PSYC*1010 (Section 01), Course Outline: Winter 2022

General Information

Due to the ongoing COVID-19 pandemic some courses are scheduled to be offered virtually and some face to face. This course is scheduled to be offered in face-to-face format. That means the course has a set day, time, and physical location. If (and only if) the university is closed due to COVID-related public health advisories, the course will switch to a modified format, where lectures will be posted on Courselink as audio-augmented PowerPoint files. The scheduled class time will be used for in-class exercises and questions. Students will be responsible for reading the audio-enhanced PowerPoint files so that they will be prepared for the in-class exercises and questions. When the university reopens for face-to-face teaching, the course will immediately revert to face-to-face format, where lectures will be delivered in person in the assigned classroom. See the section below entitled "Additional Notes" for details on COVID-related considerations.

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 guizzes, exams, and in-class questions in this course. During class there are in-class exercises (Top Hat questions) and sometimes quizzes 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 campus

Semester Offering: Winter 2022 Class Schedule and Location:

Schedule: Tuesday and Thursday, 11:30 am -12:50 pm Location: MacNaughton 105 (MACN 105)

*except for any weeks where the university is closed due to COVID and online teaching is required.

*If (and only if) face-to-face teaching is impossible due to the suspension of classroom teaching at University of Guelph, the course will be presented in alternative format (See Additional Notes). As soon as the university resumes face-to-face teaching, Psych 1010 will revert to face-to-face (in person) teaching in MACN 105 at the scheduled time.

Instructor Information

Instructor Name: Lana Trick Instructor Email: Itrick@uoguelph.ca Office location: MacKinnon Building (new extension) Room 4003

Virtual Office hours via Zoom: Monday, 2:30-4:30, Wednesday, 12-2 or by appointment (email <u>ltrick@uoguelph.ca</u>). Appointments can also be made for (masked) face-to-face meetings in Mackinnon 4003 once the university re-opens for face-to-face teaching.

GTA Information

GTA Name: Dario Aspesi, Donnelle DiMarco, Christina Gilbert, Monique Carvalho

GTA Email: <u>daspesi@uoguelph.ca</u>, <u>dimarcod@uoguelph.ca</u>, <u>gilbertc@uoguelph.ca</u>, mcarvalh@uoguelph.ca

GTA office location and office hours: By appointment. Please contact TA's via email.

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. 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 Psychological research)

Personal and ethical behavior

9. Ethical issues in research

-describe ethical principles in conducting research as it relates to the accurate (non-misleading) presentation of research results

10. 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 submitted 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. For you convenience, a detailed **Course Planner** will be provided. It suggests a study schedule that will ensure that you keep up. Please note that an outline for each lecture will be posted on Courselink 24 hours in advance of the lecture.

Date	Content	Readings (Gravetter &	Homework/quizzes/exams/
		Wallnau):	assignments
Jan 11, 13	Scientific method	Appendix A	Do the online Course
	Scientific method,		Outline and Planner Quiz
	Goals of Science	Chapter 1	that is posted on the
	and the role of		Courselink website for this
	descriptive and		course and you could earn
	inferential statistics		a bonus mark of up to 2%
	and theory.		for your understanding of
			the procedures in the
	Variables and		course. Due: January 19.
	Constants		
			Read Appendix A
	Identifying different		(arithmetic refresher)
	types of variables		

Date	Content	Readings (Gravetter & Wallnau):	Homework/quizzes/exams/ assignments
	(manipulated, measured, IV, DV)		Try the online arithmetic practice quiz on Courselink to brush up on your
	Testing a theory		arithmetic skills
	Random assignment vs.		
	Random sampling		
	Samples and populations		
Jan 18, 20	Scales of measurement	Chapters 2-3	Jan 19 (Wed: midnight): Last chance to hand in the
Practice Top Hat		Please note that you are	Courselink quiz on the
question on Jan	Line graphs, Bar	not responsible for	Course outline and Planner
18 and Top Hat 1 on Jan 20 (first	graphs, scatterplots	knowing the section on percentiles and	Quiz for a bonus of 2%
official Top Hat	Frequency	interpolation (page 49,-55	Jan 20: Online Quiz 1
question)	distributions	section 2.4).	assigned (all lectures, Appendix A, Chapters 1-2).
	Central tendency	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 25, 27	Central tendency	Chapters 3-4	Jan 26: If you want to
			submit Homework 1 for
Top Hat Question	Variability	Please note: You do not	grades, the Homework 1
2 (Jan 25)		need to know how to use	assignment on Chapters 1-
		the computational	4 must be all submitted to
		formula for Sum of	DropBox before midnight
		Squares in Chapter 4	on Wed, Jan 26. (Files must
		(page 109, 4.2 and page 113-114, section 4.6).	be readable on Drop Box or they cannot be marked.)
			Jan 27: In-class Quiz 2 (all lectures, Appendix A, and Chapters 1-4).

Date	Content	Readings (Gravetter & Wallnau):	Homework/quizzes/exams/ assignments
Feb 1, 3 Top Hat Question 3 (Feb 1)	Finish Chapters 1-4 Begin Chapter 5 (Z scores) at end of Feb 1 st lecture if time.		Feb 3: Exam 1 In class (Chapters 1-4 and all lectures to Feb 1)
	Note: Chapter 5 will NOT be on Exam 1.	Chapter 5 (after Feb 3)	
Feb 8, 10	Review Z scores	Chapter 5 Review Continued next page	See Course Planner
Top Hat Questions 4 and 5 (one per class)	Probability: Predicting individual scores using the normal distribution (Chapter 6)	Chapter 6 (pp. 159-178, 184-191). Please note that you are not responsible for the Binomial distribution (pages 179-183).	
	Predicting sample means using normal distribution	Chapter 7	
Feb 15, 17: Top Hat Questions 6 and 7 (one per class)	Predicting sample means using the normal distribution Hypothesis testing	Chapters 7-8	Feb 17: Online Quiz 3 (Chapters 1-7 and all lectures)
Feb 22, 24 Reading Week	No classes		
Mar 1, 3, Top Hat Question 8 (Mar 1).	Hypothesis testing	Chapter 8	Mar 2: If you want to submit Homework 2 for grades the Homework 2 assignment on Chapters 5- 8 must all be submitted to DropBox before midnight on Wed, March 2. (Files must be readable on Drop Box or they cannot be marked.)

Date	Content	Readings (Gravetter & Wallnau):	Homework/quizzes/exams/ assignments
			Mar 3: In-class Quiz 4 (Chapters 1-8 and all lectures).
Mar 8, 10 Top Hat question 9 (Mar 8)	Review chapters 5- 8 and prepare for cumulative exam (1-8)		March 10: Exam 2 In class (Chapters 1-8 and all lectures).
	Begin Chapter 9 if time. Please note: Chapter 9 will NOT be on Exam 2.	Chapter 9 (after Mar 10)	
Mar 15, 17	One sample t-tests	Chapters 9-10	Check Course Planner
Top Hat question 10 and 11 (one per class).	Independent sample t-tests.		
Mar 22,24 Top Hat questions 12 and 13 (one per class)	Independent Samples t-tests t-test for related samples (within subjects or repeated measures)	Chapters 10-11	Mar 24: Online Quiz 5 (Chapters 1-11)
Mar 29, 31 Top Hat Question 14 (Mar 29)	Correlation The BIG Picture (Recognizing ANOVA, Chi Square, Spearman correlation)	Chapter 15 to page 510	Mar 30: 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 Wed., Mar 30 *Mar 31. In-class Quiz 6 (all lectures, and Chapters 1- 11, and chapter 15).
Apr 5, 7	Ethics in the presentation of research results		Apr 5: Online Optional BONUS Quiz 7 assigned (all lectures and chapters and new material on ANOVA,

Date	Content	Readings (Gravetter &	Homework/quizzes/exams/
		Wallnau):	assignments
Top Hat Question	(How not to lie with		Spearman, Chi square).
15 and 16 (one	statistics)		Due no later than Sunday,
per class)			April 10 at midnight.
			April 8 (Friday, last day of
			class): Research
			Participation and Design
			Assignment due
Monday, April 25,	Final exam	Cumulative final exam.	
7-9 pm.		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).	

Seminars: none

Course Assignments and Tests:

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
Course outline and planner quiz	Jan 19 (Note: This is a Wednesday).	2% BONUS mark (This bonus marks takes your weighting total to 102%).	10
In-class Top Hat exercises. (These are like one question quizzes that occur in almost every class).	Jan 20, 25, Feb 1, 8, 10, 15, 17, Mar 1, 8, 15, 17, 22, 24, 29, Apr 5, 7	10%: Best 12 of 16 Top Hat exercises, one per day).	1-8, 10
Courselink Timed Quizzes	Jan 20, 27, Feb 17, Mar 3, 24, 31	16%: Best 4 of 6 quizzes	1-9, 10 All quizzes are
	Optional Bonus quiz: April 5	If you choose to do the Bonus quiz on April 5, your grade will be based on best 4 of 7 quizzes.	cumulative.
Research Design Assignment (5 hours' worth of SONA	Last day of class (See SONA handouts)	5%	1-2, 4, 10

Assignment or Test	Due Date	Contribution to Final	Learning Outcomes
		Mark (%)	Assessed
subject pool credits			
or written summary			
of 5 research			
articles).			
Optional Homework	First homework	Students who submit	1-7, 9, 10
Assignments	assignment	their homework to	
	(Chapters 1-4).	DropBox on time and	
	submitted to Drop	in a format that can	
	Box by Jan 26.	be read on DROP	
		BOX are eligible to	
	Second homework	have their homework	
	assignment	graded.	
	(Chapters 5-8)		
	submitted to Drop	If the homework	
	Box by March 2.	grade is higher than	
		the associated exam	
	Third homework	grade then 5% of the	
	assignment	weighting will be	
	(Chapters 9-11, 15)	taken off the exam	
	submitted to Drop	and added to the	
	Box by March 30.	homework. For	
		example, if your	
		Homework 1 grade is	
		higher than your	
		Exam 1 grade, 5% of	
		the weighting will be	
		taken from Exam 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.	
Exam 1	Feb 3 (during class)	Two possibilities:	1-9, 10
		20% normal	
		weighting or 15% for	
		students who submit	

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
		Homework 1 to DropBox on time and	
		do better on Homework 1 than Exam 1.	
Exam 2 Cumulative from the beginning of the term	Mar 10 (during class)	Two possibilities: 23% normal weighting or 18% for those who submit Homework 2 to DropBox on time and do better on Homework 2 than Exam 2.	1-9, 10
Exam 3 (Final). Cumulative from the beginning of the term	Monday, April 25, 7 – 9 pm	Two possibilities: 26% normal weighting or 21% for those who submit Homework 3 to DropBox on time and do better on Homework 3 than Exam 3.	1-10

Final examination date and time: Monday, April 25: 7-9 pm

Final exam weighting: 26% without Homework 3 or 21% if you submit Homework 3 to Drop Box before the deadline and get a better grade on your homework than on your exam. This exam will be in person unless otherwise required by closure of the university for face-to-face teaching.

Additional Notes:

1. You will get three tries on the online quiz on the Course outline (the 2% BONUS mark). Your grade will be based on your highest grade.

2. Your Top Hat grade is based on the average for the 12 of 16 Top Hat questions.

3. Your quiz grade is based on the best 4 of 7 quizzes (It is 4 of 7 if you choose to do the BONUS quiz in the last week of class. Otherwise, it is the best 4 of 6).

4. It is a good idea to do the homework if you want to do well in the course. However, if you choose, you can hand in your homework for grades, but you must submit it to Courselink Drop Box on time and in a format that can be read on Courselink DropBox. (Otherwise, your

homework cannot be marked.) If you submit your completed homework on time and do better on the homework than the associated exam, then 5% of your grade will be transferred to the homework instead. Otherwise, all of the weighting will go to the exam (and 0% to the homework). Nothing is lost by if you do not hand in submit your homework, but you may benefit if you hand in your homework to be graded if you do worse on the exam than on the corresponding homework. For Exam 1, the associated homework is Homework 1. For exam 2, the associated homework is Homework 2. For Exam 3 (the final), the associated homework is Homework 3.

4. Special COVID-related considerations.

What during the times when the university suspends face-to-face teaching due to COVID?

Psychology 1010 is designed to be taught in face-to-face format given the number of TA's allocated, time and room set up, etc. However, in the first weeks of class, we have to go to online presentation to conform to the public health guidelines for the University of Guelph. During the online-period the instructor will make use of the software that is normally used in the class during the face-to-face teaching as much as possible (e.g., PowerPoint, Courselink, Top Hat). However, she will use Zoom for office hours and classes. Please note: Face-to-face teaching will revert immediately after the requirement to teach online ends. (Lectures will *not* be videorecorded because the room is not set up for this in Psychology 1010, section 01).

- During the period of online teaching, lecture material will be presented on PowerPoint slides augmented with audio clips. These lecture outline files be posted on Courselink. To be prepared for the in-class exercises, students will be expected to read the files in advance of class. Class time will be reserved for doing the scheduled Top Hat exercises, working through examples, and answering questions. To get into class, use the Zoom link posted on the Courselink website.
- Zoom will be used for virtual-office hours. (The link can be found Courselink.)
- If online teaching is still required when in-class guizzes or exams are scheduled, then the in-class quiz or exam will be held online during class time. The multiple-choice section of the exam will be presented as a Courselink quiz. The long calculation and short-essay sections will be presented using Courselink Drop Box. (Questions will appear on Drop Box and students will submit your answers on Drop Box.) Students can choose to answer the questions by typing their responses into a word-processing program, saving the file, and uploading it in a format that DropBox can read (e.g., .doc, ,.docx, pdf.). Alternatively, if students choose to hand-write their answers for the short-essay section, they will need to use a scanner or their cell phone to take pictures of each page of their hand-written answers and their submit their answers to Courselink Drop Box in a format that Drop Box can read (.pdf, jpeg the jpg). Unreadable files cannot be marked (which means the associated grade will be zero). It is each student's responsibility to ensure that their file is readable. To ensure the file is readable, upload and save the file on Courselink Drop Box, and then try to open and read your DropBox while in Drop Box. For those who choose to hand-write their response, be sure to budget extra time for uploading files. For exams, normal exam security measures will be in effect but Respondus Lockdown technology will NOT be used. (See "Additional Course

information" for more detail about exam security measures.). Once face-to-face teaching resumes, all exams will take place in person and in class and students will hand write their answers.

Student Rights and Responsibilities when Learning Online

Privacy Rights

If you don't schedule a face-to-face meeting, you can choose to attend online office hours, which are offered every week on Zoom. Such meetings may involve individual meetings or meetings in groups. Zoom meetings will also be used during class time meetings in the event of a COVID lockdown. When online teaching is required, students will be sent a Zoom link that for the normal class time. 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 ltrick@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, appropriate 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

What happens if you get COVID during the term?

If you get COVID, it is critical that you stay away from face-to-face classes. You should quarantine yourself until you recover as required by public health advisories. For in-class exercises (Top Hat questions), online quizzes, and exams, accommodations for COVID the same as for any other serious medical condition (see Academic Considerations section below). As for any missed lecture content, first consult the very detailed lecture outlines posted on Courselink and then contact the instructor (ltrick@uoguelph.ca). She would be happy to go over material with you via Zoom during office hours. (If you cannot make it then, we will set up an appointment.)

If your illness is very severe or extends for several weeks, it may be a good idea to consider a medical withdrawal from the course, re-taking the course at a later time when you have recovered your health. It is extremely stressful to try to catch up on missed work while learning new material at the same time particularly if you are experiencing "brain fog", and this may endanger your recovery. Your health must be your first priority.

For more information, please contact your instructor (ltrick@uoguelph.ca).

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 potions are taken from the University bookstore website. Please note: This year Psychology 1010 does <u>NOT</u> 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: THE LEAST EXPENSIVE OPTION FROM THE BOOKSTORE: \$86.75

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: THE SECOND LEAST EXPENSIVE OPTION FROM THE BOOKTORE: \$120.

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: THE MOST EXPENSIVE OPTION FROM THE BOOKSTORE: \$216 or possibly \$162 if you manage to find the used copies in 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

Lab Manual: 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., the Course Planner).

2. Top Hat software. Top Hat will be used to help students keep up and stay engaged in the course. Top Allows the administration of brief (1-item) quizzes almost every day during class. Thus, we will be using the <u>Top Hat</u> (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 <u>tinyurl.com/TopHatStudentGuide</u> 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/210220

If asked, note that the 6-digit join code they are ask about is **210220** for this class.

Top Hat will require a paid subscription (see below), and the standard pricing for the cheapest option is \$30 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. To enroll (or disenroll) see the following: https://success.tophat.com/s/article/Student-Howdo-I-add-or-Disenrol-from-a-Course?name=Student-How-do-I-add-or-Disenrol-from-a-Course&fromCase=1

3. Zoom video meeting platform. Zoom will be used for virtual-office hours. During periods when the University of Guelph suspends face-to-face teaching, Zoom will also be used during the normally scheduled class-time for the presentation of in-class exercises and questions. During this period, links for classes will be posted on Courselink. Once face-to-face teaching resumes, Zoom will no longer be used during class times.

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 <u>without</u> 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 <u>ppadmin@uoguelph.ca</u>.

Field Trips: none

Additional Costs:

There are ways to acquire access to the textbook for free, but students must register for Top Hat because the TopHat in-class presentation system accounts for 10% of the grade. Top Hat Pro has a cost of \$30/term (which works out to around \$2.50 a week), though it is the same cost no matter how many courses you take during the term using Top Hat. There is also a free trial version but it will not last for the duration of the course. If you are experiencing financial complications making it difficult for you to register for TopHat, please contact the professor immediately and she will see what she can do to get these problems worked out right away (email: <u>ltrick@uoguelph.ca</u>). You cannot afford to miss out on something that accounts for 10% of your grade. The first official Top Hat is January 20.

You can visit the Top Hat Overview (<u>https://success.tophat.com/s/article/Student-Getting-</u> <u>Started-with-Top-Hat</u>) within the Top Hat Success Center 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.

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). There are also in-class quizzes that must be completed in class.

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, planner and course website. The quiz is posted in the Quiz section on the Courselink website and is due at midnight on Wednesday, January 19. You have up to 3 attempts at this quiz and your score for the quiz will be based on your best score across these three attempts. (After you do each quiz, be sure to look at the feedback to see what you did wrong.)

2. Top Hat in-class exercises. On the dates indicated in the Class Planner, you will be asked a question 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 12 of 16 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 4 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.)

3. Timed Quizzes. These quizzes will help prepare you for the time pressures you will experience on exams as well as the type of question. Your overall quiz grade will be based on the best 4 of 6 quiz marks -- OR if you take the BONUS quiz, the best 4 of 7 quizzes. In-class and online quizzes must be done on 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 2-3 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 learn up to 5% 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 5 credits participation time, you will need to read one of the articles on Courselink and write 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. 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 5% 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 2% on summaries from 2 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 a 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 (Exam 1, Exam 2, 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 and in a format that can be read by Drop Box, that means that up to 15% of their course grade may originate from homework.

6. Exams: Exams will be part multiple-choice, part long-calculation/problem questions, and part short essay (25%, 50%, and 25% of the total grade for the three types of question respectively). 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-bypoint, 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 his or her 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 by other individuals 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.

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 (email ltrick@uoguelph.ca), with your name, id#, and e-mail contact. 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).

However, please note that in Psychology 1010 arrangements have already been made to accommodate Top Hat questions and timed quizzes missed due to illness, compassionate reasons, technical problems, religious holidays, etc. For example, your Top Hat mark is based on 12 Top Hat questions though 16 are administered. This means that there are already 4 "makeup" questions in there in case you have to miss due to illness, compassionate reasons, religious holidays, technical problems, etc. Similarly, your mark for quizzes is based 4 quizzes though 7 are administered. (There are 7 if you include the BONUS quiz.)

This means that students who miss a quiz or Top Hat question won't have to worry about big backlog of quizzes and Top Hat exercises to catch up when they return -- an experience that which be overwhelming. Instead, all that they have to do is do one of the other already scheduled quizzes or Top Hat quizzes. Just wait for the next one -- more than enough are scheduled.

For the same reason, there are no extensions for the optional homework assignments. Homework must be handed in to Drop Box on time (midnight, on the assigned day). If you miss a deadline, don't worry. The 5% weighting that would have gone to the homework will added to the corresponding exam instead. That is, if you miss the deadline for Optional Homework 1, it just adds 5% to the weighting of Exam 1. Similarly, if you miss the deadline for Optional Homework 2, it adds 5% of the weighting for Exam 2, if and if you miss the deadline for Optional Homework 3, it adds 5% to the weighting to Exam 3. You never lose marks. Instead, you just redistribute them to the corresponding exam. Just make sure you study for that exam! Be sure to make use of the Hints for Homework, Sample Exam, and any in-class exercises posted on Courselink.

For matters beyond those discussed here, please see the academic calendar for information on regulations and procedures for appeals and academic appeals.

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: <u>Academic</u> <u>Misconduct Policy</u>

Illness

Medical notes will not normally be required for instances of academic consideration.

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 <u>Student Accessibility Services</u> as soon as possible.

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

Student Feedback Questionnaire

These questionnaires (formerly course evaluations) will be available to students during the last 2 weeks of the semester: March. 28th – April 08th. 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. <u>Student Feedback Questionnaire</u>

Drop date

The last date to drop one-semester courses, without academic penalty, is April 08, 2022. For regulations and procedures for Dropping Courses, see the <u>Schedule of Dates in the Academic</u> <u>Calendar</u>

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.