

**PSYCHOLOGY 210**  
**Fall 2010**

**Experimental Research Methods and Laboratory (4) WI**

**Location:** Classes: Maginnes 110  
Laboratory work: Chandler East Wing undergraduate lab rooms

**Class time:** Tuesday and Thursday, 1:10 - 4:00

**Instructor: Prof. Barbara Malt**

Chandler-Ullmann 333  
610-758-4797  
bcm0@lehigh.edu  
Wed 1-2 or by appointment

**TRAC Writing Fellow: Josh Leight**

Lucy's Café, Linderman Library  
267-377-9257  
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**Teaching Assistant: Mairin Augustine**

Chandler-Ullmann 361  
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Mon 2:30-3:30 or by appointment

**TRAC Writing Fellow: Brenna Tudor**

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**Description:** This course provides an introduction to the way that psychological experiments are conceived, designed, implemented, interpreted, and reported. It provides a grounding in design principles that can be applied to many different research issues. The lab component of this course provides hands-on experience in conducting experiments, including the use of computers in the laboratory. An important part of the course involves designing and running your own study with a small group of students. This is a writing-intensive course that provides experience in the kind of scientific writing used in the psychological literature.

**Objectives:**

- Understanding the scientific method and its relation to psychological issues
- Learning the appropriate use of different research designs and their strengths and limitations
- Developing the ability to critically evaluate psychological research from a methodological standpoint
- Gaining experience in conceptualizing, designing, and carrying out research projects
- Gaining experience in the application of statistical analyses to data
- Learning to read and write APA-style, scientific research reports
- Increasing sensitivity to ethical issues in research

We hope you enjoy the course and that it helps you become a good researcher, effective writer, and sophisticated consumer of research.

DATE	TOPIC	ASSIGNMENT
Aug 31 T	Introduction What is scientific research? and basics of the experimental method	Cozby: ch 1; also p. 17 to top of 18; and pp. 65 to middle of 85
Sept 2 Th	<i>Experiment 1 (in class)</i> Discuss results of Experiment 1 Introduction to writing a research paper	Cozby, pp. 283 to middle of 298 Szuchman: ch. 1 <b>BEGIN ASSN #1:</b> find and read article
Sept 7 T	More on writing a research paper	<b>ASSN #1 due:</b> Complete exercise in class  Szuchman: ch.3 through p. 35 <b>BEGIN ASSN #2:</b> Expt. 1 Intro draft
Sept 9 Th	Critique of Introductions	Szuchman: chs. 4, 5, 6  <b>ASSN #2 due:</b> Bring Intro draft to class for discussion  <b>BEGIN ASSN #3:</b> Expt. 1 complete draft
Sept 14 T	More on experimental design (in regular classroom)  <i>Run Experiment 2 in Instructional Lab (Chandler 247)</i>	Cozby: pp. 85 - 86 and ch. 5  <b>ASSN #3 due</b>  <b>BEGIN ASSN #4:</b> consultation and revision of ASSN #3
Sept 16 Th	Still more on experimental design	Cozby: ch. 8, ch. 9
Sept 21 T	Non-experimental and quasi-experimental methodologies  Design exercises	Cozby: ch. 6; ch. 11
Sept 23 Th	<b>Test 1</b> [all Cozby pages listed above]	
Sept 28 T	Discuss E1 reports; more on writing <i>Run Experiment 3 in class</i> Factorial design	Cozby: ch. 10  <b>ASSN #4 due</b> (turn in 1 <sup>st</sup> complete draft too)
Sept 30 Th	Discuss results of Experiment 3 More factorial design; interactions Form groups; begin to choose final projects	Szuchman, chs. 7, 8, 9  <b>BEGIN ASSN # 5:</b> Experiment 3 draft

Oct 5 T	Project work -- finalize project choice On-line searching tutorial	Cozby, pp, 18-35
Oct 7 Th	Factorial design/interaction exercises Project work	<b>ASSN # 5 due</b>  <b>BEGIN ASSN #6:</b> consultation and revision of ASSN #5
Oct 12 T	Pacing Break	
Oct 14 Th	Ethics issues and IRB forms Project work	Cozby, ch. 3 <b>Complete NIH ethics certification</b>  <b>BEGIN ASSN # 7:</b> Work on IRB forms
Oct 19 T	<b>Test 2</b> [all Cozby pages since Test 1]	
Oct 21 Th	Project work	Find articles for project
Oct 26 T	Project work	<b>ASSN #7 due:</b> Submit IRB forms
Oct 28 Th	Project work	Pilot experiment  <b>ASSN # 6 due</b> (turn in 1 <sup>st</sup> draft too)
Nov 2 T	Project work	Participant scheduling
Nov 4 Th	Data collection	
Nov 9 T	Data collection	Szuchman: pp. 6-9 on plagiarism  <b>BEGIN ASSN # 8:</b> Introduction worksheet
Nov 11 Th	Data collection	
Nov 16 T	Data collection	<b>ASSN # 8 due</b>  <b>BEGIN ASSN # 9:</b> Method worksheet
Nov 18 Th	Data collection	
Nov 23 T	Data collection - Last day	<b>ASSN # 9 due</b>  Pavkov & Pierce: pp. 1-21
Nov 25 Th	Thanksgiving Break	
Nov 30 T	Data analysis	TA will assign relevant pgs from Pavkov & Pierce to review for your analyses  <b>BEGIN ASSN# 10:</b> Results & Discussion (incl. tables and figs) worksheet
Dec 2 Th	Data analysis	
Dec 7 T	Presentation planning	<b>ASSN # 10 due</b>

Dec 9 Th	<b>Presentations</b> (Maginnes 110)  Note: Class will meet 1:00-3:00	<b>BEGIN ASSN # 11:</b> write final paper  <b>***Experiment-running wrap-up: Please see last paragraph under “Assignments” below***</b>
Dec 16 Thursday <b>FINAL PAPER DUE by 5:00</b>		

**Course Site:** Announcements and information for this course will be posted on Course Site, the electronic course resource. To reach our course, go to <https://coursesite.lehigh.edu/> and click on “Login.”

**Texts:**

**Required:** Cozby, P. C. (2009). *Methods in Behavioral Research (10<sup>th</sup> Edition)*. New York: McGraw-Hill

Szuchman, L. T. (2011). *Writing with style: APA style made easy (5<sup>th</sup> Edition)*. Belmont, CA: Thomson/Wadsworth.

Pavkov, T.W. & Pierce, K.A. (2003). *Ready, set, go! A guide to SPSS 16.0-17.0 for Windows (10th Edition)*. Boston, MA: McGraw-Hill.

**Optional:** American Psychological Association. (2010). *Publication manual of the American Psychological Association (6th edition)*. Washington, DC: APA.

*The APA Publication manual is a very useful reference tool for all Psychology majors, especially those planning to do thesis or other research work and graduate study. We recommend that you acquire a copy and keep it until you graduate and beyond. However, the essential material for this class can be gleaned from the required texts and on-line. Copies are also available at Fairchild-Martindale for reference.*

**Useful Reference:** your Psyc 110 statistics text. Keep it handy!

**Attendance:** Because this is a laboratory course, it is essential that you **ATTEND ALL CLASSES**. When an experiment or other assignment is introduced in class, you will not be in a position to do the required work if you are absent. It would be impossible for us to individually repeat the material for those who miss classes. Therefore, the policy is that help from the instructor or T.A. will only be available to absentees in cases of compelling and documented justification (e.g., medical emergency documented by a doctor's note). There is no fixed penalty for failure to attend, but because you will be unable to properly complete assignments, your grade is likely to be seriously affected.

**TRAC Writing Fellows Assistance:** This course will participate in the TRAC [Technology,

Research, and Communication] Writing Fellows program to help each student improve his or her writing. The TRAC Fellows are specially trained peer tutors who will provide you with written feedback on your paper drafts and meet with you to discuss the feedback. Complete information about the TRAC Fellows program can be found at:

<http://www.lehigh.edu/~inwxc/tracstudentinfo.html>

### **Your Responsibilities Regarding Assignments:**

***TRAC Fellow consultations:*** These consultations are for your benefit, and the drafts you submit to the Fellows will not be graded. **However, submitting drafts for review by the TRAC fellows and meeting with them to discuss the feedback is a course requirement, not an optional activity.** The fellows will file a report to me after each assignment. Points will be deducted from your paper grade (3% of grade) if you did not turn in the draft on time and actively engage in the consultation. The quality of your paper will also be lower if you do not go through the feedback and revision process, and your grade will reflect this.

***Backups:*** Please save your files frequently as you work, and keep backups of all files separately. File problems will not be accepted as an excuse for late assignments.

***Multi-Step Pieces of Work:*** Each of your assignments will require referring back to work you have previously turned in and received feedback on. We will ask for you to turn in the previous piece of work along with the new assignment so that we can see how you responded to the feedback. **So please keep your returned assignments together and be sure you know where they are!**

***Written Assignments are Individual!*** The final project research is a team effort. However, **all written assignments in this course, including for the group project, are strictly individual.** Therefore, although it is appropriate to discuss ideas, references, results, etc with other students, **all writing must be done individually.** You should **not** share drafts of any papers nor worksheets for the group project with other group members, with one small exception – the critique of Experiment 1 introduction (*only*) drafts in class.

***Academic Integrity:*** Students are expected to uphold the University Code of Conduct (see the Student Handbook for details). **The rule that all writing must be done individually will be strictly enforced.** Any sharing of writing will normally lead to a zero grade on that assignment for all of the individuals concerned and may be referred to the University Committee on Discipline. In addition, inappropriate behavior in exam-taking or **plagiarism** (using material from a source without acknowledging the source) may be referred to the Committee on Discipline.

***Late Penalties:*** Keeping up with assignments is very important in this course. **Late assignments will be penalized 3% per day or part day late**, for up to a week past the due date. (Each weekend day and holiday day **counts** as a day.) Assignments turned in more than a week late will not be graded on an individual basis; they will be assigned a grade of 50% if of acceptable quality; otherwise 0%.

Any paper that is not handed in directly to me or the TA should be put under my locked office door, and an email copy of the paper should be sent **before the deadline** as proof of on-time submission. In the event that you are away from campus and receive permission for electronic submission, it is your responsibility to make sure that the intended attachment is attached and intact. **Corrupt files or emails without the intended attachment cannot be accepted for on-time submission.**

***Responsibilities in Running Your Experiment:*** When you schedule participants for an experiment, you will be penalized if you fail to show up for an appointment. The penalty will be 2% of your final project grade for each absence. Also, each group is responsible for meeting any further requirements specified by the instructor such as assigning credits and penalties for participation in your experiment and turning in a report of those who did not sign up. **Any group that doesn't meet these responsibilities will be penalized 2% on each group member's final project grade.** Details and the due date for any required information will be announced later in the course.

**Peer Evaluation:** It is important that all members of the project groups participate fully in the research. To help ensure that this takes place, we will ask group members to rate one another at the end of the semester on their contributions to the group project. Failure to contribute appropriately to the group effort will be penalized in the final grade.

**Accommodation for Disabilities:** If you think you may need special accommodations for a disability, please inform the instructor and contact Academic Support Services in the Dean of Students office for evaluation as early as possible in the semester. The Dean of Students office will provide a letter specifying what accommodations, if any, are appropriate. Accommodations cannot be made without this letter.

## **GRADING:**

<b>Assignment</b>	<b>Percent of Final Grade</b>
Test 1	12
Test 2	12
Assignment #1	article analysis 4
Assignment #2	Experiment 1 intro draft and peer eval 4
Assignment #3	Experiment 1 draft and conference see text
Assignment #4	Experiment 1 final paper 10
Assignment #5	Experiment 3 draft and conference see text
Assignment #6	Experiment 3 final paper 12
Final project:	
Assignment #7	Group IRB form 2
Assignment #8	Introduction worksheet 8
Assignment #9	Method worksheet 8
Assignment #10	Results and Discussion worksheet 8
Assignment #11	Complete final paper 20
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Total	100