Spring 2018

MBB SEMINAR

Class Times: Th 2:30-4:30pm in Olin 301 | Office Hours: Tu 5-6pm/F 3-4pm/by appointment

Faculty Moderator

Dr. Justin Hulbert office: Preston 108 phone: x4390 e-mail: jhulbert@bard.edu (preferred contact)

Course Materials

Course materials will be posted on **Moodle2** (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 moderator's permission.

Assessment

- Moodle posts: 220pts
- Class participation: 150pts
- Article presentation: 180pts
- SProj presentations: **150pts**
- 2 x 75pts
 Final paper: **300pts**
 - - 100pts for rough
 - 200pts 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

Mind, Brain, & Behavior Seminar



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 moderator and students alike. Below you will find an outline of some of those responsibilities.

- Your faculty moderator agrees to...
 - a) Make himself 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 moderator 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

MBB 317

Mind, Brain, & Behavior Seminar



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 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*. Tea and/or coffee will be available.

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 <u>Bard Learning</u> <u>Commons (lc@bard.edu)</u>. 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). A late assignment will immediately be subject to a 10% penalty, with an additional 10% penalty leveled against that assignment's score for every 24 hours it remains late. 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 moderator 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 (<u>http://www.bard.edu/dosa/handbook/index.php?aid=1201&sid=705</u>) and to contact the faculty moderator 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

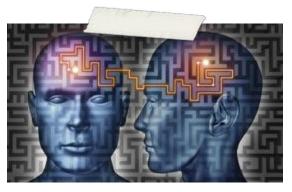
- Moodle posts (20 points per week, together accounting for 220 points) Everyone (including the presenter for a given week) is expected to generate and post to Moodle a Twitter-style headline (140 characters max-the original character limit) encapsulating a main point from one (or more) of the assigned readings for the week. Under the headline, you are also required to post at least one thought-provoking discussion question about that reading. The discussion questions are intended to help you think deeply about the articles as well as to help organize the in-class discussion. Some weeks, students may be asked to randomly draw a discussion guestion out of a hat and spend some time working with the assigned material and outside resources to begin to address the question in class. Additionally, each week you are required to source an outside article that is related to the assigned reading about which you've commented. This *related* article could be (a) a publication that was cited in the target article; (b) a publication that cited the target article; or (c) a publication you find on your own through an independent literature search. Regardless, it must add value to the content contained in the target article (e.g., by offering additional theoretical/empirical support, by offering an alternate explanation or contradictory piece of evidence, by linking it to another area of inquiry or real-life situation, or the likes). You must have access to the full article, as you are required to submit a .pdf copy of it to Moodle. The Twitter-style headline, discussion question, one-paragraph summary of the related article you sourced, and the .pdf of the related article itself must be posted to the Moodle discussion forum by 8pm the Wednesday before the reading is to be discussed. Note that your one-paragraph summary of the related article must indicate that you did more than simply paraphrase its abstract. You may be asked to provide a verbal summary in class. 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, however, 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.
 - No posts are required for the classes meeting on 2/1, 2/15, 5/10, and 5/17.



Class participation & preparation (roughly 10 points per week, together accounting for 150 points) 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 instructor's 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 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 instructor reserves the right to assign in-class exercises and short take-home assignments to facilitate your understanding of course content. Successful completion of these tasks will count towards your participation grade.



Presenting a target article + related work (180 points) affords you an excellent opportunity to practice effectively summarizing and critiquing published work. To this end, you will first be assigned one of the assigned ("target") articles and then prepare a ~30-minute PowerPoint/ Keynote/Google Slides presentation. Your presentation [in .ppt(x), .key, or .pdf form-please convert any GoogleSlides to one of those formats prior to uploading] should be uploaded to Moodle before the scheduled class begins. The first half of 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 our broad topic of mind reading, including topics we've already covered in the class; (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 an additional articles, so as to ensure that you have the relevant conceptual grounding. In fact, the second half of your presentation should be dedicated to discussing (in the same four ways mentioned above) a *related article*. This related article (which could be the same one as you summarized in your Moodle post-see above) could be (a) a publication that was cited in the target article; (b) a publication that cited the target article; or (c) a publication you find on your own through an independent literature search. Regardless, it must add value to the content contained in the target article (e.g., by offering additional theoretical/empirical support, by offering an alternate explanation or contradictory piece of evidence, by linking it to another area of inquiry or real-life situation, or the likes).

- After each 30-minute presentation:
 - The presenter is expected to take *questions from the audience*. Audience members 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 discussion.
 - All non-presenting students will be asked to do a 5-minute free write in which they summarize the presenter's main points, make connections to topics of interest, consider how compelling the findings/arguments are, and offer constructive criticism of the presentation. These free writes will be turned in and count towards participation, using a scale from √- to √+ (the high end of the scale is reserved for truly exceptional submissions). Missing free writes will receive a 0.
- Senior project presentations (two 75-point presentations, together accounting for 150 points) 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 PowerPoint-style presentation 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 Mind, Brain, and Behavior 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.
- Final paper (300 points, of which 100 points are associated with the rough draft) 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 from 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 instructor's feedback in advance of the final due date. Your rough draft will be worth 100 points. 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.

Tentative Course Schedule

Date (day)	#	Topics for Class Assignments
2/1 (th)	1	 INTRODUCTIONS: A MEETING OF MINDS What's my disciplinary line? (introductory game) In-class readings (different approaches to understanding/reading the mind): Friedenberg & Silverman (2012): chapter 1 Gazzaniga (2010, Trends in Cognitive Sciences) Heyes & Frith (2014, Science): review summary
2/8 (th)	2	 MIND READING: PROMISE & CAVEATS Bermúdez (2014): Chapter 12 Poldrack & Wagner (2004, Current Directions in Psychological Science) Bem (2011, Journal of Personality and Social Psychology) Assign summarizers/discussion leaders for future classes
2/15 (th)	3	 RESEARCH PRESENTATIONS v1.0 10-minute presentations + 5 minutes for Q&A Seniors may expand on presentations given to their home programs, if applicable 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)
2/22 (th)	4	 DEVELOPING THEORIES OF MIND Carpendale & Lewis (2004, Behavioral and Brain Sciences): target article, pp. 79-96 In-class paraphrasing exercise
3/1 (th)	5	 MEETING OF THE MINDS: OPEN PEER COMMENTARY IN BBS Skim the commentary (reading the abstracts) & carefully read authors' response from Carpendale & Lewis (2004, BBS): pp. 96-151 Selected commentary will be assigned in class & discussed/debated
3/8 (th)	6	 SPEAK YOUR MIND Goldin-Meadow (1999, TiCS) Levinson (2016, TiCS) Presenter: OPTIONAL: Pickering & Garrod (2004, BBS) First post-presentation free write in class In-class practice constructing a reverse outlining of non-presented target article
3/15 (th)	7	FINDING HARMONY • D'Ausilio et al. (2014, TiCS) - Presenter: • After class: course feedback survey (online, anonymous)
3/22 (th)		No class (Spring Break)

Date (day)	#	Topics for Class Assignments
3/29 (th)	8	MIRROR, MIRROR NEURONS ON THE WALL • Gallese & Sinigaglia (2011, TiCS) - Presenter: • OPTIONAL: Cook et al. (2014, BBS) • <u>TED Talk:</u> "The Neurons that shaped civilization" (7m 43s)
4/5 (th)	9	SOME BODY ELSE • Maister et al. (2015, TiCS) - Presenter:
4/12 (th)	10	 MIND IN THE MACHINE Cohen et al. (2017, Nature Neuroscience) Presenter: OPTIONAL: Shen (2018); Norman et al. (2006, TiCS); Lake et al. (2017, BBS) Rough draft of paper due today (by 6pm via Moodle) Nature Video: "Reading minds" (2m 5s) Vision Reconstruction (2m 56s) Gallant Lab: Brain viewer
4/19 (th)	11	MEETING OF MINDS Hasson et al. (2012, TiCS) Presenter: OPTIONAL: Schilbach et al. (2013, BBS); Stolk et al. (2016, TiCS)
4/26 (th)	12	CONFLICTS OF CONSCIOUSNESS • Tsuchiya et al. (2015, TiCS) - Presenter: • <u>PopTech:</u> "Search for consciousness" (20m 58s)
5/3 (th)	13	 CLOSING ARGUMENTS (A DEBATE): LIE DETECTION & BRAINS ON TRIAL Sip et al. (2007, TiCS) Langleben & Moriarty (2012, Psychology, Public Policy, and Law) Schauer (2009, TiCS) Roskies, Schweitzer, & Saks (2013, TiCS) Brains on Trial: "Can a brain scan tell you what you are seeing?" (6m 21s)
5/10 (th)	14	PEER REVIEW ► Students to meet on their own (faculty moderator away for psychology boards)
5/17 (th)	15	 RESEARCH PRESENTATIONS v2.0 10-minute presentations + 5 minutes for Q&A Augment presentation v1.0 with newfound perspective/expertise 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.