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  
jrl211@lehigh.edu  
by appointment

**Teaching Assistant:**  
Mairin Augustine  
Chandler-Ullmann 361  
610-758-3626 (office); 440-865-0429 (cell)  
mea209@lehigh.edu  
Mon 2:30-3:30 or by appointment

**TRAC Writing Fellow:**  
Brenna Tudor  
Lucy’s Café, Linderman Library  
908-510-3752  
bjt212@lehigh.edu  
by appointment

**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.
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<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>ASSIGNMENT</th>
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| 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 | *Experiment 1 (in class)*  
Discuss results of Experiment 1  
Introduction to writing a research paper | Cozby, pp. 283 to middle of 298  
Szuchman: ch. 1  
BEGIN ASSN #1: find and read article |
| Sept 7 T | More on writing a research paper | ASSN #1 due: Complete exercise in class  
Szuchman: ch.3 through p. 35  
BEGIN ASSN #2: Expt. 1 Intro draft |
| Sept 9 Th | Critique of Introductions | Szuchman: chs. 4, 5, 6  
ASSN #2 due: Bring Intro draft to class for discussion  
BEGIN ASSN #3: Expt. 1 complete draft |
| Sept 14 T | More on experimental design (in regular classroom)  
* Run Experiment 2 in Instructional Lab (Chandler 247) | Cozby: pp. 85 - 86 and ch. 5  
ASSN #3 due  
BEGIN ASSN #4: 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 | **Test 1** [all Cozby pages listed above] | |
| Sept 28 T | Discuss E1 reports; more on writing  
* Run Experiment 3 in class*  
Factorial design | Cozby: ch. 10  
ASSN #4 due (turn in 1st 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  
BEGIN ASSN # 5: Experiment 3 draft |
<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Activity</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Oct 5</td>
<td>T</td>
<td>Project work -- finalize project choice On-line searching tutorial</td>
<td>Cozby, pp. 18-35</td>
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<td>Oct 7</td>
<td>Th</td>
<td>Factorial design/interaction exercises Project work</td>
<td>ASSN # 5 due BEGIN ASSN #6: consultation and revision of ASSN #5</td>
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<td>Oct 12</td>
<td>T</td>
<td>Pacing Break</td>
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<td>Oct 14</td>
<td>Th</td>
<td>Ethics issues and IRB forms Project work</td>
<td>Cozby, ch. 3 Complete NIH ethics certification BEGIN ASSN # 7: Work on IRB forms</td>
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<td>Oct 19</td>
<td>T</td>
<td>Test 2 [all Cozby pages since Test 1]</td>
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<td>Oct 21</td>
<td>Th</td>
<td>Project work</td>
<td>Find articles for project</td>
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<td>Oct 26</td>
<td>T</td>
<td>Project work</td>
<td>ASSN #7 due: Submit IRB forms</td>
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<td>Oct 28</td>
<td>Th</td>
<td>Project work</td>
<td>Pilot experiment ASSN # 6 due (turn in 1st draft too)</td>
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<td>Nov 2</td>
<td>T</td>
<td>Project work</td>
<td>Participant scheduling</td>
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<td>Nov 4</td>
<td>Th</td>
<td>Data collection</td>
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<td>Nov 9</td>
<td>T</td>
<td>Data collection</td>
<td>Szuchman: pp. 6-9 on plagiarism BEGIN ASSN # 8: Introduction worksheet</td>
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<td>Nov 11</td>
<td>Th</td>
<td>Data collection</td>
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<td>Nov 16</td>
<td>T</td>
<td>Data collection</td>
<td>ASSN # 8 due</td>
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<td>Nov 18</td>
<td>Th</td>
<td>Data collection</td>
<td>BEGIN ASSN # 9: Method worksheet</td>
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<td>Nov 23</td>
<td>T</td>
<td>Data collection - Last day</td>
<td>ASSN # 9 due Pavkov &amp; Pierce: pp. 1-21</td>
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<td>Nov 25</td>
<td>Th</td>
<td>Thanksgiving Break</td>
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<td>Nov 30</td>
<td>T</td>
<td>Data analysis</td>
<td>TA will assign relevant pgs from Pavkov &amp; Pierce to review for your analyses BEGIN ASSN# 10: Results &amp; Discussion (incl. tables and figs) worksheet</td>
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<td>Dec 2</td>
<td>Th</td>
<td>Data analysis</td>
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<td>Dec 7</td>
<td>T</td>
<td>Presentation planning</td>
<td>ASSN # 10 due</td>
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Dec 9 Th
Presentations (Maginnes 110)
Note: Class will meet 1:00-3:00
BEGIN ASSN # 11: write final paper

***Experiment-running wrap-up: Please see last paragraph under “Assignments” below***

Dec 16 Thursday
FINAL PAPER DUE by 5:00

**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:**


*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 absentee 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:**

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