

UNIVERSITY OF FLORIDA COLLEGE OF MEDICINE SYLLABUS
NEUROSCIENCE
GMS 6029 Theory and History of Neuroscience (Journal Club)
GMS6029 (1 credit)

Fall 2021

Delivery Format: In person, Monday 12:00pm-1:00pm in MBI L1-101

Instructors: Drs. Drew Maurer and Sara Burke
Room Number: L1-101
Phone Number: 352-273-5092
Email Address: drewmaurer@ufl.edu; burkes@ufl.edu
Office Hours: By Appointment
Preferred Course Communications: Email
Prerequisites: Doctoral or masters students

Purpose and Outcome:

Where is neuroscience going? How far did we come? This journal club is intended for all PhD students interested in learning, discussing, and debating contemporary theory against the “textbook” historical background of neuroscience.

Course Overview:

While students are often provided a textbook understanding of neuroscience, more controversial aspects are often left out. For instance, what are the perils of ‘over selling’ results, how do we combat confirmation bias, and what is the ongoing impact of the COVID-19 pandemic on how we do research. The major goal of this course is to discuss contemporary problems with the practice of conducting neuroscience research. This journal club will provide graduate students with the opportunity to further develop their skills in the reading, interpretation, and communication of current scientific research.

Course Objectives and/or Goals:

Upon successful completion of this course, students will obtain an understanding of how fraud, bias, negligence, and hype undermine the search for truth in neuroscience. The first student enrolled in this class to read this syllabus and email Sara or Drew with the phrase “beware of the Moser Mirage” will obtain a \$100 gift Visa card.

Instructional Methods:

During this Journal club, students are expected to read the book *Science Fictions* by Stuart Ritchie. The book is available on Audible, or purchase. If you need help obtaining a copy, please ask Drs. Maurer or Burke and we will make one available. Students are expected to complete weekly readings or digest other media that are assigned, attend class, and actively participate in discussions. Students are expected to lead a discussion once during the semester. Discussion leaders are required to email Drs. Maurer and Burke 5 points of discussion related to the topic the Friday before they are

the discussion leader.

Description of Course Content:

Topical Outline/Course Schedule

This journal club will take place every Monday from 12:00pm-1:00pm during the Fall semester.

Readings:

Date	Reading/other media	Discussion Topic
8/29/22	https://www.thisamericanlife.org/764/schools-out-forever	The enduring effect of the pandemic
9/5/22	No Class – Labor Day	
9/12/22	<i>Science Fictions, Ch. 1</i>	How Science works
9/19/22	<i>Science Fictions, Ch. 2</i>	The Replication Crisis
9/26/22	Huber et al., 2019 <i>Cortex</i> . 2019 Apr; 113: 347–349 Kaelin, 2017 https://www.nature.com/articles/545387a.pdf	Less “story” and more “reliability” in cognitive Neuroscience Publish houses of brick, not mansions of straw
10/3/22	<i>Science Fictions, Ch. 3</i>	Fraud
10/10/22	<i>Science Fictions, Ch. 4</i>	Bias
10/17/22	https://podcasts.apple.com/us/podcast/school-lunches-p-hacking-and-the-original-pizzagate/id1535408667?i=1000529447507	Maintenance Phase on Brian Wansink p-hacking and fraud
10/24/22	<i>Science Fictions, Ch. 5</i>	Negligence
10/31/22	<i>Science Fictions, Ch. 6</i>	Hype
11/7/22	Vinkers et al., 2016 https://www.bmj.com/content/351/bmj.h6467	Responsible Science Communication
11/14/22	No Class – SfN	
11/21/22	https://podcasts.apple.com/ca/podcast/the-sleep-loss-epidemic/id1535408667?i=1000544917900 See also: https://guzey.com/books/why-we-sleep/	Maintenance Phase on Matthew Walker’s “Why we Sleep” and Alexey Guzey
11/28/22	<i>Science Fictions, Ch. 7-8</i>	Perverse Incentives Fixing Science
12/5/22	Discussion of <i>Science Fictions</i> with Stuart Ritchie	Bring your questions!

Note regarding respect for diverse ideas: At times your instructors may make provocative statements related to course content to spark discussion. This is not an endorsement of a position. We welcome and have respect for dissenting opinions. Moreover, we feel that hearing and sharing diverse ideas is an essential component of the active learning process. Please discuss with course faculty if you ever feel that your ideas are not being heard or respected.

Course Materials and Technology:

Journal articles published within the last two years. Specific articles are selected by the students. A digital version of the research article in PDF format will be emailed a week in advance to all enrolled students and instructors.

For technical support for this class, please contact the UF Help Desk at:

- Learning-support@ufl.edu
- (352) 392-HELP - select option 2
- [UF eLearning](#)

Academic Requirements and Grading:

Assignments:

Each student is expected to present at least once during the semester and actively participate in the discussion every week. Student presenters will be selected by the instructors.

Grading:

Satisfactory/Unsatisfactory. Grades will be determined based on class attendance and participation in paper discussions.

More information on UF grading policy may be found at:

<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#grades>

Exam Policy: No exam

Policy Related to Required Class Attendance:

Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Excused absences must be consistent with university policies in the Graduate Catalog (<http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance>). Additional information can be found here: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

Academic Integrity:

Students are expected to act in accordance with the University of Florida policy on academic integrity. As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge:

“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”

You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied:

“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”

It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For additional information regarding Academic Integrity, please see Student Conduct and Honor Code or the Graduate Student Website for additional details:

<https://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>

<http://gradschool.ufl.edu/students/introduction.html>

Please remember cheating, lying, misrepresentation, or plagiarism in any form is unacceptable and inexcusable behavior.

Online Faculty Course Evaluation Process:

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at

<https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Policy Related to Guests Attending Class:

Only registered students are permitted to attend class. However, we recognize that students who are caretakers may face occasional unexpected challenges creating attendance barriers.

Therefore, by exception, a department chair or his or her designee (e.g., instructors) may grant a student permission to bring a guest(s) for a total of two class sessions per semester. This is two sessions total across all courses. No further extensions will be granted. Please note that guests are **not** permitted to attend either cadaver or wet labs. Students are responsible for course material regardless of attendance. For additional information, please review the [Classroom Guests of Students policy](#) in its entirety.

Support Services:

Accommodations for Students with Disabilities:

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the Disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester. The College is committed to providing reasonable accommodations to assist students in their coursework.

Counseling and Student Health:

Students sometimes experience stress from academic expectations and/or personal and interpersonal issues that may interfere with their academic performance. If you find yourself facing issues that have the potential to or are already negatively affecting your coursework, you are encouraged to talk with an instructor and/or seek help through University resources available to you.

- The Counseling and Wellness Center 352-392-1575 offers a variety of support services such as psychological assessment and intervention and assistance for math and test anxiety. Visit their web site for more information: <http://www.counseling.ufl.edu>.
On line and in person assistance is available.
- You Matter We Care website: <http://www.umatter.ufl.edu/>. If you are feeling overwhelmed or stressed, you can reach out for help through the You Matter We Care website, which is staffed by Dean of Students and Counseling Center personnel.
- The Student Health Care Center at UF Health is a satellite clinic of the main Student Health Care Center located on Fletcher Drive on campus. Student Health at UF Health offers a variety of clinical services. The clinic is located on the second floor of the Dental Tower in the Health Science Center. For more information, contact the clinic at 392-0627 or check out the web site at: <https://shcc.ufl.edu/>
- UF Health Emergency Room / Trauma Center: For immediate medical care call 352-733- 0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32698, ufhealth.org/emergency-room-trauma-center.
- University Police Department: Visit police.ufl.edu/ or call 352-392-1111 (or 9-1-1 for emergencies).
- Crisis intervention is always available 24/7 from:

Alachua County Crisis Center:

(352) 264-6789

<http://www.alachuacounty.us/DEPTS/CSS/CRISISCENTER/Pages/CrisisCenter.aspx>

Do not wait until you reach a crisis to come in and talk with us. We have helped many students through stressful situations impacting their academic performance. You are not alone so do not be afraid to ask for assistance.

Academic Resources

E-learning technical support: Contact the UF Computing Help Desk at 352-392-4357 or via e-mail at helpdesk@ufl.edu.

Career Connections Center: Reitz Union Suite 1300, 352-392-1601. Career assistance and counseling services career.ufl.edu/.

Library Support: cms.uflib.ufl.edu/ ask various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center: Broward Hall 352-392-2010 or to make an appointment 352 392-6420. General study skills and tutoring. teachingcenter.ufl.edu/

Writing Studio: 2215 Turlington Hall, 352-846-1138. Help brainstorming, formatting, and writing papers. writing.ufl.edu/writing-studio/

Student Complaints On-Campus: sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/

On-Line Students Complaints: distance.ufl.edu/student-complaint-process