

PSYC23: Developmental Psychobiology
Lecture: Room SW128; Mondays, 3:00–5:00 pm

Professor

Dr. David W. Haley
Office hours: Thursdays, 2:15 to 3:15
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Course Website

Blackboard, U of T Portal
(<http://portal.utoronto.ca/>)

Course texts

The course readings are available on the course website.

Overview

This course offers an introduction to human development, developmental health, and developmental neuroscience. Recent human and animal research reveals that biology (epigenetics, physiology, and genes) and life experiences (e.g., the regulatory functions of social environment and parent-child attachment) contribute to the long-term programming and intergenerational transmission of stress physiology, brain function, and mental/physical health. 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, universal basic income, the immigrant and refugee experience, the epigenetic transmission of aggression and wartime trauma, the criminalization of motherhood, the human rights of infants and children, foster care, drug addiction, and the biopolitics of child development). Acquiring an integrated perspective via readings, lectures, class discussion, online videos, applied science assignments, and an abstract of a research proposal, students will evaluate how existing and future research might inform and improve policies and practices that optimize human development.

Learning Goals

- To learn about the long-term effects of early adversity on human development
- To learn about the early dyadic programming of the stress system
- To learn about the cognitive and neural processes that support learning, memory, social behavior, and parenting
- To generate/test/interpret novel hypotheses relevant to developmental psychobiological studies

Evaluation

Applied science assignments	(submissions x 5; 1% for each assignment)	5%
Mini research proposal	(draft = 5%; final = 5%)	10%
Oral presentations	(oral 1 = 5%; oral 2 = 5%)	10%
Exams	(midterm = 25%; final = 50%)	75%
Total		100%

Course Schedule and Assignments

I. Stress, Trauma, and Mental Health		
Jan 8	Lecture 1	
Jan 15	Lecture 2	
Jan 22	Lecture 3	
Jan 29	Lecture 4: + Tutorial A	
Feb 5	Midterm Exam + Lecture 5	

II. Inhibiting Stress, Consolidating Memory, & Inside the Maternal Brain		
Feb 12	Lecture 6 + Tutorial B	<i>Mini research proposal draft due by noon + Oral presentation I</i>
Feb 19	READING WEEK (no class)	
Feb 26	Lecture 7 + Tutorial C	
March 5	Lecture 8	<i>Mini Research proposal final + Applied science assignment #1 (both due by noon)</i>

III. Regulating Self vs. Other, Day vs. Night, and Licks vs. Hits		
March 12	Lecture 9 + Tutorial D	<i>Applied science assignment #2 due by noon + Oral presentation II</i>
March 19	Lecture 10	<i>Applied science assignment #3 due by noon</i>
March 26	Lecture 11 + Tutorial E	<i>Applied science assignment #4 due by noon + Oral presentation II (continuing)</i>
April 2	Lecture 12	<i>Applied science assignment #5 due by noon</i>

List of lectures

- Lecture 1: Developmental Psychobiology: Introduction
- Lecture 2: Early Adversity, Disrupted Attachment, & Inherited Trauma
- Lecture 3: Social Hierarchies
- Lecture 4: Stress & Mental Health
- Lecture 5: Stress & Emotion Regulation
- Lecture 6: Stress & Memory in Pre- and Full-Term Infants
- Lecture 7: Beyond Fight-or-Flight
- Lecture 8: Attachment & Synchrony
- Lecture 9: Dyadic and Hidden Regulators
- Lecture 10: Sleep, Stress, & Mental Health
- Lecture 11: Child Abuse & Criminalizing Motherhood
- Lecture 12: Parent Cognition & Mental Health

Weekly Materials

Jan 8, 2018

Week 1: Developmental Psychobiology: Introduction

Jan 15, 2018

Week 2: Early Adversity, Disrupted Attachment, & Inherited Trauma

1. Center on the Developing Child at Harvard University (2017). *Three Principles to Improve Outcomes for Children and Families*. <http://www.developingchild.harvard.edu>.
2. 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]
3. Putnam (2005). The Developmental Neurobiology of Disrupted Attachment. In *Enhancing Early Attachments*: Edited by L.J. Berlin, Y. Ziv, L. Amaya-Jackson, & M.T. Greenberg. Guilford Press: New York. [Pages 79 to 99].
4. Suomi (2011). Steve Suomi's 28-minute research talk at the National Academy of Sciences Arthur M. Sackler Colloquium: Biological Embedding of Early Social Adversity: https://www.youtube.com/watch?v=b_-kDZKNG4k
5. 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>

Jan 22, 2018

Week 3: Social Hierarchies

1. Hackmen, Farah, & Meaney (2010). Socioeconomic status and the brain: Mechanistic insights from human and animal research. *Nature Reviews: Neuroscience*, 11, 651-659.
2. Sapolsky, R (2005). Sick of poverty. *Scientific American*, 94-99.
3. Lehrer, J. (2010). Under pressure: The search for a stress vaccine. *Wired*, July, 2010. https://www.wired.com/2010/07/ff_stress_cure/
4. Tough, P. (2016). How kids learn resilience. *The Atlantic*, June, 2016. <https://www.theatlantic.com/magazine/archive/2016/06/how-kids-really-succeed/480744/>
5. Hamblin, J. (2015). The paradox of effort: A medical case against too much self-control. *The Atlantic*, July, 2015. <https://www.theatlantic.com/health/archive/2015/07/the-health-cost-of-upward-mobility/398486/>

Jan 29, 2018

Week 4: Stress, Mental Health, & Aggression

1. Sapolsky, R. (2003). Taming stress. *Scientific American*, 86-95.
2. Hall, S. S. (2014). The accidental epigeneticist. *Nature*, 505, 14-17.
3. Hari, J. (2018). Is everything you think you know about depression wrong? *Guardian*, 2018.
4. PTSD. A 50-minute episode on post-traumatic stress disorder (PTSD) from Charlie Rose's The Brain Series with a panel of scientists <https://charlierose.com/collections/3/clip/17296>
5. Stress, Portrait of a Killer (2008). A 56-minute documentary on stress. *National Geographic*: https://www.youtube.com/watch?time_continue=22&v=eYGoZuTv5rs/

**THE MIDTERM EXAM WILL TAKE PLACE IN-CLASS ON FEB 5th
AND WILL BE BASED ON COURSE MATERIAL FROM WEEKS 1-4**

Weekly Materials Continued

Feb 5, 2018

Week 5: Stress & Emotion Regulation

1. Stansbury, K. & Gunnar, M.R. (2004). Adrenocortical activity and emotion regulation. *Monogr Soc Res Child Dev.*, 59, 108-34.

Feb 12, 2018

Week 6: Stress & Memory in Pre- and Full-Term Infants

1. Haley, D. W. (2014). Infant stress and memory. Taylor & Francis Group: Psychology Press: New York and London. [Chapter 6, pages 111-134]

Feb 19, 2018

No class: Reading Week

Feb 26, 2018

Week 7: Beyond Fight-Or-Flight

1. Carter, C. S. & Porges, S. W. (2013). The biochemistry of love: An oxytocin hypothesis. *European Molecular Biology Organization Reports*, 14, 12-16.
2. Porges, S. W. (2003). The Polyvagal Theory: Phylogenetic contributions to social behavior. *Physiology & Behavior*, 79, 503-513
3. Freeman, W. J. (1995). *Societies of Brains: A Study in the Neuroscience of Love and Hate*. Psychology Press (Taylor & Francis Group): New York and London. [Chapter 6, pages 111-134]

March 5

Week 8: Attachment & Synchrony

1. Feldman, R. (2017). The neurobiology of human attachment. *Trends in Cognitive Sciences*, February 2017, Vol. 21.

March 12

Week 9: Dyadic & Hidden Regulators

1. Hofer, M. A. (2006). Psychobiological roots of early attachment. *Current Directions in Psychological Science*, 15, 84-88.

March 19

Week 10: Sleep, Stress, & Mental Health

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

March 26

Week 11: Child Abuse & Criminalizing Motherhood

1. Jaffe, S., Kaba, M., Albelda, R., Geier, K. (2014). How to End the Criminalization of America's Mothers. *Nation*, August 21, 2014. <https://www.thenation.com/article/how-end-criminalization-americas-mothers/>

April 2

Week 12: Parent Cognition & Mental Health

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

Applied Science Assignments

For this short written assignment, I ask you to think more broadly about the course material. First, please identify a question or problem in society that relates to a reading assigned for the week. Second, in 2 to 3 sentences, describe the question or problem in the assigned reading. Third, provide a source or reference for it that highlights or provides insight into the problem or question raised. A source or reference can be a web link or an attachment containing a newspaper, magazine, or journal article. This assignment should be submitted through Blackboard. Information about the assignment and due dates will be conveyed on Blackboard.

For example, if the reading is on the topic of child abuse or child maltreatment, you might raise the question of whether spanking is abusive. You then could search for a relevant source or reference on the internet or in the library. You might find a news story about a Wisconsin man charged with felony child abuse after spanking his 8-year-old son. You could use this story as your source, providing a link or including it as an attachment.

Examples of Reading Topics and Applied Questions:

- Child Abuse: Should spanking be criminalized?
- Stress: Are schools doing enough to reduce stress?
- Support for Parents: Should parents be given more generous parental leave? Why?
- Fetal Alcohol Exposure: Should pregnant women be criminalized for performing actions (such as drinking alcohol) that have the potential to harm the fetus?

An Example of the Applied Science Assignment

Course name: Developmental Psychobiology
Reading topic: Child abuse
Your Name: Example Student
Your student ID #: 00000000

Question: Is spanking abusive?

Discussion: In this reading, Teicher (2002) discusses the effects of physical and sexual abuse but does not address the question of whether spanking is a form of physical abuse, which has received attention in the news. The following story describes a Wisconsin father charged with felony child abuse for spanking his young son, which highlights a possible link between spanking and child abuse.

Source: <http://foxuonline.com/2014/12/10/wisconsin-father-charged-with-felony-child-abuse/>

Please be sure consider the following questions when working on your assignment:

- Did I provide a general description of the reading?
- Did I identify a relevant gap from the reading and ask a specific question related to this gap?
- Did I provide a source that addresses both the question and the gap?
- Did I explain how this source addresses my question or the identified gap?
- Did I complete the assignment in 2 to 3 sentences (not including your question and source)?

Mini Research Proposals

The mini research proposal is designed to help you explore and consolidate course material into a meaningful written narrative and to improve your scientific thinking and writing. Your objective is to produce a research proposal that you will write up as a 250-word abstract. Every word counts! During the semester we will spend time discussing each concrete step you need to take and each question you need to answer to write this research proposal: What is a research topic? What is a literature review? What is a hypothesis? What are methods and measures? How does one test a hypothesis?

Rough Draft: You will have an opportunity to submit a complete draft of your mini research proposal so that you can get substantial feedback before being submitting your final draft. This draft will be graded as if it were your final draft.

Final Draft: Based on earlier feedback, complete and submit your final mini research proposal. Every draft can be improved, so you will need to figure out how to improve your draft based on the feedback you received on your rough draft.

Examples of topics for mini research proposals:

Stress	Developmental psychopathology (internalizing and externalizing symptoms, mental health problems, etc.)
Social adversity (e.g., poverty, adverse childhood experiences (ACEs), socio economic status (SES), etc.)	Sleep regulation and sleep problems
Biological adversity (e.g., preterm birth, prenatal conditions, abnormal brain development, etc.)	Sex differences
Temperament	Foster care
Attachment	Developmental psychopathology (internalizing and externalizing symptoms, mental health problems, etc.)
Intergenerational transmission	Social and biological development
Gene x environment (G x E) interactions	Dyadic regulation
Brain plasticity/brain function	Child abuse
Parenting	Racism
Executive function	Optimizing development/interventions/treatments
Self-control	Practices/policies
Resilience	Child, parent, and minority rights
Learning and memory	Migration, refugees, and incarceration

An Example of the Mini Research Proposal Assignment

Course name: Developmental Psychobiology

Title: Racism Leaves Epigenetic Marks on Infant Stress Receptor Genes

Your Name: Example Student

Your student ID #: 00000000

Background and rationale. Racial discrimination is linked to racial health disparities in adults and children [1]. Although the impact of racism on biological systems engaged in the stress response has been demonstrated in pregnant women and their infants [2], it is unclear how maternal stress produced by racism is transmitted to the infant. One possibility is that infants mirror the mother's stress by means of emotional contagion, a phenomenon that has been demonstrated in the context of negative social evaluations [3]. A second possibility is that early adversity reduces the quality of parenting and alters the epigenetic programming of the infant stress receptor gene [4], both of which may be exacerbated by exposure to racism.

Hypothesis. We hypothesized that infants of mothers exposed to greater racism would show greater epigenetic marks on their stress receptor genes.

Methods. Mother-infant dyads (N = 300) were recruited from a community centre when infants were six months of age. To measure racial discrimination in mothers, the Experiences of Discrimination (EOD) questionnaire [5] was administered. To measure epigenetic marks, saliva samples were obtained from the infant using a saliva kit and shipped to a lab for analysis [4]. An ANOVA was conducted on infant epigenetic marks with maternal group (high and low discrimination) as the between subjects factor. Socioeconomic status (SES) was statistically controlled for in our analysis.

Significance and implications. If we find that epigenetic mechanisms in the infant are affected by the stress of racism on the parent, our understanding of the subtle intergenerational effects of racism will be enhanced.

Midterm and Final Exams

The midterm and final exams will consist of true/false questions (30%), multiple-choice questions (40%), and figure-labeling questions (30%). The exams are based on both the readings and lecture material, which may include material from the in-class discussions. A brief review session will be held in class before each exam.

References

- [1] Williams, D. R., & Mohammed, S. A. (2009). Discrimination and racial disparities in health: evidence and needed research. *Journal of Behavioral Medicine, 32*, 20-47.
- [2] Thayer, Z. M., & Kuzawa, C. W. (2015). Ethnic discrimination predicts poor self-rated health and cortisol in pregnancy: Insights from New Zealand. *Social Science & Medicine, 128*, 36-42.
- [3] Waters, S. F., West, T. V., & Mende, W., B. (2014). Stress Contagion: Physiological Covariation Between Mothers and Infants. *Psychological Science, 25*, 934-942.
- [4] Oberlander TF, Weinberg J, Papsdorf M, Grunau R, Misri S, et al. (2008) Prenatal exposure to maternal depression, neonatal methylation of human glucocorticoid receptor gene (NR3C1) and infant cortisol stress responses. *Epigenetics 3*, 97-106.
- [5] Krieger, N. Smith, K., Naishadham, D., Hartman, C., Barbeau, E. M. (2005). Experiences of discrimination: validity and reliability of a self-report measure for population health research on racism and health. *Social Science & Medicine, 61*, 1576-1596.

Online Questions and Answers (optional)

There will be 2 to 3 study questions per assignment about the course material in True/False and/or multiple-choice question format on Blackboard each week. The intention here is to help you study the course material, to keep up with it, and to be ready for the exam. The second component is discussion questions, which are intended to help you clarify your position on a given topic, sharpen your knowledge of the course material, and help you prepare for class discussion. Usually, there will be only 1 or 2 of these discussion questions each week. These questions may be about an assigned reading or video. The online question and answer assignment will be made available on Blackboard before each lecture starting the second week of class.

Course Website

I will make the syllabus and all readings, lecture notes, announcements, and exam review materials available on the course website (log in to the U of T Blackboard portal at <https://weblogin.utoronto.ca/>). Please check this website regularly for announcements and messages. Also, please ensure that your current e-mail address is correctly linked to your Blackboard account.

Instructions for how to submit your weekly assignments on time and correctly via Blackboard will be made available several days before the assignment is due. If you have any questions about assignments, please e-mail your TAs.

Term and Final Exams

The term and final exams will consist of true/false questions (30%), multiple-choice questions (40%), and figure-labeling questions (30%). The exams are based on both the readings and lecture material, which may include material from the in-class discussions. A brief review session will be held in class before each exam.

Missed Term Work Due to Medical Illness or Emergency:

All students citing a documented reason for missed term work (this includes assignments and midterm exams) must bring their documentation to the Undergraduate Course Coordinator, Ainsley Lawson, **within three (3) business days** of the term test / assignment due date. All documentation must be accompanied by the departmental [Request for Missed Term Work form](http://uoft.me/PSY-MTW) (<http://uoft.me/PSY-MTW>).

In the case of missed term work due to illness, only an **original copy** of the [official UTSC Verification of Illness Form](http://uoft.me/PSY-MED) (<http://uoft.me/PSY-MED>) will be accepted. Forms are to be completed in full, clearly indicating the start date, anticipated end date, and severity of illness. The physician's registration number and business stamp are required.

In the case of other emergency, a record of visit to a hospital emergency room or copy of a death certificate may be considered.

Forms should be dropped off in SW427C between 9:00 am and 4:00 pm, Monday through Friday. Upon receipt of the documentation, you will receive an email response from the Course Instructor / Course Coordinator within three business days. The Course Instructor

reserves the right to decide what accommodations (if any) will be made for the missed work.

Note that this policy applies only to missed term work (assignments and midterms). Missed final exams are dealt with by the Registrar's Office (<http://www.utoronto.ca/registrar/missing-examination>).

Failure to adhere to any aspect of this policy may result in a denial of your request for accommodation.

Late Assignments in my course

Weekly Applied Science Assignments. One of the main purposes of the Applied Science Assignment is to help students keep up with their weekly readings. For this reason, the TAs will NOT accept any late weekly assignments. Please note that technical problems, last-minute errors with the online submission process (allow yourself plenty of time!), and any unfortunate lapses in memory will NOT be entertained as excuses for lateness. One related caveat to this lateness and grading policy is that your total weekly applied science assignment grade will be averaged from your nine best scores out of ten weekly assignment scores. If you encounter illness or emergency, the policies outlined above under **Missed Term Work Due to Medical Illness or Emergency** will apply.

Mini Research Proposals. For the research proposals, late assignments will be accepted; however, late assignments will receive a **10% penalty deduction per day (e.g., 2 days late, 20% penalty deducted)**. Please keep in mind that weekends and holidays count as late days. For example, if the assignment were to be due on a Friday but you submitted it late on Sunday, you would receive a 20% penalty deduction. So the clock is ticking the moment you are late and continues until your assignment has been submitted. This late-submission policy applies to both the draft and final mini research proposal. Late mini research proposals are to be submitted on Blackboard. An exception to receiving late penalty points is if you are ill; in that case, your total penalty points will be reduced by 10%. For example, let's say you submit your assignment three days late, but you were ill and obtained a doctor's note; in this case, you'll be penalized 20% rather than 30%). It's important to submit your late assignment as soon as possible on Blackboard. To apply for the 10% reduction in penalty points due to an illness, please submit documentation as described above under **Missed Term Work Due to Medical Illness or Emergency**.

Instructions for how to submit your mini research proposals on time and correctly via Blackboard will be made available several days before the assignment is due. Late assignments due to a documented illness must be submitted on Blackboard in addition to submitting documentation of the illness (see instructions above).

Missed Term Exam: Since the final exam is cumulative, if you miss the term exam, the final will be reweighted automatically from 35% to 60%.

Missed Final Exams: Professors and TAs are not authorized to negotiate changes to the final exam schedule. Please consult the university calendar for more information.

Tutorials (Help Sessions)

To offer students a chance to meet in smaller groups in a less formal setting with a TA, four tutorials will be offered outside of the class meeting time (see description of the tutorials below). These tutorials will be scheduled during the semester to help answer questions about the weekly Applied Science Assignment and about the rough and final drafts of the Mini Research Proposals. For these tutorials, TAs will provide a brief overview of the assignment and share their insights into what they look for when marking the assignment. They will also answer specific questions you may have about the assignments. Whether you ask a question and contribute to the discussion or would like to hear some of the questions your peers raise, these tutorials should be helpful for those wishing to improve their work. A schedule of the tutorials will be posted on Blackboard and is listed below.

Description of Tutorials

During the semester, TAs will conduct four tutorial sessions:

Session A: How can I do well on my Applied Science assignments? What is a Mini Research Proposal (MRP), and how will it be evaluated?

Session B (Oral presentations I): To help you discuss your ideas for a mini research proposal you will have the opportunity to give a 2-minute presentation of your proposed topic with a brief rationale and discussion of previous work.

Session C: How do I address the TA's feedback to make my final MRP perfect?

Session D and E (Oral presentations II): To help you learn to present your research ideas you will have the opportunity to give a 5-minute oral presentation of your final mini research proposal. You may use 3 to 5 slides to convey your ideas.

On ACCORN, you can sign up for one of the three tutorials. Each tutorial/TA covers the same material in the four sessions (A, B, C, D).

Tutorial 1 (TUT0001): Mondays, in Room SW403 [TA TBA]

Tutorial 2 (TUT0002): Mondays, Room SW403 [TA TBA]

Tutorial 3 (TUT0003): Mondays, Room SW403 [TA TBA]

Please keep in mind that you are expected to attend only the tutorial sessions in the tutorial you have registered for on ROSI/ACCORN. Also, if you are unable to attend a tutorial session(s), please let your TA know in advance.

Lectures, Slides, and Readings

The schedule given in this syllabus details the lecture topics and readings for each week.

You are responsible for reading all of the assigned articles. Some but not all of the material in the lectures is also in the readings; also, there is material in the readings that is not covered in lectures. Although the organization of the lectures is independent of the readings, reading assignments are associated with the lecture for which they are most relevant. It is strongly recommended that you do the reading assigned for a meeting *before* the class meeting.

PowerPoint slides for the lectures will be posted on Blackboard in advance. The slides contain all the important material from the lecture for which you are responsible, and they are made available for your convenience and to enhance your learning of the material. If you try to learn the material only by reading the PowerPoint slides and do not come to (or watch) lecture, you will miss explanations, illustrations, and elaborations that enhance understanding and retention of the course material. Similarly, if you come to (or watch) lecture without having done the reading, you'll be less able to follow the lecture.

A good way to consolidate your knowledge and understanding of the material is to 1) attend and or watch all classes and take notes; 2) print out the PowerPoint slides of the lecture after class and compare your notes with them, so that you can see if you are catching all the important information in your note-taking; and 3) look in the assigned readings for material corresponding to the lecture—keeping in mind that not all material covered in lecture is in the articles (and vice versa).

Course Website

I will make the syllabus and all readings, lecture notes, announcements, and exam review materials available on the course website (log in to the U of T Blackboard portal at <https://weblogin.utoronto.ca/>). Please check this website regularly for announcements and messages. Also, please ensure that your current e-mail address is correctly linked to your Blackboard account.

Getting Help with Course Materials

If you are struggling with the course material, you should come to my office hours, send an e-mail to your TA, or set up a special time to meet and discuss the matter. The worst things you can do if you are struggling are to fail to ask for help, stop coming to class, or give up trying. If you have questions that are not answered in this syllabus or on the course website, you may post the question in the online discussion forum (on Blackboard; see above), bring the question to the TAs' weekly office hours, or discuss it with me during my office hours. You may also send an e-mail message to one of our TAs, but please allow *two working days' time* for a reply. Major questions relating to course content can be addressed in far greater depth in person.

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 Office as soon as possible. I 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 (located in S302) are available by appointment to assess specific needs, provide referrals, and arrange appropriate accommodations. They can be reached at (416) 287-7560 or 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. The University of Toronto's Code of Behaviour on Academic Matters (<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offenses. Potential offenses 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:

- Using or possessing unauthorized aids
- Looking at someone else's answers during an exam or test
- Misrepresenting your identity

In academic work:

- Falsifying institutional documents or grades
- Falsifying or altering any documentation required by the University, including (but not limited to) doctors' notes

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, you are expected to seek out additional information on academic integrity from your instructor or from other institutional resources (see <http://www.utoronto.ca/academicintegrity/resourcesfor students.html>).