

# PSY309H5F – Experimental Design and Theory

Monday 9:00am – 12:00pm

Online Synchronous

## Course Delivery

### ONLINE VIA QUERCUS

Lectures will be held via Zoom; link can be found on Quercus.

Tests will be administered via Quercus.

#### Learn Anywhere Guide for Students

<https://library.utm.utoronto.ca/students/quercus/learn-anywhere>

University of Toronto tech [requirements for online learning](#)

## Contact Information

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**Office Hours: Virtual, Thursday 11:00 am – 1:00 pm**

Zoom link can be found on Quercus.

**Teaching Assistants:**

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## Course Description

You will learn how to overcome practical problems in research design, as well as how to interpret and critically evaluate research findings. You will also gain experience in the processes involved in collecting and analyzing data and in writing a research paper.

Prerequisite: PSY201H5, 202H5 or equivalent, 1.0 credit in PSY at the 200 level

Exclusion: PSY309H1

## Reading Material

Research Methods in Psychology (3<sup>rd</sup> edition) by Beth Morling; ISBN, 9780393617542

Posted readings on Quercus

## Course Evaluation

Testing	50% total	Project	35% total	Assignments	15% total
Test 1	25%	Literature review	5%	Labs	15%
Test 2	25%	Proposals	5%		
		Final Paper	25%		

## Learning Outcomes

By the end of this course, students should be able to:

- Identify and evaluate reputable sources of information.
- Critically evaluate the validity and reliability of research designs and the quality of empirical evidence in scientific papers.
- Explain the scientific process through which a theory is tested.
- Analyze and identify important patterns in data and draw inferences from them.
- Design correlational and experimental studies that appropriately, and rigorously, test a theory.
- Communicate clearly the strengths and limitations of research designs.

## Course Webpage

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

**Note:** You don't need to create a new login for Quercus; it already knows who you are. You just need your UTORid and password. This is the same login that gets you onto the wireless network with your laptop, and the same one that you use to check your email. If you're confused about your UTORid or don't remember your password, go to: <https://www.utorid.utoronto.ca/>

In order to access course material, monitor course information, and view your grades you must log into Quercus. If you have any general questions regarding Quercus, please visit the following help site: <https://q.utoronto.ca/courses/46670/pages/student-quercus-guide>

## IMPORTANT COURSE POLICIES \*\*PLEASE READ\*\*

### **Missed Test Special Consideration Request Process**

Students who miss a test due to circumstances beyond their control (e.g. illness or an accident) can request that the Department grant them special consideration. Students must present their case to the Department (NOT the Instructor) by submitting a request via the online Special Consideration Request form at: <https://utmapp.utm.utoronto.ca/SpecialRequest>.

**Important note:** Once the test/exam is available online and you're unable to write or have an approved request to miss, **DO NOT** at any point attempt to access the test/exam. If at any time you access the test/exam, you will **NOT** be able to submit a special consideration and/or your request will be refused.

**If your request is approved by the department, the weight of the missed test will be redistributed to any remaining tests. For example, if you miss Test 1, then the value of that test will be redistributed to Test 2.**

### **Extension of Time Special Consideration Request Process**

Students who seek to be granted more time to complete their term work beyond the due date without penalty, owing to circumstances beyond their control (e.g., illness, or an accident), must do so by submitting a request **directly to the Instructor** for the period up to and including the last day of the term. The decision as to whether or not to apply a penalty for the specified period rests with the Instructor.

Students who seek to be granted more time to complete term work beyond the last day of the term must submit their request directly to the Department. This request covers the period following the last day of classes and ends the last day of the exam period. This is done by submitting a request via the online Special Consideration Request form at <https://utmapp.utm.utoronto.ca/SpecialRequest>. You are advised to seek advising by the departmental Undergraduate Counsellor prior to the deadline.

### **Supporting Documentation**

The University is temporarily suspending the need for a doctor's note or medical certificate for any absence from academic participation. However, you are required to use the Absence Declaration tool on ACORN found in the Profile and Settings menu to formally declare an absence from academic participation. The tool is to be used if you require consideration for missed academic work based on the procedures specific to our campus/department.

### **Missed Final Exam or Extension of Time beyond exam period**

Missed final exams or for extensions of time beyond the examination period you must submit a petition through the Office of the Registrar. <http://www.utm.utoronto.ca/registrar/current-students/petitions> and follow their procedures.

### **Penalties for Lateness**

A penalty of 10% per calendar day (i.e., including week-ends and holidays, during which students are not able to submit term work) up to and including the last day of classes, will be applied by the Instructor. After the last day of classes, the penalty of 10% per calendar day will be applied by the Undergraduate Counsellor on behalf of the Department. No penalty will be assigned if request for special consideration, described above, was successful.

### **Academic Guidelines**

It is your responsibility to ensure that you have met all prerequisites listed in the UTM Calendar for this course. If you lack any prerequisites you WILL BE REMOVED from the course up until the last day to add a course. Further information about academic regulations, course withdrawal dates and credits can be found in the University of Toronto Mississauga Calendar at: <http://www.erin.utoronto.ca/regcal/>.

You are encouraged to read this material. If you run into trouble and need advice about studying, preparing for exams, note taking or time management, free workshops and advice are available from the Robert Gillespie Academic Skills Centre at 905-828-5406.

### **AccessAbility Services**

The University provides academic accommodations for students with disabilities in accordance with the terms of the Ontario Human Rights Code. This occurs through a collaborative process that acknowledges a collective obligation to develop an accessible learning environment that both meets the needs of students and preserves the essential academic requirements of the University's courses and programs. Students requiring academic accommodations for learning, physical, sensory, or mental health disabilities or medical conditions should contact the AccessAbility Office (2037B Davis Building), 905-828-3847. <http://www.utm.utoronto.ca/accessability/>

### **Privacy and Copyright Disclaimer**

#### ***Notice of video recording and sharing (Download permissible; re-use prohibited)***

This course, including your participation, will be recorded on video and will be available to students in the course for viewing remotely and after each session. Course videos and materials belong to your instructor, the University, and/or other source depending on the specific facts of each situation, and are protected by copyright. In this course, you are permitted to download session videos and materials for your own academic use, but you should not copy, share, or use them for any other purpose without the explicit permission of the instructor. For questions about recording and use of videos in which you appear please contact your instructor.

Lectures and course materials prepared by the instructor are considered by the University to be an instructor's intellectual property covered by the Copyright Act, RSC 1985, c C-42. Course materials such as PowerPoint slides and lecture recordings are made available to you for your own study purposes. These materials cannot be shared outside of the class or "published" in any way. Posting recordings or slides to other websites without the express permission of the instructor will constitute copyright infringement.

### **Academic Honesty and Plagiarism**

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 Mississauga is a strong signal of each student's individual academic achievement. As a result, UTM treats cases of cheating and plagiarism very seriously.

The University of Toronto's Code of Behaviour on Academic Matters outlines behaviours that constitute academic dishonesty and the process for addressing academic offences. Potential offences include, but are not limited to:

In papers and assignments:

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

On tests and exams:

1. Using or possessing unauthorized aids.
2. Looking at someone else's answers during an exam or test.
3. Misrepresenting your identity.

In academic work:

1. Falsifying institutional documents or grades.
2. Falsifying or altering any documentation required, including (but not limited to) doctor's notes.

With regard to remote learning and online courses, UTM wishes to remind students that they are expected to adhere to **the Code of Behaviour on Academic Matters** regardless of the course delivery method. By offering students the opportunity to learn remotely, UTM expects that students will maintain the same academic honesty and integrity that they would in a classroom setting. Potential academic offences in a digital context include, but are not limited to:

Remote assessments:

1. Accessing unauthorized resources (search engines, chat rooms, Reddit, etc.) for assessments.
2. Using technological aids (e.g. software) beyond what is listed as permitted in an assessment.
3. Posting test, essay, or exam questions to message boards or social media.
4. Creating, accessing, and sharing assessment questions and answers in virtual "course groups."
5. Working collaboratively, in-person or online, with others on assessments that are expected to be completed individually.

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.

**Academic Rights**

You, as a student at UTM, have the right to:

- Receive a syllabus by the first day of class.
- Rely upon a syllabus once a course is started. An instructor may only change marks' assignments by following the University Assessment and Grading Practices Policy provision 1.3.
- Refuse to use turnitin.com (you must be offered an alternative form of submission).
- Have access to your instructor for consultation during a course or follow up with the department chair if the

instructor is unavailable.

- Ask the person who marked your term work for a re-evaluation if you feel it was not fairly graded. You have up to one month from the date of return of the item to inquire about the mark. If you are not satisfied with a re-evaluation, you may appeal to the instructor in charge of the course if the instructor did not mark the work. If your work is remarked, you must accept the resulting mark. You may only appeal a mark beyond the instructor if the term work was worth at least 20% of the course mark.
- Receive at least one significant mark (15% for H courses, 25% for Y courses) before the last day you can drop a course for H courses, and the last day of classes in the first week of January for Y courses taught in the Fall/Winter terms.
- Submit handwritten essays so long as they are neatly written.
- Have no assignment worth 100% of your final grade.
- Not have a term test worth more than 25% in the last two weeks of class.
- Retain intellectual property rights to your research.
- Receive all your assignments once graded.
- View your final exams. To see a final exam, you must submit an online Exam Reproduction Request within 6 months of the exam. There is a small non-refundable fee.
- Privacy of your final grades.
- Arrange for representation from Downtown Legal Services (DLS), a representative from the UTM Students' Union (UTMSU), and/or other forms of support if you are charged with an academic offence.

### **Equity Statement**

The University of Toronto is committed to equity and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect. As a course instructor, I will neither condone nor tolerate behaviour that undermines the dignity or self-esteem of any individual in this course and wish to be alerted to any attempt to create an intimidating or hostile environment. It is our collective responsibility to create a space that is inclusive and welcomes discussion. Discrimination, harassment and hate speech will not be tolerated. If you have any questions, comments, or concerns you may contact the UTM Equity and Diversity officer at [edo.utm@utoronto.ca](mailto:edo.utm@utoronto.ca) or the University of Toronto Mississauga Students' Union Vice President Equity at [vpequity@utmsu.ca](mailto:vpequity@utmsu.ca).

Please note that this outline is subject to change depending on the needs of the class (we may need additional time to cover a topic). Any changes to the syllabus will be announced in class one week before. However, assignment and test dates are fixed.

<b>Course Outline</b>						
Dates			Topics	Readings	Labs	Final Project Deadlines
					DUE: Fridays, 11:59 pm	
Week 1	September	14	FUNDAMENTALS & REPLICABILITY	Chapters 1, 2, 4	Lab 1	
Week 2	September	21	MEASUREMENT RELIABILITY & VALIDITY	Chapters 3, 5	Lab 2	Research Topic Sept 25, 11:59pm
Week 3	September	28	WRITING <i>Guest Speaker</i>		Lab 3	
Week 4	October	5	OBSERVATIONAL DESIGNS	Chapters 6, 7	Lab 4	Literature Review Oct 9, 11:59pm
Week 6	October	12	Thanksgiving (No Class) Reading Week		--	
Week 7	October	19	<b>TEST 1</b>		--	
Week 8	October	26	CORRELATIONAL DESIGN	Chapter 8	Lab 5	Correlational Proposal Oct 30, 11:59pm
Week 9	November	2	CORRELATIONAL DESIGN	Chapter 9	Lab 6	
Week 10	November	9	EXPERIMENTAL DESIGN	Chapters 10, 11	Lab 7	Experimental Proposal Nov 13, 11:59pm
Week 11	November	16	EXPERIMENTAL DESIGN	Chapter 12	Lab 8	
Week 12	November	23	QUASI- EXPERIMENTS & DATA ANALYSIS DAY	Chapters 13, 14	Lab 9	
Week 13	November	30	<b>TEST 2</b>		--	
Week 14	December	7	In-class group work on final lab		Lab 10 due in class Dec 7	Final Paper <b>Dec 7, 9:00 am</b>

**Tests** (50% of your grade) will consist of multiple choice, short answer, and essay questions. Typically, these sections comprise 1/3 of the test each. You will have 2.5 hours to complete tests, which will be timed and administered online via Quercus. Tests will be open book, which means that you can use your notes when taking the test. However, you may not consult any other person when taking your test.

**Labs** (15% of your grade) will be administered on Quercus and will be based on both the weekly assigned readings and lecture material. Labs will be made available on the day of the lecture and will be due by the end of the day on Friday, the week of the lecture. Answer keys will be provided over the weekend so that you can check your work prior to class and/or tests. Because answer keys are provided to the class for study purposes, late work will not be accepted and we will not create specialized assignments if you miss a lab. Each week, you will be given time in class to discuss the lab in groups, but submissions will be your own. The final lab (Lab 10) will be longer and due at the end of the class. You will be given the entirety of the class (Dec 7<sup>th</sup>) to work on this final lab.

You must obtain proper documentation if you miss a lab, otherwise your score is a zero. If you miss a lab and receive departmental approval for the missed work, the points you would have received for the lab will be redistributed to the rest of the labs (i.e., the other labs will count for more points).

**Final project** (35% of your grade). See Quercus for specific details about this project. Your project will be completed in small chunks rather than turned in all at once. Specifically, you will a) submit your topic idea, b) conduct a literature review, c) submit proposals, d) provide and receive peer feedback on those proposals, and e) present your work in a final paper. These components add up to a total of 35% of your grade.