

PSY 400: Advance Research in Psychology – Fall 2018 Mario Fifić

PSY 400 - 02 Class 6:00 pm - 8:50 pm R Mackinac Hall A2165

Instructor

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Office hours:
T/R 1:30-2:15pm

Textbook

Stangor, C. (2011, 5th ed.). *Research methods for the behavioral sciences*. New York: Houghton Mifflin Company. ISBN: 9780840031976

Required Paper

Carlson, K. A., & Shu, S. B. (2007). The rule of three: How the third event signals the emergence of a streak. *Organizational Behavior and Human Decision Processes*, 104(1), 113-121.

Required software (available for free):

SPSS: SPSS (ver25) Statistics is a software package used for statistical analysis

Instructions for Downloading:

https://www.gvsu.edu/cms4/asset/28A47A19-09BB-D297-22DAB69E2686844F/spss_2017.pdf

Recommended (but not required):

American Psychological Association (2009). *Publication Manual of the American Psychological Association* (Sixth Edition). Washington, D.C.: APA.

Readings of specific research articles will be announced in class.

Course Overview

The aim of this course is to apply knowledge about research methods in psychology by designing an empirical study, collecting data, and writing a paper. Theoretical and ethical issues, measurement, reliability and validity of methods, descriptive, correlational and experimental research designs, biases in experimentation, and univariate and multivariate data analysis will be discussed in class.

The course is designed to accomplish three main objectives:

- (1) Students will demonstrate the ability to design and develop an empirical study in psychology and to write an APA style research paper,
- (2) Students will learn to discuss the own study in critical ways by recognizing limits and problems,
- (3) Students will increase their overall knowledge about research in psychology.

Prerequisites

PSY 101, STA 215, and PSY 300

A good understanding of basic statistics is a must as the application of correlation and ANOVAs will be requested during the course.

General Information

Class attendance. You are expected to attend class. Students who regularly attend do well in the class. By attending class, you benefit by hearing content presented exclusively in lecture. It is expected that you inform the instructor about your absence in class in time by email.

If a student missed a class more than two times in total (three and up) and was not being excused, his/her grade would be reduced to the lower category on the grading distribution. For example, Mario didn't attend 5 classes in the semester; his overall grade was A- (93%), however his final grade was reduced to the three lower grade categories and the final grade was B.

Special needs. If there is any student in this class who has special needs because of a learning, physical or other disability, please contact me or the Office of Academic Support (OAS) at 331-2490.

Plagiarism. "Any ideas or material taken from another source for either written or oral presentation must be fully acknowledged. Offering the work of someone else as one's own is plagiarism. The language or ideas taken from another may range from isolated formulas, sentences, or paragraphs to entire articles copied from books, periodical, speeches, or the writing of other students. The offering of materials assembled or collected by others in form of projects or collections without acknowledgement also is considered plagiarism. Any student who fails to give credit in written or oral work for the ideas or materials that have been taken from another is guilty of plagiarism." (GVSU, Undergraduate & Graduate Catalog 2004-2005, p. 91). **Plagiarism or cheating will result in an F for the course.**

Support for Writing. The Meijer Center for Writing and Michigan Authors, with locations at the Allendale, Pew/Grand Rapids and Meijer/Holland **campuses**, is available to help you with the writing you do in any of your classes. Writing Consultants, who are GVSU students, have been trained to help you with all stages of your writing process, from brainstorming to organizing to editing your papers. The Center's services are free and appointments are not necessary. Simply bring a draft of your paper, the assignment sheet, and your questions/concerns about the writing to any of the Center's three locations. See www.gvsu.edu/wc for hours & location, or call 331-2922. Tell the Writing Consultant you work with that you would like notification of your visit to be sent to your professor.

Blackboard. The syllabus, announcements, outside readings, assignments, and grades will be posted on Blackboard. If additional materials are placed elsewhere, e.g. electronic library reserves, I

will provide links. I will attempt to make the lecture materials, labs, and other materials available prior to each class, although I cannot guarantee this.

Communication. The instructor will communicate all class announcements via Blackboard email. You are expected to check your email regularly. The instructor will send an announcement with this syllabus prior to the first day of class. If it is the first day of class and you haven't received this email yet, it is your responsibility to figure out why and make sure that you receive future emailed announcements. It is strongly suggested that you keep a record or file of all emails sent by the instructor because you are responsible for all information sent in such emails.

Laptop Policy. Laptop computers are permitted for taking notes. You should not surf the web, edit facebook pages, twitter, email or work on other projects. Such activities will distract you, your peers, and the instructor. You will be asked to put your computer away or leave the class if you do not use it in accordance with this policy.

Required computer access. Many assignments will require access to the internet and Microsoft Word. Although we will begin some assignments in class, you should make sure you will have access to these applications for at least four hours per week outside of class, either on the GVSU campus or elsewhere. If you have little experience/skill with Microsoft Word, you may need to devote substantially more time to this.

Assignments and Research Paper

You will be required to work on a research paper by carrying out your own study (group projects). The project will be presented and the final research paper written in APA style will be submitted at the end of the semester. The deadline for the final draft is listed below. Each day your paper is late, 10 points will be deducted from the final grade. You will also be asked to write a proposal for the IRB as part of an assignment. The assignments are turned in by the Assignment Manager through Blackboard.

Beside the major paper and the assignment you will have two exams (see below).

Exams

There will be two exams during the course of the semester. Each exam is comprised of multiple-choice questions and will focus on research design and data analysis.

The first exam will be on 10/1

The final exam will be on: 12/10

Being exam excused or making late assignment submission

If you need to be excused from exam or class attendance you would need to provide some evidence for missing the class. In the case of illness you have to bring a written confirmation by the head of the department or by a physician. In the case of the exam and if you do not bring any document, I can decide to give you another written exam (maximal 70% of the points) or to do an oral exam. In the

case of late assignment submission you will lose 10% of the points daily (Note: being late is operationally defined as submitting work 1 second or longer after the deadline).

Quizzes

There will be several quizzes during the course of the semester, all announced in the class and posted on BB. A quiz will usually be a challenging question. The quizzes serve for practice and learning and can be retaken once.

The final assignment requirement: To get a passing grade a student must (a) Submit the assignment **final research paper**, (b) Get more than 59% (F grade) on it. If one of the conditions was not met a student will not be able to get a passing grade regardless of the total number of points on other assignments and tests.

Games

On several occasions we will play simulation GAMES. Each game is a simulation of a real-life situation. We will use the games to learn how to reconstruct important relationships from real life environment, by using both simple and advance research methods. The participation is recommended as it will automatically add the participation points. Note, that some type of rewards or reward grade points will be provided for the most efficient students or teams.

Grade Distribution

A	94 - 100%
A-	90 - 93
B+	88 - 89%
B	84 - 87%
B-	80 - 83%
C+	78 - 79%
C	74 - 77%
C-	70 - 73%
D+	67 - 69%
D	60 - 66%
F	59% and lower

This course is subject to the GVSU policies listed at <http://www.gvsu.edu/coursepolicies/>.

Evaluation and Grading

Your final grade in this class will be based upon the following achievements:

Assignment 1: Peer-review You are individually asked to review a paper that belongs to your colleague.	20 points
Assignment 2: Group IRB proposal You get the maximum of 20 points from your group member evaluations	30+20 points
Assignment 3: Naturalistic Observation report Group submission	50 points
Assignment 4: Correlational study report Group submission	50 points
Assignment 5: Experimental study report Group submission	50 points
Assignment 6: Research proposal Individual paper submission	feedback
Assignment 7: Peer-review You are individually asked to review a paper that belongs to the other research group in our class.	20 points
Assignment 8: Group poster presentation/current results	40 points
Assignment 9: Group oral presentation of the final paper	40 points
Assignment 10: Individual Final paper	150 points
Exam 1	300 points
Exam 2	300 points
Quizzes	200 points
The Game	100 points
Total	1370 points

Tentative Semester Schedule

Week	Date	Class Topic	Reading	Quiz (check BB for the due date)	Assignment (check BB for the due date)
1		Course Orientation	Syllabus		
	8/29	Variables, Research Designs Construct Validity	Ch. 1 Ch. 5		
		Variables, Research Designs Measures – Operational definition External Validity/Converging validity principle	Ch. 1 Ch. 4 Ch. 5 Ch. 13	Q1	
2					
	9/5	APA article format/Groups and Assignments	Appendix A		
		Path to analysis: scales and statistical analyses	Figure D.2	Q2	As. 1
3		Guidelines for ethical issues			
	9/12	STEP 1: naturalistic observation			
		Relationship between variables	Ch. 8, Supplemental paper	Q3	
4		Statistical Inference/Word processor			
	9/19	STEP 1: Informal presentations about your research project ideas			
		Statistical Inference Frequentist vs. Bayesian Hypothesis testing	TBA	Q4	
5		STEP 2: Correlational study Correlational Designs: Regression	Ch. 9		
	9/26	Multiple regression	Lab		As. 2/As. 3
		Multiple regression	Lab		
6		STEP2: Specifying your Multiple regression research design			
	10/3	STEP 2: Informal presentations about your research project ideas			
		Complex Relationship between variables: Interactions		Q5	
7		Complex Relationship between variables: Interactions Exam Review	LAB		
	10/10	Midterm Exam How to make a poster presentation	Ch. 9/ Appendix D		
				Q6	As. 4
8		Factorial Designs: 2-Way ANOVA	Ch. 11		
	10/17	STEP3: ANOVA research design			

		STEP3: Specifying your experimental (ANOVA) research design Poster presentation	LAB	Q7	As. 8
9		Complex Relationship between variables: ANOVA Interactions			
	10/24	Complex Relationship between variables: ANOVA Interactions	LAB		
		APA		Q8	
10		STEP 3: Informal presentations about your research project ideas			
	10/31	Final paper: Converging Validity			
		Final paper: Converging Validity		Q9	
11					As. 5
	11/7	Research paper/APA			
		LAB bring your data	Lab	Q10	
12					
	11/14	Prof. Fific is away 13-17			
					As. 6
13		Data Analysis	Lab		As. 7
	11/21	How to make an oral presentation			
14					
	11/28	Thanksgiving 27-1			
15		Oral presentation			As. 9
	12/5	Oral Presentation			
		Exam Review			As. 10

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