PSY 200 – SCIENTIFIC LITERACY IN PSYCHOLOGY

Section 093  
Stephen F. Austin State University  
Spring 2012

Professor: Jeremy D. Heider, Ph.D.  
Class Location: ED 269  
Meeting Times: TR 12:30-2:10  
Credit Hours: 4  
Department: Psychology (ED 215)  
Office Location: ED 215H  
Office Hours: MTWR 9:00-11:00; or by appointment  
Phone Number: (936) 468-1584  
E-mail: heiderj@sfasu.edu

Text & Materials:  
*Note.* We will be using this text in e-Book format. It can be purchased at:  
http://www.coursesmart.com/9780205794348?__professorview=false&__instructor=1209412&__instructorinstitution=Stephen+F.+Austin+State+University&__instructorcourse=PSY+200&__instructorterm=Spring+2012

*Note.* We will be using this text in e-Book format. It can be accessed at:  
http://catalog.flatworldknowledge.com/bookhub/reader/5983?e=price_1.0-ch01#%23%23%23%23%23

*Note.* Other readings will be provided for you as the semester progresses.

Course Description:  
Topics will include information literacy and APA writing, ethics, introductory concepts in psychological statistics and research methods, and interpretation of data tables and graphs. This is as a foundation course for psychological statistics and research methods, and prepares students to be better consumers of psychological science both in and outside the classroom. Thus, there will be a strong focus on linking content with current examples in the news.

*Dr. J’s Description (the real scoop!):*
As noted in the catalog description, the information you learn in this course will serve as a “foundation” for our junior-level courses in statistics (PSY 330) and experimental methods (PSY 341). We will also put considerable effort into mastering APA-style writing, which will serve you well in a wide variety of psychology courses (not to
mention other courses that might require your papers to be written in APA style). And last but not least, you will gain a better understanding of the psychological research process as a whole, giving you the ability to understand and critically evaluate the wealth of psychological research that surrounds us, from the most formal scientific journals to everyday forms of media.

**Course Objectives:**

- To introduce basics of statistical data analysis, including descriptive and inferential statistics.
- To provide a broad overview of research methods in psychology.
- To familiarize students with how psychologists think, how they conduct research, and what the results of the research mean.
- To help students develop numerous skills, including critical analysis, integration, oral presentation, and writing.
- To enable students to design, execute, and report a psychological experiment.
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- To enable students to design, execute, and report a psychological experiment.
- To learn and practice writing skills and examine the writing style appropriate for various types of papers in psychology.

**Program Learning Outcomes (PLOs):**

<table>
<thead>
<tr>
<th>PLO</th>
<th>Proficiency Level</th>
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<tbody>
<tr>
<td>The student will demonstrate familiarity with the major concepts,</td>
<td>Intermediate</td>
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<tr>
<td>theoretical perspectives, empirical findings, and historical trends in psychology.</td>
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<td>The student will understand and apply basic research methods in</td>
<td>Intermediate to Advanced</td>
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<td>psychology, including research design, data analysis, and</td>
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<tr>
<td>interpretation.</td>
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<td>The student will respect and use critical and creative thinking,</td>
<td>Intermediate to Advanced</td>
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<td>skeptical inquiry, and, when possible, the scientific approach to</td>
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<td>solve problems related to behavior and mental processes.</td>
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<td>The student will understand and apply psychological principles to</td>
<td>Intermediate</td>
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<tr>
<td>personal, social, and organizational issues.</td>
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<tr>
<td>The student will value empirical evidence, tolerate ambiguity, act</td>
<td>Intermediate</td>
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<tr>
<td>ethically, and reflect other values that are the underpinnings of</td>
<td></td>
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<tr>
<td>psychology as a science.</td>
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**Exemplary Educational Objectives (EEOs):**

No exemplary educational objectives are assessed in this course.

**Student Learning Outcomes (SLOs):**

Students with a passing grade in this course should be able to:

- Demonstrate the ability to locate and evaluate sources of research information through the use of library database resources in psychology.
- Write a research report in appropriate scientific style, following American Psychological Association (APA) format.
• Use citations, references, and quotations correctly in psychology papers.
• Use self-evaluation and others’ comments to revise a written assignment.
• Discuss the importance of statistics and why they are necessary in virtually every field of study.
• Define and describe a number of basic statistical concepts, including descriptive and inferential statistics.
• Create and interpret tables and graphs of different formats.
• Distinguish among the general scientific approaches that are used in psychological research.
• Demonstrate an understanding of research-related ethical issues.

Means of Assessment:
In this course, students will demonstrate the course outcomes in the following ways:
• Performance on homework assignments related to each unit of the course.
• Performance on examinations related to statistics and research design.
• Completion of a research report in APA style, including drafting, peer review, and revision.
• Completion of a class presentation analyzing a piece of published empirical research.
• Participation in class discussions and demonstrations.

Course Requirements:

Homework Assignments:
There will be two homework assignments for each unit of the course (4 units = 8 homework assignments). The nature of these assignments will vary depending on the particular unit we are covering at the time (e.g., expect to do some math for the statistics homework!). Also, portions of some of these assignments will need to be completed in the first-floor computer lab (ED 127). I will try to make class time available for this purpose whenever possible, but be prepared to visit the lab outside of our normal class meeting times.

Exams:
The first two units of the course (statistics and research methods) will each culminate in an in-class examination. The statistics exam will consist of both calculation-based and conceptual items, whereas the research methods exam will be mostly conceptual. Any information found in the textbook, supplemental readings, lectures, or class discussions will be fair game for the exams.

Research Report:
This class is designated as a writing enhanced course. This means that:
• Each student will write a minimum of 3000 words or 10 pages throughout the semester.
• The course will include instruction in discipline-based writing among its objectives.
• Each student will be required to revise and re-submit at least one assignment during the term.
• Out-of-class writing assignments will count for a minimum of 20% of the course grade.
The primary manner in which the writing enhanced requirements will be fulfilled will be through the writing of an APA-style research report to close the third unit of the course. This report will be based on actual data we will collect as part of a class project. Further details on this project and the associated research report will be provided as the semester progresses.

**Class Presentation:**
At the close of the fourth and final unit of the course, you will prepare and deliver an oral presentation analyzing and evaluating the content of a published research report. This presentation will most likely be between 10 and 12 minutes in length. You will be expected to select a published research report of your choosing, read and evaluate it thoroughly, and then deliver a presentation explaining the most important aspects of the research. This presentation should utilize Microsoft PowerPoint, and should provide information in both written and visual (e.g., tables, graphs) form. Further details on this presentation will be provided as the semester progresses.
Grading Policy:

<table>
<thead>
<tr>
<th>Material</th>
<th>Possible Points</th>
<th>% of Total Points</th>
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<tbody>
<tr>
<td><strong>Homework Assignments:</strong></td>
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<tr>
<td>Statistics (2)</td>
<td>30 (15 pts each)</td>
<td>10%</td>
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<tr>
<td>Methods (2)</td>
<td>30 (15 pts each)</td>
<td>10%</td>
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<tr>
<td>Writing (2)</td>
<td>30 (15 pts each)</td>
<td>10%</td>
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<tr>
<td>Evaluation (2)</td>
<td>30 (15 pts each)</td>
<td>10%</td>
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<tr>
<td><strong>Exams:</strong></td>
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<tr>
<td>Statistics Exam</td>
<td>30</td>
<td>10%</td>
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<tr>
<td>Methods Exam</td>
<td>30</td>
<td>10%</td>
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<td><strong>Research Report:</strong></td>
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<tr>
<td>Research Report – Draft</td>
<td>15</td>
<td>5%</td>
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<tr>
<td>Research Report – Final</td>
<td>45</td>
<td>15%</td>
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<tr>
<td><strong>Class Presentation:</strong></td>
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<td></td>
<td>30</td>
<td>10%</td>
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<tr>
<td><strong>Class Attendance &amp; Participation:</strong></td>
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<tr>
<td>General Participation</td>
<td>15</td>
<td>5%</td>
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<tr>
<td>Peer Review Participation</td>
<td>15</td>
<td>5%</td>
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<tr>
<td></td>
<td><strong>300</strong></td>
<td><strong>100%</strong></td>
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Grading Scale:

A = 270-300 pts
B = 240-269.5
C = 210-239.5
D = 180-209.5
F = 179.5 or less

*Note.* These grade cutoffs are FIRM. In other words, I do not round grades. So if you end up with 269 points (or 268, or 267…), don’t even bother asking me if I will round your grade up to an A. I won’t.
Attendance Policy:
Class attendance is expected. Lectures, class discussions, demonstrations – and most importantly, your participation – are all valuable contributors to your learning. If you know you are going to be late to (or leave early from) class, please come anyway. I would rather have you present for part of class than to miss it completely. For more information on SFA’s policy on attendance and excused absences, visit http://www.sfasu.edu/upp/pap/academic_affairs/CLASS_ATTENDANCE_AND_EXCUSES.html

Academic Integrity:
Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Cheating in any form (e.g., copying your neighbor’s test answers; committing plagiarism on a paper) is unacceptable. Cheating is grounds for failure in the course, and you may also be subject to suspension or dismissal from the university. In other words, DON’T CHEAT.

Definition of Academic Dishonesty:
Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one’s own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one’s paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/academic_integrity.asp.

Withheld Grades (Semester Grades Policy A-54):
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

Statement on Americans with Disabilities:
If you have a documented disability or suspect that you have a learning problem and need accommodations, please contact Disability Services in the Human Services Building, Rm
325 (Phone: 936-468-3004). You may also visit their website for more information: To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/

**Acceptable Student Behavior:**
Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate or inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

I expect every student in my courses to be good community members by remembering to **CONSIDER THE NEEDS OF OTHERS.** This means a lot of things: (1) If others need help (e.g., asking to see your notes), then help them. (2) Don’t be disruptive in class (e.g., via excessive talking); other people might actually want to pay attention. (3) **TURN OFF YOUR CELL PHONES OR OTHER THINGS THAT MAKE NOISE.** They are annoying. No one cares that you have a phone call, nor do they need to hear what witty song you have as a ringtone. (4) Please **SHOW RESPECT FOR OTHERS’ IDEAS AND OPINIONS.** In this class we may occasionally discuss personal and/or sensitive issues that provoke strong feelings. Please be sensitive to the feelings of others in discussing these issues. Also remember that good people can have differing opinions, and that part of the purpose of the class is to increase your familiarity with how others might think and feel about various issues related to psychology and life.

**General Course Notes:**
A guiding principle in this (and any) course is to **READ EARLY and READ OFTEN.** You will maximize the benefits of lectures by completing the assigned readings before we cover them in class, and you will be better prepared for exams if you have read the material more than once. I also encourage you to ask questions, both to foster in-class discussion and to ensure that you have an understanding of what is covered in the textbook and lectures.

If necessary, you may drop this course as long as it is no later than **Wednesday, March 21st.** For more information on SFA’s add/drop policy, visit http://www.sfasu.edu/upp/pap/academic_affairs/add_drop.html
This course will utilize the **myCourses** online system (a.k.a. **Blackboard**) to facilitate learning and communication. The myCourses page for this class will be used to post course documents such as the course syllabus and lecture notes, and you will also be able to check your grades using this system.

*Note:* I highly recommend printing out the lecture notes and bringing them to class – your printouts will make a handy place to take additional notes. However, don’t make the mistake of thinking that having access to my PowerPoint notes will serve as a substitute for class attendance. It won’t!!! We will discuss a great deal of information above and beyond what is presented in the slides, so if you make a habit of missing class I can guarantee you will be at a serious disadvantage when it comes time for the exams and other assignments.

To log into myCourses, go to [http://mycourses.sfasu.edu/](http://mycourses.sfasu.edu/). This will take you to the login page (your user name and password are the same ones you use to log into mySFA).
Course Calendar:

*Note.* This proposed schedule is tentative; changes may be made as necessary. If changes are made, they will only be announced in class – so make sure you attend regularly!

**Unit 1: Introductory Statistics**

1/19, 1/24: Course Introduction; Variables and Distributions (Price, Ch 11)

1/26, 1/31: Relationships Between Variables (Price, Ch 11)

**Statistics Homework #1 Due Thursday, 2/2**

2/2, 2/7: Preparing Data for Analysis (Price, Ch 11)

2/9, 2/14: Basic Inferential Statistics (Price, Ch 12)

**Statistics Homework #2 Due Thursday, 2/16**

**STATISTICS EXAM: THURSDAY, 2/16**

**Unit 2: Introductory Research Methods**

2/21, 2/23: Research Ideas and Hypotheses (Price, Chs 1-2, 4-5)

2/28, 3/1: Ethical Issues in Psychological Research (Price, Ch 3)

**Research Methods Homework #1 Due Tuesday, 3/6**

3/6, 3/8: Nonexperimental Methods (Price, Chs 7, 9)

3/13, 3/15: NO CLASS (SPRING BREAK)

3/20, 3/22: Experimental Methods (Price, Chs 6, 8)

**Research Methods Homework #2 Due Tuesday, 3/27**

**RESEARCH METHODS EXAM: TUESDAY, 3/27**

**Unit 3: Writing in American Psychological Association (APA) Style**

3/29: General Aspects of Writing for Psychology (Price, Ch 10; Dunn, all chapters)

4/3: Elements of APA Style (Price, Ch 10; Dunn, all chapters)
4/5: NO CLASS (EASTER BREAK)

4/10: Elements of APA Style (cont’d)

Writing Homework #1 Due Thursday, 4/12

4/12, 4/17: Writing Research Reports (Price, Ch 10; Dunn, all chapters)

Writing Homework #2 Due Thursday, 4/19

4/19: Peer Review Day (bring hard copy of research report draft)

Draft of Research Report Due Tuesday, 4/24

Unit 4: Evaluating Psychological Research

4/24: Evaluating Professional Sources of Psychological Research (Price, Chs 1-2)

Evaluation Homework #1 Due Thursday, 4/26

4/26: Evaluating Popular Sources of Psychological Research

Evaluation Homework #2 Due Tuesday, 5/1

5/1: Presenting Psychological Research (Price, Ch 11)

Final Version of Research Report Due Thursday, 5/3

5/3: CLASS PRESENTATIONS

THURSDAY, 5/10, 10:30-12:30: CLASS PRESENTATIONS (cont’d)