

PSYC23: Developmental Psychobiology

University of Toronto
Fall 2021

Prerequisites

PSYB20H3 and [PSYB01H3 or PSYB04H3 or PSYB70H3] and [PSYB07H3 or STAB22H3 or STAB23H3]

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).

Learning Goals

- To understand
 - the development of dyadic regulation and attachment in infancy
 - the biology of adversity and prosocial behavior across the lifespan
 - the role of stress and safety in mental and physical health across the lifespan
- To relate and link the effects of
 - socialization and parenting on human development
 - social practices and social policies on human development
- To articulate and propose
 - novel research hypotheses
 - social policy positions

Teaching Team

Instructor and Teaching Assistants

Contacting the Teaching Team and Office Hours

Who is my instructor?

I am David Haley, and I am your instructor. I am a developmental psychologist with research interests in stress, parenting, and child development, with a focus on social and cognitive neuroscience in children and in parents.

When are my office hours?

I will hold office hours by appointment over Zoom. E-mail me and we can schedule a time that is convenient for you.

<https://utoronto.zoom.us/my/davidhaley> (Passcode: 7Mqi79)

Who is my TA?

Your TAs will be assigned to you in the first few weeks of the semester and the syllabus will be updated with their names, interests, and preferences for how to be contacted. Generally, you will meet with your TA online over Zoom to answer questions about your research proposal-related assignments or any other questions about the course.

Course Prerequisites and Course Restrictions

Can I Take the Course?

Prerequisites and/or Course Restrictions

Enrollment in this course is restricted to students in the Specialists and Major programs in Psychology and Mental Health Studies. Students in the Minor program in Psychology will be admitted if space permits. The course builds on material learned in PSYB20, a prerequisite for the course.

Can I Take the Course?

If you do not have the prerequisite course (PSYB20), you will be removed from the course several weeks after the semester begins—which is when the psychology office conducts/completes the course checks for prerequisites. So if you don't want to be kicked out in the middle of the semester, please don't enroll in this course without the prerequisites.

Course Materials

Quercus

Quercus

All of your required course materials are available on the course website on Quercus. You can access the course website on Quercus (<https://q.utoronto.ca>) using your UTORID. The course website will be organized by modules. Your weekly lecture module will include links to all of the required course materials (readings, lecture recordings, slides, participation activities, etc.).

Required Readings/Viewings: Please note that one of the goals of this course is to give you a rich and diverse view of developmental psychobiology—meaning that you will become familiar with some of the leading scientists in the field and major topics of study, and you will dig deeper into the data than you might normally do in your other textbook courses. In addition, we want to explore real-world issues and discuss some of the social implications of the science we are studying. Accordingly, you will be assigned a mixture of science review articles, original research papers, research talks, and documentaries.

Course Work and Grading

Participation, Research Proposal, and Examinations

Participation	Discussions, check-ins, surveys, and debates	12%
Research proposal	Lit review (4%), abstract (7%), recorded presentation (7%)	18%
Examinations	Midterm (30%) and final (40%)	70%

Participation (12%)

Participation activities will be conducted on Quercus for each week. Given that lectures will be released every **Tuesday by 3:00 pm** along with your participation activity, the participation activity will be due **5 days later, on Sunday evenings at 11:59 pm**. Your first participation activity, then, will be **due Sunday, September 12**. Most of the weekly participation activities involve discussions or surveys about social issues, policies, personal views, lived experiences, films, readings, lectures, and short video clips.

Research Proposal (18%)

The research proposal assignment consists of three components: An **annotated bibliography (4%, due Oct 8)**, a 500-word **abstract (7%, due Nov 8)**, and a 3-min **recorded presentation (7%, due Nov 22)**. Information about completing the research proposal is on Quercus under the Assignment tab.

Examinations (70%)

The Registrar's Office will be scheduling the midterm (30%) for after Reading Week and the final exam (40%) during the final exam period. As soon as the exam schedules have been released by the Registrar, I will make the announcement on Quercus and update your syllabus web page.

Both the midterm and the final exam will consist of true/false questions, multiple-choice questions, multiple-answer questions, figure-labeling questions, and short essay questions. The exams will be conducted online on Quercus and will be timed. The midterm exam will be based on course material for lectures 1 to 5 and the final exam will be based on course material for lectures 6 to 10.

Lectures, Required Readings/Viewings & Assignments

Lecture	Lecture Date	Topic	Required readings and assignments (This list does not include the weekly participation activities which are required).
1	Sept 7	Introduction & An Example of A Developmental Psychobiology Approach: Sleep, Stress, & Health	CDC (2021) Sadeh (1996)
2	Sept 14	Dyadic Regulation & Stress Development	Beebe & Lackmann (2015) Gunnar (2020)
3	Sept 21	Parenting & Child Development	Rilling & Young (2014)
4	Sept 28	Maternal Cognition & Stress Contagion	Dudek et al. (2016) Waters et al (2014)
5	Oct 5	Sociality, Sympathy, Empathy, Stress Cascade & Vagal Tone	Sapolsky (2003) Stress: Portrait of a Killer (2008) [video]
			Literature Review due Friday, Oct 8, 11:59 pm
	Oct 12	Reading Week (no class)	
	TBA	Midterm exam	The midterm exam will occur after Reading Week, TBD by the Registrar
6	Oct 26	Child Health & Several Types of G x E Interactions	Boyce et al. (2021) Boyce (2014) [video]
7	Nov 2	Early Adversities: Experiencing/Inheriting Racism & Trauma	Schonkoff et al (2021) Childhood Adversity (2017) [video]
			Abstract due Monday, Nov 8, 11:59 pm
8	Nov 9	Social Inequalities & Psychosocial Stressors	Sapolsky (2021) Rentscher et al (2020) Blackburn & Epel (2017) [video]
9	Nov 16	Diversity/Slavery on Implicit Racial Biases & Stress/SES on Brain Development	Hwang et al. (2021) Payne et al. (2019)
10	Nov 23	The Paradox of Self-Control: John Henryism	Recorded Presentation due Monday, Nov 22, 11:59 pm
11	Nov 30	Review & Catchup if needed	
	Dec 12-19	Final exam	Final exam date TBD by the Registrar

Required Reading List

Lecture 1

Child Development Center (CDC) at Harvard University (2021). *Three Principles to Improve Out-Comes for Children and Families*.

Sadeh (1996). Stress, Trauma, and Sleep in Children. *Child and Adolescent Psychiatric Clinics of North America*, 5, 685-700.

Lecture 2

Beebe & Lachmann (2015). The expanding world of Edward Tronick. *Psychoanalytic Inquiry*, 35:328-336.

Gunnar (2020). Early adversity, stress, and neurobehavioral development. *Development and Psychopathology* 32, 1555-1562.

Lecture 3

Rilling & Young (2014). The biology of mammalian parenting and its effect on offspring social development. *Science*, 345, 771-776.

Lecture 4

Dudek et al (2016) Infant Cries Rattle Adult Cognition. *PLoS ONE* 11(5): e0154283.

Waters et al (2014). Stress Contagion: Physiological Covariation Between Mothers and Infants *Psychological Science*, 25(4) 934-942.

Lecture 5

Sapolsky, R. M. (2003). Taming stress. *Scientific American*, 86-95.

Stress: Portrait of a Killer (2008). A 56-minute documentary on stress. *National Geographic*: https://www.youtube.com/watch?time_continue=22&v=eYGoZuTv5rs/

Lecture 6

Boyce et al (2021). Genes, Environments, and Time: The Biology of Adversity and Resilience. *Pediatrics*, 147.

Boyce (2014). *The Orchid Child and the Science of Kindness*. A 51-min research talk given at the Dalai Lama Center for Peace and Education www.youtube.com/watch?v=mSrcoGFpJw

Lecture 7

Schonkoff et al (2021). Early Childhood Adversity, Toxic Stress, and the Impacts of Racism on the Foundations of Health. *Annual Review of Public Health*.

Childhood Adversity (2017). A 54-minute episode on the effects of early adversity on brain development from Charlie Rose's *The Brain Series* with a panel of scientists:

<https://charlierose.com/collections/3/clip/29983>

Lecture 8

Sapolsky (2021). The health-wealth gap: The growing gulf between rich and poor inflicts biological damage on bodies and brains. *Scientific American*, 49-53.

Rentscher (2020). Psychosocial Stressors and Telomere Length: A Current Review of the Science. *Annu. Rev. Public Health*, 41, 223-45.

Blackburn & Epel (2017). A 61 min interview.

https://www.youtube.com/watch?v=Nki_hHbIDP4

Lecture 9

Hwang et al (2021), Neighborhood racial demographics predict infants' neural responses to people of different races. *Dev Sci* e13070.

Payne et al (2019). Historical roots of implicit bias in slavery. *Proceedings of the National Academy of Sciences*, 116, 11693-11698

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. Your 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, FALL 2021

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

- 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, complete the following three-step process:

1. Complete the Request for Missed Term Work Accommodations Form (<http://uoft.me/PSY-MTW>)
2. Declare your absence on [ACORN](#) (Profile & Settings > Absence Declaration)
3. Email both the Request for Missed Term Work Accommodations Form AND a screenshot of your Self-Declared Absence on [ACORN](#) to the email address provided by your instructor on the course syllabus within 2 business days of the missed work.

Note: If you are unable to submit your documents within 2-business days, you must still email your instructor within the 2-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.

Note: For this semester, we do not require any additional supporting documentation (e.g. 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 midterms 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” 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 your course instructor 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” and noting “Religious conflict” in the space provided.
2. Email the form to your course instructor 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 your course instructor 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 your instructor 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 your instructor, 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 your instructor 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 for accommodation. You are responsible for checking your official U of T email and Quercus course announcements daily, as accommodations may be time-critical.

- (1.) For missed assignments, do not wait for an instructor response to resume work on your assignment. Extension accommodations may be as short as one business day, depending on the nature of the illness/emergency. You should complete your assignment as soon as you are able and email it your instructor.
- (2.) For an anticipated event (e.g. scheduled surgery or an illness with a prolonged recovery period), submit a [Verification of Illness Form](#) completed by your doctor, AND this form to your instructor if you would like to request accommodations in advance of the assignment deadline or midterm date. Declare your future absence on [ACORN](#) (absences can be declared up to 14 days in the future).

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. Please make it clear in your subject line that you are requesting a second accommodation. For example, if you are given an extension but are still sick and need more time, or if you miss a make-up midterm, you must submit another request ‘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 be provided.