PSYc23 Developmental Psychobiology

Meetings: Asynchronous lectures

Professor

Dr. David Haley d.haley@utoronto.ca

Office hours: Tuesdays, 12:00 pm to 1:00 pm Zoom: https://utoronto.zoom.us/j/7200744159

Passcode: 7Mqi79

Course Website

To access Quercus, please visit: https://q.utoronto.ca

Course Description

This course offers an introduction to developmental psychobiology and presents theory and research on the emotional and cognitive processes that enable us to become social beings. Specifically, we review the interplay of psychosocial and biological processes in the development of mutual regulation and attachment and the impact of socialization and parenting on human development. Applied topics are discussed throughout the course (e.g., spanking, cry-it-out sleep training, racism in utero, poverty and social inequality, wages for housework, the human rights of infants and children, drug addiction, etc.).

Learning Goals

- ➤ To understand the development of dyadic regulation
- > To understand the biology of adversity and prosocial behavior
- > To understand the role of stress in mental and physical health
- ➤ To understand mind-to-mind interactions using dyadic measures
- To relate scientific knowledge to relevant sociopolitical issues and contexts

Weekly Activities

- Complete the assigned reading(s)
- Participate in online discussions and answer survey questions
- Watch the lecture video clips
- Review all pages in the lecture modules
- Work on your individual and group assignment(s)

Evaluation

Collaborative assignment Group assignment with presentation 10%	
Research proposal assignment Two components: 7% + 14% 21%	
Midterm exam Date TBA 20%	
Final exam Date TBA 25%	
Extra credit Drafting practice test questions 3%	
Total 103%	

Participation

Participation activities will include online (Quercus) surveys and discussions of course

material and applied issues. Each week (2%), there will be three to five survey questions and two to three discussion topics; please answer and/or contribute to each. For some survey questions and discussion topics I will provide background information that supplements or illustrates key course concepts. Participation will be worth a total of 24% of your final grade (12 weeks $x\ 2\%$).

Collaboration

To reflect on the course material and applied topics, you will collaborate on a group project focused on the problem of stress in higher education environments. Each project will describe and contextualize a selected aspect of this problem and will propose specific, novel strategies, solutions, and supports to alleviate it and, thus, improve the higher education experience. Students will work in small groups (typically three to four students each). Each group will present their projects to the class. This group project is worth 10% of your final grade.

Research Proposal

The research proposal assignment consists of two components: 1) an **annotated bibliography** and 2) a **research proposal abstract**. The assignments are designed to help you explore and consolidate course-related material into a meaningful written narrative and to improve your scientific thinking and writing.

Annotated bibliography: For this component of the assignment (7% of your final grade), you will conduct a literature review and choose 5 to 7 relevant references related to your topic. You will cite each reference in APA format. Underneath each listed reference, please provide:

- 1) Two to three sentences describing what that resource is about
- 2) Two to three sentences describing **how** it relates to your research proposal topic and question as either a) the background for your research rationale/hypothesis or b) relevant information for your methods.

Research proposal abstract: For this component of the assignment (14% of your final grade), you will provide an abstract (or summary) of your research proposal. This will include the most essential elements of your proposal (background, hypothesis, methods, discussion). The abstract has a strict word limit of 250 words. Every word counts!

Midterm Exam

There will be one midterm (20% of your final grade), consisting of true/false questions, multiple-choice questions, figure-labeling questions, and short essay questions. The midterm will be based on the weekly lecture materials.

Final Exam

The final exam (25% of your final grade) consists of true/false questions, multiple-choice questions, figure-labeling questions, and short essay questions. The exam will be based on the weekly lecture materials from weeks 1 to 12.

Course Materials

The course materials are available on the course website (log in to Quercus at https://q.utoronto.ca). Course materials will consist of assigned readings (book chapters, review articles, magazine articles, etc.) and your weekly lecture materials on Quercus.

Course Material: Readings

Lecture 1: Introduction

- 1. Keating D. P. (2017). Born Anxious: The Lifelong Impact of Early Life Adversity and How to Break the Cycle. Martin's Press [Prologue, Introduction, and Chapters 1-2]
- 2. Center on the Developing Child at Harvard University (2017). *Three Principles to Improve Out- comes for Children and Families*.

Lecture 2: Mutual Regulation and Hidden Regulators

- 1. Tronick, E. Z. (1998). "Dyadically expanded states of consciousness and the process of therapeutic change." *Infant Mental Health Journal*, 19(3), 290–299.
- 2. Hofer, M. A. (2006). Psychobiological roots of early attachment. *Current Directions in Psychological Science*, *15*, 84-88.

Lecture 3: Attachment

- 1. Lewis, T. Amini, F. and Lannon, R. (2000). A Fiercer Sea, pages 66-99 in *A General Theory of Love*. Random House. USA.
- 2. Feldman, R. (2017). The neurobiology of human attachment. *Trends in Cognitive Sciences, February* 2017, Vol. 21.

Lecture 4: Mothering

- Rilling, J. K. & Young, L. J. (2014). The biology of mammalian parenting and its effect on offspring social development. *Science*, 345, 771–776.
- Newman, L. K., Harris, M., Allen, J. (2011) Neurobiological basis of parenting disturbance. *Australian and New Zealand Journal of Psychiatry* 2011; 45:109–122.

Lecture 5: Sociality, Sympathy, and the Vagal Nerve

1. Hastings, P. D. & Miller, J. G. (2014). Autonomic Regulation, Polyvagal Theory, and Children's Prosocial Development, pages 1-20. In *Prosocial Development* (edited by L.M. Padillia-Walker & G. Carlo). Oxford Press.

Lecture 6: Temperament: Anxiety and Aggression

- 1. Hall, S. S. (2014). The Accidental Epigeneticist. *Nature*, 505, 1-4,
- 2. Sapolksy, R. (2003). Taming stress. *Scientific American*, 86-95.

Lecture 7: The Biology of Stress and Misfortune

1. Lehrer, J. (2010). Under Pressure: The Search for the Stress Vaccine. *WIRED*, 1-17, July 28, 2010.

Lecture 8: The Biology of Inequality and

1. Sapolsky, R. How Economic Inequality Inflicts Real Biological Harm. Scientific American, October, 2018.

Lecture 9: Childhood Poverty

1. Miller, G. E. & Chen, E. (2013). The Biological Residue of Childhood Poverty Volume 7, Number 2, 2013, Pages 67–73

Lecture 10: Paradoxes and Bootstraps

1. Hamblin, J. (2015). The paradox of effort: A medical case against too much self-control. *The Atlantic*, July, 2015.

Lecture 11: Sleep, Stress, and Behavior Problems

1. Sadeh, A. (1996). Stress, Trauma, and Sleep in Children. *Child and Adolescent Psychiatric Clinics of North America*, 685-700.

Lecture 12: Reflection and Review *No assigned reading

Department and University Policies

AccessAbility Services

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability or health consideration that may require accommodations, please feel free to approach the instructor and/or the AccessAbility Services Office (in SW-302) as soon as possible. You instructor will work with you and AccessAbility Services to ensure you can achieve your learning goals in this course. Enquiries are confidential. The UTSC AccessAbility Services staff members are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations.

AccessAbility Services contact information Phone: (416) 287-7560

Email: ability@utsc.utoronto.ca

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. Behaviours that constitute academic dishonesty and the processes for addressing academic offences are outlined in The University of Toronto's Code of Behaviour on Academic

Matters: http://www.governingcouncil.utoronto.ca/policies/behaveac.htm

Potential offences include, but are not limited to: • On tests and exams: (a) Using or possessing unauthorized aids; (b) Looking at someone else's answers during an exam or test; (c) Misrepresenting your identity. • In academic work: (a) Falsifying institutional documents or grades; (b) Falsifying or altering any documentation required by the University, including (but not limited to) doctor's notes.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters.

Psychology Department Missed Term Work Policy, WINTER 2021

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

- 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: http://www.utsc.utoronto.ca/registrar/missing-examination
- Instructors cannot accept term work any later than five business days after the last day of class. Beyond this date, you would need to file a petition with the Registrar's Office: https://www.utsc.utoronto.ca/registrar/term-work

Accommodations for Illness or Emergency:

For missed work due to ILLNESS OR EMERGENCY, please complete the following **two-step** process:

 Complete the Request for Missed Term Work Accommodations Form (http://uoft.me/PSY-MTW) and email it to Keely Hicks at keely.hicks@utoronto.ca ,

and

2. **Declare your absence** on ACORN (Profile & Settings > Absence Declaration) **Deadline:** You must complete the above steps **within 3 business day**s of the missed work. Note: For this semester, we do not require any additional supporting documentation (ex. medical notes) to support your missed term work accommodation request.

Accommodations for Academic Conflicts:

For missed term work due to an ACADEMIC CONFLICT (i.e. two quizzes or tests scheduled at the same time),

please complete the following process:

- 1. Complete the **Request for Missed Term Work Accommodations Form** (http://uoft.me/PSY-MTW), choosing "Other" as your reason for missed work and explaining the conflict in the space provided.
- 2. Take screenshots of your course homepages that demonstrate the conflict.
- 3. Email the form and screenshots to Keely Hicks (keely.hicks@utoronto.ca).

Deadline: You should report the conflict to Keely Hicks (keely.hicks@utoronto.ca) **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.

Note: Multiple assignments due on the same day are not considered conflicts. Accommodations may only be possible in the case of quizzes and tests that are both scheduled during the same discrete period. Back-to-back tests/quizzes are not considered conflicts.

Note: Students are responsible for keeping their course timetables conflict-free. Students who choose to register in two synchronous courses with overlapping lecture/tutorial/lab schedules may not necessarily be accommodated.

Accommodations for Religious Conflicts:

For missed term work due to a RELIGIOUS CONFLICT, please complete the following process:

- 1. Complete the **Request for Missed Term Work Accommodations Form** (http://uoft.me/PSY-MTW), choosing "Other" as your reason for missed work and noting "Religious conflict" in the space provided.
- 2. Email the form to Keely Hicks (keely.hicks@utoronto.ca).

Deadline: You should report the conflict to Keely Hicks (keely.hicks@utoronto.ca) **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.

Accommodations for Time Zone Conflicts:

If you are physically in a different time zone and a quiz or midterm is scheduled outside of 7:00am to midnight in

your local time, please complete the following process:

- 1. Complete the Time Zone Conflict Form (https://uoft.me/PSY-TimeZone), and
- 2. Email the form to Keely Hicks (keely.hicks@utoronto.ca)

Deadline: You should report the conflict to Keely Hicks (keely.hicks@utoronto.ca) **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.

Accommodations for Students Registered with AccessAbility Services:

For missed **TERM TESTS** due to ACCESSABILITY REASONS:

- **Contact your AccessAbility consultant** and have them email Keely (keely.hicks@utoronto.ca) detailing accommodations required. For missed **ASSIGNMENTS** due to ACCESSABILITY REASONS:
 - If your desired accommodation is **within the scope** of your Accommodation Letter (ex. your letter includes "extensions of up to 7 days" and you need 3 days):
 - Complete the Request for Missed Term Work Accommodations Form (http://uoft.me/PSY- MTW).
 - 2. Email the form and your **Accommodation Letter** to Keely Hicks (keely.hicks@utoronto.ca).
 - If your desired accommodation is **outside the scope** of your Accommodation Letter (ex. 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 Keely Hicks (keely.hicks@utoronto.ca) detailing the accommodations required.

After submitting your documentation:

Within approximately one to five business days, you will receive a response from your instructor detailing the accommodations to be made (if any).

You are responsible for checking your official U of T email and Quercus course announcements daily, as accommodations may be time-critical.

You should continue to work on your assignments to the best of your ability, as extension accommodations may be as short as one business day, depending on the nature of the illness/emergency.

If an accommodation has been granted but you are unable to meet the conditions of the accommodation (ex. you need a longer extension, or you missed a make-up test), you will need to repeat the missed term work procedure and submit additional forms to request further accommodation. Note that in the case of a missed make-up test, an opportunity to write a second make-up test may not be provided.

Completion of this form does not guarantee that accommodations will be made. 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 for accommodation.

Missed Accommodations

If an accommodation is granted but a continued illness/emergency prevents you from meeting the requirements of your accommodation, you must repeat the missed term work procedure to request additional accommodations.

(E.g.) If you miss a make-up midterm, you would need to submit another Request for Missed Term Work Accommodations form and declare your extended absence on ACORN.

Importance of Three Business Day window:

If you are unable to submit your documents within the three business day window, you must email Keely (keely.hicks@utoronto.ca) within the three business day window to explain the nature of the delay, and when you will be able to provide your documents. Exceptions to the documentation deadline will only be made under exceptional circumstances.

Ouestions?

If you have any questions about this Missed Term Work policy, please contact Keely Hicks (keely.hicks@utoronto.ca) **well before** the date of the test / assignment deadline to describe your circumstances and inquire about procedures.