Term Information

Effective Term	Autumn 2022

General Information

Course Bulletin Listing/Subject Area	Psychology
Fiscal Unit/Academic Org	Psychology - D0766
College/Academic Group	Arts and Sciences
Level/Career	Graduate
Course Number/Catalog	6202.01
Course Title	Biological and Social Bases of Behavior
Transcript Abbreviation	BIO SOC BASES BX
Course Description	This is a graduate level introduction to social psychology and neuroscience and their intersection. The first part of the course will familiarize the student with theories, concepts, and research paradigms employed in the field of social psychology. The second part will familiarize the student with principles of drug action as well as neural and chemical influences on socioemotional behavior.
Semester Credit Hours/Units	Fixed: 2

Offering Information

Length Of Course	14 Week, 12 Week, 8 Week, 7 Week, 6 Week, 4 Week
Flexibly Scheduled Course	Never
Does any section of this course have a distance education component?	No
Grading Basis	Letter Grade
Repeatable	No
Course Components	Lecture
Grade Roster Component	Lecture
Credit Available by Exam	No
Admission Condition Course	No
Off Campus	Never
Campus of Offering	Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites	Instructor permission required. Course is only open to doctoral students in the clinical psychology program.
Exclusions	
Electronically Enforced	Yes

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code	42.2801
Subsidy Level	Doctoral Course
Intended Rank	Doctoral

Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors

Course Details

Course goals or learning objectives/outcomes

- Familiarize students with social psychological, biochemical, and neuroscientific approaches to the study of socioemotional behavior.
- Familiarize students with common methodologies in social psychology, pharmacology, and neuroscience.
- Enrich students' own research pursuits by considering how their own work could interface with social psychology, neuropharmacology, neuroimaging, and psychoneuroimmunology.
- Develop the skills necessary to learn from peer-reviewed journal articles in biological and social psychology as well as discuss and evaluate them.
- Use effective communication and interaction skills with people of diverse abilities, backgrounds and cultural perspectives

Content Topic List

- Motivated Reasoning
- Need to Belong
- Empathy
- Interpersonal Relationships
- Inflammation
- Biology of Stress Responses
- Neural and chemical influences on social behavior

Sought Concurrence

No

Attachments

- DSK Social Biological Bases of Behavior - Proposed Syllabus 1.0.docx: Syllabus

(Syllabus. Owner: Paulsen,Alisa Marie)

Comments

- Please suggest a more appropriate CIP code, if needed. I didn't see a listing for social neuroscience. *(by Paulsen,Alisa Marie on 01/30/2022 05:56 AM)*

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Paulsen,Alisa Marie	01/30/2022 05:56 AM	Submitted for Approval
Approved	Paulsen,Alisa Marie	01/30/2022 06:05 AM	Unit Approval
Approved	Vankeerbergen,Bernadette Chantal	02/08/2022 02:56 PM	College Approval
Pending Approval	Cody,Emily Kathryn Jenkins,Mary Ellen Bigler Hanlin,Deborah Kay Hilty,Michael Vankeerbergen,Bernadette Chantal Steele,Rachel Lea	02/08/2022 02:56 PM	ASCCAO Approval

Psychology 6202.01: Discipline Specific Knowledge Seminar (Fall 2022)

Social and Biological Bases of Behavior

Instructor: Baldwin M. Way, Ph.D.
Time: Wednesdays 2:00 to 5:00pm
Location: Lazenby 120
Contact Information: way.37@osu.edu; 614-292-3348
Instructor's Office: 100G Lazenby
Office Hours: by appointment

Overview

This course is a graduate level introduction to social psychology and neuroscience. Thus, the first part of the course will familiarize the student with theories, concepts, and research paradigms employed in the field of social psychology. The second part of the course will familiarize the student with principles of drug action as well as neural and chemical influences on socioemotional behavior. In addition, focusing on similar psychological processes from both a social psychological and neuroscientific perspective provides the opportunity to think about the interface between the biochemical and the psychological levels, the potential advantages of the integration of these two different approaches for explaining thought and behavior, and the methodological considerations and challenges of research at this interface. Because a central goal of the seminar is to help students learn to think about their research from novel perspectives, students do not need to have a background in biochemical or social psychological theory, measures, or methods.

Learning Objectives

• To familiarize students with social psychological, biochemical, and neuroscientific approaches to the study of socioemotional behavior.
• To familiarize students with common methodologies in social psychology, pharmacology, and neuroscience.
• Enrich students' own research pursuits by considering how their own work could interface with social psychology, neuropharmacology, neuroimaging, and psychoneuroimmunology.
• By covering similar topics from different fields and methodologies students will gain appreciation for the merits of different approaches
• To develop the skills necessary to learn from peer-reviewed journal articles as well as discuss and evaluate them.
• Use effective communication and interaction skills with people of diverse abilities, backgrounds and cultural perspectives
• Enhance students' development as independent thinkers

Materials

Finkel, E. J., & Baumeister, R. F. (Eds.). (2019). *Advanced social psychology: The state of the science* (2nd Edition.) Oxford University Press.

This book will be on reserve in the library and is also available for rental for a reasonable price.

Banaji, M. R., & Greenwald, A. G. (2016). *Blindspot: Hidden biases of good people*. Bantam.
Bullmore, E. (2018). *The inflamed mind: A radical new approach to depression*. New York: Picador. (This is the most helpful introduction to psychoneuroimmunology that I have found.)
Other course material will be available on Carmen. Readings subject to change depending on course and student goals as well as new developments in the field.

Course Format

The course will primarily consist of discussion of readings from the primary literature as well as lectures to provide basic introductory background information. All lecture slides will be made available to students to view off-line. However, as meeting many of the learning objectives of this course require dynamic interactions with others, there is an expectation that students will make every effort to attend in-person sessions. If you anticipate being unable to attend regularly, please contact the instructor for accommodations. If the in-person format needs to be altered due to infectious disease risk, the same activities will be performed online.

Credit Hours and Work Expectations.

This is a 3-credit-hour course. According to Ohio State policy, students should expect around 3 hours per week of time spent on direct instruction (instructor content and Carmen activities, for example) in addition to 6 hours of homework (reading and assignment preparation, for example) to receive a grade of (C) average.

In-class Discussion

The discussion at each class meeting will have two primary goals:

1) Extract key principles from assigned readings, guided by the "Extraction Questions"
2) Expand from these key principles, applying Mook's "thinking through" process to consider how the readings may relate to each other and/or to other research from the course or beyond, to evaluate possible critiques of the readings, to identify future research directions, and/or to discuss how the readings may help illuminate and understanding of or solution to everyday problems or phenomena.

These goals will be achieved through students' active participation in group discussion and collaboration.

Discussion Leader (10% of final grade).

Each week a student will have the opportunity to lead the class discussion. Devise a structure for the class meeting that serves the goals of both "extraction" and "expansion". You may do this in any way you like. The job of the discussion leader is to elucidate key details of the readings and clarify points of confusion and then progress to raising questions that further the dialogue and make us think more deeply about the readings. A good discussion will also integrate across papers and themes in the course. This will be graded on a three-tier system. A check represents what the instructor expects from the average student in the class. A check-plus represents superior work, whereas a check-minus represents work that is below expectation.

Discussion Participation (10% of final grade).

Because this is a seminar, the goal is to participate in discussion in order to facilitate engagement with the material and the development of novel insights. It is expected that all students will share and participate equally (and respectfully!). This will be graded on the same three-tier system.

Thought Papers (30% of final grade).
To facilitate critical thinking about the material each week every student will need to prepare a thought paper. These should be no longer than 1 page. These are due at noon on Mondays on Carmen to give the discussion leader time to read them. For sake of organization, please name your file: "Last Name, First Name - Week X Thought Paper."

The purpose of these papers is to encourage you to actively engage the ideas you are reading about—you may have critiques of the research, thoughts about how the ideas in the papers relate to each other or to other research you've read about or are conducting. The readings may even inspire new research ideas. In other words, these papers are not meant to be summaries of what you read, but rather elaborations on your reactions. Beyond simply suggesting an idea/critique/hypothesis, you should articulate the implications of it and provide explicit evidence of how the idea/critique/hypothesis you are suggesting matters. For example:

- if offering a critique of research, articulate how this critique offers a plausible alternative understanding of the data and why this would matter in terms of the conclusions we draw
- if you pose a question of whether an effect might exist, take the next step to discuss your opinion on whether it does and why you believe this (or why it is unclear because there are reasons to support its existence but also not) as well as how you might test it and why determining whether it exists would have implications beyond what we already know based on existing theory;
- if you are proposing an application of the research, be specific about exactly how the findings would be applied, considering challenges that might be encountered and some potential solutions. The papers need not be formal in style, but they should be coherent enough for me to follow. Each paper should be less than one page, which should be enough for you to rigorously engage with the readings and elaborate on your "thinking through" process.

Thought papers will be graded on a three-tier system. A check represents what the instructor expects from the average student in the class. A check-plus represents superior work, whereas a check-minus represents work that is below expectation. The primary criteria for evaluation of the thought papers will be the degree to which you think critically about the readings. If you don't understand a key issue, say so and discuss why it is a critical question for understanding the topic.

Examination (25% of final grade).
There will be an examination at the conclusion of the social psychological section of the course. The exam consists of a series of short-answer and short essay-based questions. The midterm will be completed online before fall break. Students must complete all work on their own without consulting others.

Cumulative Project (25% of final grade).
As this course is designed to expose you to a new research area, the culminating project has the goal of fostering the integration of your primary research focus with the subject matter or methods presented this semester. The currency, quite literally, of an academic researcher is the ability to write grants and unfortunately graduate students get little experience in doing this. Therefore, your final project should take the shape of a standard NIH grant proposal. This will include specific aims, background, innovation, and approach sections. Max length is that of an R21 (6 pages). Further information on grant writing format will be presented in class. Standard grading scheme (ie A, A-).

Late assignments
Late submissions will not be accepted. If you anticipate having difficulties submitting an assignment by the deadline, please notify your instructor immediately.

Grading
The final grade will be weighted:

Social Psychology Examination: 25%
Cumulative Project: 25%
Discussion Leader: 10%
Discussion and Classroom Participation: 10%
Thought Papers: 30%

Grading Scale
A standard OSU grading scale will be used: A = > 93%; A- = 90-92.9%; B+ = 87-89%; B = 83-86.9%; B- 80-82.9%; C+ = 77-79.9%; C = 73-76.9%; C- = 70-72.9%; D+ = 67-69.9%; D = 60-66.9%; E < 60%

Academic integrity policy
See **Descriptions of major course assignments**, above, for my specific guidelines about collaboration and academic integrity in the context of this online class. It is expected that you do your own work.

OHIO STATE'S ACADEMIC INTEGRITY POLICY
Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the university's *Code of Student Conduct* (studentconduct.osu.edu), and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the university's *Code of Student Conduct* and this syllabus may constitute "Academic Misconduct."

The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the university or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the university's *Code of Student Conduct* is never considered an excuse for academic misconduct, so I recommend that you review the *Code of Student Conduct* and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by university rules to report my suspicions to the Committee on Academic Misconduct. If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.
It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct http://studentlife.osu.edu/csc/.
Other sources of information on academic misconduct (integrity) to which you can refer include:

- Committee on Academic Misconduct web page (go.osu.edu/coam)
- Ten Suggestions for Preserving Academic Integrity (go.osu.edu/ten-suggestions)
- Eight Cardinal Rules of Academic Integrity (go.osu.edu/cardinal-rules)

Copyright for instructional materials
The materials used in connection with this course may be subject to copyright protection and are **only** for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Statement on Title IX
All students and employees at Ohio State have the right to work and learn in an environment free from harassment and discrimination based on sex or gender, and the university can arrange interim measures, provide support resources, and explain investigation options, including referral to confidential resources.
If you or someone you know has been harassed or discriminated against based on your sex or gender, including sexual harassment, sexual assault, relationship violence, stalking, or sexual exploitation, you may find information about your rights and options at titleix.osu.edu or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu. Title IX is part of the Office of Institutional Equity (OIE) at Ohio State, which responds to all bias-motivated incidents of

harassment and discrimination, such as race, religion, national origin and disability. For more information on OIE, visit equity.osu.edu or email equity@osu.edu.

Commitment to a diverse and inclusive learning environment

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

It is expected that class discussions will focus on the ideas, not the person sharing the ideas. Thus, the goal is to foster critical thinking without criticizing the person.

Your mental health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. No matter where you are engaged in distance learning, The Ohio State University's Student Life Counseling and Consultation Service (CCS) is here to support you. If you find yourself feeling isolated, anxious or overwhelmed, on-demand resources are available at go.osu.edu/ccsondemand. You can reach an on-call counselor when CCS is closed at 614- 292-5766, and 24-hour emergency help is also available through the 24/7 National Prevention Hotline at 1-800-273-TALK or at suicidepreventionlifeline.org. The Ohio State Wellness app is also a great resource available at go.osu.edu/wellnessapp.

ACCESSIBILITY ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

Requesting accommodations

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your

accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Course technology

TECHNOLOGY SUPPORT

For help with your password, university email, Carmen, or any other technology issues, questions, or requests, contact the Ohio State IT Service Desk. Standard support hours are available at ocio.osu.edu/help/hours, and support for urgent issues is available 24/7.

- **Self-Service and Chat support:** ocio.osu.edu/help
- **Phone:** 614-688-4357(HELP)
- **Email:** servicedesk@osu.edu
- **TDD:** 614-688-8743

TECHNOLOGY SKILLS NEEDED FOR THIS COURSE

- Basic computer and web-browsing skills
- Navigating Carmen (go.osu.edu/canvasstudent)
- CarmenZoom virtual meetings (go.osu.edu/zoom-meetings)

HELPFUL EQUIPMENT SHOULD THE CLASS NEED TO GO ONLINE DUE TO COVID INDUCED CHANGES

- Computer: current Mac (MacOs) or PC (Windows 10) with high-speed internet connection
- Webcam: built-in or external webcam, fully installed and tested
- Microphone: built-in laptop or tablet mic or external microphone
- Other: a mobile device (smartphone or tablet) to use for BuckeyePass authentication

REQUIRED SOFTWARE

- Microsoft Office 365: All Ohio State students are now eligible for free Microsoft Office 365. Full instructions for downloading and installation can be found at go.osu.edu/office365help.

CARMEN ACCESS

You will need to use BuckeyePass (buckeyepass.osu.edu) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you take the following steps:

- Register multiple devices in case something happens to your primary device. Visit theBuckeyePass - Adding a Device help article for step-by-step instructions (go.osu.edu/add-device).
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click **Enter a Passcode** and then click the **Text me new codes** button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Download the Duo Mobile application (go.osu.edu/install-duo) to all of your registered devices for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi service

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357(HELP) and IT support staff will work out a solution with you.

Accessibility of course technology

This online course requires use of CarmenCanvas (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with me.

- Canvas accessibility (go.osu.edu/canvas-accessibility)
- Streaming audio and video
- CarmenZoom accessibility (go.osu.edu/zoom-accessibility)
- Collaborative course tools

Course Calendar (Subject to Change)

Date	Topic	Readings
Social Psychology		
8/24	Introduction	Reis, H. T. (2010). How we got here from there: A brief history of social psychology. In R. Baumeister & E. Finkel (Eds.), *Advanced social psychology: The state of the science* (pp. 25-60). New York: Oxford. Jordan, C. H. and Zanna, M. P. (1999) How to read a journal article in social psychology. In R. F. Baumeister (Ed.), *The self in social psychology* (pp. 461-470). Philadelphia, PA: Psychology Press. Neuroanatomy for dummies: https://www.youtube.com/watch?v=QL20YcbeZY4
8/31	Motivated Reasoning	Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, 108, 480-498. Ditto, P. H., & Lopez, D. F. (1992). Motivated skepticism: Use of differential decision criteria for preferred and nonpreferred conclusions. *Journal of Personality and Social Psychology*, 63, 568-584. Dunning, D. (1999). A newer look: Motivated social cognition and the schematic representation of social concepts. *Psychological Inquiry*, 10, 1 – 11.
9/7	Ostracism and the need to belong	Review: Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497. Kross, E., Berman, M. G., Mischel, W., Smith, E. E., & Wager, T. D. (2011). Social rejection shares somatosensory representations with physical pain. *Proceedings of the National Academy of Sciences*, *108*(15), 6270-6275. Woo, C. W., Koban, L., Kross, E., Lindquist, M. A., Banich, M. T., Ruzic, L., ... & Wager, T. D. (2014). Separate neural representations for physical pain and social rejection. *Nature communications*, *5*(1), 1-12.
9/14	Interpersonal Relationships and Bonding	Gable, S. L., Gosnell, C. L., & Prok, T. (2019). Close relationships. In R. Baumeister & E. Finkel (Eds.), *Advanced social psychology: The state of the science* (2nd Ed, pp. 227-248). New York: Oxford. Reis, H. T., Clark, M. S., & Holmes, J. G. (2004). Perceived Partner Responsiveness as an Organizing Construct in the Study of Intimacy and Closeness. In D. J. Mashek & A. P. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 201–225). Crocker, J., & Canevello, A. (2008). Creating and undermining social support in communal relationships: The role of compassionate and self-image goals. *Journal of Personality and Social Psychology*, 95(3), 555-575.
9/21	Empathy	Zaki, J. (2020). Integrating empathy and interpersonal emotion regulation. *Annual Review of Psychology*, *71*, 517-540. Cialdini, R. B., Brown, S. L., Lewis, B. P., Luce, C., & Neuberg, S. L. (1997). Reinterpreting the empathy-altruism relationship: When one into one equals oneness *Journal of Personality and Social Psychology, 73*, 481-494. Batson, C. D., Sagar, K., Garst, E., Kang, M., Rubchinsky, K., & Dawson, K. (1997). Is empathy-induced helping due to self-other merging? *Journal of Personality and Social Psychology, 73*, 495-509. Coll, M. P., Viding, E., Rütgen, M., Silani, G., Lamm, C., Catmur, C., & Bird, G. (2017). Are we really measuring empathy? Proposal for a new measurement framework. *Neuroscience & Biobehavioral Reviews*, *83*, 132-139.
9/28	Intergroup Processes	Brewer, M. (2019). Intergroup Relations. In R. Baumeister & E. Finkel (Eds.), *Advanced social psychology: The state of the science* (2nd Ed, pp. 249-274). New York: Oxford.

		Van Bavel, J. J., Packer, D. J., & Cunningham, W. A. (2008). The neural substrates of in-group bias: A functional magnetic resonance imaging investigation. *Psychological science*, *19*(11), 1131-1139. Cikara, M., Bruneau, E., Van Bavel, J. J., & Saxe, R. (2014). Their pain gives us pleasure: How intergroup dynamics shape empathic failures and counter-empathic responses. *Journal of experimental social psychology*, *55*, 110-125.
10/5	Attitudes and Implicit Bias	Banaji, M. R., & Greenwald, A. G. (2016). *Blindspot: Hidden biases of good people*. Bantam. Schimmack U. The Implicit Association Test: A Method in Search of a Construct. *Perspectives on Psychological Science*. 2021;16(2):396-414. Gawronski, B. (2019). Six lessons for a cogent science of implicit bias and its criticism. *Perspectives on Psychological Science, 14*(4), 574–595
Social Pharmacology and Neuroscience		
10/12	The Biology of Stress and Emotion	Dickerson, S. S., & Kemeny, M. E. (2004). Acute stressors and cortisol responses: A theoretical integration and synthesis of laboratory research. *Psychological Bulletin*, *130*(3), 355–391. Cole, S.W. (2019) The conserved transcriptional response to adversity. *Current Opinion Behavioral Sciences*, 28, 31–37 Barrett, L. F. (2017). The theory of constructed emotion: An active inference account of interoception and categorization. *Social Cognitive and Affective Neuroscience*, *12*(1), 1–23.
10/19	Inflammation and Affect I	Bullmore Book, Chapters 1,2, and 3 Eisenberger, N. I., Berkman, E. T., Inagaki, T. I., Rameson, L. T., Mashal, N. M., & Irwin, M. R. (2010). Inflammation-induced anhedonia: Endotoxin reduces ventral striatum responses to reward. *Biological Psychiatry*, 68, 748-754. Inagaki, T. K., Muscatell, K. A., Irwin, M. R., Cole, S., & Eisenberger, N. I. (2012). Inflammation selectivity enhances amygdala activity to socially threatening images*. Neuroimage*, 59, 3222-3226.
10/26	Inflammation and Affect II	Bullmore Book, Chapters 5, 6, and 7. Eisenberger, N. I., Inagaki, T. K., Mashal, N., & Irwin, M. R. (2010). Inflammation and social experience: An inflammatory challenge induces feelings of social disconnection in addition to depressed mood*. Brain, Behavior, and Immunity*, 24, 558-563. Inagaki, T.K., Muscatell, K.A., Moeini, M., Dutcher, J., Jevtic, I., Irwin, M.R., Breen, E., & Eisenberger, N.I. (2015). The role of the ventral striatum in inflammatory-induced approach toward support figures. *Brain, Behavior, and Immunity, 44,* 247-252
11/2	Introduction to Pharmacology and the Opioids and Social Connection	Pert, C. B., & Snyder, S. H. (1973). Opiate receptor: demonstration in nervous tissue. *Science*, *179*(4077), 1011-1014. Motulsky, H. (1996). The Graphpad Guide to Analyzing Radioligand Binding Data. Graphpad Software. Olson, J. Chapter 1: Clinical Pharmacology Made Ridiculously Simple. 1994 Medaster, Miami, Fl. Review: Machin, A. J., & Dunbar, R. I. M. (2011). The brain opioid theory of social attachment: A review of the evidence. Behaviour, 148(9-10), 985-1025. Hsu, D. T., Sanford, B. J., Meyers, K. K., Love, T. M., Hazlett, K. E., Wang, H., . . . Zubieta, J. K. (2013). Response of the mu-opioid system to social rejection and acceptance. Molecular Psychiatry, Inagaki, T. K., Ray, L. A., Irwin, M. R., Way, B. M., & Eisenberger, N. I. (2016). Opioids and social bonding: naltrexone reduces feelings of social connection. *Social cognitive and affective neuroscience*, *11*(5), 728-735.
11/9	Opioids and Social Behavior II	Rütgen, M., Seidel, E. M., Silani, G., Riečanský, I., Hummer, A., Windischberger, C., ... & Lamm, C. (2015). Placebo analgesia and its opioidergic regulation suggest that empathy for pain is grounded in self

		pain. *Proceedings of the National Academy of Sciences*, *112*(41), E5638-E5646. Burns, J. W., Bruehl, S., Chung, O. Y., Magid, E., Chont, M., Goodlad, J. K., . . . Somar, K. (2009). Endogenous opioids may buffer effects of anger arousal on sensitivity to subsequent pain. *Pain*, 146(3), 276-282. Bruehl, S., Burns, J. W., Chung, O. Y., & Chont, M. (2011). Interacting effects of trait anger and acute anger arousal on pain: The role of endogenous opioids. *Psychosomatic Medicine*, 73(7), 612-619.
11/16	Serotonin and Social Behavior I	Review: Godlewska, B. R., & Harmer, C. J. (2021). Cognitive neuropsychological theory of antidepressant action: a modern-day approach to depression and its treatment. *Psychopharmacology*, *238*(5), 1265-1278. Knutson B, Wolkowitz OM, Cole SW, Chan T, Moore EA, Johnson RC, Terpstra J,Turner RA, Reus VI. Selective alteration of personality and social behavior by serotonergic intervention. Am J Psychiatry. 1998 Mar;155(3):373-9. Livermore, J.A., Holmes, C.L., Moga, G., Adamatzky, K., Critchley, H.D., Garfinkel, S.N., and Campbell-Meiklejohn, D. (Under review). Serotonergic effects on interception.
11/23	No Class: Thanksgiving	
11/30	Serotonin and Social Behavior II Ecstasy	Review: Parrott, A. C. (2013). Human psychobiology of MDMA or 'ecstasy': An overview of 25 years of empirical research. Human Psychopharmacology, 28(4), 289-307. Bedi G, Hyman D, de Wit H. Is ecstasy an "empathogen"? Effects of ±3,4-methylenedioxymethamphetamine on prosocial feelings and identification of emotional states in others. Biol Psychiatry. 2010 Dec 15;68(12):1134-40. Hysek, C. M., Domes, G., & Liechti, M. E. (2012). MDMA enhances "mind reading" of positive emotions and impairs "mind reading" of negative emotions. Psychopharmacology, 222(2), 293-302.
12/7	Hallucinogens, Mysticism, and Dissolution of the Self	James, William. 1902 Varieties of Religious Experience. Lectures 16 and 17: Mysticism. Doblin, R. (1991). Pahnke's "Good Friday experiment": A long-term follow-up and methodological critique. *Journal of Transpersonal Psychology*, *23*(1), 1-28. Hall, W. (2021). Why was early therapeutic research on psychedelic drugs abandoned? *Psychological Medicine,* 1-6.
	Final Assignment	

Barrett introduces predictive processing. Do you want to follow up on that?
I think you could and maybe should.

If do opioids

Review: Machin, A. J., & Dunbar, R. I. M. (2011). The brain opioid theory of social attachment: A review of the evidence. Behaviour, 148(9-10), 985-1025.

Zubieta, J. K., Ketter, T. A., Bueller, J. A., Xu, Y., Kilbourn, M. R., Young, E. A., & Koeppe, R. A. (2003). Regulation of human affective responses by anterior cingulate and limbic mu-opioid neurotransmission. Archives of General Psychiatry, 60(11), 1145-1153.

Hsu, D. T., Sanford, B. J., Meyers, K. K., Love, T. M., Hazlett, K. E., Wang, H., . . . Zubieta, J. K. (2013). Response of the mu-opioid system to social rejection and acceptance. Molecular Psychiatry, doi:10.1038/mp.2013.96; 10.1038/mp.2013.96

Burns, J. W., Bruehl, S., Chung, O. Y., Magid, E., Chont, M., Goodlad, J. K., . . . Somar, K. (2009). Endogenous opioids may buffer effects of anger arousal on sensitivity to subsequent pain. Pain, 146(3), 276-282.

Bruehl, S., Burns, J. W., Chung, O. Y., & Chont, M. (2011). Interacting effects of trait anger and acute anger arousal on pain: The role of endogenous opioids. Psychosomatic Medicine, 73(7), 612-619.

Maybe cover the molecular stuff in lecture.

Lane, T., Wassef, N., Poole, S., Mistry, Y., Lachmann, H. J., Gillmore, J. D., … Pepys, M. B. (2014). Infusion of pharmaceutical-grade natural human C-reactive protein is not proinflammatory in healthy adult human volunteers. *Circulation Research*, *114*(4), 672–676. https://doi.org/10.1161/CIRCRESAHA.114.302770

Felger, J. C., Haroon, E., Patel, T. A., Goldsmith, D. R., Wommack, E. C., Woolwine, B. J., … Miller, A. H. (2018). What does plasma CRP tell us about peripheral and central inflammation in depression? *Molecular Psychiatry*. https://doi.org/10.1038/s41380-018-0096-3

Empathy and Intergroup

Their pain gives us pleasure: How intergroup dynamics shape empathic failures and counter-empathic responses
M Cikara, E Bruneau, JJ Van Bavel, R Saxe
Journal of experimental social psychology 55, 110-125

SSRIS

Rütgen, M., Pletti, C., Tik, M., Kraus, C., Pfabigan, D. M., Sladky, R., ... & Lamm, C. (2019). Antidepressant treatment, not depression, leads to reductions in behavioral and neural responses to pain empathy. *Translational psychiatry*, *9*(1), 1-13.

Psychology of Stress

Biggs, A., Brough, P., & Drummond, S. (2017). Lazarus and Folkman's psychological stress and coping theory. *The handbook of stress and health: A guide to research and practice*, 351-364.

Remember implicit association test is being used for suicide.
Schimak's post.
https://replicationindex.com/2019/11/24/iat-behavior/

Petty, R. E., Briñol, P., Fabrigar, L. R., & Wegener, D. T. (2019). Attitude structure and change. *Advanced social psychology: The state of the science*, 217-259.

Inflammation and Depression

Frank, Jokela, et al Steptoe 2021 Association Between Systemic Inflammation and Individual Symptoms of Depression- A Pooled Analysis of 15 Population-Based Cohort Studies – AJP

You could also do a social psych section on well-being and the good life and then touch on this with inflammation:

Fredrickson, B. L., Grewen, K. M., Coffey, K. A., Algoe, S. B., Firestine, A. M., Arevalo, J. M. G., … Cole, S. W. (2013). A functional genomic perspective on human well-being. *Proceedings of the National Academy of Sciences of the United States of America*, *110*(33), 13684–13689. https://doi.org/10.1073/pnas.1305419110

Papers to save for the presentation as they may be too clinical:

Davis, A. K., Barrett, F. S., May, D. G., Cosimano, M. P., Sepeda, N. D., Johnson, M. W., ... & Griffiths, R. R. (2021). Effects of psilocybin-assisted therapy on major depressive disorder: a randomized clinical trial. *JAMA psychiatry*, *78*(5), 481-489.

Nutt & Carhart-Harris 2020 The Current Status of Psychedelics in Psychiatry - JAMA Psychiatry