## PSY 303 - Research Methods Fall 1999

Tuesday/Thursday 9:30 - 10:50, Straub Hall 146 Labs (all in Straub Hall 180; see times under GTFs)

Instructor: Sara Hodges, PhD

Office: Straub 331

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GTF: Nick Hong, MS

Labs: Wednesday 12-1:20 and Wednesday 1:30-2:50

Office: Straub 309

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GTF: Anna Wilson, MS

Labs: Tuesday 2-3:20 and Wednesday 9-10:20

Office: Straub 203

Office hours: Tues 3:30-4:30, Weds 10:30-11:30 & by appt.

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Course Web Page: http://www.uoregon.edu/~sdhodges/303-99.htm

### **COURSE OBJECTIVES/CONTENT:**

This course serves a theoretical and practical introduction to doing research in psychology. We will cover the major issues in conducting psychological research, discussing

how to:

- 1) formulate a research question
- 2) design a study
- 3) conduct the study
- 4) analyze data and interpret findings
- 5) communicate the results

These topics will be covered in the text and in the lectures. In addition, you will engage in activities that will require the practical application of what you have learned, including research projects that you will conduct in small groups or individually.

Although the course is specifically designed to teach research methods in psychology, the course has been designed with an eye to teaching general research skills that can be used in other fields (e.g., data analysis, program evaluation). An even more general goal is to teach logic and critical analysis skills that will allow you to be an informed consumer of other people's research findings and claims.

### **COURSE PREREQUISITES:**

PSY302 (Statistical Methods) or its equivalent is a prerequisite for this course. You must have a working knowledge of statistics for this course.

### **COURSE READINGS:**

The required text for this course is <u>Research in Psychology: Methods and Design</u> (2nd edition), by C. James Goodwin. An optional resource that you will find highly useful, particularly if you intend to take more psychology courses and especially if you are considering

graduate school in psychology, is the <u>Publication Manual of the American Psychological</u> <u>Association</u> (4th edition). The manual is a helpful and complete guide to writing papers outside of psychology as well. Students who have taken this course in the past have found the manual valuable. Even if you do not purchase this book, you are responsible for following the guidelines within it for your assignments in this class. A copy of the manual is also available at the reference table in the Knight Library. You may wish to purchase the optional text, <u>A Simple Guide to SPSS for Windows</u>, by L. A. Kirkpatrick and B. C. Feeney. This is a helpful guide to the statistics software you will be using to analyze data in the course lab.

In addition to these books, there are three articles that you will be required to read early on in the quarter. Copies are on reserve in the reserve room at the Knight Library. You may also read these articles in the bound journals in the Knight Library. There is also an optional article available on reserve in the Knight Library that is helpful in guiding your reading of journal articles.

### **COURSE REQUIREMENTS:**

1) There is no substitute for attending class AND lab in this course. Most of the topics covered are understood only via a combination of background knowledge (that you will get from reading the text) and demonstrations and discussion that will occur in class and in lab. However, more importantly, you will participate in several activities in class and in lab that will allow you to practice and master research skills. This practical training aspect of the class cannot be achieved without your attendance. Furthermore, because one important aspect of learning research methods is to learn how to critique research design and execution, part of your job as a member of this class is to provide suggestions and feedback to your classmates.

I strongly recommend planning to attend EVERY class and EVERY lab. If you miss a quiz or an in-class assignment, you cannot make it up. If you miss more than two classes, I will not use office hours to go over what you missed. (I reserve the right to grant exceptions to the two previous statements under dire circumstances, but don't count on being an exception.) If you know you must miss a lab, it's best to let your GTF know in advance.

Your attendance at the scheduled exam period is mandatory. If you do not attend, you will fail the course.

If you don't already have an e-mail account, please get one, as there may be additional class information that I will distribute via e-mail. Once you have your account, or if you already have one, send an E-mail message to YOUR GTF (see top of syllabus for GTF e-mail addresses and which lab goes with which GTF) so he or she will know you are online. This is your first class assignment.

If you send me E-mail questions about the class, I will try to answer them as soon as I can; however, if they are long or complicated, it is possible (but unlikely) that you will have to wait until my next office hours for an answer. Also, from time to time I will post helpful information on the course web page.

2) All papers in this class will be typed in a readable font, double-spaced, left justified only, and with margins of one inch at the top, bottom, left side and right side (these are all consistent with the APA <u>Publication Manual</u>). If you foresee problems meeting these qualifications, please discuss them with me.

3) Reading assignments should be completed before lecture on the day they are listed on the syllabus. Homework assignments are due at the beginning of class on the day they are due. Assignments turned in after the start of class are half a day late, with a 5% penalty, up until 4 pm of the due date; papers turned in after 4 pm are 1 day late with a 10% penalty. Each subsequent day rolls over at 4 pm, with an additional 10% penalty. If you do not turn in your paper in class, turn it into the Psychology Department office (131 Straub) and get the time stamped on it. Do not plan to skip class to finish your paper—your paper will be penalized anyway, and you will miss class and get behind.

Each student gets one "bonus day late" credit that can be used on any Homework 1-3 (not on Homework 4, or the final poster). The bonus allows you to turn in the assignment up until 4 pm the day after the due date without penalty.

Some assignments in the course are ongoing, and are not listed specifically on the syllabus (for example, analyzing the data for your final project). You will be reminded about these activities in class periodically, but it will be your responsibility to pace yourself.

4) As part of the course, there is a lab in the Straub Hall computer lab (Straub 180). Lab attendance is not optional, and attendance and participation and performance on lab assignments will be part of your course grade.

5) Grading will be broken down as follows:

4 quizzes, @ 25 points each	= 100  points
Homework 1 (Introduction)	= 25 points
Homework 2 (Reference section and summary)	= 25 points
Homework 3 (Intro and methods for final project)	= 75 points
Homework 4 (Results and discussion for final project)	= 50 points
Midterm	= 75 points

(you may drop one quiz, and have your midterm count 100 instead)

Final poster\*\* = 100 points
Worksheets, participation, and attendance = 50 points

Total = 500 points

\*\*The poster is worth 100 points. However, if you do not attend the final poster session (during the scheduled exam for this course), you will receive a failing grade for the course.

Final grades MAY be curved upwards. Extra credit options totaling no more than 5% of a student's grade (25 points) may be offered throughout the quarter. Detailed instructions for the homework assignments and the final project will be distributed in class. Quizzes will be short (approximately 15 minutes) and will cover class material and reading since the last quiz (i.e., they are not cumulative, although later concepts that build on earlier ones are fair game). The midterm is cumulative. In a sense, homework assignments relating to your final project (2, 3, & 4) ARE cumulative. You will need to turn in either the original or a copy of Homework 3 with Homework 4.

STUDENTS WITH DISABILITIES: If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with me soon. Please request that the Counselor for Students with Disabilities send a letter verifying your disability. NONNATIVE ENGLISH SPEAKERS: If you have been speaking English for a limited time, and anticipate that your English abilities may interfere with your progress in this course, please arrange to see me. I can advise you on available resources and discuss possible accommodations.

# COURSE SCHEDULE:

Note: Readings and assignments due are to be **completed** by the beginning of class on the date listed below. This schedule will be adhered to as closely as possible. Should changes occur, you will be notified. Goodwin = C. James Goodwin, Research in Psychology: Methods and Design (2nd edition).

Assignment Due				(Library wrksht due in LAB this week)	HM1
New Assignment		HM1-Writing an introduction Library Worksheet	HM2-Reference section/Article summary	HM3 Intro & methods for final project	ting
Probable Class Topic Introduction to course	Scientific method IV's & DV's Operational Definitions	Writing introductions Ethical issues	Ethical issues (cont.) Citations	<b>Quiz 1</b> Measurement	Writing methods sections Statistical power, Signif testing
Reading To Be Completed	Thurs Sep 30 Goodwin Chs. 1 & 3: Scientific Thinking in Psych. and Dev. Ideas for Res. in Psych. Also, read the course syllabus	Goodwin Ch 2: Ethics in Psych'l Res (Also start reading inadmissable evid. articles for HM1)	(Continue reading inadmissible evid. articles for HM1)	Goodwin Ch 4: Measurement, Sampling and Data Analysis	Thurs Oct 14 Goodwin Appendix A: Communicating Results Goodwin Appendix C: Using Statistics
Date Week I Tues Sep 28	Thurs Sep 30	Week II Tues Oct 5	Thurs Oct 7	Week III Tues Oct 12	Thurs Oct 14

Date	Reading	Probable Class Topic	New Assignment	Assignment Due
Tues Oct 19	Goodwin Ch 12: Descriptive Research Methods Goodwin Appendix B: Developing Surveys	Observation & Surveys		HM2
Thurs Oct 21		<b>Quiz 2</b> Observation (cont.)	Project Worksheet	
Week V Tues Oct 26	Goodwin Ch 5: Introduction to Experimental Research	Experiments		
Thurs Oct 28	Goodwin Ch 6: Control Problems in Expt'l Research	Within subjects, longitudinal designs		HM3 Project Worksheet
Week VI Tues Nov 2	Goodwin Ch 7: Experimental Design I Single Factor Designs	Experimental confounds		
Thurs Nov 4		Quiz 3 Experimental design Counterbalancing		
Week VII Tues Nov 9	Goodwin Ch 8:	Data Analysis	Interaction Worksheets	

\*\*\*WEDNESDAY Nov 10 is data collection night, from 7-10 pm, in Straub 146\*\*\*

Data Analysis Interactions

Experimental Design II Factorial Designs

Assignment Due Worksheets Interaction New Assignment Correlational research Interactions (cont.) Class Correlational Research Thurs Nov 11 Goodwin Ch 9: Reading Date

HM4-Results Correlation and causality Writing results and Tues Nov 16 Week VIII

and discussion discussion

TEST

Thurs Nov 18

Small N Designs Goodwin Ch 11: Tues Nov 23 Week IX

Small N Designs

Thanksgiving - NO CLASS \*\*\* Bonus for turning in HM 4 before Thanksgiving - TBA! \*\*\* Thur Nov 25

and Applied Research Quasi-Expt'l Designs Tues Nov 30 Goodwin Ch 10: Week X

Quasi expt'l designs

Time series designs

(can't use late bonus) HM4

Thurs Dec 2

Wrap-up Quiz 4

\*\*\*Mon., Dec. 6: Results and discussions should be graded by 10 am (check your e-mail). You can pick them up from your GTF in order to use them in preparing your poster.

Exam period: Presentations of final projects in the form of a poster. \*\*\*Weds., Dec 8, 8 am (probably in the EMU Fir Room) --

# LAB SCHEDULE - All labs meets in Straub 180 except on Oct. 5 & 6, when they meet in the Knight Library.

Please note you may have assignments due in lab, too. These will be announced and distributed in lab.

Date	Class Activity
Sept 28/29	Intro to lab, e-mail
Oct 5/6	Library orientation (Class meets in Knight Library
	Electronic Classroom this week, except Weds 9-
	10:20, which meets in the Knight Library ITC,
	second floor)
Oct 12/13	Measurement (library worksheet due)
Oct 19/20	Observation and reliability
Oct 26/27	Choosing a stats test
Nov 2/3	NO REGULAR lab you must meet with your GTF or
	the instructor this week about your project (details
	TBA).
Nov 9/10	Data analysis
Nov 16/17	Data analysis
Nov 23/24	NO LAB
Nov 30/Dec 1	Preparing posters