PSYC*1010, Course Outline: Fall 2020

General Information

DUE to the COVID-19 pandemic, this course is offered in an alternative format.
Alternative Delivery Synchronous – AD-S Virtual: day and time for class lecture.

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). This is a challenging course that requires regular attendance at lectures and consistent hard work outside of class as well. There are graded homework assignments, quizzes, in-class exercises, in addition to exams. There are also non-graded practice exams to help you prepare for the exams. Note that the homework, the quizzes, and the in-class exercises involve doing computer work, making use of a variety of computer programs, including Mind-tap, Top Hat, Zoom, and Courselink (D2L) among others. There is also a research design assignment, which involves the SONA website (described below). This course is a lot of work, but if you do the work and master the material, not only will you be well set for later Psychology courses (many courses require that you know this information as a prerequisite), but you will acquire skills that you may find valuable in your later career. To do well in this course, it is essential that you keep up with the readings and homework or you will find yourself overwhelmed. Effective time management is critical. However, if you take a disciplined approach, keeping up and asking the professor for help when you are struggling, you will find that the course is easier to manage.
This course is taught from a research methods perspective. There will be numerical calculations but 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: Fall 2020

Class Schedule and Location:
Schedule: Tuesday and Thursday, 5:30 pm-7:00 pm
Location: Online

Due to the social distancing requirements made necessary by the COVID virus this course will be offered as an online "blended" course, one that has both synchronous elements, ones that occur during the Tuesday/Thursday 5:30-7:00 pm class times, and asynchronous elements, ones that occur within a specific time range outside of class (e.g. within a day or several days). Some of the materials or links to materials will be on the Courselink website, which you will receive access to when you enroll for the course. Some activities will involve Zoom, but you will also access that through the Courselink website. Other elements, and in particular, the synchronous elements (the lectures) will involve Top Hat software. Directions on how to register for Top Hat and Zoom are listed at the end of this course outline in the section on other course resources.

Instructor Information

Instructor Name: Lana Trick
Instructor Email: ltrick@uoguelph.ca

As a general rule, I will do my best to answer emails within 2 business days. I do not check or answer emails on Saturdays or Sundays. I prefer that you ask your questions during class so that everyone can benefit from the discussion. Alternatively, you could make use of the Discussion Forum on Courselink for course related questions. If the matter is private, please come to office hours to discuss.

Office location and office hours:

MacKinnon, 4003. However, due to COVID, I will not be on campus but will have my office hours online via Zoom (https://zoom.us/my/trick). However, another way you can connect is by going through Courselink (the course website), looking under the CONTENT tab (it is on the horizontal bar on the top of the page), and then going to the folder on the left side of the page called "Zoom link for Office hours…". Look inside the folder and you will see the link.

Online Office hours: Monday 2-4, Wednesday 1-3.

GTA Information

GTA Name: Larissa Panetta, Monique Carvalho, Joanna Collaton, Pietro Paletta, and Jessica Seddon
GTA Email:lpanetta@uoguelph.ca, mcarvalh@uoguelph.ca, ppaletta@uoguelph.ca, jseddon@uoguelph.ca
GTA office location and office hours: Due to COVID, the GTA's will not be on campus. It is best that you contact the instructor with any questions about course content, either during office hours or during class (see the information in the previous section).

If you must contact a specific GTA, the best way to do it is by email. They will do their best to answer emails within a week and they will be unavailable on Saturdays or Sundays. It is unfair if one TA ends up with all of the emails, and consequently, the TA you contact should reflect your last name. Students with last names beginning with the letters A-H in the alphabet should contact the Larissa Panetta. Those with last names beginning with the letters I-L should contact Monique Carvalho. Those with last names beginning with the letters M-P should contact Joanna Collaton; those last names beginning with the letters from Q– T should contact Pietro Paletta. Finally, those with last names beginning with letters U-Z should contact Jessica Seddon.

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 Psychological 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, r^2). 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 be mislead and what honest researchers do to avoid misleading others when presenting data about the results of study. (Learning outcome: 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, text-based homework, in-class exercises, quizzes, and research methods/ design assignments. 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. Please note that lecture dates are tentative. In this class, as in all others, sometimes it takes more or less time to cover material than expected.

****Important**: Please note that you are expected to do the text readings and MINDTAP homework **in advance** of the associated lecture. Those deadlines will not change. You need to come prepared having done your homework and readings beforehand so you will be able to do the more challenging in-exercises that will occur during each class. The Mind-tap homework prepares you for multiple-choice questions, and the problem sets give you multiple tries to get the answer correct. However, in this course, you will also be required to do long calculation and short-essay questions, which are more difficult -- and you will not be given multiple chances to get it right. The lecture prepares you for those types of question; Mindtap gives you background you need to start. Thus, with the exception of the Sept 10 lecture (first day of class), course readings and Mindtap homework are to be done in advance of the associated lectures. In the event that we get off schedule in lecture, please see the class website (Courselink D2L) to see the outline for the next lecture so that you can see the topics that will be discussed. Deadlines for the homework and the dates of the quizzes and exams will not change though the material covered in a given lecture might depending on how quickly we work through the materials.

NOTE. In this course, due to COVID, we are structuring it is such a way that you will have a large number of small assignments, each worth a small amount. This is to your advantage. Many students have exam anxiety associated with courses that involve math. In this course, 49% of your grade is based on things other than exams – of that, 30% is made up of the daily work that is involved in doing the textbook homework exercises (Mindtap) and the series of in-class exercises that are administered almost every class. (These in-class exercises involve Top Hat, Courselink, and Zoom.) It is important to keep up, attending class and doing the readings. Time-management is a critical in this course. You will need to be strategic and prioritize. This means doing things such as setting out your course planner for ALL your courses, and doing things in advance when possible. Do things on the day assigned rather than waiting for the last minute. Notice: There are **no extensions** in this course. That means if you the set of in-class exercises on a specific day or if you miss a quiz or homework chapter deadline, you miss it. However, there are other ways to win marks. For one, you always have a few extra assignments, the best 16/20 class exercises, the best 4 of 7 quizzes, the best 11 of 12 homework assignments. It is only if you miss more than 4 in class exercises, 3 quizzes, or 1 homework assignment does your mark begin to suffer. Even then, because there are so many in-class exercise sets, quizzes, and homework assignments, each is only worth a small percentage of your grade (respectively, 0.94%, 4%, or 1.25%).

Date	Content	Readings (Gravetter & Wallnau): Abbrev: ~	Homework~/Quizzes */Exams**/ assignments
September:Preparation from the time when you register	You will be receiving emails in the week before classes begin		**Getting to know you: Your Personal Profile.** This allows me to find out about you, but it also gives you a chance to practice using the 3 types

Date	Content	Readings (Gravetter & Wallnau): Abbrev: ~	Homework~/Quizzes */Exams**/ assignments
			of files you will need to use on DROP BOX while introducing yourself (1% Bonus Mark). Deadline: Sept 17, midnight. Note: With this bonus mark, it makes it possible for you to get 101% if you get 100% on the remainder of the requirements.
Sept 10 (Be sure to attend. There will be an assignment for you on the first day – a math refresher and practice online quiz that you will need to complete to be prepared for the actual online quiz on Sept 24).	Introduction to Statistics and Research Design (Scientific reasoning, goals of science) Identifying variables Samples and populations Random assignment vs. Random sampling	Chapter 1: Introduction to Statistics Math Review: Appendix A Gravetter and Wallnau Text Chapter 2 (pp. 33-51, 58, bottom 59-mid 61 to the end) *Frequency distributions *Doing this work on the first weekend of class will make the remainder of the schedule easier.	*Practice online quiz on Courselink for MATH refresher (Appendix A) ~It is important that you get your text and the associated software (Mindtap) right away and your life will be less stressful. (For an explanation, see homework policy below.)
Sept <u>15,</u> 17	Practice: Identifying variables Samples and populations Random assignment vs. Random sampling Frequency distributions	Chapters 1-2	<u>^Practice day</u>: Sept 15. First in class exercises. These exercises are not for marks, but they give you a chance to get used to using the technologies you will be using for the rest of the year. ^First In-class exercises for marks: Sept 17 ~Mindtap problem set 1 (deadline: Sunday, Sept 20).
Sept 22, 24*	Central tendency Variability	Chapters 3- 4	^In-class exercises, Sept 22 ~Mindtap problem set 2 (deadline: Wed, Sept 23). ^In-class exercises, Sept 24

Date	Content	Readings (Gravetter & Wallnau): Abbrev: ~	Homework~/Quizzes */Exams**/ assignments
			*Quiz 1 (online) assigned at the end of class on Sept 24. It is based on Appendix A, lectures, Chapters 1-3. ~Mindtap problem set 3 (deadline: Sunday, Sept 27)
Sept 29, Oct 1*	Finish Chapters 1-4	Chapter 4 @Do PRACTICE EXAM Oct 4 (see Coureslink files).	^In class exercises, Sept 29 ~Mind-tap problem set 4 (deadline: Wed, Sept 30) ^In class exercises, Oct 1 *Quiz 2 (online) begins during class time on Oct 1 (All the material you have learned to this point. This helps you practice for the exam scheduled for the following week.) It is based everything (lectures, Appendix A, Chapters 1-4). @Do Practice Exam: Sunday, October 4.
Oct 6, 8**	*We finish up Chapters 1-4) and will start Chapter 5 though it will not be on the Oct 4 exam. Z scores	Go over Quiz 2 Begin Chapter 5 if time.	^In class exercises, Oct 6. **Online Exam 1: Begins during class time on Oct 8 (Chapters 1-4 and all lectures) *You are not responsible for knowing Stem and Leaf or interpolation on this or any of the other exams. ~On the weekend after the exam, get started on your Mindtap homework for exam period 2.
Oct 15.	Note: Oct 13 is "Study Break Day",	Chapter 5 Review	~Mindtap problem set 5 (Deadline: Wed, Oct 14).

Date	Content	Readings (Gravetter & Wallnau): Abbrev: ~	Homework~/Quizzes */Exams**/ assignments
	the day after Thanksgiving. Chapter 5	Chapter 6 (pp. 159-178, 184-191). Please note that you are not responsible for the Binomial distribution	^In class exercises, Oct 15 ~Mindtap problem set 6 deadline (deadline: Sunday Oct 18)
Oct 20, 22*	Probability Introduction to hypothesis testing	Chapter 7 Chapter 8	^In class exercises, Oct 20, 22 ~Mind-tap problem set 7 (deadline: Wednesday Oct 21) *Quiz 3 (online) on Courselink assigned at end of class on Oct 22 on all material you have learned to this point. ~Mindtap problem set 8 (deadline: Sunday, Oct 25).
Oct 27, 29*	Hypothesis testing	End Chapter 8 @Do PRACTICE EXAM 2 Nov 1st (See Courselink files)	^In class exercises, Oct 27, 29 *Quiz 4 (online) assigned during class on Oct 29 on all of the material you have learned to this point. @Do practice Exam 2, Sunday, Nov 1
Nov 3, 5**	Hypothesis testing *If we have extra time on Oct 30 we will start Chapter 9, but it will not be on the second exam.	REVIEW chapters 5- 8 And prepare for cumulative exam (1-8) Go over Quiz 4. Begin Chapter 9 if time (Chapter 9 is not on exam 2).	^In class exercises, Nov 3. **Online Exam 2 begins during class on Nov 5 (Cumulative midterm: ALL lectures and text readings and sample exams from the beginning of the term)
Nov 10, 12.	Introduction to t-statistics (one sample t-test)	Chapter 9 -10	^In-class exercises, Nov 10 ~Mind-tap problem set 9 (deadline: Wednesday, Nov 11),

Date	Content	Readings (Gravetter & Wallnau): Abbrev: ~	Homework~/Quizzes */Exams**/ assignments
			^In-class exercises, Nov 12. ~Mindtap problem set 10 (deadline: Sunday, Nov 15)
Nov. 17, 19*	t-test for independent samples (between subjects t) t-test for related samples (within subjects or repeated measures)	Chapter 10 Chapter 11 Chapter 15 to page 510	^In class exercises, Nov 17 ~Mindtap problem set 11 (deadline: Wed., Nov 18), ^In class exercises, Nov 19 *Quiz 5 (online) on Courselink begins at the end of class Nov 19. It is on all of the material you have learned to this point. ~Mindtap problem set 15 (deadline: Sunday, Nov 22).
Nov 24, 26*	t-test for related samples Correlation	Chapter 11 Chapter 15 to page 510	^In class exercises, Nov 24 ^In-class exercises, Nov 26 *Quiz 6(online) begins during class on Nov 26. On all of the material you have learned to this point.
Dec 1*, 3	Big picture: Putting it all together Recognizing the situations in which you use each statistic.	Finish up Chapters 9-11, 15 (to page 510) Learn when to use ANOVA, Chi square, Spearman correlation Go over Quiz 6 @Do Practice Exam 3.	^In class exercise Dec 1 *Optional BONUS (online) quiz assigned Dec 1 if you choose to do it. ^Bonus in-class exercises Dec 3 (if you choose). Dec 4: Deadline for the Research Participation and Design Assignment: Last day of class (unless otherwise noted by SONA) @Do Practice Exam 3 to Prepare you for final.

Date	Content	Readings (Gravetter & Wallnau): Abbrev: ~	Homework~/Quizzes */Exams**/ assignments
Dec 11, 7-9 pm.	Online Final Exam .	Cumulative final exam. Exam will be based on everything covered in lecture or the text since the beginning of the term as well as everything that has been covered in the 3 practice exams.	

*Please note that there an online schedule will be posted for you on Courselink for your convenience.

Labs: None
Seminars: None

Course Assignments and Tests:

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
Getting to know you: Personal Profile	Sept 17, 2020	1% (Bonus: Brings total to more than 100%).	Provides practice using DROP BOX to submit the 3 types of files we will be using in class.
Mindtap Homework assignments: Computerized exercises associated with Gravetter Wallnau Text	Mindtap homework is background work you need to do to be prepared for each lecture. You are expected to do it in advance of the lecture, so that you will be ready when we start doing in-class exercises, timed quizzes, and exams. Expect 1- 2 Mindtap deadlines per week in the first two weeks of every exam period. Mindtap deadlines are on Wednesday and Sunday at midnight. MINDTAP deadlines: Exam period 1	15% (based on best 11 of 12 chapter PROBLEM SETS for the homework assignments across the term). Each Mindtap homework assignment is worth 1.36%. Note you do these exercises through Mindtap Applia. There is one problem set per chapter. Only the problem sets are marked in each chapter though there are additional exercises if you want practice. For each problem set, your mark will be based your average across 3 attempts at that problem set.	1-7, 11

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
	>START work on Sept 6. >Mindtap homework must be completed at midnight on the days specified , though I will give you a one hour grace period, which means that the final (as in "Mindtap will not accept your assignment anymore") deadline will be 1 am on the next day. That is, for a Sunday deadline, Mindtap will not accept assignments any later than 1 am Monday morning. For Wednesday deadlines, Mindtap will not accept assignments any later than 1 am on Thursday morning. Chapter 1: Sept 20 Chapter 2: Sept 23. Chapter 3: Sept 27 Chapter 4: Sept 30 Exam period 2 >START work on Oct 9 >Homework must be completed by Chapter 5: Oct 14 Chapter 6: Oct 18 Chapter 7: Oct 21 Chapter 8: Oct 25 Exam period 3: >START work on Nov 6. >Homework must be completed by Chapter 9: Nov 11		

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
	Chapter 10: Nov 15 Chapter 11: Nov 18 Chapter 15: Nov 22		
Timed Quizzes	Sept 24, Oct 1, Oct 22, 29, Nov 19, 26 Note: Optional Bonus Recovery quiz Dec 1 if you choose to do it.	16% (Best 4 of 6 quizzes). Each quiz is worth 4% of your grade. Note: Best 4 of 7 quizzes if you choose to do the Optional Bonus Recovery quiz on Dec 1	1-5, 7-9, 11 *All quizzes are cumulative
In-class exercises	Sept 17, 22, 24, 29, Oct 1, 6, 15, 20, 22, 27, 29, Nov 3, 10, 12, 17, 19, 24, 26, Dec 1, BONUS exercise Dec 3	15%. Average based on best 16 of 19 days' worth of in-class exercises. Each in-class exercise is worth 0.94% of your grade. Note: Best 16 of 20 if you do BONUS day (Dec 3).	1- 9, 11 *All exercises are cumulative
Research Design Assignment (3 hours' worth of SONA participant pool credits or written summaries for each of 3 research articles).	Last week of class (See SONA): Dec 4	3%	1-2, 4, 11
Online Exam 1	Oct 8	15%*	1-11
Online Exam 2 (cumulative from the beginning of the term)	Nov 5	17%*	1-9, 11
Online Exam 3 (cumulative from the beginning of the term)	Dec 11	19%*	1-11

Additional Notes (if required):

Final examination date and time: December 11, 2020: 7-9 pm.

Final exam weighting: 19%

Course Resources

Required Texts:
Gravetter, F.J., & Wallnau, L.B. (2017). Statistics for the Behavioural Sciences, 10e edition. Nelson/Cengage publishing. Complete with MindTap software (needed for homework).
A computerized version of the text has been created especially for this class in order to reduce costs for students and provide homework (this homework is graded). This custom version is about less expensive than a regular text. Furthermore, the homework will provide you a way to practice and get immediate feedback and this will help you do better in the class. There are several ways for you to get the text, as shown below. Choose one option. Prices listed here are those directly as quoted from the publisher and they do not include tax, or any extra fee that the bookstore might add.
Note that you can get this at both the University bookstore and the Co-op bookstore, which is usually slightly cheaper. It may be a little more complicated, but if worst comes to worst, you can even arrange for payment online by contacting Nelson directly (https://www.cengage.ca/shop).
Below are the three options for your text:
Option #1 – paperless option - MindTap printed access card (includes e-book) 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 and an online e-book.

ISBN: 9781337280754
Price: The least expensive option (I was quoted $99.95 before tax.)
Option #2 -- loose-leaf version of the text with MindTap access code (includes e-book):
Package ISBN: 9781337128995
Price: The second least expensive option (I was quoted $110.95 before tax).
Package includes:
-Printed Access Card for MindTap for Gravetter & Wallnau's Statistics for The Behavioral Sciences, 10th Edition
-Loose-Leaf version of the Gravetter & Wallnau, Statistics for The Behavioral Sciences, 10th Edition
Option #3 -- bound text with MindTap access code (includes e-book):
Package ISBN: 9781305918542
Price: The most expensive option (I was quoted $179.95 before tax.)
Package includes:
-Printed Access Card for MindTap for Gravetter & Wallnau's Statistics for The Behavioral Sciences, 10th Edition
-bound version (regular text) of the Gravetter & Wallnau, Statistics for The Behavioral Sciences, 10th Edition
Here is the course registration URL to get Mind-tap:
https://login.nelsonbrain.com/course/ MTPPQ4JN7B16
Here is the course key for students: MTPPQ4JN7B16
Note that only the problem sets for chapters 1 to 11 and 15 are for grades. Everything else in the chapter-learning path is for practice. (Practice is critical in this course.)

Chapters 12, 13, 14, 16, 17, and 18 are hidden from the view of students because this material is not covered in the course. As well, the sections on SPSS are also made invisible to students (you do not have to worry about learning them for this course.
There is also electronic copies of the text in in the library but you need an account to get access to the MindTap exercises.
Recommended Texts: None

Lab Manual: None

Other Resources:
1. Courselink website. Online materials (exercises, online quizzes), in-class assignments involving Drop Box, Practice exams, and the links to online lectures office hours, etc. will be provided on the Courselink website (D2L website). You will also notice that there are outlines for each lecture there in the sections called "Outlines, not notes for Exam period…" Exams will also be administered using Courselink quizzes and Drop Box. (This will be used in combination with Zoom, see below.).

2. Mind-tap software will be used to administer the homework associated with the text. Mindtap is included with the Gravetter and Wallnau text, purchased using 1 of the options I have listed above. This is used to provide computerized exercises that serve as the homework for this course -- homework is graded.

3. Top Hat software. We will be using Top Hat Pro (www.tophat.com) for class participation including in-class exercises and lectures. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message. 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 problems making it difficult for you to register in TopHat, please contact the professor immediately (ltrick@uoguelph.ca) and we will see what we can do to get these problems worked out.

You can visit the Top Hat Overview (https://success.tophat.com/s/article/Student-Getting-Started-with-Top-Hat) 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.

An email invitation will be sent to you by email, but if don't receive this email, you can register by simply visiting our course website: https://app.tophat.com/e/033093
Note: Our Course Join Code is 033093
Should you require assistance with Top Hat Pro at any time please contact their Support Team directly by way of email (support@tophat.com), the in app support button, or by calling 1-888-663-5491. Specific user information may be required by their technical support team when troubleshooting issues.
To enroll (or disenroll) see the following: https://success.tophat.com/s/article/Student-How-do-I-add-or-Disenrol-from-a-Course?name=Student-How-do-I-add-or-Disenrol-from-a-Course&fromCase=1

Reminder: The course code is 033093

4. Zoom software. Zoom will be used for doing in-class exercises including group work, exams, and meetings. You will need to download the zoom software. See https://zoom.us/download. Instructions for how to use zoom can be found at Using Zoom for Students

https://www.youtube.com/watch?v=gTry51wPjdA&feature=youtu.be

5. The SONA website. 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). 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 Software: single semester = $30. Note the cost is the same no matter how many classes you have using Top Hat during that term. If you go with this option, it works out to $7.50/month. Alternatively, if you want to get Top Hat for 12 months (3 terms) it would cost $48, which works out to $4/month. This would cover the cost of any and all courses that you would use with Top Hat for the year. For more information, see attachment on TOP HAT (www.tophat.com/pricing).

Course Policies

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.

Student Rights and Responsibilities when Learning Online

Privacy Rights

Lectures held via Top Hat and Zoom may be recorded for students who cannot attend during the scheduled time. As a student, 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 you are consenting to your presence in lecture recordings. Thus, 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

Grading Policies

1. 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. 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, just consider it one of the 2 quiz marks you drop. (Six quizzes are administered and you only need the marks from 4. That means you can consider the other 2 as makeup quizzes). As well, should you decide to take it, there is an option of taking an optional online BONUS QUIZ on Dec 1 (If you take the BONUS quiz, that means it can be the best 4 of 7 quizzes.)
2. In-class exercises. During every class from Sept 17 on, you will be asked to do several questions during the lecture. For these questions, you will be required to answer online with your cellular phone, computer or tablet using the Top Hat software and/or by using Drop Box on Courselink on your computer or tablet. The questions may take a variety of formats. They may involve multiple-choice questions, questions that involve hand calculations, writing or even drawing. There are several activities per class, and the in-class mark is based on the average of these activities. Many students like this option because it gives them a way to earn marks other than by doing quizzes and exams.
Each set of in-class exercises has a specific deadline and if you miss that deadline, there are no extensions or makeups. If you have technical problems or miss a class due to illness, personal issues, or religious holidays, just consider it one of the 4 you will drop. You only need to do 16 day's worth of class exercises and 20 are administered. This is to avoid homework "pile up", which occurs when you have to try to make up for past missed deadlines while at the same time keeping up as the new work (and deadlines) comes in. Homework "pile up" can be extremely stressful and I want to spare you that unpleasant experience. Instead, your mark is based on the average of the best 16 of 19 day's worth of in-class exercises (16 of 20 if you take the do the BONUS class exercise on Dec 3). If you miss more than 4 days of exercises, it will begin to affect your mark, but each assignment is only worth a small percentage, and there are ways to make up these points if you manage to get the bonus marks on the exams and timed quizzes 2, 4, and 6
3. Mindtap Homework (the assigned problem sets). The only way to do well in this class is to do the readings and practice and practice. If you want to do well in this course, you will need to spend at least an hour or more each day doing your readings and practicing. That means you will be doing homework. The Gravetter and Wallnau text comes equipped with exercises and reviews to help you learn the material (the Mind-tap system). Some of the homework is graded. There are deadlines on the material in order to help you keep up. It is in your best interest to read the text, and do the homework as you go. Otherwise it will become increasingly difficult for you to do well in this course. If you miss a deadline, just go on and try to be on time for the next one. This way I hope to avoid people being overwhelmed by a big backlog of overdue assignments. Each assignment is only worth a small percentage of your overall mark, and it is better start on the next assignment. If you are having trouble with the material, definitely contact the professor (ltrick@uoguelph.ca). She would be happy to help. Your homework mark is based on the best 11 of 12 Mindtap problem sets (one per chapter).
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 3% 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 3 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 3% for the Research Participation and Design Assignment mark. For example, you may have 1% based on participation in 1 hour 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. Here is the address. https://www.uoguelph.ca/psychology/research/sona

There is information 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. 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). These exams will involve Courselink and Zoom. 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. It is your responsibility to inform me (the instructor) if you miss an exam and I will then make the arrangements for the makeup exam. Often, make-up exams occur during my office hours the week following the exam (in the zoom session). If you feel that an exam question has been mis-marked, I would be happy to mark the exam again for you if you ask. (Your mark may not necessarily go up but I will provide detailed comments to explain what went wrong in efforts to help you for next exam.) If you are having trouble with exams, it is strongly recommended that you email me so we can arrange a zoom meeting. I will go over your exam point-by-point with you and together you can work out a strategy to help you do better in future exams.
Course Policy on Group Work:

Students are expected to complete quizzes, exams, homework, in-class exercises, and Top Hat exercises 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. 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 or learning teams, and in fact, for in-class exercises you may be encouraged to do so. That is, students may form groups to brain-storm and problem solve together, bouncing ideas off each other for purposes of class exercises. However, ultimately each of you will have to submit your own assignment to Drop Box (on Courselink), which means you cannot simply xerox someone else's work. Your partner or team members will not be there when you write the exam. That is why it is important that students each do their own work so that each of you can perform well on the exams.
For more detail, see the section on Additional Course Information at the end of this document.
Course Policy regarding use of electronic devices and recording of lectures:

Electronic recording of classes or class materials 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.

University Policies

Disclaimer

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings and academic schedules. Any such changes will be announced via CourseLink and/or class email. All University-wide decisions will be posted on the COVID-19 website and circulated by email.

Illness

The University will not require verification of illness (doctor's notes) for the Fall 2020 or Winter 2021 semesters.

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

However, please notice that in this class, arrangements have already been made to accommodate in-class exercises, timed quizzes, and homework missed due to illness, compassionate reasons, or religious holidays. Your in-class exercise mark is based on 16 days when there are 20 days-worth of class exercises if you include the Bonus Day. This means that there are already 4 “makeup” days in there in case you have to miss due to illness, compassionate reasons, religious holidays, or for that matter technical glitches. Similarly, your mark for quizzes is based 4 quizzes though 7 administered (counting the Bonus Quiz). That means there are already 3 make-up quizzes in there that you can use to make up for any quizzes missed due to illness, compassionate reasons, religious holidays, technical problems etc.

Consequently, there are no extensions for quizzes or in-class exercises. If you miss one, just wait for the next -- more than enough are scheduled. This way students who miss a quiz or day of in-class exercises won’t have a big backlog assignments to catch up when they return. This is especially important in a class such as Psychology 1010, where there are a large number of quizzes and assignments.

Similarly, for Mind-tap questions, if you miss a deadline, don’t worry. Catch up the best you can and get ready for the next deadline. It is the best 11 of 12 chapters, so if you miss one for whatever reason (illness, personal issues, computer issues) just count it as the one “free one” you get to miss. If you miss more it will begin to count against your average, though there is a way to redeem yourself if you earn the bonus marks on every in-class quiz or exams. There are ways to recover but it is better to avoid missing the deadline. The best way to avoid missing deadlines is work ahead.

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

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

Course Evaluation Information

Please refer to the Course and Instructor Evaluation Website **.**

Drop date

The last date to drop one-semester courses, without academic penalty, is Dec. 04, 2020 . For regulations and procedures for Dropping Courses, see the Schedule of Dates in the Academic Calendar. Instructors must still provide meaningful and constructive feedback to students prior to the 40th class day. 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 be able to 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. However, Turintin will also be used in exams, and for those there will be no time for an advance report because the exam takes place within several hours.