Faculty of Arts and Science - Psychology

# PSY201H1 S

## Statistics I

## Summer 2025 Syllabus

## Course Meetings

**PSY201H1 S**

| Section | Day & Time | Delivery Mode & Location |
|---------|-----------|--------------------------|
| **LEC0101** | Monday or Friday @ 2:00 PM EST Wednesday @ 2:00 PM EST (check schedule for each week). | Online Asynchronous |

Refer to ACORN for the most up-to-date information about the location of the course meetings.

## Course Contacts

**Instructor:** Prateek Dhamija
**Email:** prateek.dhamija@mail.utoronto.ca
**Office Hours and Location:** Office hours by Appointment: https://calendly.com/prateek-dhamija/15min
**Additional Notes:** Please allow 24-48 hours for response.

| Mo Cui | mo.cui@mail.utoronto.ca | Shikang Peng | shikang.peng@mail.utoronto.ca |
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| Amy Gourley | amy.gourley@mail.utoronto.ca | Aiden Steeves | aidan.steeves@mail.utoronto.ca |
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**Prerequisites**: PSY100H1/ PSY100Y5/ (PSYA01H3 **and** PSYA02H3)/ COG250Y1
**Corequisites**: None
**Exclusions:** ECO220Y1/ EEB225H1/ GGR270H1/ IRW220H1/ POL222H1/ SOC202H1/ STA220H1/ STA238H1/ STA248H1/ STA288H1/ ECO220Y5/ PSY201H5/ STA215H5/ STA220H5/ PSYB07H3/ STAB22H3/ STAB23H3/ STAB57H3
**Recommended Preparation**: Grade 12 Calculus
**Credit Value:** 0.5

# Course Overview

Fundamentals of descriptive and inferential statistics, including population and sampling distributions, simple association, probability, estimation, and hypothesis testing.

## Description and Course Goals

- Statistics are present in our day-to-day lives and it is important that we understand how to use and consume this information.
- This course introduces the fundamentals statistics with a focus on statistical procedures in psychology.
- The skills that you learn in this course may be the most widely applicable outside of your studies of psychology. A majority of scientific research, and many areas of government and industry use statistical skills for analysis and to help determine how to improve their processes.

The end goal of this course is to learn how to **correctly use** statistics. This includes:

- Understanding the fundamentals of statistics.
- Learning how to apply statistical principles to data generated from experiments.
- Develop critical thinking skills and apply these skills to presented in statistical information in daily life.
- Conducting statistical tests on datasets
- Data Visualization (how to interpret data presented in figures and how to present it)

# Course Materials

- **Required Textbook**: Gravetter, F. J. & Wallnau, L. B. (10th Ed). Statistics for the Behavioral Sciences. Thomson Wadsworth.
- **Required Online Platform**: Mindtap is a required part of the course. It will provide you access to the online content and problem sets. 10 of the 12 problem sets will count towards your final grade. The lowest two will be dropped.
- **Where to Purchase**: This etext can be purchased online from the UofT bookstore for $65.00 for 12 months. There is a 14 day trial so that you can get access to the textbook without paying if you need to drop the course later on.
    - Please make sure that you are searching for the correct course on the bookstore: https://uoftbookstore.com/textbooks/access_codes.asp?
    - Registration of the MindTap account is required. Instructions can be found here: https://www.cengage.com/coursepages/UofT_Su25_PSY201
- **Quercus**: All course communications will be made available on Quercus including the syllabus, lectures slides, announcements, tutorials, assignments, grades and supplementary information. **Please check announcements often!**
- *In Person Test*: paper and pencils for practicing, taking notes, basic calculator. Phones and scientific calculators will NOT be allowed for use as calculators for the final exam.

# Marking Scheme

| Assessment | % | Details | Due Date |
|---|---|---|---|
| **Test 1 - Online** | 15% | 3 hours test in 24-hour time window. Internet access required. | 2025-07-14 |
| **Test 2 - Online** | 20% | 3 hours test in 24-hour time window. Internet access required. | 2025-07-29 |
| **Mindtap Homework** | 10% | • **Description**: Each week there will be an assigned problem set questions on MindTap that go along with the textbook (for a total of 12 problem sets).<br><br>These are there to supplement your studying by providing questions on the textbook material.<br><br>• **How much is the Mindtap homework worth?** Each problem set will be worth 1%. There will be 12 assigned problem sets. The lowest two will be dropped to contribute to 10%.<br><br>• **Which problems?** Problem set questions from the 'Apply it' header on Mindtap<br><br>• **When?** Due Sundays at 11:59 PM EDT (please refer to the schedule or on your Mindtap account).<br><br>The 'suggested' deadline on the syllabus is set up to pace the work out for you. However, to allow for more flexibility, MindTap problem sets 7 days can be handed in after the suggested deadline without penalty. The due date on the Mindtap page is the final due date. | Sundays @ 11:59 PM (check schedule below or Mindtap). |
| **Statistical Literacy Assignment** | 14% | • **When**? Sunday August 10th at 11:59 PM EDT.<br>• **What is it?** Find a popular science article that makes a claim and could/should be supported by statistical evidence. After reading the material, students will submit a 5 page, double-spaced response describing the article's claims, what statistical support is needed, its strengths, weaknesses and a personal reflection about the article. | 2025-08-10 |
| **Statistical Literacy Assignment Outline** | 1% | Outline Create a brief approximately 1-page (12 pt. Times New Roman or Arial) outline of the important information in the article. This can be in point form/dot-jot. There will be an scaffold provided for students to fill out. | 2025-07-21 |
| **In-Person Final Exam** | 40% | | Final Exam Period |

## Course Schedule

| Week | Day | Date | Topics | Readings | Major Assignments and Deadlines (all times EDT) |
|---|---|---|---|---|---|
| **1** | Wed | Jul 2 | Intro: Why Study Statistics? Variables & Measurement | Chapter 1 | |
| | Fri | Jul 4 | Frequency Distributions & Data Visualization | Chapter 2 & 3 | MindTap Chapter 1 - 3 **Suggested: July 6 11:59 PM** |
| **2** | Mon | Jul 7 | Central Tendency & Variability | Chapter 3 & 4 | |
| | Wed | Jul 9 | Probability & Z-scores | Chapter 5 | MindTap Chapter 4 - 5 **Suggested: July 13 11:59 PM** |
| **3** | **Sun-Mon** | **Jul 13** | **Test 1 Start (3 hours; 15%)** | **Covers Ch. 1 - 5** | **Start: July 13 5:00 PM End:   July 14 5:00 PM** |
| | Wed | Jul 16 | The Normal Distribution and Sampling Distributions | Chapter 6 & 7 | MindTap Chapter 6 -7 **Suggested: July 20 11:59 PM** |
| | Fri | Jul 18 | Introduction to Hypothesis Testing | Chapter 8 | |
| **4** | Mon | Jul 21 | T-tests Part I | Chapter 8 & 9 | MindTap Chapter 8 - 9 **Suggested: July 27 11:59 PM** |
| | Mon | Jul 21 | **Outline Due** | | **Outline Due: 11:59 PM** |
| | Wed | July 23 | T-tests Part II | Chapter 10 & and 11 | MindTap Chapter 10, 11 **Suggested: July 30 11:59** |
| | **Thurs** | **Jul 24** | **Test 1 marks Posted** | | |
| **5** | **Tues** | **Jul 29** | **Last Day to Drop Course** | | |
| | **Tues-Wed** | **Jul 29** | **Test 2 Start (3 hours; 20%)** | **Covers Ch. 1 - 10** | **Start: Jul 29 5:00 PM End: Jul 30 5:00 PM** |
| | **Fri** | **Jul 30** | One way ANOVA | Chapter 12 | |
| **6** | Wed | Aug 6 | Correlations and Regressions | Chapter 15 | |
| | Fri | Aug 8 | Review | | |
| | Sun | Aug 10 | **Statistical Literacy Assignment (14%)** | | **Due August 10 @ 11:59 PM** |
| **7** | **Thurs** | **TBD: Aug 15-26** | **In Person Final Exam (3 hours; 40%)** | | **Date/Location TBA** |

# Policies & Statements

### Plagiarism Detection Tool

Normally, students will be required to submit their course essays 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 essays 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 web site (https://uoft.me/pdt-faq).

### 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.

### Students with Disabilities or Accommodation Requirements

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 https://studentlife.utoronto.ca/department/accessibility-services/. 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.

### Specific Medical Circumstances

If you become ill and it affects your ability to do your academic work, consult me right away. 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. If you cannot submit a VOI due to limits on terms of use, 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 (including dates, academic impact, practitioner's signature, phone and registration number). For more information on the VOI, please see http://www.illnessverification.utoronto.ca. For information on Absence Declaration Tool for A&S students, please see https://www.artsci.utoronto.ca/absence. If you get a concussion, break your hand, or suffer some other acute injury, you should register with Accessibility Services as soon as possible.

## Accommodation for Personal Reasons

There may be times when you are unable to complete course work on time due to non-medical reasons. If you have concerns, speak to me or to an advisor in your College Registrar's office; they can help you to decide if you want to request an extension or other forms of academic consideration. They may be able to email your instructors directly to provide a College Registrar's letter of support and connect you with other helpful resources on campus.

## Quercus Info

This Course uses the University's learning management system, Quercus, to post information about the course. This includes posting readings and other materials required to complete class activities and course assignments, as well as sharing important announcements and updates. New information and resources will be posted regularly as we move through the term.

To access the course website, go to the U of T Quercus log-in page at https://q.utoronto.ca. SPECIAL NOTE ABOUT GRADES POSTED ONLINE: Please also note that any grades posted are for your information only, so you can view and track your progress through the course. No grades are considered official, including any posted in Quercus at any point in the term, until they have been formally approved and posted on ACORN at the end of the course. Please contact me as soon as possible if you think there is an error in any grade posted on Quercus.

## Course Materials, including lecture notes

Course materials are provided for the exclusive use of enrolled students. These materials should not be reposted, shared, put in the public domain, or otherwise distributed without the explicit permission of the instructor. These materials belong to your instructor, the University, and/or other sources depending on the specific facts of each situation and are protected by copyright. Students violating these policies will be subject to disciplinary actions under the Code of Student Conduct.

## Equity, Diversity and Inclusion

The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

## Academic Integrity

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters (https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019). If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, please reach out to me. Note that you are expected to seek out additional information on academic integrity from me or from other institutional resources. For example, 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. Consult the Code of Behaviour on Academic Matters for a complete outline of the University's policy and expectations. For more information, please see [A&S Student Academic Integrity (https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity)](https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity) and the [University of Toronto Website on Academic Integrity (https://www.academicintegrity.utoronto.ca)](https://www.academicintegrity.utoronto.ca).

## Generative Artificial Intelligence

The use of artificial intelligence to complete marked work is not permitted in the course. Tests, assignments and problem sets should be completed without their use. Students may not copy or paraphrase from any generative AI applications for the purpose of completing assignments in this course.

Representing as one's own idea, or expression of an idea, that was AI-generated will be considered an academic offense in this course. This course policy is designed to promote your learning and intellectual development and to help you reach course learning outcomes.

Generative AI may be used for studying or general questions about the course content, but the material may not be accurate so use with caution.

## Mental Health and Well-Being

Your mental health is important. Throughout university life, there are many experiences that can impact your mental health and well-being. As a University of Toronto student, you can access free mental health and wellbeing services at Health & Wellness ([https://studentlife.utoronto.ca/department/health-wellness/](https://studentlife.utoronto.ca/department/health-wellness/)) such as same day counselling, brief counselling, medical care, skill-building workshops, and drop-in peer support. You can also meet with a Wellness Navigation Advisor who can connect you with other campus and community services and support. Call the mental health clinic at 416-978-8030 ext. 5 to book an appointment or visit **[https://uoft.me/mentalhealthcare](https://uoft.me/mentalhealthcare)** to learn about the services available to you.

You can also visit your College Registrar to learn about the resources and supports available: [https://www.artsci.utoronto.ca/current/academic-advising-and-support/college-registrars-offices](https://www.artsci.utoronto.ca/current/academic-advising-and-support/college-registrars-offices)

If you're in distress, you can access immediate support: [https://uoft.me/feelingdistressed](https://uoft.me/feelingdistressed)

## Video Recording and Sharing (Download and 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 sources depending on the specific facts of each situation and are protected by copyright. Do not download, copy, or share any course or student materials or videos without the explicit permission of the instructor.

For questions about the recording and use of videos in which you appear, please contact your instructor.

## Late/Missed Assignments

**Mindtap Problems Sets**: Problem sets have a 'suggested' deadline on the syllabus, which is there to pace the problem sets out for you. However, to allow for more flexibility, MindTap problem sets can be handed in after the suggested deadline until the MindTap due date. The due date on the Mindtap page is the final due date. After that date, they won't be accepted.

Also remember that the lowest 2 mindtap assignments will be dropped.

**Assignment**: If the statistical literacy assignment is handed in late, there will be a 5% penalty per 12 hours late (i.e. 10% per 24 hours).

Assignments will not be accepted after 4 days and will be graded with 0. Please email the course instructor with appropriate details and a time to discuss on a case-by-case basis if you are handing in work later than 4 days. Please email as soon as possible.

## Make-Up Quizzes/Tests

If you miss a test for reasons beyond your control (illness or accident), please contact me (prateek.dhamija@mail.utoronto.ca) with documentation in support of your specific circumstances **within one week of the missed test**.

Please include documentation which could include the following: an Absence Declaration (via ACORN), the University's Verification of Student Illness or Injury (VOI) form, or an email from your College Registrar. The VOI indicates the impact and severity of the illness, while protecting your privacy about the details of the nature of the illness. If you cannot submit a VOI due to limits on terms of use, 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 (including dates, academic impact, practitioner's signature, phone and registration number). For more information on the VOI, please see https://registrar.utoronto.ca/policies-and-guidelines/verification-of-illness-or-injury/. For information on Absence Declaration Tool for A&S students, please see https://www.artsci.utoronto.ca/absence. If you get a concussion, break your hand, or suffer some other acute injury, you should register with Accessibility Services as soon as possible.

Please note that I am not informed automatically if you fill out an VOI, absence declaration form, or contact accessibility services etc., so please do make sure that you email me as well to let me know.

If your request is approved, you will have one opportunity to write a make-up test. If you miss the make-up test and can provide supporting documentation for your absence, the weight of the missed test will be added to your final exam.

Students who miss final examinations should file a petition for a deferred exam with their College Registrar's Office.

## Online Communication

General inquiries about course content should be posted on the discussion board

Important information will be posted in the announcements page. Please monitor this page regularly and/or keep the notifications on so that you can get important information and updates.

- This will include final exam time/locations, corrections on the test (i.e. typos or ambiguous language), updates about the course schedule and more. Please turn on notifications during the term tests for updates during the tests.

Scheduling appointments should be done through the Calendly link above. Personal questions, questions during tests should be directed to course instructor email.

Questions about your assignment should be directed to your specific TA once you have been contacted by them. Please refer to the remarking policy below for more information.

## Re-marking Policy - Timeline and Protocol

Inquiries must be made within two weeks of the returned grade feedback from TA. A regrade of your assessment may increase your grade, have no effect or decrease your grade (e.g. if an adding error is discovered during the re-evaluation).

If you believe that your assignment was graded incorrectly/unfairly, please follow the following steps:

1. **Please wait for 24 hours following the return of the assignment**. Read the comments that were provided and look over your work to consider the grade. If it is a test, please wait for the test review video to go over most common issues that came up as it may explain your grade.

2. Contact the TA team by filling out the regrading form available on Quercus with details on where you think something went wrong. The TA will provide more information via email or set up a 10-minute meeting (if needed) to review your concerns.

3. Attend the meeting/correspond with the TA and discuss the issue. Please remember to discuss the matter clearly, professionally, and politely. We want to be helpful and fair.

4. If you still think that something in your assignment was graded incorrectly following the meeting, please use the regrade dispute form found on Quercus. The course instructor will consider the comments on it and remark the question. This final grade **will stand, and it may increase, remain the same or decrease**.

### Departmental Guidance for Undergraduate Students in Psychology
The Department of Psychology recognizes that, as a student, you may experience disruptions to your learning that are out of your control, and that there may be circumstances when you need extra support. Accordingly, the department has provided a helpful guide at https://www.psych.utoronto.ca/current-programstudents/guidance-undergraduate-students-psychology to clarify your and your instructor's responsibilities Page 8 when navigating these situations. This guide consolidates Arts & Science Policies for undergraduate students in one place for your convenience. As an instructor in the department, I will frequently consult with these recommendations when providing you with support, and I recommend that you also consult it to learn more about your rights and responsibilities before reaching out to me.

### Course Conflicts

Students are not permitted to enrol in two courses that have overlapping schedules or conflicting components, such as lectures, tutorials, labs, or assessments. If a student chooses to ignore this policy and enrols in courses with scheduling conflicts, it is their responsibility to manage any resulting issues. Instructors are not obligated to provide accommodations for missed term tests, quizzes, assignments, or other course requirements due to such conflicts (see https://psych.utoronto.ca/current-program-students/guidance-undergraduate-students-psychology#enrolment-concerns-accordion-4). Students are strongly advised to review their course schedules carefully and consult with the College Registrar's Office if needed before finalizing their enrolment.