

PSYCHOLOGY 200
Introduction to Scientific Thinking and Design in Psychology

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10:30 – 11:30, 12:30 – 1:30

Texts:

1) Solso & MacLin. (2002). *Experimental psychology. A case approach*. 7th edition. Allyn & Bacon (paperback). All Chapter assignments in the schedule below (S&M, ch. x) are in this book. Available at Zavelle's and at Temple Store. Some used copies may be available.

2) Rosnow & Rosnow. (2003). *Writing papers in psychology*. 6th edition. Thomson Wadsworth (paperback). All R&R assignments are in this book. Available at Zavelle's and at Temple Store. Some used copies may be available, but since it is a 2003 publication, that is not very likely.

Introduction:

This course presents an introduction to the scientific process in psychology. It involves study of the scientific method, as well an introduction to the actual carrying out and writing up of research, with emphasis on writing. There will be three demonstration experiments (**Demos.**) and one full-scale **Experiment** to be carried out and written up. Each one will be carried out and analyzed by the class as a group, although each of you will separately write each assignment. The demos. are small-scale projects; the experiment consists of a complete research paper, as if you were submitting it to a journal. There are other assignments, as well, which are presented in the schedule beginning on page 3.

An important part of this course consists of PARTICIPATING in research carried out in class. Adequate written presentation of a research project depends on complete understanding of what was done, and why. One's understanding of the logic of an experiment is greatly enhanced by participating in the research; therefore, it is crucial that students be in class for all sessions. In addition, some class time will be spent analyzing data, and reviewing earlier assignments, both of which are crucial for adequate student performance. Students who are consistently late and/or absent from class will find themselves lacking in understanding of what has been done, and will write poor papers because of that. A significant part of the grade is based on presence in class and participation in class research projects. Plan your schedule accordingly.

The schedule is a full one – after the first few weeks, there is approximately one written assignment due every week. The schedule has been designed so that students will have available any information needed for a given assignment. For example, Demo. 2 is not due until we will have reviewed Demo. 1 with each student individually. (Here is another example of the importance of your presence in class.) In addition, in order for us to return Demo. 1 in time for review before Demo. 2 is due, it is necessary that we receive it in time. This is true of all assignments – each is dependent on others. Therefore, assignments must be handed in when due.

ASSIGNMENTS HANDED IN AFTER THE SCHEDULED CLASS ARE LATE; THAT IS, ASSIGNMENTS ARE DUE IN CLASS, NOT SOME TIME LATER THAT SAME DAY. IF AN ASSIGNMENT IS HANDED IN AFTER CLASS, IT IS LATE, AND WILL BE GRADED ACCORDINGLY. THE GRADE FOR LATE ASSIGNMENTS WILL BE LOWERED ONE FULL GRADE (E.G., A- BECOMES B-; B BECOMES C; ETC. NO ASSIGNMENT WILL BE ACCEPTED AFTER THE CLASS FOLLOWING THE ONE IN WHICH IT WAS DUE. NO MAKE-UPS WILL BE GIVEN FOR EXAMS, EXCEPT IN

EXTRAORDINARY CIRCUMSTANCES, BASED ON A WRITTEN EXCUSE (SUCH AS A DOCTOR'S NOTE). DO NOT ASSUME THAT YOU WILL BE ABLE TO MAKE UP AN EXAM.

PLAGIARISM

This course centers on research and writing, and in order to learn how to carry out research and how to think and write in scientific style, it is imperative that each person carry out all assignments and submit his or her own work. Presenting someone else's work as your own is plagiarism, and it undermines any learning that might be possible in the course, as well as making other people's honest efforts worth less. It is of utmost importance that all the work handed in in this course be your own, and therefore plagiarism will be dealt with severely. If you try to present the work of others as your own, and you are caught, **you will fail the course**. That is, plagiarism will have impact far beyond the assignment on which it occurred. (For the information of students, it is usually not very hard to tell when someone is handing in another author's work as his or her own.) We will spend time in class discussing what is and what is not plagiarism, and Rosnow and Rosnow spend time discussing it (read pp. 64 – 66). If you have any questions concerning the ethical implications of any aspect of your work in this course (or in any other course if you want an outside opinion) come and talk to the instructor or one of the teaching assistants.

Cheating on an exam is comparable to plagiarism and is just as serious. It will also result in failure for the **course** (not just for the exam on which cheating occurred).

STUDENTS WITH DISABILITIES

Any student who has a need for accommodation due to a disability should contact the instructor or one of the assistants to discuss his or her specific situation. Disability Resources and Services (215 – 204 – 1280; Ritter Annex 100) can coordinate any necessary accommodations for exams and so forth.

SCHEDULE

Date	Monday	Date	Wednesday
		1/22	General overview of course
1/27	Introduction to scientific inquiry (S&M, ch. 1, 16, 13, 26);	1/29	Introduction to scientific inquiry: discussion of scientific presentation of research. HAND IN ANSWERS TO QUESTIONS FOR S&M CH. 16 (OMIT #4), CH. 13 (QUESTIONS 1 – 4), CH. 26 (QUESTIONS 1 – 4).
2/3	More on science; overview of experimental design (ch. 2); ethics in research (S&M, ch. 3; R&R 63 - 66);	2/5	Demo. 1 carried out and analyzed; the research process & introduction to writing papers
2/10	The research process & introduction to writing papers (R&R, ch. 1; S&M ch. 10); Experiment 1 carried out and analyzed; reading for Exp. 1 available	2/12	QUIZ on Exp. 1 reading; Exp. 1 discussed; completion of introduction to research. Library searches (R&R, ch. 2; S&M, ch. 9)
2/17	EXAM 1 on S&M, ch. 1, 2, 3, 10; R&R ch. 1, 2, and pp. 88 (bottom) – 99; introduction to format of references	2/19	Design techniques (S&M, ch. 4, 19, 21); HAND IN ANSWERS TO CH. 19, QUESTIONS 1, 2, 4, 7, 8; AND FOR CH. 21; REFERENCE LIST FOR EXP. 1 DUE
2/24	Demo. 2 carried out and analyzed; reference list returned; DEMO 1 DUE	2/26	Experimental design and control (S&M, ch. 5, 15, 24); HAND IN ANSWERS TO QUESTIONS FOR CH. 15, 24. Discussion of writing process (R&R, ch. 5 – 7)
3/3	Demo. 1 returned and reviewed; Quiz on R&R, ch. 5 – 7.	3/5	Control of subject variables (S&M, ch. 7, 11); OUTLINE OF INTRO. FOR EXP. 1 DUE
3/17	Demo. 3 carried out and analyzed; DEMO. 2 DUE ; outline of Intro. for Exp. 1 returned and reviewed	3/19	DESIGN CRITIQUES I (CH. 6) DUE and discussed
3/24	Demo. 2 returned and reviewed;	3/26	HAND IN ANSWERS TO QUESTIONS 1 – 4 FROM CH. 11; 1st DRAFT OF INTRO. 1 DUE.
3/31	DEMO. 3 DUE;	4/2	

4/7	DESIGN CRITIQUES II (CH. 8) DUE; DEMO 3 returned & reviewed	4/9	EXP. 1 METHOD DUE; Draft of Intro. to Exp. 1 returned & discussed
4/14	EXP. 1 DISCUSSION 1st DRAFT DUE; Exp. 1 Method returned	4/16	2nd DRAFT OF INTRO. DUE
4/21	Exp. 1 Discussion 1 st draft returned and discussed	4/23	2 nd draft intro. returned and discussed
4/28	EXAM 2 on S&M, ch. 4, 5, 7; Exp. 1 Method & Results returned & discussed	4/30	2nd DRAFT DISCUSSION DUE
5/5	2 nd draft discussion returned		
	FINALS WEEK: EXPERIMENT 1 DUE		

REMEMBER: ASSIGNMENTS HANDED IN MORE THAN ONE CLASS SESSION LATE WILL NOT BE ACCEPTED; LATE ASSIGNMENTS WILL LOSE ONE GRADE (E.G., A- \Rightarrow B-, ETC.). NO MAKE-UPS FOR EXAMS/QUIZZES EXCEPT IN EXTRAORDINARY CIRCUMSTANCES. ALL ASSIGNMENTS MUST BE TYPED

Calendar of Assignments by Type for the Semester

Date	Demo.	Exam/Quiz	S&M ch. Qs	Exp. 1	Other
1/22					
1/27					
1/29			16, 13, 26		
2/3					
2/5					
2/10					
2/12		Q: Exp. 1 reading			
2/17		Exam 1			
2/19			19, 21	Ref. List	
2/24	Demo. 1				
2/26			15, 24		
3/3		Q: R&R ch. 5 - 7			
3/5				Outline of intro.	
3/17	Demo. 2				
3/19					Design crit. 1
3/24					
3/26			11	1 st draft intro.	
3/31	Demo. 3				
4/2					
4/7					Design crit. 2
4/9				Method	
4/14				Discussion 1 st	
4/16				2 nd draft intro.	
4/21					
4/23					
4/28		Exam 2			
4/30				Discussion 2 nd	
5/5					
Finals				Final draft	

Elements of Demos

Title Page (10 Points)

1. Page header and page #
2. Running head
3. Useful title
4. Correct by-line
5. Organization

Method (25 points)

1. Participants adequately described (5)
2. Materials comprehensible and complete; no procedure in materials (10)
3. Procedure replicable from presentation (10)

Results (15 points)

1. Scoring (students score themselves?)
2. Describe table
3. Statistics presentation comprehensible
4. Sentence or two summarizing results

References and Table[s] (20 points)

1. Correct order
2. Correct alphabetization for references
3. Correct format for references (book title)
4. Helpful title for table
5. Double spacing
6. Correct information in table
7. No statistics in table

Overall Format (5 points)

1. Lack of errors of other sorts in preparation of paper

Total.....75 points (adjusted for papers worth more.)

Criteria for Grading Psychology 200 Laboratory Report

Section	Points	Criteria
Title page	5	Format correct, all parts present, title helpful
Abstract	10	Correct format, study summarized effectively, nothing important left out
Introduction	20	Reasonably broad literature review, important studies cited, logical discussion, lead-in to present study, cite primary sources

Method	20	Correct format, possible to replicate study from method
Results	20	Describe results, present table(s), present analyses
Discussion	15	Discuss issues, go back to issues raised in introduction, cite studies, draw out implications of present study
References, Tables	10	Correct format of references and tables

Total 100 points (above will be adjusted for papers worth more)

Students' Responsibilities for the Semester

Assignment	Points
Quiz on Exp. 1 reading	100
Answers to questions from 8 experiments (50 pts. each)	400
References for Exp. 1 (quantity and format)	100
Exam 1 on Solso & MacLin	200
Three demos. – analyze and write up results	1) 100
	2) 150
	3) 200
Total for demos.:	450
Design critiques I	150
II	150
Quiz on R&R	150
Exam 2 on Solso & MacLin	200
Exp. 1 – outline of intro.	100
1 st draft intro.	200
method & results	200
1 st draft discussion	200
2 nd draft intro	100
Final version	300
Attendance, participation, etc.	250
Total for Semester:	3250