

Grand Valley State University
Psychology 400 01/03/04: Advanced Research Methods in Psychology

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Section 1: Tuesdays 6:00 – 8:50 ASH 2119
Section 3: Thursdays 6:00 – 8:50 ASH 1314
Section 4: T/R 4:00 – 5:15 ASH 2320

*My course involves a number of in-class assignments and group projects I do not typically permit students to attend different sections.

Office Hours: 9-10pm; 3-4pm. Please email in advance to confirm my availability during my 3pm office hours. Students with appointments will be given priority during office hours. Please indicate the reason for your visit in the email so that I can be well prepared for your visit.

Course Description: Experimental and survey methods in psychology. Topics covered include philosophy of science; theory development; measurement; reliability and validity of methods; experimental, quasi-experimental, and survey research designs; biases in experimentation; univariate and multivariate data analysis; and research ethics.

Course Objectives: The course is designed to accomplish three main objectives: (1) To teach students how to evaluate real-world claims like those presented in the media (e.g., Does cell phone use increase the frequency of car accidents? Does playing violent video games cause aggressive behavior?); (2) To teach students how to critically evaluate and summarize empirical research findings; (3) To provide students with the basic skills to conduct research in the social sciences.

Course Prerequisites: PSY 101, STA 215, WRT 150 and PSY 300. You may not take any of these prerequisite courses concurrently with PSY 400.

*****Please ask me during the first class about the cheapest options for purchasing the required texts.**

Required Texts:

Mitchell, M. & Jolley, J. (2007). *Research Design Explained* (7th ed). Belmont: Wadsworth

American Psychological Association (2010). *Publication Manual of the American Psychological Association*. (6th ed). Washington, DC: Author. *Copies are available in the Zumberge:*
BF76.7 .P83 2010

*Please DO NOT use pocket or non-APA published versions of this manual. Most have a number of mistakes (this includes some guides that are assigned in writing classes)

Research articles, supplemental readings and my lecture notes will be posted online.

Tentative Grade Evaluation:

	Description	Weight	Due Date
Homework	Exit surveys, assignments and homework will be administered on a random basis throughout the semester. These will be used to assess your knowledge of a particular topic or to collect feedback on the course.	10%	Randomly administered throughout the semester.
Quizzes	Quizzes will be centered on the assigned readings and topics covered in lecture	10%	
Midterm and Final	There will be a midterm and a final. They will be multiple choice, short or long answer depending on the material being tested.	15% each	February 23-25 (tentative) April 25 th -29th
Research Proposal Initial Submission	This will be the initial submission of your research project write up. Additional information concerning this assignment will be posted on BlackBoard.	10%	March 1-3 (tentative)
Research Presentation	With a partner, you will present and critique a research article.	10%	April 19-21
Peer Evaluations	You will be evaluated by your peers based on your contribution to both your research proposal and your research presentation	10%	April 26-28
Research Proposal Final Draft	The final draft of your APA style research proposal.	15%	April 26-28

Final grades are determined after combining scores from the assignments, peer evaluation, class participation and the final exam. Students are ranked in order of total scores and a grade is assigned so that the class average falls between the 75th and 79th percentiles (Letter grade = B)

This is a *tentative* grade distribution

Rating Letter Grade Grade Point Value Percentage Grades

Excellent	A	4.0	90-100%
Excellent	A-	3.7	85-89%
Good	B+	3.3	80-84%
Good	B	3.0	75-79%
Good	B-	2.7	70-74%
Satisfactory	C+	2.3	65-69%
Satisfactory	C	2.0	60-65%
Satisfactory	C-	1.7	55-59%
Poor	D+	1.3	50-54%
Minimal Pass	D	1.0	45-49%
Failure	F	0	0-44%

Missed Exam/Assignment:

Unfortunately, many of you do not have adequate health insurance. Because if this, I typically will not require a note from a health professional to document your absence. However, documentation is necessary if you miss more than one major assignment or exam, or in the case you miss the final exam. A registered health professional must provide the medical certificate, acknowledge the date of the missed exam/assignment, and provide his/her contact information. If you miss any class component, you must report your illness to me within 48 hours of the exam/assignment due date, however your documentation may be provided at a later date. If a single class component is missed, the student will be given an extension or have the weight of the missed examination/assignment added to the final examination.

Student Responsibilities:

ACADEMIC INTEGRITY: Grand Valley State University is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the *Code of Student Behaviour* (online at <http://www.gvsu.edu/studentcode/index.cfm>) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University. No student shall represent another's substantial editorial or compositional assistance on an assignment as their own. Furthermore, no student shall submit in any course or program of study, without the written approval of the course instructor, all or a substantial portion of any academic writing, essay, thesis, research report, project assignment, presentation or poster for which credit has been obtained by the student or which has previously been or is being submitted by the student in another course or program of study in the University or elsewhere. All forms of dishonesty are unacceptable at the University. Cheating, plagiarism and misrepresentation of facts are serious offenses. Anyone who engages in these practices will receive a grade of zero for the exam or paper in question and no opportunity will be given to replace the grade or redistribute the weights. Any offense will be reported to the Dean of the CLAS who will determine the disciplinary action to be taken.

CELL PHONES: As long as you are not disruptive, feel free to use it.

STUDENTS WITH DISABILITIES: If there is any student in this class who has special needs because of a learning, physical, or other disability, please contact me and Disability Support Resources (Room 200 STU; 616 331 2490). Furthermore, if you have a physical disability and think you will need assistance evacuating this classroom and/or building in an emergency, please make me aware so that I can develop a plan to assist you.

ACADEMIC SUPPORT CENTRE: Students who require additional help in developing strategies for better time management, study skills or examination skills should contact the Advising Resource Centre (200 STU).

WRITING CENTER: <http://www.gvsu.edu/wc/>

The writing center has a number of my ex-students who provide advice and support in scientific writing and composition of research reports. Please contact the writing center directly to make an appointment.

***Disclaimer:** This syllabus is subject to change. Any changes will be announced in class.*

Tentative Lecture Schedule & Assigned Readings:		
January 10/12	<i>Course Introduction</i> <i>Psychology as Science</i> Discussion: <ul style="list-style-type: none">• Karl Popper and Thomas Kuhn• Objectivity in Science• Results versus Theory Driven Research• Formulating Research Ideas Overview of Research Project	Syllabus Assigned Readings: Hergenhahn (2001) Recommended Review Readings: <i>Remler & Ryzin</i> (Chapter 10) <i>Stangor</i> (Chapter 5)
January 17/19	<i>Review of Experimental Methods</i> Discussion: <ul style="list-style-type: none">• Variance• Pre-testing Within & Between Subject Designs	Assigned Reading: <i>Mitchell & Jolley</i> (Chapter 10 & 15) Begin Background Reading in Areas of Interest (Hint: Use PsycInfo)

January 24/26	<i>Review of Experimental Methods</i> Discussion: <ul style="list-style-type: none"> • Variance • Pre-testing Within & Between Subject Designs 	Assigned Reading: <i>Mitchell & Jolley</i> (Chapter 10 & 15) Begin Background Reading in Areas of Interest (Hint: Use PsycInfo)
January 31/ February 2	<i>Factorial Designs</i> Activity: Form research groups In-Class Exercise Plotting, Interpreting and Describing Interactions	Assigned Reading: <i>Mitchell & Jolley</i> (Chapter 12) <i>Mitchell & Jolley</i> (Chapter 13)
February 7/9	<i>Conducting Experiments</i>	Assigned Reading: <i>Mitchell & Jolley</i> (Chapter 11)
February 14/16	<i>Survey Methodology</i> Discussion: <ul style="list-style-type: none"> • Elements of constructing a survey • Item Construction 	Assigned Reading: Sinclair et al. 2001
February 21/23	Midterm	
February 27 March 1	TBA / Project Time	
Spring Break March 5 - 12		

March 14/16	<i>Survey Methodology</i> Discussion: <ul style="list-style-type: none"> • Elements of constructing a survey • Item Construction 	Assigned Reading: Sinclair et al. 2001
March 21/23	<i>Research Ethics</i> The power of the situation on human behavior	Assigned Reading: Mitchell & Jolley (Chapter 2) Shane (2009) New York Times Article
March 28/30	<i>Analysis of Variance</i> <ul style="list-style-type: none"> • Review of T • One way ANOVA 	Assigned Reading: Jackson & Verberg (2009; Chapter 8)
April 4/6	<i>Statistics (ANOVA)</i> <ul style="list-style-type: none"> • Two way ANOVA • Post Hoc and Planned Comparisons 	Assigned Reading: Christensen (Chapter 14) Stangor (Chapter 8)
April 11/13	<i>Regression</i> <ul style="list-style-type: none"> • <i>Testing interactions Using Regression</i> • <i>Mediational Analysis</i> 	
April 18/20	<i>RESEARCH PRESENTATIONS</i>	Final Research Proposal due Peer Evaluations due