# PSY 303 RESEARCH METHODS IN PSYCHOLOGY SPRING 2015 SYLLABUS Class meets T/Th 8:30-9:50a in Straub 145

#### INSTRUCTOR

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## **TEACHING ASSISTANTS**

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\*LISB is the Lewis Integrative

Sciences Building

#### **COURSE OVERVIEW**

How do we make sense of human behavior? In this course, we will develop an instinct for an empirical answer: "Follow the data". We will wrestle with how to create an informative empirical endeavor: from making observations, to formulating a testable scientific hypothesis, to collecting relevant and valid data, to analyzing and communicating these data, to asking what's next. Making sense of how and why people feel, think and act the way they do is something we all do everyday -- in this course, we will learn how to give ourselves the best shot at making conclusions that are true. Whether we read about others' discoveries or make our own, we should follow the data.

#### **COURSE MATERIALS**

#### (1) Textbook (required)

Morling, B. (2012). Research methods in psychology: Evaluating a world of information (1<sup>st</sup> ed.). New York: Norton.

#### (2) PDF files on Blackboard (required)

Additional readings and materials will be posted on our Blackboard site.

#### (3) Helpful resources (recommended)

Clark, H.H. Everyone can write better (and you are no exception). Advice to students of psychology. http://www.psychology.stonybrook.edu/sbrennan-/psy384/papers/hc\_write.html

American Psychological Association (2009). Publication manual of the American Psychological Association (6th ed.). Washington, DC: APA.

#### INSTRUCTION PHILOSOPHY

Our motto in this course is: Follow the data. This mindset will serve you well throughout your life as a working professional and citizen. You are well prepared to hone your data-following skills. You come to this course with more skills than you may realize -- you have learned about some psychological phenomena, you have tackled foundational psychology statistics, and you have years of experience noticing science news headlines. If you want to coast, then you don't need me. If you want to sharpen your ability to understand these headlines, and to make your own research headlines, then this is the course for you. Welcome.

#### LEARNING GOALS FOR THIS COURSE

You will develop many skills in this course. Your efforts will help you:

- (1) <u>Think</u>. Think like a scientist when you read science headlines -- you will become a sharper consumer of scientific discoveries. Think like a scientist when you make your own science headlines -- you will become a sharper producer of scientific discoveries.
- (2) <u>Find</u>: Find relevant articles in the primary psychological literature on a given topic, identify key research questions and hypotheses in scientific articles, and critically evaluate the research design and quality of evidence presented.
- (3) <u>Show</u>: Choose appropriate basic statistical analysis techniques for a specific research question and set of data, complete basic data analyses, and summarize the results in an APA-style report.
- (4) <u>Tell</u>: Communicate clearly and effectively about psychological topics, including methodological and ethical issues in psychology, based on an understanding of both the strengths and limitations of empirical evidence.

#### BLACKBOARD IS YOUR FRIEND

This course is full of exciting material, from lecture and lab. You must stay <u>organized</u> in order to remain energized (instead of becoming overwhelmed and exhausted).

I cannot stress this enough: You must <u>check Blackboard</u> regularly and you must <u>check email</u> at least once per day. Many lab activities will depend on frequent communication among you, your labmates, and your instructor.

Your best bet is to use your calendar to mark important dates, develop a system to organize your course materials and handouts, and check Blackboard and your email at least once a day.

#### **EXPECTATIONS & GRADING**

Your job is to come to class and lab, do the readings & assignments, get involved in the material, and ask lots of questions. The class grades will be based on in-class quizzes, lab assignments, and a final exam.

**Readings**. Expect to dedicate considerable time outside of class to the readings -- it will be both demanding and rewarding. You are expected to complete the assigned readings before the class and to take an active role in the class. Material from the readings will be on quizzes and the final exam. You will apply principles from the readings to your lab work.

**Labs.** This is where the magic happens. You are expected to attend your weekly lab section, complete related assignments, and build your skills consistently throughout the quarter. Half of the grade that you earn in this course will be from lab assignments, as befits the importance of learning to actively grapple with the empirical process – developing a research question, summarizing what we already know, testing hypotheses, and communicating new conclusions. See the lab schedule for more details. Your best bet is to attend section every week and build skills with your instructor and fellow student colleagues.

**Quizzes**. Brief in-class quizzes will happen every other Tuesday (see syllabus). These quizzes are designed to help you use knowledge throughout the course. Each quiz will take no more than 20 minutes of our class time. Quizzes will cover material presented in lectures and in the readings. You can prepare for these quizzes by coming to class and doing the readings.

Students may drop one quiz grade, no questions asked. This could be because you missed class on a quiz day (so you received a 0) or it could be the lowest quiz grade of your 4 quizzes. Because of this generous policy, make-up quizzes will only be offered in extraordinary circumstances with documented proof of medical or family emergency. If you happen to miss one quiz day, you will drop that quiz.

**Final Exam.** The final exam will cover material presented in lectures, in the readings, and in lab sections. The final exam will be a cumulative exam covering the full quarter of material. According to the Final Exam Schedule from the Office of the Registrar, the final exam for this course will be given on **Tuesday June 9, 2015 at 8 AM.** 

#### **FINAL LETTER GRADE**

Final letter grades will be assigned according to the table on the right. Plusses, not minuses, will be assigned. "Percent" is calculated by a weighted average of the <u>percent correct</u> on all assignments, quizzes, and exams, adjusting for the percent that each counts toward your final grade. Decimals will be rounded to the nearest percent score.

# Final letter grades will be weighted like this:

Lab assignments: 50% (each HW = 10%) In-class quizzes (best 3 of 4): 30% (each quiz = 10%)

Final exam: 20%

grade	percent
A+	97-100
Α	90-96
B+	87-89
В	80-86
C+	77-79
С	70-76
D+	67-69
D	60-66
F	<=59

#### ACADEMIC HONESTY

The short version: Don't cheat. Don't plagiarize. If you are unsure, please ask your lab instructor or me.

As a member of the university community you are expected to be honest and forthright in all of your academic endeavors. To falsify the results of one's research, to present the words, ideas, data, or work of another as one's own, or to cheat on an examination corrupts the essential process by which knowledge is advanced.

All work submitted in this course must be your own and produced exclusively for this course. The use of sources (ideas, quotations, paraphrases) must be properly acknowledged and documented.

It is considered cheating if you obtain any kind of information about answers and solutions to the work in this course from any non-intended source (including your peers) or if you transfer such information to others. You may not use notes, readings, or other aids during PSY 303 quizzes or exams. You may study with other students in preparation for an exam, but your answers on a quiz or exam must be your own.

It is also considered cheating if you lie to Dr. Fausey or any teaching assistant about an absence relating to an assignment, quiz, or exam.

Another form of academic misconduct is plagiarism, or using someone else's ideas and words without appropriate citation on a written assignment. Do not copy from Wikipedia, other college students' papers, scholarly articles, websites, and a host of other sources. Do not attempt plagiarism because you will be caught. Plagiarism is academic misconduct and cases of plagiarism will be treated as such.

Please note that it is <u>mandatory</u> for instructors to report suspected academic misconduct to the Office of Student Conduct. For the consequences of academic dishonesty, refer to the Schedule of Classes published quarterly. <u>Violations will be taken seriously and are noted on student disciplinary records.</u>

For more information regarding academic honesty and the student conduct code at the University of Oregon, visit the University's Office of Student Life website at: http://studentlife.uoregon.edu/StudentConductandCommunityStandards/StudentConductCode/tabid/69/D efault.aspx

#### STUDENTS FOR WHOM ENGLISH IS NOT THEIR NATIVE LANGUAGE

Please speak with Dr. Fausey during Week 1 in order to discuss accommodations you might need during quizzes and exams, such as translators or foreign language dictionaries.

#### STATEMENT FOR STUDENTS WITH DISABILITIES

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring accommodation, please contact UO Accessible Education Center.

#### **FAQ**

#### What if I miss a quiz or exam?

With the exception of extreme and unforeseen circumstances, contacting Dr. Fausey on the day of (or even worse, after) the quiz/exam will be considered an unexcused absence and will result in a 0 on the quiz/exam. If you have a scheduling conflict and cannot take a quiz or an exam at its appointed date and time, you must tell Dr. Fausey as soon as possible. Your best strategy is to take quizzes and exams on their scheduled date/time.

#### What if I turn in an assignment late?

If you submit an assignment after its due date, your grade on the assignment will be reduced by 50%. This is true whether you submit your assignment 1, 2, 3, 4, or 5 days late. After 5 days, late work will no longer be accepted without some documented medical or family emergency. Your best strategy is to submit assignments on time.

## Do you grade on a curve? Offer extra credit?

No, I do not grade on a curve. No, I do not offer extra credit except for what is stated below. Your best strategy is to focus your energy on doing your best on all of your work.

#### Optional: psychology research extra credit

Extra credit work must be completed by Friday June 5, 2015, 5 PM.

You may participate in Psychology Department research through the Psychology Department Human Subjects Pool. For each credit of participation assigned to Psych 303, you earn a 1% improvement to your final grade, for up to 3%. No more than 3% extra credit points are permitted. For more information, go to the HSP website at <a href="http://darkwing.uoregon.edu/~hscoord">http://darkwing.uoregon.edu/~hscoord</a> and/or contact the human subjects coordinator, Bill, by email at hscoord@uoregon.edu.

#### Do you take attendance?

No, I do not take attendance. I expect you to make responsible decisions about managing your time. Please note that a lot of material and essential practice will be conducted in lecture and lab. The majority of your learning will come through the opportunity to ask questions during lectures and labs. Each session is designed with you in mind. Your best strategy is to show up and reap the benefits.

#### **DISCLAIMER**

This syllabus is an outline of the course and its policies, which may be changed for reasonable purposes during the quarter at the instructor's discretion. You will be notified in class and/or via email if any changes are made to this syllabus and an updated syllabus will be provided on Blackboard.

# **LECTURE SCHEDULE**

Day	Date	Description	Read	Quiz		
INTRODUCTION						
Т	Mar 31	Course overview: Follow the data!	Ch. 1			
THE DATA BASICS						
TH	Apr 2	What counts as data?	Ch. 2			
		How do I find existing data?				
Т	Apr 7	How do I make an argument with data?	Ch. 3			
TH	Apr 9	How do I make an even stronger argument with data?	Ch. 3			
Т	Apr 14	How do I protect the people who provide the data?	Ch. 4	Quiz 1		
HOW TO GATHER THE DATA?						
TH	Apr 16	What data should I collect? (measurement)	Ch. 5	1		
Т	Apr 21	Are my data useful? (validity)	Ch. 5			
TH	Apr 23	Who contributes data? (sampling)	Ch. 6			
DATA: ASSOCIATIONS						
Т	Apr 28	So I measured two variables: Are they related?	Ch. 7	Quiz 2		
TH	Apr 30	So I measured lots of variables: Are they related?	Ch. 8			
Т	May 5	Data Blitz! Student-led research brainstorms				
DATA: CAUSAL						
TH	May 7	I have a hypothesis – how do I design an experiment?	Ch. 9	1		
T	May 12	How else could I test my hypothesis?	Ch. 9	Quiz 3		
TH	May 14	Do I believe the data?	Ch. 10			
T	May 19	Is the answer to my research question "It depends"?	Ch. 11			
TH	May 21	Data Blitz! Student-led data discussion				
LET'S	S GET R	REAL	1	l		
			Ch. 12			
T	May 26	How do I "follow the data" when it's impossible to		Quiz 4		
TH	May 28	reach every research method ideal?  Are my data important to anyone besides me?	Ch. 13			
'''	June 2	Course review: Putting it all together!				
TH	June 4	Course review: I utiling it all together!				
FINAL EXAM WEEK						
Т	June 9	8:00 AM - 10:00 AM. CUMULATIVE FINAL EXAM.				

# LAB SCHEDULE

#### Goal:

# To write a top-notch original empirical paper about a research question that matters to you!

<sup>\*</sup>All assignments are due at the <u>beginning</u> of <u>your</u> weekly lab section.

Week	Goals	Skill Practice	DUE
1	Meet your team – instructor & labmates	Find existing papers	
March 30	Understand how to generate a research question & figure out what we already know about it		
2	Understand how to write for psychological science	APA Writing Style & Citations	Activity: Article summary
April 6			*ungraded, but will be part of next week's Lit Review
<b>3</b> April 13	Understand a data file	Open & manipulate excel data file Plot data	DRAFT Literature Review
<b>4</b> April 20	Connect data & theory: Understand how data help us answer a research question	Identify variables Descriptive data analysis & interpretation	Activity: Make a plot
<b>5</b> April 27	Develop design good practice: How to design an experiment that helps you answer a research question	Design an experiment to test your hypothesis	
<b>6</b> May 4	Develop design flexibility: Compare & contrast research designs to answer the same big picture question	Design multiple experiments to test your hypothesis	DRAFT Methods
<b>7</b> May 11	Connect data & theory: Understand how correlational data help us answer a research question	Correlational data analysis & interpretation	
<b>8</b> May 18	Connect data & theory: Understand how factorial data help us answer a research question	Factorial data analysis & interpretation	DRAFT Results & Discussion
9	Feedback & group discussion	Instructor choice	
May 25			
10	Feedback & group discussion	Instructor choice	FINAL FULL PAPER
June 1			

<sup>\*</sup>Your lab section instructor is your go-to person for these activities, assignments, and grading.

<sup>\*</sup>You are expected to attend section and follow all Blackboard announcements – important details about assignments will be shared in section and on Blackboard.