

PSY319HIF-L0201 Developmental Psychology Lab

Fall 2023

Mondays 2:00 – 5:00 pm, Sidney Smith 560

Contact Information Professor Amy Finn

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Description

This course is designed to develop key skills used by researchers in developmental psychology and in psychology more broadly. Many of these skills are also useful in non-academic contexts. The course is designed to provide experience designing studies, conducting literature searches, collecting and interpreting data, and presenting findings.

Prerequisites:

PSY202H1/ ECO220Y1/ SOC252H1/ STA221H1/ PSY202H5/ STA221H5/ PSYC08H3/ STAB27H3/ STAC32H3, and PSY210H1/ PSY210H5/ PSYB20H3 with Recommended Preparation in PSY203H1

Note about prerequisites: It is your responsibility to ensure that you have met all prerequisites listed in the Psychology section of the A&S Calendar for this course.

Goals and Learning objectives

The goal of this course is to give you the opportunity to learn about how to conduct research that answers questions about child development. This includes **homing in on a specific research question**, **performing studies** that can provide answers to these questions, **interpreting data**, and effectively **writing about and presenting research**.

Requirements

Students will be asked to 1) actively participate in discussions, and 2) conduct, analyze and present both observational and experimental studies.

Marking Scheme

% of Grade	Assignment/Task
20	Participation
5	Statement of interest, due September 18 th
15	Open-ended observation & reflection paper, due September 25 th
20	Replication of a developmental study & paper, due October 23 rd
30	Experiment and paper
	- Idea abstract due October 2 nd
	 Complete testing materials due October 30th

	 First draft of research paper due November 20th Peer feedback due November 27th Final draft of research paper due December 4th
10	Experiment poster and presentation due on day of presentation – either November 27 th or December 4 th .

Participation (20%)

This lab class is a great opportunity to engage with your peers! You will get the most out of it if you come to class and come prepared. Every week your participation in the class will be scored. Your score will be based on the (1) quality (relevance, insight added), (2) quantity (not too much, not too little), and (3) conciseness (making good use of everybody's time) of your contributions. Listening carefully to your classmates' contributions is essential. Questions that spark a class discussion or that help us understand concepts can be significant contributions, too.

In making this assessment, I am answering the question **"how different would the class have been if that student would not have been present?"** Your score will be 0 (absent, silent, non-relevant), 1 (ok), 2 (good), or 3 (outstanding) points, for a maximum of 22 points (getting a 2 each day will therefore result in full credit: 100% for the participation component of your grade). This will make up 20% of your grade overall.

If in class participation is difficult, opportunities to participate in online forums will be made available, but coming to class (when healthy) will still be needed to get full participation marks. If class must be missed due to health, you are welcome to comment on the online discussion board to receive participation marks for the day, making sure to go beyond what you note in your weekly response paper for that day.

Your online comments will also be scored similarly to in class comments: 0 (non-relevant and just restating the reading), 1 (ok; you asked or answered a question and it makes sense), 2 (good; you asked or answered a question and it was thoughtful), or 3 (outstanding; you asked or answered a question and it was so thoughtful it even made me think in a new way) points.

Statement of interests (5%)

For this assignment, you will be asked to describe a topic that you might be interested in investigating as a Developmental Psychologist. This might be a topic you've always been interested in, one you heard about in a class, or maybe something you just think about in trying to write the assignment. It does not need to be an established topic. Beyond saying what the topic is, you should specify why you find it interesting, and what you'd want to discover about it. Please also discuss the possible impact that learning more about this topic would have on the world. This should be **no longer than 500 words.**

Open-ended observation and reflection paper (15%)

You will be asked to observe a recording (you will be provided with a 30-45 minute video) of children's free play and then write a reflection paper describing something you observed, and reflecting on its significance. This should be no longer **1,000 words**.

You could write about something that happened in the span of one minute, some repeated event, or a general feature of children's play that you noticed. The topic depends on what catches your attention and interest. But the paper should not be merely descriptive, so please do not just describe events. You could also discuss why the thing you observed is interesting or important and discuss questions that your observation raises.

Replication of a developmental study & paper (20%)

The purpose of this research project is to provide you with the experience of collecting data from a young child and evaluating how these data fit with existing data and theories in the literature. The project requires that you (1) observe and interact with a child either virtually or in person in the context of one of three classic developmental studies, and (2) write up your results according to the instructions provided for the study that you choose.

The three studies are (1) object permanence in an infant aged (roughly) 8 to 14 months, (2) language development in a child aged roughly 18 months to 4 years, or (3) conservation in a child aged 4 to 7 years. After reviewing the three studies on more detail, you will be asked to **pick one** and follow the instructions for that study.

You must obtain the services of a child in the appropriate age range, and that may limit which study you can actually conduct. If you have a child in your life, you should choose the study that is appropriate for their age.

Once you've completed the data collection, you will be asked to provide write ups that describe the child's behavior and how does or does not fit with previous work. You will also be asked for reflections in the form of specific prompts per experiment. This should be no longer **1,500 words**.

Experiment and paper (30%)

You will be asked to design, conduct and write up an experiment.

Your task is to identify a specific issue in this field of developmental psychology that remains unresolved or requires further investigation (they all do \textcircled) and turn this into a testable question. This question may be based on an issue from class discussion, but this is not required. However, because this is a developmental lab, it should relate to child development. The most important part of this assignment is your ability to identify a specific and important experimental question and to design an experiment that address this question.

After identifying the question, you will be asked to design the study to test the question and then collect data. <u>Data will be collected in class, with your peers doing their best to channel their childhood selves.</u> You will then analyze the data and write it up in a formal report which will be no longer than **2,500 words** and include the following sections:

<u>*Title and Abstract:*</u> This is the most frequently read section of any research article, so it is worth making it good! It should be 200 - 250 words and convey the research question/background, methods, results *and their significance*. This section is usually written last.

<u>Introduction</u>: The introduction should describe the problem and cite relevant studies from the literature that inform your hypothesis (these should go beyond what has been covered in class). Clearly state your hypothesis and your predictions at the end of this section.

<u>Methods</u>: Describe the experimental methods you used to test your hypothesis. These should be sufficiently detailed to address the question at hand. For instance, if you are investigating the development of nonverbal memory processing it is not sufficient to write "subjects were tested on a nonverbal memory task." Your paper should include a discussion of why your choice of experimental methodology is best for testing the hypothesis you present.

<u>Results</u>: Present your findings clearly and succinctly using the appropriate statistics and make sure to visualize your central findings. **1-2 Figures are ideal.**

<u>Discussion/Significance</u>: Finally, discuss the results of your experiment, and what bearing these results have on your hypothesis. If an outcome different from the one you predicted occurred, what are the possible reasons for this outcome and what this might mean for your hypothesis? Importantly, be sure to address the broader significance of your findings. Imagine that you are trying to convince a granting agency that they should fund this research. Why is the research important? Will it change existing theories? Might it have some clinical application?

There are <u>7</u> important deadlines for your Experiment and Paper

- Submit your idea as a research abstract with 1) a clear statement of the research question, 2) a figure depicting the task or design and 3) a figure depicting anticipated results. You will spend time in class giving each other feedback on your ideas. *This is due October 2nd*
- Meet with Professor or TA one on one to discuss project proposal. Time will be allocated for this during class <u>on October 2nd</u>
- 3. Submit testing materials and data output format/data sheet. This is due October 30th.
- 4. Conduct experiment on members of class on <u>October 30th or November 13th</u>.
- 5. Submit a first draft of your research paper: due on November 20th.
- Provide feedback to peers. After submitting your proposal, you will have <u>one week</u> to provide feedback to 2 peers via Quercus on their drafts. Writing is an inherently social and iterative processes that is greatly improved by both giving and receiving such feedback! This is due <u>November</u> <u>27th</u>.
- 7. Submit a final draft of your research paper: due December 4th.

Experiment poster and presentation (10%)

Finally, you will be asked to construct a poster based on your findings and present this to the class during one of our last two class periods together. Creating **a clear poster** will be evaluated (5%) separately from the **presentation** (5%) and we will go over how to do this in class with multiple examples.

You will then be asked to present your poster during a blitz. The "data blitz" talk is a staple of many scientific conferences and is an opportunity to express your ideas convincingly and succinctly. In the last two classes, each student will briefly present their experiment and findings to the class. I anticipate that each student will have approximately 10-15 minutes to with 8-10 minutes for discussion.

Course Webpage/Quercus

The website associated with this course is accessible via http://q.utoronto.ca

Writing Help

Book an appointment online with the Writing Centres on St. George Campus:

http://www.writing.utoronto.ca/writing-centres/arts-and-science

English is not your first language? Take a look at these resources:

http://www.writing.utoronto.ca/faqs/english-as-second-language http://www.artsci.utoronto.ca/current/advising/ell

Academic Integrity

All students, faculty and staff are expected to follow the University's guidelines and policies on academic integrity. For students, this means following the standards of academic honesty when writing assignments, collaborating with fellow students, and writing tests and exams. Ensure that the work you submit for grading represents your own honest efforts.

Plagiarism—representing someone else's work as your own or submitting work that you have previously submitted for marks in another class or program is a serious offence that can result in sanctions. Speak to me or your TA for advice on anything that you find unclear. To learn more about how to cite and use source material appropriately and for other writing support, see the U of T writing support website at http://www.writing.utoronto.ca.

The University of Toronto's Code of Behaviour on Academic Matters (<u>https://www.viceprovoststudents.utoronto.ca/policy-guideline/code-of-behaviour-on-academic-matters/</u>)

outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offenses.

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 behavior 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.

University's Plagiarism Detection Tool

Normally, students will be required to submit their course writing to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their work to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation website (<u>https://uoft.me/pdt-faq</u>).

On the use of Generative Artificial Intelligence (Gen AI) Tools

Students may use generative artificial intelligence tools (e.g., ChatGPT) for assignments in this course. If you choose to use generative artificial intelligence tools to assist you in the assignments in this course (including posting on the discussion board and providing peer feedback), this use must be documented in an appendix for each assignment and noted in the posting/feedback. The documentation should include what tool(s) were used, how they were used (e.g., include your prompts), and how the results from the AI were incorporated into the submitted work. These tools can be most helpful in improving your writing and clear expression of your ideas (rather than trying to generate complete content which is unlikely to meet the standards of the assignments).

on COVID, masks & other protections

As of the writing of this policy, the University of Toronto no longer requires (though recommends) masks, and no longer requires COVID-19 vaccinations except for students living in residence. That said, medical masks (ideally N95, KN95, or KN94) and vaccinations remain incredibly important public health tools which, when used widely, help to keep viral transmission lower and protect those we are in community with.

What if you get sick?

If you believe you may have been exposed to COVID-19 or believe you are infected, please exercise caution when deciding whether to come to class or otherwise go in public. Rapid antigen tests are still available and useful tools in tracking your infection status.

I understand it may be different in other courses, but please remember that there is sufficient flexibility built into this course to allow you to make choices prioritizing your health and safety and that of others.

Specific Medical Circumstances, including COVID

If you become ill and it affects your ability to attend class or complete and assignment, send me an email. Normally, I will ask you for documentation in support of your specific medical circumstances. This documentation can be an Absence Declaration (via ACORN) or the University's Verification of Student Illness or Injury (VOI) form. The VOI indicates the impact and severity of the illness, while protecting your privacy about the details of the nature of the illness. You can submit a different form (like a letter from a doctor), as long as it is an original document, and it contains the same information as the VOI. For more information on the VOI, please see <u>http://www.illnessverification.utoronto.ca</u>. For information on Absence Declaration Tool for A&S students, please see <u>https://www.artsci.utoronto.ca/absence</u>. If you get a concussion, break your hand, or suffer some other acute injury, you should register with Accessibility Services as soon as possible.

Missed Deadlines

Work that is turned in late without contacting me and documentation will incur a 3% penalty for every 24-hour period or portion thereof. **Assignments will not be accepted 5 days after the due date**. If lateness is due to COVID or related, points will be redistributed elsewhere.

Resources and Accommodations

Accessibility Needs

Students with diverse learning styles and needs are welcome in this course. If you have an acute or ongoing disability issue or accommodation need, you should register with Accessibility Services (AS) at the beginning of the academic year by visiting <u>http://www.studentlife.utoronto.ca/as/new-registration</u>. Without registration, you will not be able to verify your situation with your instructors, and instructors will not be advised about your accommodation needs. AS will assess your situation, develop an accommodation plan with you, and support you in requesting accommodation for your course work. Remember that the process of accommodation is private: AS will not share details of your needs or condition with any instructor, and your instructors will not reveal that you are registered with AS.

Religious Accommodations

As a student at the University of Toronto, you are part of a diverse community that welcomes and includes students and faculty from a wide range of cultural and religious traditions. For my part, I will make every reasonable effort to avoid scheduling tests, examinations, or other compulsory activities on religious holy days not captured by statutory holidays. Further to University Policy, if you anticipate being absent from class or missing a major course activity (such as a test or in-class assignment) due to a religious observance, please let me know as early in the course as possible, and with sufficient notice (at least two to three weeks), so that we can work together to make alternate arrangements.

Other Resources

Student Life Programs and Services (<u>http://www.studentlife.utoronto.ca/</u>) Academic Success Services (<u>https://studentlife.utoronto.ca/department/academic-success/</u>) Counselling and Psychological Services (<u>https://studentlife.utoronto.ca/department/health-wellness/</u>)

Health and well-being

As a student, you may experience challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating and/or lack of motivation, financial concerns, family worries and so forth. These factors may affect your academic performance and/or reduce your ability to participate fully in daily activities. Everyone feels stressed now and then – it is a normal part of university life. Some days are better than others, and there is no wrong time to reach out. There are resources for every situation and every level of stress. There are many helpful resources available through your College Registrar (https://studentlife.utoronto.ca/) or through Student Life

(<u>https://studentlife.utoronto.ca/task/support-when-you-feel-distressed/</u>). An important part of the University experience is learning how and when to ask for help. Please take the time to inform yourself of available resources.

Wellness Statement*

As your professor, I value your health and well-being. In order to succeed in my class, in University, and beyond, you must work hard AND balance the work with rest... and attention to your mental and physical health. Yes, I plan to challenge you... By the end of this class, I hope you will feel proud of your growth and learning much like the marathoner feels accomplished by their triumphs across the finish line.

However, this work cannot be at the expense of your well-being. Working until exhaustion is NOT a badge of honour; it shows you are out of balance.

In addition to the many resources and supports available to you at UofT, you might find this <u>self-care packet</u> (with a self-assessment, advice, and worksheets) helpful in reaching your self-care goals.**excerpted from Dr. Molly Metz of the UofT and Dr. Nicole Gonzalez Van Cleeve of Brown University*

Date	Topic, Question, Reading & Sign up
Sept. 11	Course introduction, the scientific method & conducting literature searches
	Overview of <u>statement of interest</u> – <i>due next week</i> !
Sept. 18	Design in developmental research
	Overview of <u>open-ended observation and reflection paper</u> – <i>due next week</i> ! Reading: Design in <i>Developmental Research Methods</i> by Scott A. Miller (posted)
	Statement of interest due
Sept. 25	Methods & Statistics
	Prep for individual project meetings Overview of experiment idea and abstract <i>– due next week</i> !
	Reading: Statistics in <i>Developmental Research Methods</i> by Scott A. Miller (posted)
	Open-ended observation and reflection paper due
Oct. 2	Methods & Statistics cont. & Individual project meetings + peer work
000.2	Reading: Statistics in <i>Developmental Research Methods</i> by Scott A. Miller (posted)
	Overview of <u>replication study and paper</u> – <i>due Oct. 23</i>
	Experiment idea abstract due
Oct. 9	No class
Oct. 16	Data organization and analysis in R workshop
Oct. 23	Creating Experiments & Stimuli & Writing about research
	Replication study and paper due
Oct. 30	Collecting data #1
	Experiment testing materials due
Nov. 6	No class
Nov. 13	Collecting data #2
Nov. 20	Presenting research (poster and blitz)
	First draft of research paper due
Nov. 27	Data blitz #1
	Peer feedback due
	Poster due (1/2 class)
Dec. 4	Data blitz #2
	Final draft of research paper due
	Poster due (1/2 class)