

Course Syllabus

- Title:** Design and Evaluation of Psychological Research – PSY 6130: Section 001
- Term:** Fall 2012
Mondays and Wednesdays: 1:00-2:15pm
- Location:** University Hall – Room #1610
- Credit Hours:** 3
- Instructor:** Jon Elhai, Ph.D.
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Jon.elhai@utoledo.edu (e-mail)
www.jon-elhai.com
- Office Hours:** Mondays: 2:15-3:15pm
University Hall (UH) – Room #1370
- Required Text:** Leong, F. T. & Austin, J. T. (2006). The psychology research handbook: A guide for graduate students and research assistants (2nd Ed.). Thousand Oaks, CA: Sage.
- Salsburg, S. (2002). The lady tasting tea: How statistics revolutionized science in the Twentieth Century. New York: Holt Paperbacks.
- Articles downloadable from this site. You may be required to sign in with a Google/Gmail account in order to proceed:
<http://goo.gl/iwJ5g>

Course Description:

Readings and discussion of problems of research design and analysis.

Learning Objectives:

1. Students should identify various design methodologies to analyze research questions in psychology.
2. Students should identify and describe statistical procedures used to analyze research questions.
3. Students should effectively critique scientific journal articles in psychology.
4. Students should conduct a literature review and empirical study proposal in their area of psychological research.

Course Policies and Procedures

1. Attendance: It is the responsibility of each student to attend all classes, and turn in all assignments on time.

Please do not arrive late to class! Students are expected to contribute to class discussion – including asking questions of other students presenting their work. Attendance and participation are worth 20% of the final grade.

a. Classroom Environment. It is expected that the classroom environment will be peaceful and respectful. Having electronic devices in class, such as notebook computers and cell phones, is distracting. Please do not use such devices in class.

2. Research Project. A primary ultimate goal of this course is for students to independently develop knowledge in a specific area within their research area and propose an empirical study in that area. This will be accomplished using the following steps: 1) discuss and select an appropriate, narrowly focused research topic/area in psychology; 2) review and succinctly summarize the recent literature that has analyzed the research topic; 3) formulate a research question(s), and hypothesis/hypotheses within the research topic (based on the literature review's findings); and 4) design an empirical study (considering specific procedures and instruments) to test the hypothesis. After step #2 (but before step #3) – at mid-semester - each student must submit a brief, article-length Introduction/Literature

Review (roughly 3 to 8 double-spaced pages) (worth 20% of the final grade). Subsequently, by the semester's end, each student should submit a revised Introduction that includes step #3, along with a new Methods section that covers step #4 (roughly 2 to 5 additional double-spaced pages) (worth 20% of the final grade).

Topics must be approved by the Instructor; and the students should consult with their advisors along the very steps outlined above for additional guidance in the particular research area selected. Thus, this project is a project specifically intended for this course, but is also meant to jump-start the student's collaborative research with their advisor. Papers should be typed with 12 pt font, double-spaced, with 1 in. margins, submitted via email to the Instructor. Late papers will be deducted 10% per day late. APA format (6th Ed.) must be used for structuring the paper and for citing and referencing.

The class sessions will involve generally discussing methodology and statistical issues in psychology research, to provide students with training on how to conceptualize and conduct their studies. Class sessions will also involve discussion and questions pertinent to the particular studies being developed.

Upon completion of the project, each student will present his/her project to the class at the end of the semester (worth 20% of the final grade).

Note: every student in the class must complete a brief plagiarism tutorial before submitting the Introduction. **No grades will be assigned unless the tutorial is completed before the Introduction is submitted.** This tutorial can be found at:

www.jon-elhai.com/courses/plagiarism-tutorial

3. Journal Article Review. Students will pair up to conduct and present a critical review of an empirical study published in a journal article. Acceptable journal articles must be published this year, and in an APA journal. For a list of journals published by APA, see the following website: www.apa.org/journals. (UT's electronic library has fulltext access to all APA journals.) The presentation should briefly summarize the study, but should primarily critique the study's rationale, methods and analytic approach. The presentation may (but is not required to) involve a PowerPoint presentation. Each student pair should email the journal article to the Instructor at least a week in advance of presentation, so that the Instructor can distribute the article to the class, for the members of class to review. Members of class and the Instructor will be expected to contribute to the presentation by asking critical questions to the presenters about the study. The presentation will be worth 20% of the final grade.

4. CITI Ethics Training. Any involvement in research at UT requires first requires completion of the University of Miami's established Collaborative Institutional Training Initiative (CITI) program online. This program can be accessed through UT's website: <http://www.utoledo.edu/research/RC/HumanSubs/training.html>. Specifically, the Social and Behavioral version of the course should be selected which is most appropriate for the discipline of psychology. This course may take 5-6 hours to complete (but not necessarily in one sitting). And the course should be completed after research ethics is discussed in class – by **October 3**. A completion certificate should be downloaded and provided to the Instructor by that date.

5. Grading:

Grading scale

| | | | | | |
|---|--------|----|-------|----|-------|
| A | 93-100 | A- | 90-92 | B+ | 87-89 |
| B | 83-86 | B- | 80-82 | C+ | 77-79 |
| C | 73-76 | C- | 70-72 | D+ | 67-69 |
| D | 63-66 | D- | 60-62 | F | < 60 |

Grades will be equally based on the Project Introduction, Project Method section, Project Presentation, Journal Article Review, and Course Attendance/Participation.

No other grades will be given except as noted above. If a student is doing poorly in the course (by not attending or by failing to submit assignments), it is the student's responsibility to drop or withdraw from

the course before the appropriate deadline. If it is too late to drop or withdraw from the course, a mark of “Incomplete” will not be assigned; rather the student will be assigned the actual grade earned.

6. Academic Honesty: Department of Psychology Statement on Academic Honesty - Academic honesty is expected from students enrolled in courses and programs offered by the Department of Psychology; violations of this expectation will not be tolerated.

Violations of the expectation of academic honesty include, but are not limited to:

- * Obtaining or attempting to obtain a copy of an examination prior to its administration.
- * The unauthorized use of study material or textbooks during an examination.
- * Obtaining unauthorized assistance from and giving unauthorized assistance to another individual during an examination or completion of an assignment.
- * Plagiarism in written assignments. Plagiarism includes: (a) using, copying or paraphrasing another author’s materials without appropriate acknowledgment through quotation and citation; (b) unauthorized collaboration in the preparation of reports, term papers, or theses.

In accordance with the Policy Statement in the University Catalog, instructors have the responsibility and right to bring cases of alleged dishonesty to department, college, and university administrative units. Students involved in academic dishonesty may expect to receive a grade of F on specific assignments, as well as in the course where the assignment was made.

Student Behavior - Students are expected to follow University policy with regards to proper conduct in the classroom, as detailed in the University of Toledo Student Handbook (See <http://www.utoledo.edu/studentaffairs/dos/> for details.) Disciplinary action for violation of these policies will be decided on a case by case basis and will be in accord with University policy.

7. Class Communication: the Instructor will communicate to students by email about class announcements, changes to the course schedule (including class cancellations), and grades. **It is the student’s responsibility to check their UT email account daily for such announcements.**

8. Additional Ground Rules: 1) Grade disputes must be submitted in writing in order to be considered. 2) Grievances about the course and/or Instructor should be brought up with that individual first in order to resolve the matter, prior to discussing the matter with the department/university’s administration.

9. Office of Accessibility. Students registered with the Office of Accessibility for a disability must discuss possible accommodations with the Instructor during the first week of class in order to allow such accommodations to occur.

Schedule of Classes and Readings (The assigned chapter should be read **before** each class)

| Week | Note | Required Reading | Class Session | Activity Due |
|---------|--|---|--|---|
| Aug. 20 | | L&A Ch. 1 | Intro Research process | |
| Aug. 27 | | L&A Ch. 2 L&A Ch. 3 L&A Ch. 4 | Finding a research topic Bibliographic search Evaluating an article | |
| Sep. 3 | No class Sep. 3 (Labor Day) | L&A Ch. 6 Articles 1-4 | Design | |
| Sep. 10 | | L&A Ch. 7 L&A Ch. 8 L&A Ch. 9 | Tests and measures Questionnaire design Scale development/refinement | |
| Sep. 17 | | L&A Ch. 10 Articles 5-6 L&A Ch. 11 | Sampling Power | |
| Sep. 24 | | L&A Ch. 12 L&A Ch. 13 | Ethics and IRB Conducting mail and web surveys | |
| Oct. 1 | No class Oct. 1 (Fall Break) | L&A Ch. 14 L&A Ch. 15 | Conducting phone surveys Collecting data in groups | CITI web training |
| Oct. 8 | | L&A Ch. 16 L&A Ch. 17 | Data acquisition and cleanup Qualitative methods | Literature review |
| Oct. 15 | No class Oct. 15 (instructor traveling) | L&A Ch. 18-20 L&A Ch. 21 S-Whole Book | Statistics in design Meta-analysis | |
| Oct. 22 | | L&A Ch. 22 L&A Ch. 23 L&A Ch. 24 L&A Ch. 25-26 | Archival data APA style Writing steps Responding to reviewers | |
| Oct. 29 | No class Oct. 29-31 (Conference) | | | |
| Nov. 5 | No class Nov. 5 (conference) | | Article review presentations | Article review presentations |
| Nov. 12 | No class Nov. 12 (Vets Day) | L&A Ch. 27 L&A Ch. 28 | Research lab Multilevel modeling | |
| Nov. 19 | No class Nov. 21 (Thanksgiving) | L&A Ch. 30 | Grant seeking | |
| Nov. 26 | No class Nov. 26 | L&A Ch. 31 L&A Ch. 32 | Demographic and cultural issues Theory | |
| Dec. 3 | | | Project presentations | Project presentations |
| Dec. 10 | Dec. 10 is Last Meeting | | Project presentations | Final project (including Methods section) |

Note: This syllabus may be appended by the instructor if necessary. Students are responsible for any changes made.