PSYC*1010 (Section 02), Course Outline: Winter 2025

General Information

DUE to the ongoing COVID-19 pandemic some courses are being offered virtually and some face to face. **This course is offered using the Face-to-Face format. The course has set day, time, and location of class.**

Course Title: Making Sense of Data in Psychological Research

Course Description:
The course is an introduction to statistical methods in research. There are two goals: 1) to make you a more knowledgeable audience for statistical information so that you will not be fooled when a faulty argument is made; 2) to provide you with the statistical tools you need to carry out your own empirical research. The course begins with descriptive statistics (techniques of summarizing or describing research findings) and progresses to inferential statistics (techniques for making predictions about populations based on findings from samples). Psych 1010 is a course that requires regular attendance at lectures and consistent (daily) work outside of class. You will need to attend lectures and keep up with the readings to understand the material, but it is also very important that you get lots of practice if you want to do well on the quizzes, exams, and in-class questions in this course. During class there are in-class exercises (Top Hat questions) to help you practice. There are homework assignments designed to give you practice, and if you submit your homework on time, you will be given the option of having part of your course grade based on the marks for your homework assignments. In this course it is important to keep up or you will find yourself overwhelmed when studying for quizzes and exams. However, if you take a disciplined approach, doing an hour or two of work every day of the week, and being sure to get help from the professor when you encounter difficulties, you will find that it is not so bad.

This course is taught from a research methods perspective. Although there will be numerical calculations that involve using a calculator, a critical component of this course is gaining the ability to be able to describe and explain what it is you are doing – that is indicate how quantification and statistics fit into a more general process of learning about human nature using observation and reasoning. That means that one of the things you will be required to do is explain what the statistics do and why you might choose on statistic over another given the underlying research question. In every exam there will be “big picture” questions where you have to explain what you are doing and why in your own words, using simple (jargon-free) language and concrete examples of your own creation. On the sample exams there will be exercises to help you prepare for these “big picture” questions. The idea behind these questions is to ensure you can understand the research process as a whole, and the role that statistics plays – so you not only understand what you are doing but why you are doing it. Consequently, there is more to this course than “number crunching”. You will also be developing important critical thinking skills (including the ability to analyze and evaluate an

argument), and communication skills, including both writing skills and listening and note-taking skills.

Credit Weight: 0.5

Academic Department (or campus): Psychology, University of Guelph

Semester Offering: Winter 2025

Class Schedule and Location:

Schedule: Monday, Wednesday, and Friday, 9:30 am – 10:20 am
Location: RICH 2520 (Richards 2520)

Instructor Information

Instructor Name: Skylar Laursen
Instructor Email: slaursen@uoguelph.ca
Office location: Mackinnon Building (extension) Room 4022

In-person office hours: Monday and Wednesday, 10:30 am – 11:30 am

GTA Information

GTA Name: Sydney Austin, Sadie Neufeld, Natasha Vogel, Shayla Lazanik
GTA Email: astins@uoguelph.ca, sneufe02@uoguelph.ca, vogeln@uoguelph.ca, slazanik@uoguelph.ca

Course Content

Specific Learning Outcomes

Critical and Creative Thinking

1. Depth and Breadth of Knowledge
   - Describe core concepts in the scientific method, research methods and statistics, and indicate how these ideas work together in the scientific method
   - Understand and apply key concepts in research methods and statistics as it relates to the scientific method

2. Inquiry and Analysis
   - Formulate questions about psychology. Know how to find relevant evidence.
   - Evaluate hypotheses based on data
   - Recognize the importance of supporting statements with evidence

3. Problem Solving
    - Identify issues and creates a plan to address the problem using knowledge of research methods and statistics

Literacy

4. Methodological literacy: The ability to understand, evaluate, and apply appropriate methodologies for rigorous psychological science
    - Recognize and describe basic research methodologies (e.g. random assignment, random sampling, etc.) and how they work together

5. Quantitative literacy
    - Understand the use of numerical data
    - Demonstrate ability to interpret data (including formulas)
    - Demonstrate ability to analyze data (perform calculations) and interpret data to test a claim
    - Use quantitative data as evidence for claim

6. Visual literacy:
    - Use graphs, tables and images and visual images and their source
    - Evaluate images and their source (e.g. discerning when a graph is misleading).

Communication

7. Reading Comprehension (e.g. reading the text materials)
    - Read at a university level, acquiring psychological information
    - Understand sophisticated theoretical and empirical writing in psychology

8. Listening skills (a component of Oral communication)
    - Determine the key points in an auditory presentation (on the fly) by listening
    - Summarize information in a clear and concise way so that you can later access the information
    - Ask questions of the speaker when you require clarification

9. Written Communication
    - Explain complex abstract processes in simple, clear, and jargon-free language, presenting ideas in a logical order, using concrete examples, and diagrams, graphs when necessary (see Visual literacy)
    - Write clearly and demonstrates general psychological knowledge when presenting ideas
    - Write using the appropriate vocabulary, presenting statistical results in APA format (American Psychological Association, the standard format for Psychology research)

Personal and ethical behavior

10. Ethical issues in research
    - Describe ethical principles in conducting research as it relates to the accurate (non-misleading) presentation of research results

11. Personal organization/ time management
    - Recognize the importance of planning for completion of tasks
    - Deal with intense time pressures, prioritizes and complete important or urgent tasks to schedule, starts task early rather than waiting until the deadline
    - Cope with time pressures without panicking, by being strategic, and determining a way to get the best results in a limited amount of time
    - Demonstrate personal accountability and responsibility

For each of the following objectives of this course, the relevant learning outcome is listed afterwards.

On successful completion of this course, you will be able to accomplish the following:

A. Identify and describe key concepts in quantitative psychology, including those relating to the scientific method, research design, and inferential and descriptive statistics. Apply these concepts when solving problems (Learning outcomes; 1, 3- 5, 7-9)

B. Describe the stages involved in scientific reasoning and specify the role and importance of quantification in the scientific method (the scientific reasoning process). Use an example of your own creation to help you explain how this process works. (Learning outcomes: 1, 2, 4, 8- 9)

C. Identify the weak points within scientific arguments (places where error can enter), and the places where an individual could lie or mislead using statistics or the graphical (Learning outcomes: 1-6, 8-9)

D. Analyze a research question, identifying the relevant measured and manipulated variables and the scale of measurement for variables. Indicate whether the study is a true experiment, a quasi-experiment, or correlational design and describe the relative strengths and weaknesses of each type of design. (Learning outcomes: 1-3, 7-9)

E. Identify the independent and dependent variables in true and quasi-experiments, being sure to report the measures in terms of how they are measured or manipulated (operational definitions). Identify the relevant variables in a correlational study, describing each variable in terms of how it is measured. (Learning outcomes: 1-5)

F. Describe the differences between descriptive and inferential statistics, indicating when each would be used. Determine the appropriate form of statistical analysis for simple experiments. This involves choosing the correct descriptive and inferential statistic. (Learning outcomes: 1-5, 7-9)

G. Create and graph frequency information (frequency distributions). Calculate measures of central tendency (mean, medium, mode) and variability (e.g., range, standard deviation, variance). Explain the meaning and importance of these measures, using jargon-free language and concrete examples of your own creation. (Learning outcomes: 1, 3-9)

H. Interpret information that is presented in graphical format (graphs). Create graphs for frequency distributions, true and quasi-experiments, and correctional studies. (Learning outcomes: 6)

I. Explain what hypothesis testing is, indicating its purposes, the processes involved, and the places where error can enter into the process using jargon-free language and concrete examples of your own creation. Indicate the role of probability in hypothesis testing and inferential statistics. Note: This involves knowing how to define probability and inferential statistics in your own words. (Learning outcomes: 1-9)

J. Carry out hypothesis testing using z-tests, t-tests, and Pearson correlation. (This involves calculating the statistic as well using the result in decisions and presenting the result in writing in APA format). Calculate measures of effect size (e.g. Cohen's d, r2). Indicate what statistical significance means and indicate how this is related to effect size and statistical power. Note: This means you will have to be able to describe what each concept mean in simple jargon-free language, using a concrete example of your own creation to explain what you mean. (Learning outcomes: 1-9)

K. Describe how statistics can be used to mislead and what honest researchers do to avoid misleading others when presenting data about the results of study. (Learning outcomes: 10)

L. Plan your work across the term so that you complete the homework on time and complete the quizzes, the practice exam, and research design assignment on time. Start assignments early so you will not have to rush. Note that steady effort is required, and it is important to create a calendar in advance where you save your deadlines. Deal with time pressures in exams and quizzes, learning how to prioritize and be strategic in order to make the best of limited time. (Learning outcome: 11).

These outcomes will be measured in exams, in-class exercises, quizzes, and a research methods/ design assignments. As well, these options will also be achieved by submitting the homework. They will also be achieved by working on the practice exams posted on Courselink.

Lecture Content

The table below lists the content of the lectures, but lecture dates are tentative. In this class, as in all others, sometimes it takes more time to cover material than expected.

*Text readings and homework should be done in advance of the associated lecture to ensure you are prepared for the in-class exercises that occur during the lectures. Please note that an **outline** for each lecture will be posted on Courselink at least 24 hours in advance of the lecture.

Date	**Content**	**Readings (Gravetter & Wallnau):**	**Homework/Quizzes/ Exams/Assignments**
Week 1: Jan 6 – 10	Scientific method: Scientific method, goals of science and the role of descriptive and inferential statistics and theory. Variables and Constants Identifying different types of variables (manipulated, measured, IV, DV) Testing a theory Random assignment vs. random sampling Samples and populations Scales of measurement	Appendix A Chapter 1	Do the online Course Outline Quiz that is posted on Courselink and you could earn a bonus mark of up to 2% for your understanding of the procedures in the course. Due: Monday January 13 at midnight. Read Appendix A (arithmetic refresher) Try the online arithmetic practice quiz on Courselink to brush up on your arithmetic skills Jan 10: Online Quiz 1 opens after class (10:30 am). Based on lectures from Week 1
Week 2: Jan 13 – 17 Practice Top Hat Questions (2) on Jan 13	Line graphs, bar graphs, scatterplots Frequency distributions	Chapters 2-3 Please note that you are not responsible for knowing the section on percentiles and interpolation (page 49,-	Jan 13 (Monday: midnight): Last chance to complete the Course Outline Quiz for a bonus of 2%

First official Top Hat Questions (2) Jan 17	Central tendency	55 section 2.4). You are also not responsible for the section on interpolating the median in Chapter 3 (pages 80- to the top of page 82, also called section 3.3. Finding the median for a continuous variable).	Jan 17: Online Quiz 1 due at **9:00 am (before class)** Jan17: Online Quiz 2 opens after class (10:30 am). Based on lectures from Week 2
Week 3: Jan 20 – 24 Top Hat Questions (2 per day) Jan 20 and 24	Central tendency Variability	Chapters 3- 4 Please note: You do not need to know how to use the computational formula for Sum of Squares in Chapter 4 (page 109, 4.2 and page 113-114, section 4.6).	Jan 24: Online Quiz 2 due at **9:00 am (before class)**
Week 4: Jan 27 – 31 Top Hat Questions (2) Jan 27	Finish Chapters 1-4 Midterm 1 Review	Finish Chapter 4	Jan 28: If you want to submit Homework 1 for grades, the Homework 1 assignment on Chapters 1- 4 must be submitted to DropBox before midnight on Tues., Jan 28. (Assignments must be submitted as a **single PDF file**) Jan 29: Midterm 1 In class (Chapters 1-4 and all lectures to Jan 29) Jan 31: No Class
Week 5: Feb 3 – 7	Z scores Probability: Predicting individual	Chapter 5 Chapter 6 (pp. 159-178, 184-191). Please note	Feb 7: No in-person class

Top Hat Questions (2) Feb 3	scores using the normal distribution (Chapter 6) Predicting sample means using normal distribution	that you are not responsible for the Binomial distribution (pages 179-183). Chapter 7	Feb 7: Online Quiz 3 opens after regular class time (10:30 am). Based on lectures from Week 5
Week 6: Feb 10 – 14 Top Hat Questions (2 per day) Feb 10 and 14	Predicting sample means using the normal distribution Hypothesis testing	Chapters 7-8	Feb 14: Online Quiz 3 due at **9:00 am (before class)** Feb 14: Online Quiz 4 opens after class (10:30 am). Based on lectures from Week 6
Reading Week: Feb 17 – 21	**No classes**		
Week 7: Feb. 24 – 28 Top Hat Questions (2 per day) Feb 24 and Feb 28	Hypothesis testing	Chapter 8	Feb 28: Online Quiz 4 due at **9:00 am (before class)**
Week 8: Mar 3 – 7 To Hat Questions (2) Mar 3	Review chapters 5- 8 and prepare for Midterm Exam 2 (chapters 1-8)	Finish Chapter 8	Mar 4: If you want to submit Homework 2 for grades the Homework 2 assignment on Chapters 5- 8 must be submitted to DropBox before midnight on Tues., March 4. (Assignment must be submitted as a **single PDF file**)

			March 5: Midterm 2 In class (Chapters 1-8 and all lectures). Mar 7: No Class
Week 9: Mar 10 – 14 Top Hat Questions (2 per day) Mar 10 and 14	One sample t-tests Independent sample t-tests.	Chapters 9-10	Mar 14: Online Quiz 5 opens after class (10:30 am). Based on lectures from Week 9
Week 10: Mar 17 – 21 Top Hat Questions (2 per day) Mar 17 and 21	Independent Samples t-tests t-test for related samples (within subjects or repeated measures)	Chapters 10-11	Mar 21: Online Quiz 5 due at **9:00 am (before class)** Mar 21: Online Quiz 6 opens after class (10:30 am). Based on lectures from Week 10
Week 11: Mar 24 – 28 Top Hat Questions (2 per day) Mar 24 and 28	Correlation The BIG Picture (Recognizing ANOVA, Chi Square, Spearman correlation)	Chapter 15 to page 510	Mar 28: Online Quiz 6 due at **9:00 am (before class)** Mar 28: Online Quiz 7 opens after regularly scheduled class (10:30 am). Based on lectures from Week 11
Week 12: Mar 31 – Apr 4 Top Hat Questions (2 per day) Mar 31 and Apr 4	Ethics in the presentation of research results (How not to lie with statistics) Final Exam Review	Additional readings to be posted on courselink	Apr 4: If you want to submit Homework 3 for grades, the third homework assignment (Chapters 9-11, and 15) must be submitted to DropBox before midnight Fri., Apr 4

			Apr 4: Online Quiz 7 due at **9:00 am (before class)** Research Participation and Design Assignment due last day of class (Apr 4) at **5:00 pm**
Tuesday, April 15, 7:00 – 9:00 pm		Cumulative final exam. Exam will be based on everything covered in lecture or the text since the beginning of the term (Chapters 1-11, 15 and all lectures).	

Labs: none
Seminars: none

Course Assignments and Tests:

Assignment or Test	**Due Date**	**Contribution to Final Mark (%)**	**Learning Outcomes Assessed**
Course outline quiz	Jan 13 (Monday)	2% BONUS Mark (this bonus mark takes your total weighting to 102%)	11
In-class exercises (Top Hat questions – 2 per day)	Jan 17, 20, 24, 27, Feb 3, 10, 14, 24, 28 Mar 3, 10, 14, 17, 21, 24, 28, 31 Apr 4	10%: Best 30 of 36 Top Hat exercises). Top Hat exercises are marked for both participation (40%) and correctness (60%). Therefore, if you answer a question incorrectly, you will still receive partial marks for participating in the activity	1 – 8, 11

Timed Quizzes	Jan 17, 24, Feb 14, 28, Mar 21, 28, Apr 4	11%: Best 5 of 7 quizzes	1 – 9, 11 All quizzes are cumulative
Research Participation and Design Assignment (5 hours' worth of SONA subject pool credits or written summary of 5 research articles)	Last day of class (See SONA handouts)	4%	1, 2, 4, 11
Optional Homework Assignments	First homework assignment (Chapters 1-4). Submitted to Drop Box by Tues. Jan 28 at midnight Second homework assignment (Chapters 5-8) submitted to Drop Box by Tues Mar 4 at midnight. Third homework assignment (Chapters 9-11, 15) submitted to Drop Box by Fri, Apr 4 at midnight	Students who submit their homework to DropBox on time are eligible to have their homework graded. If the homework grade is higher than the associated exam grade then 5% of the weighting will be taken off the exam and added to the homework. For example, if your Homework 1 grade is higher than your Midterm 1 grade, 5% of the weighting will be taken from Midterm 1 and added to Homework 1) If students submit all 3 homework assignments on time to Drop Box, that means their homework will be worth up to 15% of the overall course grade.	1 – 7, 9, 11
Midterm Exam 1	Jan 29 (during class)	Two possibilities: 20% normal weighting or 15% for students who submit Homework 1 to DropBox on time and do better on Homework 1 than Midterm 1.	1 – 9, 11

Midterm Exam 2 (cumulative from the beginning of the term)	Mar 5 (during class)	Two possibilities: 25% normal weighting or 20% for those who submit Homework 2 to DropBox on time and do better on Homework 2 than Midterm 2.	1 – 9, 11
Final Exam (cumulative from the beginning of the term)	April 15, 7:00 – 9:00 pm.	Two possibilities: 30% normal weighting or 25% for those who submit Homework 3 to DropBox on time and do better on Homework 3 than Final Exam	1 – 11

Final examination date and time: April 15, 7:00 pm

Final exam weighting: 30% without Homework 3 or 25% if you submit Homework 3 to Drop Box before the deadline and get a better grade on your homework than on your exam.

Course Resources

Required Texts:
Gravetter, F.J., & Wallnau, L.B. (2017). Statistics for the Behavioural Sciences, 10e edition. Nelson publishing.

There are 5 different ways for you to obtain a textbook: 3 involving the university bookstores and 2 outside the bookstore. Choose the way that you prefer.

To begin, texts are available at both the University bookstore and the Co-op Bookstore on campus and can be purchased online. Prices for the bookstore options are taken from the University bookstore website. Please note: This year Psychology 1010 does NOT require MindTap software. There is no need to purchase MindTap though it comes "free" with the loose-leaf paper version.

Option #1 – Paperless option. Ebook for Gravetter and Wallnau's Statistics for The Behavioral Sciences, 10th Edition. This is a printed access card that can be sold in the bookstore. ISBN: 978035765839

Price: $77.00 at the Bookstore

Option #2 – Loose-leaf version of the text with Ebook. (It also comes with a MindTap code, but you do not need to use it). Package ISBN: 9781337128995

Price: $142.50 at the Bookstore

Package includes:
- Loose-Leaf version of the Gravetter & Wallnau, Statistics for The Behavioral Sciences, 10th Edition
- Printed Access Card for Ebook and MindTap for Gravetter & Wallnau's Statistics for The Behavioral Sciences, 10th Edition. (Sorry. There was no way I could this offer except with MindTap attached)

Option #3 – Bound text (includes e-book):

Package ISBN: 9781305504912

Price: $235.95 at the Bookstore

Package includes:
- Bound version (regular text) of the Gravetter & Wallnau, Statistics for The Behavioral Sciences, 10th Edition
- Ebook

There are also several options that do not involve buying the text from the university bookstores.

Option #4 – You may be able to pick Gravetter and Wallnau's Statistics for the Behavioural Sciences (10th edition) second-hand if you look around. It has been in use for several years.

Price: Costs will vary depending on what kind of deals you can find.

Option #5 – Copies of the Gravetter and Wallnau Statistics for the Behavioural Sciences 10th edition are also available at no cost from the University of Guelph library if you do not mind sharing the text with others. (This means the text is only available to you for short-term intermittent use.) There are both hard copies and Ecopies on short-term reserve. Plan carefully to avoid the rush just before exams, quizzes, and homework assignments.

To get access to the library copies of the text, look in the Content section on Courselink for a file called "Ares Course Reserve List". You can find a link to the library there.

Price: FREE -- but you need to be well organized so that you will be able to get access to the text when you need it. You can count on the text being unavailable right before exams, quizzes and homework assignments so don't wait until the last moment. It is important to plan. Get the materials you need right away so you will be prepared.

Recommended Texts: none

Other Resources:

1. Courselink website (also called D2L). The Courselink website will be used to present online resources, including online quizzes, Drop Box, and sample exams.. You will also notice that there are outlines for each lecture and a variety of other study aids (e.g. course planner).

2. Top Hat software. We will be using the Top Hat (www.tophat.com) classroom response system in class. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text messaging.

   You can visit tinyurl.com/TopHatStudentGuide for the Student Quick Start Guide which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system. An email invitation will also be sent to your school email account. If you don't receive this email, you can register by visiting the course website

   tophat.com/e/513350

   If asked, note that the 6-digit join code they are ask about is 513350 for this class.

   Top Hat will require a paid subscription, and the standard pricing for the cheapest option is $33 for 4-months of unlimited access but if you have purchased a yearlong subscription from the previous semester, you won't have to pay anything (it is valid for 12 months). For a full breakdown of all subscription options available please visit www.tophat.com/pricing.

   The course code is 513350

3. Microsoft Teams (Teams) software. This is online meeting software that is available at no cost to all University of Guelph students. Teams makes it possible to have face-to-face online interactions as well as present documents for others to view. Teams meetings will be scheduled on a as needed basis.

4. The SONA website. To sign up to participate in an experiment for the Research Participation and Design Assignment, please check the SONA system website. This is the link to SONA (https://www.uoguelph.ca/psychology/research/sona). There is information there on that website about how to get into a SONA experiment and there is also information about the articles and how to hand in the alternative assignments (the written summaries of the articles). To log into Sona, you must enter the first page of the website and click the green button that says "University of Guelph SSO Log In." Clicking this green button will lead you the University of Guelph central login window, where you

will need to enter your central login information. As a reminder, your username is your University of Guelph email address without including the "@uoguelph.ca" and your password is the same password you use to access Courselink. If you have questions about the login process, please email ppadmin@uoguelph.ca.

Field Trips: none

Additional Costs:
Top Hat will require a paid subscription (described in detail above), and the standard pricing for the cheapest option is $33 for 4-months of unlimited access but if you have purchased a yearlong subscription from the previous semester, you won't have to pay anything (it is valid for 12 months). For a full breakdown of all subscription options available please visit https://tophat.com/pricing/

Course Policies

Some of the lecture material is not in the text and there will be questions from lecture on exams. You are responsible for material in the lecture as well as the text. There are in-class exercises (Top Hat questions) that can only be done in class because the answers are discussed immediately after the exercise is administered (it is unfair to give out a question after the answer has been published). Before every lecture an outline of the topics to be discussed during the lecture will be posted on Courselink in a file called "Outlines, not notes for the lecture". As might be expected from the title of this file, these outlines are not meant to serve as a replacement for taking notes. In fact, note-taking (learning through listening) is one of the learning outcomes that we are trying to achieve in this course (learning outcome 8, listed above).

Grading Policies

1. To ensure that everyone fully understands policies and procedures in Psychology 1010, the beginning of the term there is an online quiz where you will be asked questions about the content of the course outline. The quiz is posted in the Quiz section on the Courselink website and is due at midnight on Monday, Jan 13. You have up to 2 attempts at this quiz and your score for the quiz will be based on your best score across these two attempts.

2. Top Hat in-class exercises. On the dates indicated in the Lecture Content section of the course outline, you will be asked two questions during lecture and you will be required to answer online using the Top Hat Software. With Top Hat, you can answer using your cellular phone, computer, or tablet. Your in-class exercise mark is based on the best 30 of 36 Top Hat Questions. If you have technical problems or miss a Top Hat question due to illness, personal issues, religious holidays, etc., just consider it one of the 6 you will drop. Once a Top Hat question has been given in class, there is no way to do it again because the answer will be discussed immediately after the question is posted. Top Hat questions are based on both participation (40%) and correctness (60%). Therefore, if you answer a question incorrectly you will still earn partial marks for completing the question.

3. Timed Quizzes. These quizzes will help prepare you for the time pressures you will experience on exams as well as the types of questions you will be asked. Your overall quiz grade will be based on the best 5 of 7 quiz marks. Online quizzes must be done within the days assigned. If you have technical problems or miss a quiz due to illness, personal issues, or religious holidays, or any other reason just consider it one of the 2 quiz marks you drop.

4. Research participation and design assignments. One of the best ways to learn about research is to participate, and in particular, there are special benefits for quantification students because participation will give you a chance to see how the concepts of this course are applied in actual research projects that are being carried out at the University of Guelph. Furthermore, if you choose to continue on in Psychology, you may one day be carrying out your own research as part of an undergraduate honours thesis, research internship, or research project. Consequently, you may enjoy talking to more senior students in the Psychology program, either upper year undergraduate students, graduate students, or research interns/assistants. In this course, you may earn 4% for participating in the psychological studies occurring in the department (these are advertised in the SONA network). Your assignment is to participate in this experiment, and afterwards you will need to read the debriefing sheet to find out for yourself the answers to the following questions:

   a. What is the research question for this study? Why is it important to know about this? (For example, what are the real-life ramifications of this study?)

   b. What variables are the researchers investigating? (List the independent and dependent variables or in correlational designs, the measured variables.)

   c. What type of design does this study have? (True experiment, quasi-experiment, and correlational design)

   Notice: If you participate in a study, you do not have write anything or turn it in. I would just like you to think about these issues as you do the study so you can benefit from your experience maximally. The experience of being in a study should give you some real-life experience with some of the concepts we are discussing in class.

   There are also options for those who choose not to participate in a study. If you are not interested in participating in a study or if there are no studies available on the SONA network, you may also choose the option of reading published journal articles that will be made available on the SONA website (address listed below). Specifically, for each of the 4 credits participation time, you will need to read one of the articles on Courselink and write a summary for each in the format described under “Alternative Assignment” tab on the SONA website, making sure that in your summary you also mention the answers to each of the four questions listed above. Note: These must be written in your own words, not ones from the article or ones written by your classmates or AI software. Plagiarism and cheating are

regarded as academic misconduct. For further information, see the section on academic misconduct.

Thus, there are two types of research participation and design assignment: those based on actual research participation and those based on reading published articles on Courselink and writing the required summary. Many of you will find that you end up doing both types of assignment to make up your 4% for the Research Participation and Design Assignment mark. For example, you may have 3% based on participation in 3 hours-worth of experiments and another 21% on summaries from 1 of the articles posted on the SONA website. All research participation and design papers are due by no later than midnight on the last day of scheduled classes. It is a good idea to spread these out over the term to prevent you from being overwhelmed at the end of the year. (This is where planning and time management enters in.)

To sign up to participate in an experiment, check the SONA system website (https://www.uoguelph.ca/psychology/research/sona). There is information there on that website about how to get into a SONA experiment and there is also information about the articles and how to hand in the alternative assignments (the written summaries of the articles).

5. Optional Homework Assignments. To do well in this course, it is beneficial to practice every day so that you will be ready for relevant quizzes and exams when they come. Consequently, it is an extremely good idea to do the homework. However, in this course, there is also a way for you to earn grades by handing in your homework. If you complete your homework and submit it to the Courselink DropBox on time (before the deadline) then you will be eligible to have your homework graded and have the marks that contribute to overall course grade. There are three homework assignments (Homework 1, Homework 2, and Homework 3), which each correspond to a specific exam (Midterm 1, Midterm 2, Final Exam respectively). If you submit your homework on time, and the grade on your homework is higher than that on the corresponding exam, then you will be eligible to have 5% of the weighting put onto the homework and taken from the corresponding exam. Students may submit 0, 1, 2 or 3 homework assignments, but if they choose to submit all 3 homework assignments to Drop Box on time, that means that up to 15% of their course grade may originate from homework. **Because all homework assignments are optional, there will be no extensions granted for any homework assignment.**

6. Exams: Exams will be part multiple-choice, part long-calculation/problem questions, and part short essay. All exams will be cumulative insofar as the chapters build on one another but there are only so many questions that can be asked in a specific exam, so when studying it makes sense to place slightly more emphasis on the chapters presented in that exam period. When studying for exams, be aware that you will be responsible for both the information presented in lecture and that presented in text. Note that each student must take all three exams. In the event that you miss an exam due to illness or serious personal issues, a makeup exam will be rescheduled for you within 13 days of the original exam. It is your

responsibility to inform the instructor if you miss an exam and she will then make the arrangements for the makeup exam. In most cases, make-up exams occur during office hours the week following the exam. If you feel that an exam question has been mis-marked, the instructor would be happy to mark the exam again for you if you ask. Your mark may not necessarily go up but she will provide detailed comments to explain what went wrong in efforts to help you for next exam. If you are having trouble with exams, please see the instructor. She would be happy to go over your exam with you, point-by-point, and help you work out a strategy about how you can do better on exams.

Course Policy on Group Work:
Each student is expected to complete quizzes, exams, homework, and Top Hat questions on their own. There is little benefit to parroting the answer of some other student word-for-word (or for that matter the textbook or another source) and if there is evidence that students are doing this it will be dealt with as per the regulations on Academic Misconduct. Similarly, if students work together on quizzes or share quiz answers (over the internet, email, phone, or by any other means) that will be treated as Academic Misconduct and dealt with as specified below. However, that does not mean that students cannot form study groups. However, it is important that everyone in the end does his or her own work so that each of you can perform well on the exams.

Course Policy regarding use of electronic devices and recording of lectures:
Electronic recording of classes is expressly forbidden without consent of the instructor. When recordings are permitted, they are solely for the use of the authorized student and may not be reproduced, or transmitted to others, without the express written consent of the instructor.

Similarly, any material created by the course instructor is intended for those enrolled in this course solely. Under no circumstances are you allowed to disseminate course materials to external parties.

Student Rights and Responsibilities when Learning Online Privacy Rights
If you choose to schedule an online meeting with the instructor or one of the TAs Microsoft Teams will be used. Students will be sent a Teams link that will direct them to the meeting. As a student, at these meetings you have the right to protect your privacy online and may choose to turn off your video and/or audio when in session. In the event that your video and/or audio remain on, please note that depending on the circumstances, these sessions may be video-recorded by the instructor. If you prefer not to be distinguishable during a recording, you can choose one or more of the following actions:

1. Turn off your camera
2. Mute your microphone
3. Use the chat function to pose questions.

If you do not wish to be recorded you may discuss possible alternatives or accommodations with your instructor (contact slaursen@uoguelph.ca). I would like to remind you once more, under no circumstances are you permitted to transmit copies of the recordings to others without the express written consent of the instructor.

Online Behaviour
According to the University Secretariat, students have a responsibility to help support community members' access to the tools they need to engage in their learning and development, both in and outside of the classroom. An example of this type of responsibility is the requirement to abide by the following:

Section 4.3.3. Disruption - to not interfere with the normal functioning of the University, nor to intimidate, interfere with, threaten or otherwise obstruct any activity organized by the University, including classes, or to hinder other members of the University community from being able to carry on their legitimate activities, including their ability to speak or associate with others.

As such, inappropriate online behaviour will not be tolerated. Examples of inappropriate online behaviour include:

- Posting inflammatory messages about your instructor or fellow students
- Using obscene or offensive language online
- Copying or presenting someone else's work as your own
- Adapting information from the Internet without using proper citations or references
- Buying or selling term papers or assignments
- Posting or selling course materials to course notes websites
- Having someone else complete your quiz or completing a quiz for/with another student
- Stating false claims about lost quiz answers or other assignment submissions
- Threatening or harassing a student or instructor online
- Discriminating against fellow students, instructors and/or TAs
- Using the course website to promote profit-driven products or services
- Attempting to compromise the security or functionality of the learning management system
- Sharing your username and password

University Policies

Disclaimer:
Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings, changes in classroom protocols, and academic schedules. Any such changes will be announced via CourseLink and/or class email. This includes on-campus scheduling during the semester, mid-terms and final examination schedules. All University-wide decisions will be posted on the COVID-19 website (https://news.uoguelph.ca/2019-novel-coronavirus-information/) and circulated by email.

Academic Consideration
When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for

Academic Consideration:
Academic Consideration, Appeals and Petitions

Academic Misconduct
The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar:
Academic Misconduct Policy

Illness
Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g., final exam or major assignment).

Accessibility
The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact Student Accessibility Services as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 54335 or email accessibility@uoguelph.ca or the Student Accessibility Services Website

Student Feedback Questionnaire
These questionnaires (formerly course evaluations) will be available to students during the last 2 weeks of the semester: March 24th – April 4th. Students will receive an email directly from the Student Feedback Administration system which will include a direct link to the questionnaire for this course. During this time, when a student goes to login to Courselink, a reminder will pop-up when a task is available to complete.
Student Feedback Questionnaire

Drop date
The last date to drop one-semester courses, without academic penalty, is Friday April 4, 2025. For regulations and procedures for Dropping Courses, see the Schedule of Dates in the Academic Calendar.

Instructors must provide meaningful and constructive feedback, at minimum 20% of the final course grade, prior to the 40th class day. For courses which are of shorter duration, 20% of the final grade must be provided two-thirds of the way through the course.

Current Undergraduate Calendar

Additional Course Information

Course instructors are allowed to use software to help in detecting plagiarism or unauthorized copying of student assignments. Plagiarism is one of the most common types of academic misconduct on our campus. Plagiarism involves students using the work, ideas and/or the exact wording of other people or sources without giving proper credit to others for the work, ideas and/or words in their papers. Students can unintentionally commit misconduct because they do not know how to reference outside sources properly or because they don't check their work carefully enough before handing it in. Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

In this course, your instructor will be using Turnitin.com to detect possible plagiarism, unauthorized collaboration or copying as part of the ongoing efforts to prevent plagiarism in the College of Social and Applied Human Sciences.

A major benefit of using Turnitin is that students will be able to educate and empower themselves in preventing misconduct. In this course, you may screen your own assignments through Turnitin as many times as you wish before the due date. You will be able to see and print reports that show you exactly where you have properly and improperly referenced the outside sources and materials in your assignment.