

3750:220:001 (Class Number 71576)
Experimental Psychology
Fall 2007

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Office hrs: MW 9-10 AM

Class Information: M & W 12:15-1:55, CAS Rm. 139

LABS: (sign up for one) M (Section 011, #71577) 10-10:50, CAS 335
 W (Section 012, #71578) 10-10:50, CAS 335

Course Books

Required

Pelham, B.W., & Blanton, H. (2007). *Conducting research in psychology: Measuring the weight of smoke* (3rd ed.). Belmont, CA: Wadsworth. (ISBN: 0-534-53294-2)

Recommended (used in Professional Issues class)

Rosnow, R.L., & Rosnow, M. (2006). *Writing papers in psychology* (7th ed.). Belmont, CA: Wadsworth. (ISBN: 0-534-53331-0)

Both texts are available at the Student Union's Bookstore and on hard-copy, two-hour reserve in Bierce Library.

I will send messages and electronic materials to your UAnet e-mail account. Be sure this is active and check it periodically. To re-activate this account, change your password, transfer mail from here to another account you check regularly, etc., go to the UAkron homepage (<http://www.uakron.edu>). In the lower left corner, pull down the menu that starts with "Business Units." Select "Computing," then refer to the right-hand menu. Follow directions from here. To transfer your messages from your UAnet e-mail to another account (e.g., hotmail or aol), select E-Mail Management under E-Mail Tools, enter your UAnet id and password, then Manage My e-mail Settings. From here, click on the Forward Mail button and complete the instructions.

Course Objectives

This course lays a critical foundation for psychology majors by introducing basic concepts in research design. The overarching goal for the course is to give you the tools to think critically about research, to ask testable questions, to design sound methodologies, and to conduct and present systematic research. Throughout your upper-level courses and however you eventually use your psychology major, being a critical consumer of research and having the capabilities to design quality research are skills with unbounded possibilities.

I plan to expose you to a wide array of research methodologies used across the various fields within psychology including experiments, surveys, observation, single-participant designs, and so on. I think the best way to learn about research is to do it, and this class will emphasize a hands-on approach throughout. You will conduct research projects including hypothesis generation, data collection, data analysis, and presentation. To ground this application, we will learn and apply basic concepts used by

researchers. We'll learn these through lectures, readings, and a series of chapter quizzes, and we'll apply them through class discussions, exercises, and demonstrations as well as application assignments.

I regard research as a *process*. Single studies rarely fully answer the questions we pose, but rather whole programs of studies evolve using a myriad of methodologies to add pieces to the puzzle we are putting together. Every study is filled with design decisions that ultimately affect the value of what you learn from doing it. There is no cookbook way to design a study, and every decision is potentially critical. I find this process truly exciting, and I hope to share my enthusiasm with you. With strong research skills under your belt, the possibilities for discovery are unlimited.

The learning objectives I consider primary for this course include:

- Learning to analyze and critically evaluate ideas, arguments, and points of view.
- Learn to apply course materials to improve your thinking and problem solving.
- Developing specific skills, competencies, and points of view needed by psychologists.
- Learning how to find and use resources for answering questions and solving problems.

University, Department, and Instructor Policies

Registration. University policy dictates that: "Students whose names do not appear on the university's official class list by Sept. 10, 2007 will not be permitted to participate (attend class, take exams, or receive credit)."

Attendance. If you must miss a class, please let me know in advance and make arrangements to get work due on that day to me. University policy states: "A student is expected to attend all class meetings for which registered. A student may be dropped from a course by the Dean if absence is repeated and the instructor recommends this action; a student can gain readmission only with permission of both."

Withdrawal. University policy mandates: "A student may withdraw from a course without an adviser's or course instructor's signature through the 14th day of a semester [Sept. 10]; and up to the midpoint of the semester, a student may withdraw from a course with the signature of the student's adviser [Oct. 19]. After the midpoint of a semester, a student must have the signature of both the course instructor and the adviser [Nov. 16]. Such authorization must be dated and processed through the offices of the Registrar and the Cashier no later than the last day of the 12th week of classes [Nov. 16] ... Should the instructor or adviser refuse to sign the withdrawal form, the student may appeal to the Dean of the student's college, who shall make the final decision after consultation with the instructor and adviser who declined to approve the withdrawal. An approved withdrawal will be indicated on the University official academic record by a 'WD.' A student who leaves a course without going through the withdrawal procedure will be given an 'F' in the course."

Tape recording. The Department of Psychology notes: "It is the policy of the Department of Psychology that taping by students or others of lectures or classroom discussions of any kind shall be done only with the prior express permission of the instructor; tape recordings and other material distributed by the instructor shall be restricted to the personal use of the students enrolled in the course."

Students with disabilities or special needs. Please contact the instructor ASAP so we can arrange to accommodate those needs.

Anti-discrimination policy. It is the policy of this institution that there shall be no unlawful discrimination against any individual in employment or in its programs or activities at the University of Akron because of race, color, religion, sex, age, national or ethnic origin, disability or status as a veteran. The University of Akron prohibits sexual harassment of any form in all aspects of employment and in its

programs and activities and prohibits discrimination on the basis of sexual and racial or ethnic orientation in employment and admissions.

Instructor policies. Plagiarism is the presentation of someone else's work or ideas as your own. You will be working on teams for some projects, and I do encourage group studying. However, unless indicated, *assignments must be completed individually and will be graded as such.* It is important to clearly reference your work using APA format. Plagiarism will result in a lower grade depending on the extent of the transgression; extensive plagiarism or cheating will result in a grade of zero for that assignment or for the course and Academic Misconduct charges may be filed.

All assignments must be typed (except worksheets requiring filled-in answers). You are responsible for complying with any changes announced in class. Incompletes will be given only in extenuating circumstances. Late papers will be penalized (10% reduction/day) unless arrangements are made at least one week in advance of the due date. Make-up quizzes will not be given. All work is due as hardcopy (i.e., not electronically) unless permission is granted in advance.

Occasionally, a discrepancy arises between a student's and an instructor's (or TA's) perceptions regarding grades. If you have some concerns about a grade on a quiz or on a writing assignment, please feel free to come speak with me about it during office hours. However, please be aware that if you believe your work warrants additional points and would like to discuss that, you must present a clear, compelling case in writing, within two class periods of receiving your grade on the quiz or assignment. I will be happy to discuss quizzes, quiz materials, and your responses with you, but I will not discuss point adjustments without your written case in my hand. (This does not mean that submitting a case guarantees point adjustments. Indeed, point adjustments may be higher or lower than the original grade.)

Assignments and Grading

There are three major categories of assignments for the course, totaling 500 points:

- (1) Chapter Quizzes (totaling 220 points; 44% of the final grade)
- (2) Homework Assignments (totaling 55 points; 11%)
- (3) APA-style Papers from Lab (totaling 225 points; 45%)

All graded assignments are due in class, NOT in lab.

Keep up. There are many assignments for this class, and they build on each other. The schedule is demanding and tight. If you fall behind early, this will snowball across your remaining assignments. Use the Schedule of Assignments on page 6 to keep up and to record your grades.

Computation of Grades

Points will be summed across all assignments. Final letter grades will follow the standard pattern of 93% and above (465-500 points) = A; 90%-92.9% (450-464 points) = A-; 87%-89.9% (435-449) = B+; 83%-86.9% (415-434) = B; 80%-82.9% (400-414) = B-; 77%-79.9% (385-399) = C+; 73%-76.9% (365-384) = C; 70%-72.9% (350-364) = C-; 67%-69.9% (335-349) = D+; 63%-66.9% (315-334) = D; 60%-62.9% (300-314) = D-; and below 60% (below 300) = F. Lab and class participation will affect borderline grades, both favorably and unfavorably.

APA Format

Some worksheets and your research papers must conform to the guidelines of APA format. Your textbook (Ch. 11) has some basic information that will be helpful as well as a demonstration manuscript in Appendix 4. Additionally, hard copies of the *Publication Manual of the American Psychological Association* (5th ed.) can be found in the Akron U libraries, including in the reserve stacks at Bierce where

they are non-circulating, in the Psi Chi office (which also has a hardcopy style helper. Also, please consult Rosnow and Rosnow's text. Help with APA format can be found on-line at:

- (1) <http://webster.comnet.edu/apa/index.htm>
Cites online resources, including sample papers, that may be helpful.
- (2) <http://www.uwsp.edu/psych/apa4b.htm#IA>
This is an especially useful tool for checking style points.

Chapter Quizzes

Individual credit. Each chapter quiz will comprise 10 multiple choice questions worth 2 points each. These will be given in class on the assigned dates (see the Schedule of Classes), and each will cover the materials in one chapter and its accompanying lecture(s). There will be ten quizzes overall, covering Chapters 1 through 10 of Pelham and Blanton (2003). The lowest of these individual scores will be dropped to yield up to 180 *individual* points.

Group credit. There will be an opportunity to earn group credit on each of the quizzes when each is taken in class on the assigned date. After all individuals have handed in their quiz, your assigned 3-4 person group will answer each of the quiz questions *as a group*. **Every group member will get one-half point for every correct answer** (with a maximum score then of 5 for each quiz). There will be nine group exams, with the lowest dropped, to yield up to 40 *group* points.

There will be no group portion for the stat quiz taken on Sept. 5. Rather, this one quiz will be taken only as a group and will count for 20 *individual* points (i.e., 2 points per item).

Students requiring extra time or special facilities must be registered with the disability center on campus. **No make-up quizzes will be given.** All quizzes will begin at the start of the assigned class period (see page 6), and no one will be permitted to participate in the group portion if they are late for the quiz. The individual grade will be extrapolated to cover the group portion if a student misses an in-class quiz because of an excused absence; in the case of an unexcused absence, both the individual and group grade for that quiz will be zero.

Homework Assignments

There are three homework assignments: (1) the APA Style Worksheet (worth 15 points); (2) a worksheet on Presenting and Analyzing Data (20 points); and (3) the Chapter 12 Application Assignment. Handouts specific to each will be distributed in class, and the due date for each assignment appears in the Schedule of Assignments on page 6. The coupon on page 7 can be used to grant a one-time extension for a homework (assignments due Monday are extended to Wednesday; due Wednesday to Friday).

APA-style Papers from Lab

You will complete four research projects and papers in lab (see page 7 for the Schedule of Labs). These projects focus on (1) the Bell Curve, (2) Artificial Intelligence, (3) the Stroop Effects, and (4) Fat Attitudes. The coupon on page 7 can be used to grant a one-time extension for a final paper (papers due Monday are extended to Wednesday; due Wednesday to Friday). The sections required for each paper and the general grading rubric for each section within a paper appear on page 8.

There is a general flow to these papers. First and foremost, they build on each other, growing more complete and complex as we go. They are designed to give you the most practice writing the core sections of an APA-style paper: the Methods and Results sections.

Second, they follow a similar procedural pattern beginning with (1) data collection and entry into SPSS, (2) data analysis, (3) drafting and getting peer feedback, and (4) finalizing for grading. All data

will be collected from you and your classmates. You will need to serve as a participant in three of the studies (not the Bell Curve) outside of lab time, Handing in the required data and data verification automatically will earn 5 points each time; failure to hand in data on time will result in the automatic deduction of 25% of the total points for that paper (i.e., a final paper grade of no higher than a C). **HAND IN YOUR DATA ON TIME.**

Supervised lab time in the computer lab (CAS 319) will be provided for all projects, and you will work with your assigned team to do these analyses. You may need to arrange for additional time outside lab to complete these analyses.

Peer review opportunities also are provided during lab time for each project. **To be eligible to participate in peer review labs**, you must come to lab with a *reasonable* draft of your final product. Lab time then can be used to work with your group and your TA to polish and complete your paper as well as provide feedback to your team members.

Teamwork

You will be assigned to a 3-4 person at the start of class. You will complete the follow-up group portion of each quiz, do the one statistics quiz, analyze project data, and peer review each other's work in lab with these team members. Except as just noted, **all other work will be done individually, will require that a unique assignment be handed in by each individual, and will be graded individually.**

Here are some pointers for making the most of your team work:

- Agree on meeting times outside of class, use your in-class lab time wisely (including consultation time with instructors), and designate clearly what each person should do before the next meeting.
- Do all of your required (and agreed-on) individual preparation on time, and come to group meetings and lab sessions prepared. Let everyone know in advance if you must miss a scheduled meeting. Please remember that when you don't do your work (or when you do it sloppily), you are not just hurting yourself but may be hurting the rest of your group!
- **If things are not going well in your group** . . . first, please try to work out the problems within your group. But you will also have some options if meetings aren't solving the problem:
 - If a team member refuses to cooperate, the remaining group members should let the instructor and/or TA know this.
 - If a group member is not cooperating, meet with your group and try to work out a resolution to the problem. If the non-cooperation continues, meet as a group with your instructor and/or TA (1) If no resolution is achieved, the cooperating team members should notify the uncooperative member politely but clearly in writing that s/he is in danger of being fired; you must give a copy of this notification to your instructor; (2) If there is no subsequent improvement, the team should notify the individual (again in writing and with a copy to the instructor) that s/he is no longer part of the team. The fired student must meet with Dr. Yoder to discuss options, including possibly moving to another group that agrees to accept the student or to complete the work alone.
 - Similarly, if an individual feels that s/he is shouldering an inequitable burden of the work load, s/he may issue a warning memo (a written notification) to each team member. The group should meet as a whole and try to work out a resolution to the problem. If there is no improvement, the person may quit the team and join another group that agrees to accept the student or complete the work alone.

Schedule of Assignments

	Due Date	Pt Value	MY POINTS
CHAPTER QUIZZES*		individual / group	
Ch. 10 - Group Stat Quiz	W, Sept. 5	20 / 0	
Ch. 1 - Knowing	W, Sept. 12	20 / 5	
Ch. 2 - Logic, Art, & Ethics	W, Sept. 19	20 / 5	
Ch. 3 - Measurement	W, Oct. 3	20 / 5	
Ch. 4 - Surveys	M, Oct. 15	20 / 5	
Ch. 5 - Threats	M, Oct. 29	20 / 5	
Ch. 6 - Nonexperiments	M, Nov. 5	20 / 5	
Ch. 7 - Experiments	M, Nov. 12	20 / 5	
Ch. 8 - Quasi-Experiments	W, Nov. 21	20 / 5	
Ch. 9 - Choosing the Right Design	W, Nov. 28	20 / 5	
Subtotal		180 / 40	
* lowest quiz dropped			
HOMEWORK ASSIGNMENTS			
APA Style Worksheet	W, Sept. 5	15	
Chapter 12 Application	W, Oct. 31	20	
Presenting and Analyzing Data	Dec. 10 noon in Dr. Yoder's Box	20	
Subtotal		55	
LAB ASSIGNMENTS			
Participant Data**			
Artificial Intelligence	M, Sept. 24	5	
Stroop Test	M, Sept. 24	5	
IAT data for Fat Attitudes	M, Sept. 24	5	
Bell Curve Paper	M, Oct. 1	25	
Artificial Intelligence Paper	M, Oct. 22	35	
Stroop Paper	W, Nov. 14	70	
Fat Attitudes Paper	Dec. 10 noon in TA's Box	80	
Subtotal		225	
** failure to hand in complete data in class on Sept. 24 will result in a pre-graded 25% reduction on the applicable paper			
TOTAL		500	

Schedule of Labs

<u>Date</u>	<u>Topic</u>
Aug. 27/29	Statistics Refresher
Sept. 3/5	NO LABS (No lecture on Sept. 3 – Labor Day holiday)
Sept. 10/12	Lecture: APA style
Sept. 17/19*	Bell Curve Study data collection and SPSS data entry
Sept. 24/26	Draft Methods and Results sections for Bell Curve Study – peer review
Oct. 1/3	Lecture: Using SPSS
Oct. 8/10*	Analyze AI data
Oct. 15/17	Draft Methods and Results sections for Artificial Intelligence Study – peer review
Oct. 22/24*	Analyze Stroop data
Oct. 29/31	Draft Introduction and Methods sections for Stroop Study – peer review
Nov. 5/7	Draft Results and remaining sections for Stroop Study – peer review
Nov. 12/14*	Analyze IAT and AFA data
Nov. 19/21	Draft Introduction section for Fat Attitudes Study – peer review
Nov. 26/28	Draft Methods and Results sections for Fat Attitudes Study – peer review
Dec. 3/5	Draft Discussion and remaining sections for Fat Attitudes Study – peer review
Dec. 10	Before 2 PM in Drew's mailbox: Final Fat Attitudes Study (to be graded) – all sections

***Meet in the computer lab (CAS 319)**

LATE COUPON-*Experimental Psychology*

You may attach this coupon to any ONE finalized **APA-style Paper from Lab** and hand it in two days (next class or the TA's mailbox) after the due date without penalty.

(Cannot be used for any other assignment.)

LATE COUPON-*Experimental Psychology*

You may attach this coupon to any ONE **Homework Assignment** and hand it in two days (next class or Dr. Yoder's mailbox) after the due date without penalty.

(Cannot be used for any other assignment.)

Contents and Grading Point Values for Each APA-style Paper from Lab

	Bell Curve	Artificial Intelligence	Stroop Test	Fat Attitudes
Abstract			6	6
Introduction				
Lit Review				4
Hypothesis(es)	4	4	6	6
Method				
Participants		4	4	4
Materials	4	4	8	8
Procedure	4	4	8	8
Results	8	14	20	20
Includes a table	no	no	yes	yes
Includes a figure	no	yes	no	yes
Discussion				6
References			4	4
APA style	5	5	14	14
Includes title page	yes	yes	yes	yes
TOTAL	25	35	70	80

Abstract

Your summary of the study is complete, containing key information from each section of the paper.

Introduction: Quality of literature review

You need to describe and cite research supportive of the hypotheses you propose. This does not necessarily mean citing everything you read; rather, citing relevant literature.

Introduction: Hypothesis development

You make a logical argument that leads up to the proposal of your clearly stated hypotheses.

Method: Participants

You describe your participants (number, relevant demographic characteristics)

Method: Materials

You fully describe the materials you used, giving pertinent information about standard scales, so that a reader could check your citations and use your descriptions to full re-create your materials. Any coding schemes are fully detailed.

Method: Procedure

(Design section is optional—outlines design of study)

Step-by-step description of how participants were recruited and what they encountered in your study

Results

Appropriate statistics used, appropriate data displays (e.g., tables and figures), and analyses follow in logical order as dictated by your hypotheses.

Discussion

Brings the paper full-circle back to the hypotheses and relevant literature speculating about unsupported hypotheses, directions for future research, and implications for further scale development and usage.

References

Complete and in APA format

Conformity to APA format, writing, & grammar

All sections included, running head, title page, double spaced, headers, page numbers, etc.