li> <li>▶ First post-presentation reflection in class</li> </ul>
3/4 (w)	6	<b>NEUROPLASTICITY</b> <ul style="list-style-type: none"> <li>• AUTHOR (YEAR, JOURNAL) <ul style="list-style-type: none"> <li>- Presenter: Sana Tariq</li> <li>- Discussant: _____</li> </ul> </li> </ul>
3/11 (w)	7	<b>LEARNED AVOIDANCE BEHAVIOR</b> <ul style="list-style-type: none"> <li>• AUTHOR (YEAR, JOURNAL) <ul style="list-style-type: none"> <li>- Presenter: Bruno Souza Di Nucci</li> <li>- Discussant: _____</li> </ul> </li> </ul>
3/18 (w)	8	<b>GENE EDITING WITH CRISPR</b> <ul style="list-style-type: none"> <li>• AUTHOR (YEAR, JOURNAL) <ul style="list-style-type: none"> <li>- Presenter: Adam Fallah</li> <li>- Discussant: _____</li> </ul> </li> <li>▶ Rough draft of paper due today (by 6pm via Moodle)</li> </ul>
3/25 (w)	--	<b>No class (Spring Break)</b>



Date (day)	#	Topics for Class   Assignments
4/1 (w)	<b>9</b>	<b>FINANCIAL MARKET PSYCHOLOGY</b> <ul style="list-style-type: none"> <li>• AUTHOR (YEAR, JOURNAL)</li> <li>- Presenter: Michael O'Donnell</li> <li>- Discussant: _____</li> </ul>
4/8 (w)	<b>10</b>	<b>PHENOMENOLOGY OF PAIN PERCEPTION</b> <ul style="list-style-type: none"> <li>• AUTHOR (YEAR, JOURNAL)</li> <li>- Presenter: Lukas Hemmer</li> <li>- Discussant: _____</li> </ul>
4/15 (w)	<b>11</b>	<b>SLEEP DEPRIVATION</b> <ul style="list-style-type: none"> <li>• AUTHOR (YEAR, JOURNAL)</li> <li>- Presenter: Alex Luscher</li> <li>- Discussant: _____</li> </ul>
4/22 (w)	<b>12</b>	<b>RESERVED FOR GUEST SPEAKER/SPECIAL TOPICS</b>
4/29 (w)	<b>13</b>	<b>RESERVED FOR GUEST SPEAKER/SPECIAL TOPICS</b> ▶ Note: Senior Projects are due today
5/6 (w)	<b>14</b>	<b>FINAL PAPER PEER REVIEW</b>
5/13 (w)	<b>15</b>	<b>RESEARCH PRESENTATIONS v2.0</b> ▶ 10-minute presentations + 5 minutes for Q&A ▶ Final paper due today (by 6pm via Moodle)

*Schedule is subject to change to improve pacing and/or accommodate unforeseen events (e.g., severe weather). However, for planning purposes, every effort will be made to maintain scheduled due dates.*