PSYC*1010 (Section 01), Course Outline: Fall 2018

General Information

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). Please note that is a challenging course that requires regular attendance at lectures and consistent hard work. There are graded homework assignments, quizzes, and in-class questions, in addition to exams and (non-graded) sample exams. Note that the homework, some of the quizzes, and the in-class questions involve use of computerized exercises, notably Mind-tap, Courselink, and Top-Hat, which means you will be doing some of this work on the computer. There is also a research design assignment. 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, if you attend lectures (and do the Top Hat exercises), do your readings, keep up with the Mind-tap homework, do the timed quizzes, do the sample exams, and make sure to ask the professor questions when you are struggling, you will find that the course is easier to manage.

This course is taught from a research methods perspective. Although there will be numerical calculations, 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 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 2018

Class Schedule and Location:

> Schedule: Tuesday and Thursday, 1:00 pm -2:20 pm
> Location: MCLN 102

Instructor Information

Instructor Name: Lana Trick
Instructor Email: ltrick@uoguelph.ca
Office location: MacKinnon Building (new extension) Room 4003
Office hours: Monday, 4-6 pm, Wednesday 1-3 pm or *by appointment

GTA Information

GTA Name: TBA
GTA Email: TBA

GTA office location and office hours: By appointment: Contact 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. 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, students will be able to do the following:

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)

J. 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 outcomes: 10)

K. 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, 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. Please note that you are expected to do the text readings and MINDTAP homework in **advance** of the associated lecture, and those deadlines will not change. You need to come prepared having done your homework in beforehand so you will be able to do the more challenging exercises that we will be doing during 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 6 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. (Outlines will be posted at least 2 days in advance of the actual lecture.) Deadlines for the homework and the dates of the quizzes and exams will not change though the material covered in a given lecture might.

Date	Content	Readings (Gravetter & Wallnau):	Homework/quizzes/exams/ assignments
		Please note: In this course, readings and Mindtap exercises are always to be done in advance of the associated lecture. Mindtap homework is the background you need before we start the more difficult material in the lectures. It will also help you know what questions to ask – what things you struggle with so I can go over it in more depth in lecture. The Mind-tap questions prepare you for multiple-choice questions, but you also need to learn how to do other types of question in statistics, and that is what the lecture prepares you for.	
Sept 6 (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 20). Practice Top Hat questions on Sept 6 and 11 before the first official Top Hat question starts on Sept 13	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 MindTap Applia (associated with the Gravetter and Wallnau text) Begin Chapter 2 (pp. 33-51, 58, bottom 59-mid 61 to the end) Start work on Chapter 2 Frequency distributions	*Practice online quiz on Courselink for MATH refresher (Appendix A) *It is essential that you get your text and the associated software (Mindtap) right away. Do not delay. There is material that you will be tested on as of Sept 20. There are no extensions on Mindtap Applia Homework – I do this is to avoid "homework pile-ups" that occur when people miss deadlines and the assignments begin to back up. Each homework assignment is only worth a

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		*Doing this work on the first weekend of class will make the remainder of the schedule easier.	small percentage. Still, doing the homework is the best way to learn the material. It is best to do your homework right away. *For best results, start Mindtap homework and practice quizzes from the first day of class. Be working on the first weekend before things get busy during the term. (See policy on deadlines on homework. You have to get it in on time or you cannot receive marks on that specific homework

Date	Content	Readings (Gravetter & Wallnau):	Homework/quizzes/exams/ assignments
		Please note: In this course, readings and Mindtap exercises are always to be done in advance of the associated lecture. Mindtap homework is the background you need before we start the more difficult material in the lectures. It will also help you know what questions to ask – what things you struggle with so I can go over it in more depth in lecture. The Mind-tap questions prepare you for multiple-choice questions, but you also need to learn how to do other types of question in statistics, and that is what the lecture prepares you for.	
			assignment. See deadline policy at the end.)
Sept 11, 13* Top Hat Question 1 (First official Top Hat question for marks on Sept 13)	Research Design (identifying different types of study) Descriptive Statistics Frequency distributions Central tendency	Complete Chapter 2 (pp. 33-51, 58, bottom 59-mid 61 to the end) Frequency distributions *Please note that you are not responsible for Interpolation or Stem and Leaf in Chapter 2. Throughout the year, you are never responsible for learning SPSS. Start Chapter 3 Central tendency	*Avoid the rush by starting the Mindtap homework now *Quiz 1 (online) assigned on Sept 13 on Courselink. It is based on Appendix A, Chapter 1 to this point and all lecture notes.

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Sept 18, 20* Top Hat Questions 2 and 3 (one per lecture)	Central tendency Variability	Chapters 3- 4 Do the Exercises in the Courselink file called: Written exercises to help you prepare for In-class quiz and Exam	*Mindtap problem set deadlines (Sept 16, 19) *Quiz 1 (online) on Sept 20. It is based on Appendix A, Chapter 1-3 and material in lectures to this point.
Sept 25, 27** Top Hat Question 4 (Sept 25)	Finish Chapters 1-4	Chapter 4 This is the period when you consolidate and practice what you learned in Chapters 1-4 in preparation for the exam. *Do the Exercises in the Courselink file called: Written exercises to help	*Mind-tap problem set deadlines (Sept 23, 26) *Quiz 2 (in class) on Sept 27 (All the material you have learned to this point. This helps you practice for the exam scheduled for the following week.)

Date	Content	Readings (Gravetter & Wallnau):	Homework/quizzes/exams/assignments
		Please note: In this course, readings and Mindtap exercises are always to be done in advance of the associated lecture. Mindtap homework is the background you need before we start the more difficult material in the lectures. It will also help you know what questions to ask – what things you struggle with so I can go over it in more depth in lecture. The Mind-tap questions prepare you for multiple-choice questions, but you also need to learn how to do other types of question in statistics, and that is what the lecture prepares you for.	
		you prepare for In-class quiz and exam. Be sure to prepare for the essay question. There are exercises on Courselink for that too.	
Oct 2, 4* Top Hat Question 5 (one per class)	*We finish up Chapters 1-4 (going over the in-class quiz) and will start Chapter 5 though it will not be on the Oct 4 exam. Z scores	Chapter 5	**Exam 1: Oct 4 (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.

Date	Content	Readings (Gravetter & Wallnau):	Homework/quizzes/exams/ assignments
		Please note: In this course, readings and Mindtap exercises are always to be done in advance of the associated lecture. Mindtap homework is the background you need before we start the more difficult material in the lectures. It will also help you know what questions to ask – what things you struggle with so I can go over it in more depth in lecture. The Mind-tap questions prepare you for multiple-choice questions, but you also need to learn how to do other types of question in statistics, and that is what the lecture prepares you for.	
Oct 11. Top Hat Question 6.		Chapter 5 Review Chapter 6 (pp. 159-178, 184-191). Please note that you are not responsible for the Binomial distribution	*Mindtap problem set deadline (Oct 10)
Oct 16, 18* Top Hat Questions 7 and 8 (one per class)	Probability Introduction to hypothesis testing	Chapter 7 Do the exercises associated with each class, and also the exercises in the Courselink file called: Written exercises to help you prepare for in-class quizzes and exams.	*Mind-tap problem set deadlines (Oct 14, 17) *Quiz 3 (online) on Courselink assigned Oct 18 on all material you have learned to this point.

Date	Content	Readings (Gravetter & Wallnau):	Homework/quizzes/exams/ assignments
		Please note: In this course, readings and Mindtap exercises are always to be done in advance of the associated lecture. Mindtap homework is the background you need before we start the more difficult material in the lectures. It will also help you know what questions to ask – what things you struggle with so I can go over it in more depth in lecture. The Mind-tap questions prepare you for multiple-choice questions, but you also need to learn how to do other types of question in statistics, and that is what the lecture prepares you for.	
		Begin Chapter 8	
Oct 23, 25* Top Hat 9 (Oct 23).	Hypothesis testing	End Chapter 8 Do the exercises in the Courselink file called: Written exercises to help you prepare for in-class quizzes and exams	*Mind-tap problem set deadline (Oct 21) *Quiz 4 (in-class) on Oct 25 on all of the material you have learned to this point.
Oct 30, Nov 1* Top Hat question 10 (Oct 30).	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) Do the exercises in the Courselink file called: Written exercises to help you prepare for in-class quizzes and exams	**Exam 2 on Nov 1 (Cumulative midterm: ALL lectures and text readings and sample exams from the beginning of the term) On the weekend after the exam, get started on the

Date	Content	Readings (Gravetter & Wallnau): Please note: In this course, readings and Mindtap exercises are always to be done in advance of the associated lecture. Mindtap homework is the background you need before we start the more difficult material in the lectures. It will also help you know what questions to ask – what things you struggle with so I can go over it in more depth in lecture. The Mind-tap questions prepare you for multiple-choice questions, but you also need to learn how to do other types of question in statistics, and that is what the lecture prepares you for.	Homework/quizzes/exams/ assignments
		Begin Chapter 9	Mindtap homework for Exam period 3.
Nov 6, 8. Top Hat questions 11 and 12 (one per class)	Introduction to t-statistics (one sample t-test)	Chapter 9 -10	Mind-tap problem set deadline (Nov 7)
Nov. 13, 15* Top Hat Questions 13 and 14 (one per class)	t-test for independent samples (between subjects t) t-test for related samples (within subjects or repeated measures)	Chapter 10 Chapter 11	Mindtap problem set deadlines (Nov 11, Nov 14) *Quiz 5 (online) on Courselink on Nov 15 all of the material you have learned to this point.

Date	Content	Readings (Gravetter & Wallnau):	Homework/quizzes/exams/ assignments
		Please note: In this course, readings and Mindtap exercises are always to be done in advance of the associated lecture. Mindtap homework is the background you need before we start the more difficult material in the lectures. It will also help you know what questions to ask – what things you struggle with so I can go over it in more depth in lecture. The Mind-tap questions prepare you for multiple-choice questions, but you also need to learn how to do other types of question in statistics, and that is what the lecture prepares you for.	
Nov 20, 22* Top Hat Question 15 (Nov 20)	t-test for related samples Correlation	Chapter 11 Chapter 15 to page 510	*Mind-tap problem set deadline (Nov 18) *Quiz 6(in-class) on Nov 22. On all of the material you have learned to this point.
Nov 27*, 29* Top Hat Question 16 (Nov 27)	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	*Optional BONUS (online) quiz assigned Nov 27 if you choose to do it. *Deadline for the last Research Participation and Design Assignment: Last day of class (unless otherwise noted by SONA)

Date	Content	Readings (Gravetter & Wallnau):	Homework/quizzes/exams/ assignments
		Please note: In this course, readings and Mindtap exercises are always to be done in advance of the associated lecture. Mindtap homework is the background you need before we start the more difficult material in the lectures. It will also help you know what questions to ask – what things you struggle with so I can go over it in more depth in lecture. The Mind-tap questions prepare you for multiple-choice questions, but you also need to learn how to do other types of question in statistics, and that is what the lecture prepares you for.	
Dec 8*, 2:30 pm Saturday	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 sample exams.	

Labs: None

Seminars: none

Course Assignments and Tests:

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
Mindtap Homework assignments: Computerized exercises associated with Gravetter Wallnau Text (Mindtap)	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 prepared when we start doing in-class exercises as preparations for the quizzes. Expect 1- 2 Mindtap deadlines per week in the first two weeks of every exam period. Mindtap deadlines are on Wednesdays and Sundays. **MINDTAP deadlines:** Exam period 1 >START work on Sept 6. >Homework must be completed by: Chapter 1: Sept 16 Chapter 2: Sept 19. Chapter 3: Sept 23 Chapter 4: Sept 25 Exam period 2 >START work on Oct 5 >Homework must be completed by Chapter 5: Oct 10 Chapter 6: Oct 14	15% (based on best 11 of 12 chapter PROBLEM SETS for the homework assignments across the term). 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 on the best of 3 attempts at that problem set.	1-7, 11

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
	Chapter 7: Oct 17 Chapter 8: Oct 21 Exam period 3: >START work on Nov 2. >Homework must be completed by Chapter 9: Nov 7 Chapter 10: Nov 11 Chapter 11: Nov 14 Chapter 15: Nov 18 Note that in the last 2 weeks of every exam period, there is COURESLINK homework for you, to help you get ready for the in-class quizzes and exams. The Course link homework involves long calculation and essay questions that you will get on the in-class quizzes and exams. Courselink homework is not marked, but if you do it, you will find your in-class quiz and exam grades will be much higher.		
Timed Quizzes (Courselink and in-class quizzes)	Sept 20, 27, Oct 18, 25, Nov 15, 22	16% (Best 4 of 6 quizzes)	1-5, 7-9, 11 *All are cumulative

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
	Note: Optional Bonus Recovery quiz Nov 27 if you choose to do it.		
Top-Hat questions (administered during lecture)	Sept 13, 18, 20, 25, Oct 2, 11, 16, 18, 23, 30, Nov 6, 8, 13, 15, 20, 27	10% (average based on best 12 of 16 Top Hat question marks)	1- 8, 11 *All are cumulative
Research Design Assignment (5 hours worth of SONA subject pool credits or written summary of 5 research articles).	Last week of class (See SONA)	5%	1-2, 4, 11
Exam 1	Oct 4 (during class)	16%*	1-9, 11 *All exams are cumulative. You need to be doing those questions in the Courselink File entitled "Written Exercises to help you prepare for in-class quizzes and exams".
Exam 2 (cumulative from the beginning of the term)	Nov 1 (during class)	18%*	1-9, 11 *All exams are cumulative. You need to be doing those questions in the Courselink File entitled "Written Exercises to help you prepare for in-class quizzes and exams"
Exam 3 (cumulative from the beginning of the term)	Dec 8, 2:30 pm.	20%*	1-11 All exams are cumulative. You need to be doing those questions in the Courselink File

Assignment or Test	Due Date	Contribution to Final Mark (%)	Learning Outcomes Assessed
			entitled "Written Exercises to help you prepare for in-class quizzes and exams".

Additional Notes (if required):

Final examination date and time: Saturday, Dec 8, 2:30-4:30 pm

Final exam weighting: 20%

Course Resources

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

Please note you can get this at both the University bookstore and the Co-op bookstore (which is usually slightly cheaper). If worst comes to worst, you can even arrange for payment online by contacting Nelson directly!

 Below are the three options for your Psych 1010 course:

Option #1 -- loose-leaf version of the text with MindTap access code (includes e-book):

Package ISBN: 1337128996

Price: THE LEAST EXPENSIVE OPTION

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 #2 – 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.

ISBN: 1305647327

Price: THE SECOND MOST EXPENSIVE OPTION

Option #3 -- bound text with MindTap access code (includes e-book):

Package ISBN: 1305918541

Price: THE MOST EXPENSIVE OPTION

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: https://login.nelsonbrain.com/course/MTPN98BPDW48

Here is the course key for students: MTPN-98BP-DW4M

Four your new MindTap course for FALL 2018, I copied the same format that had been set up for the MindTap course for Winter 2018.

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.

Note: There are also hard-copies of the text in 3-hour reserve in the library (these can be used while in the library). If you do not have a computer, you can also use the library computers to do the homework assignment and online quizzes through Courselink. Unfortunately, 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) 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…"

2. Mind-tap software (included with the Gravetter and Wallnau text, purchased using 1 of the options I have listed.) 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 the Top Hat (www.tophat.com) classroom response system in class. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message.

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

tophat.com/e/463745

If asked, note that the 6-digit join code they are ask about is **463745** for this class.

TBA Top Hat will require a paid subscription (see below), and the standard pricing for the cheapest option is $26 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-How-do-I-add-or-Disenrol-from-a-Course?name=Student-How-do-I-add-or-Disenrol-from-a-Course&fromCase=1

The course code is 463745

Field Trips: none

Additional Costs:

TBA Top Hat Software: single semester = $26 for all courses involving TopHat; one year is $38 for all TopHat courses. Four year access it is $75. For more information, see attachment on TOP HAT (www.tophat.com/pricing).

Course Policies

1. Attendance: Regular attendance at lectures is required. Some of the lecture material is not in the text and there will be questions from lecture on exams. It is each student's responsibility to be there and take notes. Note-taking is an important skill, one that will serve you well in other courses and later in life. (Employers value this skill.) The ability to determine what is relevant "on the fly" as you listen, to record things as you go in such a way that you understand your own writing, is conducive to success in other domains. One goal for this course is to improve note-taking skills. However, if you aren't there, you can't improve your skills. Each student is responsible for acquiring his or her own notes (under no circumstances will the instructor provide you with notes). However, if you have trouble understanding your notes, or if you have difficulties understanding the material or determining what is important in the lecture or text, the instructor will be happy to go over your notes with you. During that time, you and the instructor can work on strategies to help you improve your note taking skills. Please notice that there are detailed outlines for each lecture on Courselink. These files are called "Outlines, not notes… "and then afterwards there is the name of the exam period (first exam, second exam, third)).

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 Nov 27 (If you take the BONUS quiz, that means it can be the best 4 of 7 quizzes.)

2. Top Hat in-class exercises**.** On designated dates (see the course outline) you will be asked a question during lecture and you will be required to answer online (using your cellular phone) using the Top Hat software. Many students like this option because it gives them a way to earn marks other than by doing quizzes and exams, which can be nerve-wracking. If you miss a Top Hat question, you cannot make it up. However, you can miss up to 4 Top Hat questions without it affecting your mark. Your 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, or religious holidays, just consider it one of the 4 you will drop (you only need 12 Top Hat questions and 16 are administered).

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 ([trick@uoguelph.ca](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 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, 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. 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. (It is your responsibility to inform the instructor if you miss an exam and she will then make the arrangements for the makeup exam.) Generally, make-up exams occur during her 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, it is strongly recommended that you come see the instructor. She 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:

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 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

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 note that in arrangements have already been made to accommodate Top Hat questions and timed quizzes missed due to illness, compassionate reasons, or religious holidays. 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, or for that matter technical glitches. Similarly, your mark for quizzes is based 4 quizzes though 6 administered. That means there are already 2 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. (3 if you take the BONUS quiz).

By doing it this way, it 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.

Similarly, for Mind-tap questions, if you miss a deadline, you miss it. Catch up the best you can and get ready for the next deadline. However, 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 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 the [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 November 2, 2018. For regulations and procedures for Dropping Courses, see the [Schedule of Dates in the Academic Calendar](#). [Current Undergraduate Calendar](#)