PSYC50: Higher-Level Cognition

0.5 credits

University of Toronto, Scarborough

Winter Term, 2023 LEC01 (in-person)

<u>Instructor:</u> Prof. Michael Souza (he/him) (note: my surname is pronounced "SUES-uh")

Email: michael.souza@utoronto.ca (please note: I do not read or respond to Quercus messages)

Office Hours: This information can be found under Quercus Announcements

Head TA: Arijit De

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I. Your instructor



<u>Dr. Souza</u> is an Associate Professor (Teaching Stream) of Psychology and Neuroscience at UTSC. He received his Ph.D. in Psychology from the University of California, Berkeley in 2010. His teaching interests include cognitive neuroimaging, higher-order cognitive functions, and cognitive impairments and neurorehabilitation.

II. Course description, pre-requisites and learning goals

Executive functions are a set of mental functions that enable goal-directed behavior. These functions strengthen during typical development and may be affected by numerous factors, including positive (e.g., education) or destructive aspects of nurture (e.g., exposure to teratogens), psychological illness, neurological injury, and more. From a content standpoint, this course will provide you with an opportunity to better understand executive functions from theoretical, experimental and applied standpoints. From a process standpoint, you will have an opportunity to strengthen your ability to consume and critique primary research, to plan and execute a collaborative research project on an appropriate topic of your choosing, and to gain confidence in ability to speak in a scientific context.

Prerequisites: [(PSYB01H3) or (PSYB04H3) or PSYB70H3] and

PSYB07H3 or STAB22H3 or STAB23H3] and

[PSYB55H3 or PSYB57H3]

After successful completion of this course, you will have demonstrated an improved ability to:

- 1. <u>Describe</u> the core components and operations of key theoretical frameworks of executive control;
- 2. <u>Understand</u>, <u>analyze</u>, and <u>evaluate</u> neurocognitive research in the key domains of executive functioning;
- 3. <u>Apply</u> theory and relevant research in executive functioning to a multitude of important, relatable real-world challenges and scenarios (e.g., vulnerability to addiction);
- 4. <u>Understand</u> and <u>describe</u> the central elements of primary research articles in the executive function literature, with an eye towards strengthening the ability to <u>evaluate</u> this work;
- 5. <u>Co-construct</u> a thoughtful, appropriately-researched project pitch, proposal, and revised proposal on a topic pertinent to executive functioning;
- 6. <u>Co-construct</u> and <u>co-present</u> a scientific poster for an academic audience;
- 7. <u>Identify</u> and <u>articulate</u> the value and contribution of this course to your broader program of study (i.e., Psychology and/or Mental Health Studies, as appropriate).



III. Course readings

This course will <u>not</u> use a textbook. This course will prioritize strengthening your ability to become competent in consuming and evaluating primary literature and as such, will wholly rely on such articles.

IV. Course webpage

Please visit Quercus (https://q.utoronto.ca/) and sign in with your UTORid credentials to access our course webpage. This webpage will house all course-related materials, including announcements, discussion boards, lecture and related learning materials, assessments, and marks. You should expect to visit this webpage a few times per week to ensure you are up-to-date on any new happenings in the course throughout the term.

V. Course requirements and grading

Reading checks (RC1: 4%; RC2: 4.5% RC3: 5%; RC4: 5.5%; RC5: 6% = 25% of the course grade) (Learning outcomes 14, 7)

To help build your ability to consume primary research, we will have five relatively low stakes reading checks on the assigned readings. They will increase modestly in value (by 0.5% each time) from as little as 4% to as much as 6% of the course grade.

The reading checks are intended to provide you with an opportunity to strengthen your ability to consume primary research, which will be helpful for not only your project, but for the rest of your life. Please don't infer that the small course mark value reflects small learning value here; rather, the low stakes approach is provided here to give you a safer space to strengthen this skill. Consistent with the high value placed on this learning, reading checks will occur in lieu of a Midterm.

The reading checks will be structured as timed Quercus Quizzes and will consist of short response/essay questions. These questions will tap your understanding of the rationale for the research, core features of the methods, and understanding and interpreting the results. They will also progressively load on your ability to critique the work in informed and principled ways.

Only specific weeks have a reading check (see course schedule, last page of this syllabus). These reading checks will always occur on a Thursday and cannot not be taken on another day for any reason. You will be permitted 30 minutes to write, and that 30 minutes may occur at any time during the 24 hours of that Thursday:

For example, for RC #1 on Thursday, 02-Feb, you may write your exam at any time on 02-Feb between 00:00-23:59 hrs. The quiz locks at midnight on 03-Feb, so be sure to start it by no later than 23:30 to have the full time.

Please note that there will be absolutely NO makeups for the reading checks <u>under any circumstances</u>. Any accommodation provided will result in the value of the Reading Check being added to the Final. Students who miss more than two reading checks will have that portion of the mark reassigned to a paper assignment.

<u>Cumulative</u> Final Examination (31% of course grade)

(Learning outcomes 1-4, 7)

The goal of the Final is to test your ability to think about executive functions in conceptual, experimental and applied manners. The Final exam will include material from all content lectures and the several readings associated with Week 11 (see the course schedule). The Final will consist of both multiple-choice (MC) questions and short-answer (SA) questions, and the point distribution will be skewed towards the SA questions.

Each MC question will have five (5) options and these questions may come in various formats, including (but not limited to) questions with diagrams and "all of the above" or "none of the above" options. MC questions will be drawn from both lecture and the textbook.

SA questions will consist of multi-part questions that are broken down to help you structure your thinking. Each question will require a several sentence response and may also require the creation or analysis of a visual (e.g., diagram). SA questions will be drawn from lecture only. SA questions will be weighted based on relative difficulty (i.e., the challenge/complexity of thought), as opposed to how many things you need to say (i.e., we will not employ a system of five points requiring five "things" to say).

Rote memorization of lectures and the readings will not guarantee you a high mark; rather, I expect you to not only learn what things are, but also why they are relevant, how/why they are and might be used, etc. To acclimate you to my question style and to help keep you on task with the lecture materials, sample questions will be posted after each content lecture. I advise you to navigate this material while it is fresh in your mind and to seek assistance from Prof. Souza for any issues that would benefit from clarification or a discussion.

<u>Importantly</u>, the date of the Final is not announced by the University until the middle of the term. You should NOT make travel plans until you learn the date of your final exams. You CANNOT take the Final at a different date/time unless you have a verifiable medical reason.

Literature Review Group Project (multiple parts that constitute a total of 44% of the course grade) (Learning outcomes 1-7)

<u>Together with two partners of your choosing</u>¹, you will engage in research to learn more about a topic related to executive functioning. Your group will research a <u>minimum</u> of nine (9) peer-reviewed, scholarly articles and will detail what you've learned into both a scientific poster presentation for a scientific audience. Full details will be posted on Quercus – and are an official extension of this syllabus – but the major pieces are noted below.

Forming your group of three (PASS/PENALTY scoring)

You are responsible for forming groups prior to the stated deadline. Please use class time and/or the discussion board in Quercus to connect with fellow classmates so that you may share pertinent information for forming a group. You will submit documentation clarifying that you understand what is expected of you in this project, and that you will work in good faith as a team to accomplish this portion of the course.

Topic Pitch (02% of course grade)

<u>Prior to fleshing out your topic proposal</u>, you will need to submit a one paragraph pitch to Quercus to clarify what your proposed research will examine, and why it is crucial for others to know about the topic. You will be evaluated on the extent to which your pitch is feasible in the context of this assignment, clearly articulated, and engaging for the reader and proposed audience.

Topic proposal (8% of course grade)

After receiving an approved topic pitch, you will then co-develop a one (1) page document, single-spaced and in 11pt Times New Roman font, that offers: (1) your project's working title, taking care to represent the breadth of your focus in a concise, engaging way; (2) a paragraph introducing your topic, taking care to contextualize and substantiate your research focus/goal; (3) a paragraph articulating your proposed division of labor to ensure all group members are contributing fairly and equally; and (4) learning outcomes to specify what your audience should expect to learn from your work. The proposal must include at least three (3) peer-reviewed, empirical articles as references, and the reference information for those articles must be included on a second page. You will be evaluated on the quality and clarity of the items listed above.

Revised proposal + annotated bibliography (12% of course grade)

After your group has received and carefully reviewed detailed feedback on your topic proposal, you will then carefully revise and refine your proposal. This will involve: (1) a systematic review of the feedback you received and a thoughtful, productive response to each element in a peer-review like format; (2) the revision

¹ Final course enrolment may not be divisible by 3, hence there may be 1-2 groups with two members. Such groups will be held to the same standard as their other peers.

of your topic proposal informed by this feedback, <u>still honoring the one-page limit</u>; and (3) producing an annotated bibliography, which should first include a full list of properly cited references (APA format), and starting on the following page, a brief paragraph summarizing each article and how you plan to use it in your research. You will be evaluated on the quality and clarity of the items listed above.

Scientific Poster Presentation (20% of course grade)

Scientific posters are a critically important medium for conveying scientific knowledge, and this course offers you an ability to practice this process. After carefully reviewing your revised proposal and annotated bibliography, your group will assemble a scientific poster to disseminate your findings to others. Half of the groups will present live in class on the last day of class and the other half will present virtually via Zoom. Your group will deliver a 12-minute presentation with time equally split across presenters. A detailed marking rubric prior to your presentation so that you understand exactly how you will be marked for this assignment.

Peer-review of posters (02% of course grade)

Receiving positive and constructive feedback is a crucial component to continued self-improvement. As such, you will have an opportunity to not only give such feedback to your colleagues on their presentations, but you will also receive their feedback your presentation. This portion of the mark will be evaluated based on the degree of detail, clarity, and reasonableness of the feedback.

VI. Course policies

Classroom conduct and participation

I work to create an interactive dynamic during my lectures that engages you to think and reflect. I challenge you to use this time to actively engage with the content we are covering, as active learning and immersion in the material will facilitate your ability to think critically about these concepts. I challenge you to structure your time in such a way that you can reasonably space out your learning, as effective skill development in particular requires time, practice, and reflection.

Lecture slides

Lecture materials will be posted on a weekly basis to control the flow of learning and engagement in the course. Lecture slides will be posted in PDF format in two version only (2 slide and 6 slides per page).

You must know that these lecture slides are not a suitable substitute for watching lectures and engaging the materials. Lecture slides alone are not themselves exhaustive, as we will regularly cover important material that extends beyond them during lecture. Know that you are responsible for this material.

Instructional materials are only for the purpose of learning in this course and must not be distributed or used for any other reason whatsoever.

E-mail policy

In most cases, e-mails will be answered within 48 hours of receipt (not including weekends). The email subject should include our course name and nature of the inquiry (i.e., "PSYC50: Why are EFs so awesome?"). The start of your email should include your full name and student ID number so that I know who you are. Emails that you send should contain no more than one question and you should try to explain your current understanding of the concept in the email (which will be affirmed or corrected).

If you are not used to writing emails in an academic context, I encourage you to review this online resource so that you adopt proper email etiquette now and in the future: https://tinyurl.com/kysxwtx

Office hours

Office hours are a valuable resource for you to learn more about the class and/or important things related to (but outside of) the class. You should consider visiting Prof. Souza's office hours if you would like to (1) discuss course content or course requirements, (2) if you have an issue with your course progress, or (3) you would like to discuss the field of psychology/neuroscience and how to get more involved. Your Head TA is also an incredibly valuable resource not just for staying on top of course content/requirements, but also learning more about graduate studies in Psychology. I strongly encourage you to consult with them as needed.

Syllabus changes

There may be minor changes to the syllabus during the term. You will be notified of these changes ASAP and no changes will be instituted that dramatically affect your ability to properly prepare for an examination (e.g., reading an extra chapter the week before the Midterm).

Department of Psychology Missed Term Work Policy

For missed term work (assignments and term tests) due to illness, emergency, or other mitigating circumstances, please follow the procedures outlined below.

Note:

- The following reasons are not considered sufficient for missed term work: travel for leisure, weddings, personal commitments, work commitments, human error.
- Missed Final Exams are handled by the Registrar's Office and should be declared on eService.
- Instructors cannot accept term work any later than five business days after the last day of class. Beyond this date, accommodations are only possible via the Registrar's Office <u>petition process</u>.

The email address to submit missed term work accommodation requests in PSYC50 is: michael.souza@utoronto.ca

ILLNESS OR EMERGENCY accommodations:

For missed work due to ILLNESS OR EMERGENCY, complete the following process:

- 1. Complete the Request for Missed Term Work Accommodations Form.
- 2. Declare your absence on ACORN (Profile & Settings > Absence Declaration)
- 3. Email **both** of the following items to the course email **WITHIN 2 BUSINESS DAYS** of the missed work:
 - a. the Request for Missed Term Work Accommodations Form
 - b. a screenshot of your Self-Declared Absence on ACORN

<u>Note:</u>

- If you are unable to submit your request within 2 business days, you must still email your instructor within the 2 business day window to explain the nature of the delay. Exceptions to the 2 business day deadline will only be made under exceptional circumstances.
- If your absence is declared on ACORN, we do not require any additional supporting documentation (e.g. medical notes) to support your missed term work accommodation request.

ACADEMIC CONFLICT accommodations:

For missed term work due to an ACADEMIC CONFLICT (e.g. two midterms at the same time):

- 1. Complete the Request for Missed Term Work Accommodations Form.
- 2. Take screenshots of your course Quercus pages that demonstrate the conflict.
- 3. Email the form and screenshots to the course email at least two weeks (10 business days) before the date of the activity, or as soon as possible if it was not possible to identify the conflict earlier. Requests sent after the activity deadline may not be accommodated.

Note:

- Multiple assignments due on the same day are <u>not</u> considered conflicts. Students are expected to manage their time effectively to meet assignment deadlines.
- Back-to-back tests/quizzes are <u>not</u> considered conflicts. Only overlapping activities are conflicts.
- Students are responsible for keeping their course timetables conflict-free. Students who register in two courses with overlapping lecture/tutorial/lab schedules will not be accommodated.

RELIGIOUS CONFLICT accommodations:

For missed term work due to a RELIGIOUS CONFLICT:

- 1. Complete the Request for Missed Term Work Accommodations Form.
- 2. Email the form to the course **email at least two weeks (10 business days) before the date of the activity**, or as soon as possible if it was not possible to identify the conflict earlier. Requests sent after the activity deadline may not be accommodated.

ACCESSABILITY SERVICES accommodations:

For missed *TERM TESTS* due to ACCESSABILITY REASONS:

 Contact your AccessAbility consultant and have them email the course email detailing accommodations required.

For missed ASSIGNMENTS due to ACCESSABILITY REASONS:

- If your desired accommodation is **within the scope** of your Accommodation Letter (e.g. your letter includes "extensions of up to 7 days" and you need 3 days):
 - 1. Complete the Request for Missed Term Work Accommodations Form.
 - 2. Email the form *AND* your Accommodation Letter to the course email specifying how many days extension you are requesting.
- If your desired accommodation is **outside the scope** of your Accommodation Letter (e.g. your letter includes "extensions of up to 7 days" but you need more time than that):
 - 1. **Contact your AccessAbility consultant** and have them email the course email detailing the accommodations required.

Accommodation Procedure:

After submitting your documentation, you will receive a response from your instructor or TA. This form does not guarantee that you will be accommodated. The course instructor reserves the right to decide what accommodations (if any) will be made. Failure to adhere to any aspect of this policy may result in a denial of your request. You are responsible for checking your official U of T email and Quercus course announcements daily, as accommodations may be time-critical.

For missed assignments, do not wait for the instructor's response to resume work on your assignment. Extensions may be as short as one business day, depending on the nature of the illness/emergency. Complete your assignment as soon as you're able, and email it to your instructor.

For an anticipated absence (e.g. a scheduled surgery or an illness with a prolonged recovery period), if you would like to request accommodations in advance, submit a <u>Verification of Illness Form</u> completed by your doctor AND the <u>Request for Missed Term Work Accommodations Form</u> to the course email. Absences can be declared up to 14 days into the future on ACORN.

Missed Accommodations

If an accommodation is granted but a continued illness/emergency prevents you from meeting its requirements, you must repeat the missed term work procedure to request additional accommodations. Please make it clear in your subject line that you are requesting a second accommodation. E.g. If you are given an extension but are still sick and need more time, or if you miss a make-up term test, you must submit another Request for Missed Term Work Accommodations Form and declare your extended absence on ACORN. *Note: In the case of a missed make-up test, an opportunity to write a second make-up test may not necessarily be provided.

AccessAbility

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the AccessAbility Services as soon as possible.

AccessAbility Services staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations <u>416-287-7560</u> or email <u>ability@utsc.utoronto.ca</u>. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

Academic Integrity

Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student's individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto's Code of Behaviour on Academic Matters

(http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/ppjun01 1995.pdf) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement;
- Submitting your own work in more than one course without the permission of the instructor;
- Making up sources or facts;
- Obtaining or providing unauthorized assistance on any assignment.

On tests and exams:

- Receiving aid of any form from another person in the context of an examination
- Using or possessing unauthorized aids;
- Looking at someone else's answers during an exam or test;
- Misrepresenting your identity; and
- When you knew or ought to have known you were doing it.

In academic work:

- Falsifying institutional documents or grades;
- Falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes; and
- When you knew or ought to have known you were doing so.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If students have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, they are expected to seek out additional information on academic integrity from their instructors or from other institutional resources.

Note that you may see advertisements for services offering grammar help, essay editing and proof-reading. Be very careful. If these services take a draft of your work and significantly change the content and/or language, you may be committing an academic offence (unauthorized assistance) under the Code of Behaviour on Academic Matters.

It is much better and safer to take your draft to the Writing Centre as early as you can. They will give you guidance you can trust. Students for whom English is not their first language should go to the English Language Development Centre.

If you decide to use these services in spite of this caution, you <u>must</u> keep a draft of your work and any notes you made before you got help and <u>be prepared to give it to your instructor on request.</u>

VII. Resources you will likely find helpful...

(a) UTSC administrative information, academic support, and well-being

Quercus (learning platform for this course)

Important Dates and Deadlines

Academic Advising and Career Centre

Writing Services

AccessAbility

Health and Wellness

(b) Relevant academic programs and opportunities at UTSC

Neuroscience Specialist in Cognitive Neuroscience

Psychology, Mental Health Studies Calendar (course listings, program requirements, etc.)

Chapter of Psi Chi, the International Honours Society in Psychology

Psychology and Neuroscience Departmental Association (PNDA)

Department of Psychology

(c) If you enjoy this course, consider checking out these UTSC faculty and courses below!

Prof. Blair Armstrong PSYC59

Prof. Jonathan Cant PSYC51 | PSYC75 | PSYD51

Prof. George CreePSYC70 | PSYD52Prof. Cendri HutchersonPSYC57 | PSYD17

Prof. Michael Inzlicht PSYC19

Prof. Andy Lee PSYC53 | PSYD55

Prof. Adrian NestorPSYB03 | PSYC03 | PSYD54Prof. Matthias NiemeierPSYB51 | PSYC52 | PSYD51

Assigned readings

- Chae, S. E., & Alexander, P. A. (2022). Exploring Potential Educational and Social Contributors to Relational Reasoning Development. *Mind, Brain, and Education*, 16(2), 183-192. https://doi.org/10.1111/mbe.12311
- Gilbert, S. J., & Burgess, P. W. (2008). Executive function. *Current Biology*, *18*(3), R110-R114. https://doi.org/10.1016/j.cub.2007.12.014
- Haratsis, J. M., Hood, M., & Creed, P. A. (2015). Career goals in young adults: personal resources, goal appraisals, attitudes, and goal management strategies. *Journal of Career Development*, 42(5), 431-445. https://doi.org/10.1177%2F0894845315572019
- Hardee, J. E., Phaneuf, C., Cope, L., Zucker, R., Gearhardt, A., & Heitzeg, M. (2020). Neural correlates of inhibitory control in youth with symptoms of food addiction. *Appetite*, *148*, 104578. https://doi.org/10.1016/j.appet.2019.104578
- He, J. W., Tu, Z. H., Xiao, L., Su, T., & Tang, Y. X. (2020). Effect of restricting bedtime mobile phone use on sleep, arousal, mood, and working memory: a randomized pilot trial. *PloS One*, *15*(2), e0228756. https://doi.org/10.1371/journal.pone.0228756
- Medina, M. S., Castleberry, A. N., & Persky, A. M. (2017). Strategies for improving learner metacognition in health professional education. *American Journal of Pharmaceutical Education*, 81(4), 78. DOI: https://doi.org/10.5688/ajpe81478
- Novakovic-Agopian, T., Kornblith, E., Abrams, G., McQuaid, J. R., Posecion, L., Burciaga, J., ... & Chen, A. J. (2019). Long-term effects of executive function training among veterans with chronic TBI. *Brain Injury*, 33(12), 1513-1521. https://doi.org/10.1080/02699052.2019.1645357
- Parong, J., Seitz, A. R., Jaeggi, S. M., & Green, C. S. (2022). Expectation effects in working memory training. *Proceedings of the National Academy of Sciences*, 119(37), e2209308119. https://doi.org/10.1073/pnas.2209308119
- Pennycook, G., & Rand, D. G. (2019). Lazy, not biased: Susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning. *Cognition*, 188, 39-50. https://doi.org/10.1016/j.cognition.2018.06.011
- Roediger, H. L., & Gallo, D. A. (2001). Reading journal articles in cognitive psychology. *Visual perception: Key Readings in Cognition*, 405-415.
- Wegmann, E., Müller, S. M., Turel, O., & Brand, M. (2020). Interactions of impulsivity, general executive functions, and specific inhibitory control explain symptoms of social-networks-use disorder: An experimental study. *Scientific Reports*, 10(1), 1-12. https://doi.org/10.1038/s41598-020-60819-4
- Yu, Y., Yu, Y., & Lin, Y. (2020). Anxiety and depression aggravate impulsiveness: the mediating and moderating role of cognitive flexibility. *Psychology, Health & Medicine*, 25(1), 25-36. https://doi.org/10.1080/13548506.2019.1601748

PSYC50: Lecture and reading schedule

May be subject to minor revisions with advance notice from the instructor

<u>Week</u>	<u>Date</u>	Topics of the day	Readings and associated deadlines
1	11-Jan	Goal-directed cognition; course overview	Roediger & Gallo (2001)
		Identifying executive functions	Raff blog entry
2	18-Jan	Theories of executive functions (EFs)	Gilbert & Burgess (2008)
		Skills: Making the most out of Reading Checks	-
3	25-Jan	Theories of EFs (con't)	Medina et al. (2017) (Prac RC)
		Skills: Working effectively as a team	
4	1-Feb	Working Memory (WM)	He et al. (2020) (RC #01)
		Skills: Designing a strong topic proposal	RC#1 on 02-Feb from 00:00-23:59 hrs
5	8-Feb	Inhibitory control (IC)	Wegmann et al. (2020) (RC #02)
			RC#1 on 09-Feb from 00:00-23:59 hrs
6	15-Feb	Cognitive Flexibility (Cf)	Yu et al. (2020) (RC #03)
			RC#3 on 16-Feb from 00:00-23:59 hrs
7	22-Feb	NO CLASS - READING WEEK	
8	1-Mar	Planning	Haratsis et al. (2019) (RC #04)
			RC#4 on 02-Mar from 00:00-23:59 hrs
9	8-Mar	Reasoning and problem-solving	Chae & Alexander (2021) (RC #05)
			RC#5 on 09-Mar from 00:00-23:59 hrs
10	15-Mar	<u>Skills</u> : Creating an effective poster <u>Skills</u> : The art of constructive feedback	<u>-</u>
11	22-Mar	Executive functions in "real life"	Hardee et al. (2020)
			Parong et al. (2022)
			Pennycook & Rand (2019)
			Novakovic-Agopian et al. (2019)
12	20.14	D W 11 . D	
12	29-Mar	Poster Workshop Day	-
13	5-Mar	Scientific Poster Presentations!	
14	TBD	Final Examination	Lectures from weeks 2-6; 8-9; 11
			Readings from week 11 only
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Please note that deadlines associated with the research project can be found on the Detailed Project Guidelines, posted separately from this syllabus and course schedule.