# PSY 400: Advance Research in Psychology – Fall 2016 Mario Fifić

# Advanced Research in Psychology - PSY 400 - 03 Class 4:00 pm - 5:15 pm TR ASH 2121

#### Instructor

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Office hours:

T/R 10:30am-11:15am

2:30pm-3:45pm

# **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 Statistics is a software package used for statistical analysis Instructions for Downloading: http://www.gvsu.edu/stat/spss-instructions-for-downloading-21.htm

#### 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 a APA style research paper, (2) Students will learn to discuss the own study in critical ways by recognizing limits and problems, and (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.** It is expected that you inform the instructor about your absence in class in time by email.

**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 <a href="www.gvsu.edu/wc">www.gvsu.edu/wc</a> 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 TBA
The final exam will be on: (location TBA)

If you do not participate, you have to bring a written confirmation by the head of the department or by a physician. 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.

# **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 an infinite number of times, before the final exam. The lecturer will provide help about how to solve the quiz question during the class time.

# **Extra Credit Opportunity**:

(a) Demonstrate the external validity in your study (to be explained in the class). This usually means that you should conduct a variant of the study presented in the final research paper and add it to the final report.

#### **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

## **Evaluation and Grading**

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

### **Assignment 1: Peer-review**

20 points

You are **individually** asked to review an Assignment 1 paper that belongs to your colleague.

#### **Assignment 2: Group IRB proposal**

**30+20 points** 

You get the maximum of 20 points from your group member evaluations

# **Assignment 3: Research proposal**

Individual paper submission

30points

## **Assignment 4: Peer-review**

20 points

You are **individually** asked to review an Assignment 1 paper that belongs to the other research group in our class.

Assignment 5: Group poster presentation of the final paper

20 points

Assignment 6: Group oral presentation of the final paper

40 points

**Assignment 7: Final paper** 

130+20 points

You get the maximum of 50 points from your group member evaluations

Exam 1 40 points

Exam 2 100 points

Quizzes 100 points

Total 570 points

# **Tentative Semester Schedule**

Week	Date	Class Topic	Reading	Quiz TBA	Assignment
1	8/30	Course Orientation	Syllabus		
	9/1	Variables, Research Designs Construct Validity	Ch. 1 Ch. 5		
2	9/6	Labor Day Recess September 4-6			
	9/8	APA article format/	Appendix A		
		Groups and Assignments	(Carlson & Shu, 2007)		
3	9/13	Internal Validity/ Word processor	Ch. 12		As. 1 Introduction
	9/15	Path to analysis: scales and statistical analyses	Figure D.2		
4	9/20	Guidelines for ethical issues	Ch. 3		As. 2 Introduction
	9/22	External Validity	Ch. 15		
		Informal presentations about your research project ideas			As.1 Deadline

5	9/27	Statistical Inference	Ch. 8, Supplemental paper	As. 3 Introduction
	9/29	Statistical Inference	Ch. 8	
6	10/4	Factorial Designs: ANOVA	Ch. 10	
	10/6	Correlational Designs: Regression	Ch. 9	
	10/11	Exam Review		
7	10/13	Midterm Exam		As. 2 Deadline
8	10/18	Factorial Designs: 2-Way ANOVA	Ch. 11	As.3 Deadline for feedback
	10/20	Group research project - meeting with professor	Office Visit!	
9	10/25	Factorial Designs: 2-Way ANOVA	Ch. 11	
	10/27	Correlational Designs: Multiple Regression	Ch. 9/ Appendix D	
10	11/1	Multiple regression	Appendix D	As.3 Deadline
	11/3	ANOVA n- way		
	44/0	AA II: I	4 1: 5	
11	11/8 11/10	Multiple regression  ANOVA n- way	Appendix D	As. 4 Introduction
	11/10	ANOVA II- Way		
12	11/15	LAB bring your data		As.4 Deadline
	11/17	Mario is absent Nov. 17-21		
		Mario is absent Nov. 17-21		
13	11/22	Research paper/APA		
	11/24	Thanksgiving Day Recess Nov. 23-27		
		Thanksgiving Day Recess Nov. 23-27		
14	11/29	How to make a poster presentation		As.5 Introduction
	12/1	How to make an oral presentation		As. 6 Introduction
15	12/6	Poster presentation/ Oral presentation		As. 5 Deadline
	12/8	Oral Presentation		As. 6 Deadline
	12/9			As. 7 Deadline

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