

University of North Carolina Wilmington
PSY355-004 INTRODUCTION TO EXPERIMENTAL PSYCHOLOGY
SYLLABUS SPRING 2012

Dr. Nora E. Noel, Instructor

Ms. Emily Randall, Teaching Assistant

Class time MWF 12 – 1:50, Rm 216 S&B

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Textbook and readings:

1. Webster, S. (2007) **Hand in hand: Research design and statistics in the behavioral sciences**. (Atomic Dog—an imprint of Cengage/Thomson learning) REQUIRED
2. American Psychological Association **Publication Manual 6th Edition** (2009) REQUIRED
3. Ethics Certificates must be **completed before the first test**. The site is <http://www.uncw.edu/ors/documents/HowToRegisterforCITtraining.pdf>
You must complete the **Basic Human Subjects Protection** course for Social-Behavioral Researchers
4. Other readings will be required and posted as needed on the website. Details will be available in class.

Class prerequisite: To be a member of this class, you are required to have completed PSY 225 (Psychology Statistics) with a passing grade. If you have not completed this course, please see me immediately.

Catalog description: 4 credits. Prerequisite PSY225. Basic principles of research design and evaluation, including techniques of data collection and analysis, and conduct, interpretation and reporting of various types of psychological research. Experimental research is emphasized.

Class Requirements: This is a four credit advanced level course in Psychology, requiring both lecture and laboratory hours to complete the course. In order to pass the course, there are certain standards you will need to meet. These will be outlined at the beginning of class.

1) Attendance and participation in laboratory and classroom exercises and projects is so important to the course, that 10% of your grade will be determined by your attendance and participation. Prompt attendance (that is, arriving on time) and attending the full class (that is, not leaving early) are considered part of participation. We take attendance every day. In addition, we have pop quizzes that count as part of your attendance and participation grade. For a four credit class, you are normally expected to spend six hours in class (lectures, class projects, experiments, etc.) and six hours out of class (studying, data entry and analysis, writing, etc) each week. Do not miss a class.

2) Lectures will be given as part of class. On your tests and pop quizzes, you are required to know the material presented in the lectures as well as the material in the book and the posted readings.

3) Laboratory Writing Assignments will also be completed as part of class and outside of class. Usually they will necessitate working as part of a team. These assignments must be completed by the deadline given in class for you to get credit for them. All writing assignments must be turned in electronically (no paper) and points will be taken off if they are misspelled and ungrammatical.

→Note: the UNCW Writing Center has tutors to help you with writing clearly in APA style.

4) Presentations of research are part of class. You will have to prepare at least two, one at the beginning of the course and one at the end. Details will be given in class.

5) Tests will be given in class at announced times (see below). Tests are comprehensive. Each test will emphasize the new material but will incorporate some material from previous tests. A make-up test will be given only if you produce a legitimate excuse for being absent (for example, a note from the ER doctor). A

make-up test may be an oral test, requiring you to give answers on the spot. Occasionally, a **pop quiz** or writing assignment will be given in class. These count as part of your attendance/participation grade. There will be absolutely no make-ups on pop quizzes.

Lecture Outline

Unit 1: Values and Ethics in Science (Chapters 1 – 3 and other posted readings)

Using the library to do background research

Using the APA publication manual

Ethics certificates must be turned in by date of Test 1 (February 1).

Test 1 February 1

Unit 2: Operational Definitions of Dependent and Independent Variables (Chapters 4 and 5)

Unit 3: Hypothesis Testing with One-Factor Designs (Chapters 6 – 9)

Test 2 March 9

Unit 4: Factorial designs (Chapters 10 and 11)

Test 3 March 26

Unit 5: Other types of designs used in Psychology (Chapters 12 and 13)

Final Exam (comprehensive) Friday May 4, 11:30 – 2:30

Laboratory Outline

Unit 1: Finding, interpreting and presenting scientific psychological literature

Initial Class presentations (Group Power Point presentation) January 20 & 23

Unit 2: Conducting a simple experiment and writing about it

Laboratory Report 1 (due February 24)

Unit 3: Conducting a 2nd experiment and writing about it

Laboratory Report 2 (due April 4)

Unit 4: Conducting a 3rd experiment and writing about it

Laboratory Report 3 (present April 27 or 30; paper due Friday May 4)

Determination of Your Grade:

The Lecture and the Laboratory sections each count 50% of your grade as follows.

Lecture (50% of grade)

5% Test 1

10% Test 2

10% Test 3

15% Final Exam

10% Class attendance and participation (including pop quiz and surprise writing assignments in class)

Laboratory (50% of grade)

5% Presentation

10% Laboratory Report 1

15% Laboratory Report 2

20% Laboratory Report 3

Recap of Schedule:

January

18 Library Day (meet Ms. Lisa Williams in Library classroom, 1022)

20 & 23 Article Presentations

February

1 Test 1

24 Lab report 1 due

March

9 Test 2

26 Test 3

April

4 Lab report 2 due

27 or 30 Lab Report 3 presentation due

May

4 Final Lab report due

Final Exam

MAY 4: 11:30 – 2:30

Important Notes about the course:

-All members of UNCW's community are expected to follow the academic Honor Code. Please read the UNCW Honor Code carefully (as covered in the UNCW Student Handbook). Academic dishonesty in **any** form will not be tolerated in this class. You could be given an F for the course. Please be especially familiar with UNC-W's position on plagiarism as outlined in the UNCW Student Handbook. **Plagiarism** is a form of academic dishonesty in which you take someone else's ideas and represent them as your own. We will discuss plagiarism in class so you understand examples.

-In addition, please note that UNCW practices a zero tolerance policy for any kind of violent or harassing behavior. If you feel you are being harassed in class, please consult with the teacher. If you are experiencing an emergency of this type contact the police at 911 or UNCW CARE at 962-2273. Resources for individuals concerned with a violent or harassing situation can be located at <http://www.uncw.edu/wsrc/crisis.html>.

-Finally, please be courteous to your teachers and class mates: turn off your cell phones, pagers or other distractions during class. You can check messages at break time. Laptop use is permitted as long as you are not distracting others (e.g. no noise, no attention-getting photos). Violation of these rules may result in your immediate dismissal from the class for that day.

Take Home Message: This is a tough class—no doubt about it. However, it is one of the most valuable courses you will take in regard to both jobs and graduate school. If you get started early and stick with it, you will learn **so much** about research and writing that you won't recognize yourself at the end of the semester.

What you should learn from PSY355 (These are the class goals)

1. Develop critical thinking skills with respect to psychological concepts.
2. Review and practical application of key statistical concepts (descriptive & inferential).
3. Understanding & use of APA format.
4. Independent practice with technical/scientific writing, as demonstrated with at least **three** APA-formatted written assignments including at least two complete APA-style research reports. These reports should be a submission-style manuscript that includes all major sections (Introduction, Methods, Results, & Discussion) and the Introduction should include a literature with references to several empirical research papers.
5. Practice conducting a literature search with a major data-base search engine (e.g., PsycINFO).
6. Active ("hands-on") research experience employing a true experimental design that includes practice in research design, data collection, and data analysis.

7. Computer competency (generally obtained through implementation of the goals noted above, especially literature search, data/statistical analysis, and report preparation).

8. Preparation for the "capstone" Category 2 course.

Optional (for this document):

9. Understanding of core concepts and experimental designs related to the practice of scientific psychology. At a minimum, this should include the following topics:

- Operational Definitions.
- Independent & Dependent Variables.
- Extraneous Variability & Confounds.
- Internal & External Validity.
- The Purpose & Use of Correlations.
- Between-Subject & Within-Subject Experimental Designs.
- Factorial Designs including Main Effects & Interactions.
- Small-N Designs.
- Research Ethics including the IRB and Informed Consent.