# **PSY201H1 F LEC0101**

# Statistics I

# Spring 2025 Syllabus

# **Course Meetings**

# Online Asynchronous

Modules will be posted on Monday and Thursday Mornings on the weeks they are scheduled (see calendar)

Live! with Dr. Metz (optional but highly recommended Q&A sessions) on Thursdays 12-130pm. All review sessions will be recorded and posted to the course webpage.

Live! Zoom Room: https://utoronto.zoom.us/j/88569746311 PW: Psy201

### **Course Contacts**

Course Website: https://q.utoronto.ca/courses/389833

Instructor: Dr. Molly Metz (she/her)
Email: molly.metz@utoronto.ca

Office Hours and Location: Online, by appointment

(Zoom office: https://utoronto.zoom.us/j/6900330470, PW: zoom)

Book here: https://calendly.com/profmetz/office-hours

Additional Notes: See course website for all TA contact info and office hour details

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

Credit Value: 0.5

### **Course Materials**

Gravetter, F. J., & Wallnau, L. B. (2017). Statistics for the Behavioral Sciences (10<sup>th</sup> Ed.).

Boston, MA: Cengage Learning. ISBN: 978-1-337-36622-9 (required)

MindTap ® Psychology, ISBN: 978-1-337-28075-4 (required)

Coursekey: MTPPTGJ50C41

MindTap Site: https://student.cengage.com/course-link/ MTPPTGJ50C41

A note about our text: I encourage you to shop around for the best price, but a special UofT price is available at our bookstore – MindTap® alone (which includes an ebook version of our text) can be purchased for \$65, and MindTap® bundled with a paperback version of the text can be purchased for \$129.95. In addition, purchasing MindTap® through the bookstore will come with 12 months of access (compared to the typical 6 months, and for less money!), something to consider if you will be taking Psy202 this Spring or next Summer! Purchase Mindtap Access from the bookstore here.

If the cost of this platform is prohibitive and will prevent you from participating in this class, please email Dr. Metz to help with a plan.

#### **Course Communication**

- General inquiries related to course content, policies, or assessments should first be
  posted to the relevant Quercus Discussion Board. TAs and the instructor will monitor
  the board, but you are welcome to respond to and support your peers as well!
- Scheduling appointments to review content, get study advice, or view tests email TAs directly at Psy201.uoft@gmail.com
- Personal questions related to illness, accessibility, accommodations, class concerns email the instructor directly at molly.metz@utoronto.ca
- EMAILS: Please use a descriptive subject line, a greeting, complete and grammatically correct sentences, and a signature with your full name (in other words, think of email as professional communication; click <a href="here">here</a> for a great how-to). Please include "PSY201" in the subject line with the topic of your email! We will try to respond to all emails within 2 business days. Finally, we may not respond to emails between the hours of 8pm and 8am.
- All course communication should be sent via email (not Quercus inbox) and from your official UofT account.

#### Course Overview

"Statistical thinking will one day be as necessary a qualification for efficient citizenship as the ability to read and write." — H.G. Wells

Statistical thinking, also called *statistical literacy*, is "understanding statistics well enough to be able to consume the information that [you] are inundated with on a daily basis, think critically about it, and make good decisions based on that information" (Rumsey, 2002). The goals of this class are two-fold: to help you become good statistical citizens, and to lay the foundation of statistical thinking for those of you who will go on to more advanced statistics courses and applications.

# **Course Learning Outcomes**

By the end of this course, you will be able to[1]:

Goal One: Interpret basic statistical results

- Calculate and interpret the meaning of basic measures of central tendency and variability.
- Distinguish between causal and correlational relationships.
- Interpret data displayed as statistics, graphs, and tables.

Goal Two: Apply appropriate statistical strategies to test hypotheses

- Recognize the difference between a research hypothesis and a statistical hypothesis.
- Select and implement an appropriate statistical analysis for a given research design, problem, or hypothesis.
- Identify the correct strategy for data analysis and interpretation when testing hypotheses.
- Recognize the limitations of hypothesis testing and identify some of the remedies recommended by the field.

Goal Three: Apply appropriate statistical and research strategies to collect, analyze and interpret data, and report research findings

- Select, apply, and interpret appropriate descriptive and inferential statistics.
- Identify and operationally define variables.
- Limit cause-effect claims to research strategies that appropriately rule out alternative explanations.
- Produce and interpret reports of statistical analyses using APA style.

Goal Four: Distinguish between statistical significance and practical significance

- Distinguish between statistically significant and chance findings in data.
- Calculate and interpret the meaning of basic tests of statistical significance.
- Calculate and interpret the meaning of confidence intervals.
- Calculate and interpret the meaning of basic measures of effect size statistics.
- Recognize when a statistically significant result may also have practical significance.

Goal Five: Evaluate the public presentation of statistics

- Recognize when statistics are presented in an inaccurate or misleading way, either intentionally or unintentionally.
- Assess the validity of statistical conclusions made in popular research reporting (i.e., in blogs or newspapers).

[1] Adapted from the Undergraduate Learning Goals set forth by Society for Teaching Psychology's 2012 Statistical Literacy Taskforce

#### **Course Structure & Assessments**

### Content Delivery

This is an *asynchronous course*, which means that lecture recordings and other videos will be posted on Mondays and Thursdays, and you will be able to watch and read at your convenience. During these videos, we will introduce and expand on the important concepts of the course, as well as explore real-world applications related to these concepts.

The textbook is a supplement to the video content; some assigned chapters will review or expand on what we discuss, while others will expose you to important topics that we will *not* be discussing together. You will be responsible for assigned chapters for all tests, whether it was explicitly covered in lecture or not. Although there is overlap between the lecture videos and the assigned readings, both offer unique content and perspectives and thus neither can be viewed as a substitute for the other. In other words, success in this class is more likely when you both view the lectures AND do the readings.

Playing the lecture videos is a great first step toward success, but learning doesn't happen by passively absorbing rogue information from the atmosphere. In order to get the most out of this (or any) class, *active engagement* is key. This may include: participation in learning checks or activities, taking notes on readings and videos, or even just actually thinking about questions that are posed. This definitely does not include: checking social media, doing other work, texting or engaging in side conversations, watching a show, sleeping, etc.

Additional activities in the online modules will not be assessed for marks, nor will attendance be formally recorded; however, in my experience, deeper engagement with activities is associated with deeper engagement with the material and a more fulfilling class experience. In addition, statistics is a truly cumulative course – it is difficult to be successful in week 5 if you do not give time and energy to weeks 1-4. If you are looking for a class where you can do all the reading and videos the night before a test and wing it, *this is not the class for you!* This is ESPECIALLY the case because it is an online asynchronous course, which means self-directed and regulated learning is key.

#### Feedback and Review

At the end of each module, you will be asked to submit a brief survey about what the most confusing or muddiest points were for you (as well as what you learned or enjoyed). Then, each week on Thursday, I will do a live review session hosted on Zoom of the previous week's material (see the syllabus for specific chapters). In addition, with any time remaining, I will answer questions posed via the chat. If you are unable to attend these sessions, fear not, as they will be recorded and posted on the course site.

#### Independent Practice & Formative Assessment

**Problem Sets.** As in most learning contexts, regular practice is critical to your success in this class. Lecture videos will provide some opportunities to apply concepts that are introduced, but this is not sufficient, neither for test performance nor for long-term retention and application (also called *learning*). I selected the MindTap® platform for this class because it provides multiple research-based methods of review that will support you through this course. I strongly recommend you familiarize yourself with the different types of

activities and schedule them into your weekly study plan. To encourage implementation of an effective regular study plan, you will complete Problem Sets for a grade. The remaining types of activities will not be graded per se (i.e., Mastery Training, End of Chapter Problems, Exam Reviews), though time spend on this type of practice will likely pay off in test performance. Using your MindTap® subscription, you will complete Problem Sets for each of the assigned chapters.

Problems sets will typically be due the Thursday after a Monday module and the Sunday after a Thursday module in which we cover the assigned chapters; some weeks, there will be multiple problem sets due. Extensions for technical difficulties will only be given in the case of a system-wide error, so make sure you plan accordingly.

Reflective Learning Journals. A reflective learning journal is a record of the reflective thought and meaning you are making as you engage in a learning experience. Thinking about your thinking – or 'metacognition' – can help you become a better learner. Statistics in particular can be a challenging class for students because for many it is associated with a lot of anxiety. By reflecting on your feelings, you will understand them better and be able to manage them more effectively. Even if you have no anxiety, reflecting on your learning throughout the course will help you become a better learner (and who doesn't want that?). In addition to reflecting on your learning, you can also use these journals to monitor your progress, problem-solve, and track your learning goals and priorities.

To be able to earn full marks, you must complete at least 5 entries by 11:59pm on June 15. Because the purpose is to encourage you to be actively aware of your learning throughout the course, **entries must be submitted at least 4 days apart from one another** (so you cannot complete or submit all of your journal entries in the first or last week of class!). While I will not be able to read every journal entry for every student, at least two of your journal entries will be read by me in order to determine your final journal mark, which will be posted to Quercus at the end of the term.

#### Summative Course Assessments

**Exams.** There will be 1 term test and 1 cumulative final exam. The tests will be multiple choice, short answer, and brief essay/computations, and will cover information from both lecture and readings. You should be prepared not only to perform calculations, but to provide definitions and explanations of concepts, make connections (across concepts, across texts, etc.), and apply the material to new situations. The midterm will be open-book and open-note (but not open-classmate or open-Google!) and completed individually without the assistance of AI. For the final exam, you will be able to prepare a single aid sheet to use. Details will be provided at the end of the term.

The midterm will be made available on Monday May 26, 9am, and will be due no later than Tuesday May 27, 8:59am. Though the test will be open for approx. 24 hours, once you open the test, you will have a window of 3 hours in which to complete it. The final exam will

be held ON CAMPUS and will be scheduled by the Faculty of Arts & Science, date/time TBA.

**Statistical Literacy Project.** As an opportunity to apply what you learn to real-world scenarios, we will engage in smaller group Discussion Board-based assignments. After signing up for a specific topic, you will be assigned readings or videos on that topic, then will engage in a facilitated discussion with your group members. More details of this assignment will be provided later in the term.

# Marking Scheme

There are no extra credit opportunities, but fear not: there are plenty of regular credit opportunities!

All final grades will be rounded to the nearest tenth of a percent. Your grade will then be determined the official FAS grading scale. Final grades are non-negotiable. Grade changes will be made *only* to correct for grading errors.

### Exams (75%)

Midterm Multiple Choice – 12.5% Midterm Short Answer – 20% Final – 42.5%

## Application (25%)

Problem Sets – 10%
Reflective Learning Journal – 5%
Statistical Literacy Assignment – 10%

**Note:** Any grades posted in the Quercus gradebook are posted for your information only, so you can view and track your progress through the course. No grades are considered official, included any posted in Quercus at any point in the term, until they have been formally approved by the Course Instructor at the end of the course.

# **Course Schedule**

Week	Day	Topic	Reading	Due	Notes
1	M 5/5	Module 0: Welcome to the Course		Sign up for Mindtap, Complete entrance survey	
	Th 5/8	Module 1: Variables & Measurement  Live! Module 0	Ch 1	Ch 1 Problem Set (due Sunday 5/11)	Waitlist closes EOD, 5/8
2	M 5/12	Module 2: Frequency Distributions & Data Visualization	Ch 2	Ch 2 Problem Set (due Thursday 5/15)	Last day to enrol, 5/11
	Th 5/15	Module 3: Central Tendency & Variability  Live! Modules 1 and 2	Ch 3-4	Ch 3-4 Problem Sets (due Sunday 5/18)	
3	M 5/19	Module 4: Z-Scores, Probability, & The Normal Curve	Ch 5-6	Ch 5-6 Problem Sets (due Thursday 5/22)	
	Th 5/22	Study Break Live! Modules 3 and 4			Should have 2 RLJs done by now
4	M 5/26	MIDTERM			
	Th 5/29	Module 5: Introduction to Hypothesis Testing  No Live!	Ch 7-8	Ch 7-8 Problem Sets (due Sunday 6/1)	
5	M 6/2	Module 6: Hypothesis Testing with the t-Statistic	Ch 9	Ch 9 Problem Set (due Thursday 6/5)	Last day to drop, 6/2
	Th 6/5	Module 7: t-Tests with 2 Samples  Live! Modules 5 and 6	Ch 10-11	Ch 10-11 Problem Sets (due Sunday 6/8)	
6	M 6/9	Module 8: Hypothesis Testing with More than 2 Groups – ANOVA	Ch 12	Ch 12 Problem Set (due Thursday 6/12)	Should have 4 RLJs done by now
	Th 6/12	Module 9: Hypothesis Testing with Correlation & Regression  Live! Modules 7 and 8	Ch 14	Ch 14 Problem Set (due Sunday 6/15)  Statistical Literacy Assignment due Sunday 6/15  All RLJs due <b>by</b> Sunday 6/15 (sooner is better!)	
Finals	6/19-6/24	Live! Module 9 TBA  FINAL EXAM ON CAMPUS  Date/Time TBA			Last day to change grading option, LWD, 6/17

## **Policies & Statements**

## Make-Up Quizzes/Tests

If you miss a term test, you should submit documentation that demonstrates your inability to complete that assessment (i.e., a VOI, the ACORN illness self-declaration tool, or an email from your college registrar or accessibility counselor). Documentation should be submitted to me via email within 7 calendar days of the missed test. If you do not contact the instructor or provide the requested documentation, you will receive a 0 for the missed test.

As a rule, makeup tests will not be issued. If you miss the term test, your final assessment will be reweighted to 65%, with an additional 5% allocated to each of your Mindtap, RLJ, and Statistical Literacy Assignment grades.

If you miss the final assessment, you will need to contact your College Registrar to file a petition for late term work (<a href="https://www.artsci.utoronto.ca/current/faculty-registrar/petitions">https://www.artsci.utoronto.ca/current/faculty-registrar/petitions</a>) or work out an alternative plan.

# Late/Missed Assignments

As a rule, late assignments will not be accepted. Late assignments will only be accepted in the case of registered accommodations or extraordinary circumstances and may involve point deductions. Please alert me to these extraordinary circumstances by email within 12 hours of the missed deadline (or as soon as you can), and we will set up a time to discuss these on a case-by-case basis.

**"Life Happens" Insurance:** However, I definitely recognize that sometimes life happens; therefore, I have built some flexibility into the course to allow for illness, other obligations, and terrible, horrible, no good, very bad days, *no questions asked and no documentation necessary*.

Your Problem Sets will be scheduled using what I call "Best-By Deadlines." Like milk or bread, your homework has a best-by date. This is functionally the established deadline, like you are used to working with. However, if you find yourself struggling to meet the deadline for *any* reason, you can still turn in the assignments **up to 4 days late**, with **no penalty**. Like other kinds of best-by dates, though, the longer you go past the target, the staler (or sour-er, ew!) things become – falling behind, such that you are not doing the problem sets around the same time as the relevant lectures, will make it harder (though not impossible) to stay on track for major assessments. In addition, I will drop the lowest THREE of your problem sets at the end of the term (just in case that bread goes TOTALLY moldy and you just can't bring yourself to dive in ??).

### **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.

#### **Accommodation for Personal Reasons**

There may be times when you are unable to complete course work on time due to non-medical reasons. If your "life happens" situation is larger or more extended than the above policy covers, contact Dr. Metz to discuss your situation. I am here to support you and will help make accommodations where reasonable, possible, and in fairness to other students. It is also a very good idea to speak with an advisor in your College Registrar's office; they can support you in requesting extensions or accommodations, and importantly, connect you with other resources on campus for help with your situation.

Please do not feel like you need to perform or share your trauma in order to get the support you need. I do need to know when you are struggling and need some extra help, but you do *not* need to share private details of your life in order to qualify for a discussion of alternative arrangements that can be made.

# **Specific Medical Circumstances**

If you become ill and it affects your ability to do your academic work, please contact me right away. Normally, I will ask you for some kind of documentation in support of your specific medical circumstances such as the Absence Declaration (via ACORN) or the University's Verification of Student Illness or Injury (VOI) form. I do not need to know details of your situation, but I do need to know the extent of the issue, how long it is expected to last, and what type of support you are requesting. If you get a concussion, break your hand, or suffer some other acute injury, you should register with Accessibility Services as soon as possible.

## 24/14 Grade Dispute Policy

You need to wait for at least 24 hours following the return of an assignment/assessment before bringing a grade concern to me; use this time to reflect upon your performance and grade and to review all of the feedback, rubrics, and comments available to you. If available, please visit office hours or viewing sessions to discuss your concerns with the instructor or TA. If you have remaining concerns or would like to request a regrade, please bring them to my attention within 14 days of the return of the assignment/assessment (the specific date and format will be provided upon release of the grades in question) by completing the form provided.

Please write a short paragraph detailing your grade concern (including a) the question(s) in question; b) why you provided the answer you did and where in the course materials you learned this content, and c) why you think the key is incorrect or incomplete and what in the course materials would support your request) and submit it to the form provided. Grade disputes are not to be directed to your TAs. Only reasonable and well-justified concerns will be

considered, and all decisions are final. By submitting a request, please note that the I may need to review the entirety of the assignment to understand your concerns in context, and thus your grade may go up, down, or stay the same

## **Academic Integrity**

Academic Integrity is at the heart of the mission and values of University of Toronto and is an expectation of all students. Maintaining academic integrity is a means to ensuring that you are achieving the outcomes of this course and that your grades accurately reflect your learning and understanding of the course material. In addition, your performance in the next course in this series depends heavily on your ability to truly learn this material and apply it in future contexts. Ensure that the work you submit for grading represents your own honest efforts.

Academic misconduct will not be tolerated in any form. Academic misconduct includes, but is not limited to:

- Submitting the work of another (whether in part or in whole) as your own. This includes putting your name on group work that you did not contribute to.
- Possessing prohibited materials while writing tests and exams.
- Providing or receiving assistance from another student unless explicitly permitted to do
  so by the instructor. In this class, this means that unless explicitly stated, all
  homework, problem sets, and writing submitted for a grade must be done
  independently and without the assistance of Al. You are, however, encouraged to
  study and practice with peers.

I strongly recommend you familiarize yourself with the <u>Code of Behaviour on Academic Matters</u> (<a href="https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019">https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019</a>). Ignorance of the policy is not a defense for violating it. If you are at all uncertain about what constitutes academic dishonesty, please see your TA or the instructor – do not risk your grade or integrity! For more information, please see <a href="#">A&S Student Academic Integrity</a> (<a href="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</a>) and the <a href="https://www.academicintegrity.utoronto.ca">University of Toronto Website on Academic Integrity</a> (<a href="https://www.academicintegrity.utoronto.ca">https://www.academicintegrity.utoronto.ca</a>).

# **Course Materials, including lecture notes**

Students are free to use all lecture video, slides, and other materials for their own use. Students are, however, NOT permitted to share lecture slides or recordings with others not enrolled in this course. ONLY the instructor has permission to record and post the live student hour.

Uploading course materials to the web or shared server is expressly prohibited. Lectures are the intellectual property of the instructor, and the slides and recordings should be respected thus. Specifically, I do not want to discover that a student has put any of my materials into the public domain, has sold my materials, or has given my materials to a person or company that is using them to earn money (this is a real thing that has happened). Students violating these policies will be subject to disciplinary actions under the Code of Student Conduct.

# Land Acknowledgment, Equity, Diversity and Inclusion

In this course, I wish to acknowledge this land on which the University of Toronto operates. For thousands of years, it has been the traditional land of the Huron-Wendat, the Seneca, and the Mississaugas of the Credit. Today, this meeting place is still the home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work on this land. Learn more about the acknowledgement of traditional land in the University of Toronto.

As well, I am committed to creating a learning environment for my students, where your diverse perspectives and identities are respected and represented. I intend for this course to respect and promote diversity, equity, and human rights, so you will gain a more comprehensive understanding of psychology beyond historical biases. Your suggestions are encouraged and appreciated. Please let me know how I could improve the effectiveness of this course for you or for other students or student groups.

### **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.

Audre Lorde once said, "Caring for myself is not self-indulgence, it is self-preservation, and that is an act of political warfare." Please see your wellness as an act of power and perseverance. The core to your success. Hold each other accountable. Hold me accountable. I [want] to... change this "achievement-oriented" culture into one that embraces well-being and growth. Let's start a revolution together.

In addition to the many resources and supports available to you at UofT , you might find this self-care packet (with a self-assessment, advice, and worksheets) helpful in reaching your self-care goals

## **Additional Content**

#### **Student Resources**

# **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 <a href="helpful quide">helpful quide</a> to clarify your and your instructor's responsibilities 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.

Peer Support: Connect with Your Classmates!

Recognized Study Groups: I encourage everyone to strongly consider joining or leading a study group. The Faculty of Arts and Science has a Recognized Study Groups (now fully online!) program that can help you facilitate this (particularly useful if you don't know anyone else in the class!). If you become a study group leader, you can also receive co-curricular credit. To learn more about the program and join or start a study group visit: https://sidneysmithcommons.artsci.utoronto.ca/recognized-study-groups/

**Meet To Complete (MTC) Program:** New this year, Meet to Complete drop-in sessions allow students across academic disciplines to work alongside peers to support motivation and community, set goals with the support of a student staff member, and earn a CCR credit after participating in 6 MTC sessions. Learn more by visiting: <a href="https://sidneysmithcommons.artsci.utoronto.ca/meet-to-complete/">https://sidneysmithcommons.artsci.utoronto.ca/meet-to-complete/</a>

**Quercus Discussion Board:** You are encouraged to both ask AND answer questions about course content and administration on the course discussion board. The TAs and course instructor will also monitor this board and provide answers or input when needed. For example, if you have any questions about the content presented in this syllabus, the discussion board is a perfect place to ask for clarification - that way everyone can benefit from the response. Before posting a question, please check to see whether it has already been answered/discussed.

### Other Campus Resources

Accessibility Services (AS): Students with diverse learning and needs are welcome in this course. If you have an ongoing disability issue or accommodation need, you should register with Accessibility Services (AS) (<a href="http://accessibility.utoronto.ca">http://accessibility.utoronto.ca</a>) at the beginning of the academic year. 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 then assess your

medical 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 condition with any instructor, and your instructors will not reveal that you are registered with AS.

Mental Health and Well-Being: As a student, you may experience a range of challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating and/or lack of motivation. These factors may affect your academic performance and/or reduce your ability to participate fully in daily activities. All of us benefit from support and guidance during times of struggle. There are many helpful resources available through your college Registrar or through Student Life (for example, <a href="http://www.studentlife.utoronto.ca/hwc">http://www.studentlife.utoronto.ca/hwc</a> or <a href="https://www.studentlife.utoronto.ca/feeling-distressed">https://www.studentlife.utoronto.ca/hwc</a> or <a href="https://www.studentlife.utoronto.ca/feeling-distressed">https://www.studentlife.utoronto.ca/feeling-distressed</a>). An important part of the University experience is learning how and when to ask for help. Please take the time as early as possible to inform yourself of available resources and do not hesitate to seek assistance from your Teaching Assistant or the Course Instructor to help learn what supports are available.

Academic Success Centre: "Academic Success professional staff are dedicated to helping you reach your highest learning potential. Every student is capable of achieving academic excellence, but not all learning takes place in the classroom, and not everyone learns in the same way. Your life is more complex than your academic responsibilities, so [they] look at the whole picture and take an individualized approach to supporting you. [They] know there is no 'right' way to get through university, and [they] welcome the opportunity to explore strategies that might help you find greater balance between life and learning." Check out their study spaces, attend a workshop or meet with a learning strategist here:

https://www.studentlife.utoronto.ca/asc/about-us

**English Language Resources**: For anyone who would like to advance their understanding and command of English, there are many supports available at UofT. Two examples are: http://www.artsci.utoronto.ca/current/advising/ell/resources-for-students

And <a href="http://www.writing.utoronto.ca/advice/further-resources/online-esl-resources">http://www.writing.utoronto.ca/advice/further-resources/online-esl-resources</a>. Your College Registrar will also be able to direct you to other resources.

**Writing:** As a student here at the University of Toronto, you are expected to write well (yes, even in a statistics class!). The university provides its students with a number of resources to help them achieve this. For more information on campus writing centres and writing courses, please check in with your College Registrar or visit <a href="http://www.writing.utoronto.ca/">http://www.writing.utoronto.ca/</a>

# Bonus Section on Online Learning

**Getting Ready for Online from UofT Office of Online Learning:** The University of Toronto is welcoming many of its new and returning students to online learning this year. Whether you are new to U of T or a returning student, you may be looking for advice on how to be successful while learning online. This resource has been developed to introduce you to some tips and strategies for success. Take a moment to read and take part in the activities on this page to help you prepare for your online learning experience. <a href="https://onlinelearning.utoronto.ca/getting-ready-for-online">https://onlinelearning.utoronto.ca/getting-ready-for-online</a>

**South College Newsletter on Online Learning in a Pandemic** (obviously the campus-specific stuff doesn't apply, but otherwise, this is one of the best, most comprehensive resources I've seen)

https://sway.office.com/DI3EfuY4n5tZJI7n

#### Common Mistakes to Avoid as a New Online Student

<a href="https://www.learnhowtobecome.org/career-resource-center/student-success-online-college/">https://www.learnhowtobecome.org/career-resource-center/student-success-online-college/</a>

Tips from Cognitive Educational Psychologist (and one of Dr. Metz's BFFs) on Success with Online Courses - <a href="https://www.youtube.com/watch?v=1IIUVU-d1DM">https://www.youtube.com/watch?v=1IIUVU-d1DM</a>

#### Advice for students new to remote coursework

<a href="https://gcci.uconn.edu/2020/03/31/pass-it-on-advice-for-students-new-to-remote-coursework/">https://gcci.uconn.edu/2020/03/31/pass-it-on-advice-for-students-new-to-remote-coursework/</a>

Check out this Study Skills Inventory – this will help you identify your strong and weak strategies, and offer things to focus on to up your studying game!

<a href="https://students.iusb.edu/academic-success-programs/academic-centers-for-excellence/study-skills.html">https://students.iusb.edu/academic-success-programs/academic-centers-for-excellence/study-skills.html</a>

An assignment calculator to help you break down projects into smaller, more manageable chunks: https://ctl.utsc.utoronto.ca/assignmentcal

#### A Note on Taking Notes

Research indicates that taking notes by hand results in significantly better retention of conceptual information than taking notes on a laptop, and this is partially explained by the necessity of summarizing and paraphrasing in order to take notes by hand and keep up with the lecture (see Mueller & Oppenheimer, 2014). However, a recent study indicates that even more important than the note-taking method is the presence of *digital distractions* (off-task texting or browsing) – digital distractions were a meaningful predictor of both note quality and learning and

were especially disruptive to laptop note takers (Flanigan & Titsworth, 2020). So, what does this mean?

- 1. Well, I recommend trying to take notes longhand (i.e., on paper), especially if you haven't tried it in awhile.
- 2. Whether you take notes on paper or on a laptop, be mindful of process. In other words, as tempting as it can be (especially now that you can pause the lecture video), don't write everything down word-for-word! Be careful to select key points, write things in your own words, and to organize your notes all of these things will help you better learn the material and be able to retrieve it more effectively on later tests.
  - 1. Note Taking 101 from Oregon State University
  - 2. Note taking styles
    - 1. One specific note-taking style to try: <a href="Cornell Notes">Cornell Notes</a>
    - 2. Not sure which to try? Here are a bunch of templates!
  - 3. Regardless of method, minimize distraction as much as possible. Close all other browser windows and turn off notifications on your phone, if possible.
    - 1. https://getcoldturkey.com/
      - Can block yourself out of certain websites, the entire Internet, apps, etc., during specific time windows (e.g., when you have a class!)
    - 2. <a href="http://selfcontrolapp.com/">http://selfcontrolapp.com/</a> (for Mac users)
    - 3. StayFocusd (Google Chrome extension)
      - 1. Limits time spent on distracting websites
    - 4. Freedom (available in the app store) same idea, works on your iPhone, iPad
    - 5. Forest (<u>https://forestapp.cc/</u>, available for Android and Apple and as a Chrome extension) – While the app is open and you're focusing on your work, a tree grows!
    - 6. https://www.boomeranggmail.com/
      - 1. If you use Gmail and email is a major distraction during class/studying pause your inbox!
    - 7. If you need to take a break or you find you aren't focusing well, don't try to multitask while listening to lecture, just press pause and come back when you can! (Just make sure to come back ??) This is one of the major benefits of asynchronous online learning, shaping it to fit your patterns and schedule.

#### **Advice for Course Success**

It is important for all students to realize that there will be a distribution of grades in this class that reflects your mastery of some very technical and often-challenging concepts. Remember that your grade in this course is not a reflection of your general ability or your character.

This is a difficult, but not impossible course; it is my hope that you will find this class challenging but rewarding in terms of the knowledge you will walk away with. If you anticipate having difficulty (or when you are), I strongly urge you to do the following:

- "Attend" every lecture, and take good notes. While attendance will not be graded, per se, the ability to truly learn and use the material in this class is strongly related to regular encounters with it, through lectures, videos, and readings.
- Review lecture notes shortly after writing them for the first time; compare these to the slides. If you need clarification on anything, ask in the weekly survey or post on the discussion board. Don't wait until right before the exams! Reorganizing and combining this information can help you consolidate and remember it.
- Manage your time wisely. Familiarize yourself with the syllabus, put important dates in your calendars now, and space out your work there is just too much to do it at the last minute! This is especially important now, with many classes moved online.
- Use the resources available to you that includes your course materials (especially this syllabus), the TAs, me, and the many amazing services offered on campus.
- Discuss the material with another student. Form a study group. Go to office hours. Ask the TA questions. Ask me questions. ASK QUESTIONS.

More resources here on <u>studying</u>... On <u>time management</u>... <u>On hosting a remote study</u> group...On prioritizing...

#### **Advice from Former Stats Students**

#### On studying...

For future Psy201 students, the one advice I would give is to not take the course lightly. The assignments that are given every week will help you keep up with the content. Also, you should not get complacent after the first midterm and prepare diligently for the second one.

When you get a chance to, review your past midterms! It really helps, and that way you can see where you struggled so you can study more effectively and not make the same mistakes on the final!

Keep up with your homework. It really is a building blocks and you need to learn it slowly over time (and not do 4 chapters all in one night to try and catch up).

I advise students to make associations as much as possible between the lecture content and the world as well as practice problems as much as possible because it's only going to cement the concepts and formulas in your brain which during an exam can help reduce some of that nervousness or anxiety one might feel under testing conditions.

### On the assignments...

The weekly Mindtap problem sets are what will help you succeed in this course and the literacy assignment is probably one of the most eye-opening assignments that you will have to do during your undergraduate years.

The literacy assignment may seem not that fun at first, but once you know it can help you know more about your surroundings and be more aware of your action, it can be very useful.

The Mindtap activities are amazing! I'm pretty sure the only reason I passed the midterms was by doing the end of chapter quizzes and tests. So future PSY201 students should do them because they're helpful and you're paying for them anyways.

### On class periods...

Handwrite your notes. This has been shown in studies to help with retention of information, but it also allows you to add notes in the margins. It also helps you with making sure you're taking notes based on the lecture instead of just the PowerPoint because you can access the PowerPoint online at any time. Finally, it allows you to make all kinds of drawings, which are super helpful in visualizing information and help with overall understanding, especially in this course.

My biggest piece of advice is pay attention during lecture and trust her when she says not to use laptops. I never really noticed much of a difference before between taking notes by hand or on the computer but I feel like taking notes by hand in this class helped immensely. I could really focus on what was going on in class rather than feeling distracted and wanting to pop open a new tab and check Facebook quickly.

I think it is important to attend every lecture. Although the PowerPoint slides are posted, you gain a substantial amount of insight by hearing content from Dr. Metz. She provides valuable examples, personal stories and in-class worksheets. Sometimes it may seem like the topics being covered are repetitive or self-explanatory, but they are all very cohesive and it is surprising how hard it is to catch up if you just miss one class.

#### On asking questions...

Advice that I have for students in the future is to know that Dr. Metz and [the TAs] are open to questions at all times. If you have questions about course material they are willing to spend the extra time with you to work on material.

Dr. Metz is more than available via email and after every lecture. I know in second-year going up to your prof can be intimidating, especially with the fear of asking a "stupid" or rhetorical question. But do NOT limit yourself, don't be nervous. Seek help when you need it; I promise you Dr. Metz is very approachable and more than willing to help you!

Take advantage of office hours whenever you can, Dr. Metz is always willing to go over material you didn't quite get the first time in class then. If you can't make it to office hours send her an email, she is one professor I could always count on to respond.

#### On value...

This has really been a great class--one of those college courses that will actually benefit us in daily life and will be of much use (consistently) in the future.

Most things you learn in Psy201 is going to stick with you till the end of your career especially if you are pursuing a profession in science, research, or academia. I also think having knowledge and being trained in this field is something to be very proud of as a lot of people are not aware of, for example, what standard deviation is, even when it comes up in almost every science article/report.

You might want to put yourself on the PSY202 waitlist right now if you haven't yet since regardless of how much you think you don't get statistics or how worried you are, this course can change that and even if PSY202 isn't a requirement you might end up really wanting it as I did!

Advice I would offer to future PSY201 students is don't be afraid of the title "Statistics," when you get past the mathematics of it all (which isn't very much) you will truly learn to love and appreciate the new information you will learn in this class. The professor is great so don't worry at all about being confused or not understanding complicated information, you have great guidance so ask questions and learn from them! Oh and don't forget correlation does not equal causation.

My advice to future students is don't be discouraged if you are not "good" at this class. You may not be going into research for your whole career! Do the best you can but know just because you may not be great at this doesn't mean Psychology is not for you.