

**Grand Valley State University**  
**Syllabus**  
**PSY 400 – Advanced Research Methods, Online**

**Instructor Information**

Name: Mario Fifić, Ph.D., Associate Professor  
Office hours: By appointment via Blackboard Collaborate Ultra (an online meeting platform)  
Email: fificm@gvsu.edu. Reaching me by email is generally much easier than reaching me by phone.  
Phone: (616) 331-5061

**Office Hours:**

T/Th 1-3pm. Schedule by email. We could meet in the virtual office, located on BB, left-hand side panel: Virtual office Prof. Fific

**Class Time and Place**

Asynchronous Online Course administered via Blackboard

**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.

**Course Description (from GVSU)**

ADVANCED RESEARCH IN PSYCHOLOGY

Research in designated areas (e.g., perception, cognition, social, developmental, etc.). See current schedule of classes for areas offered. Original research project required. Formal presentations of research proposals and project reports, following APA style is required.

**Why Should You Take This Course?**

From a professional point of view, and also from a consumer point of view, making valid inferences is very important in a modern society, For example, we may be interested to learn what are the best teaching methods to improve learning in elementary schools, what is the best approach to treat some illness, which produce is the most bang for your buck, and the list goes on... Almost any inference comes from the evaluation of evidence collected by using some appropriate method. The research methods class PSY400, provides a critical insight to understanding how the process of inference validation is conducted, and which methods and procedures are the essential part of that process. In this class you should learn how to make stronger and more valid inferences, and also how to recognize an inference level from other sources (media, research databases).

**Course General Goals**

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.

**Course Specific Goals**

In the advance research method class (PSY400), you will be able to learn the following:

1. Learn how to choose an appropriate statistical analysis for your research
2. Learn the advanced statistical hypothesis testing

3. Work on modelling of complex relationship between variables
4. Learn to use high-level factorial and multiple regression statistical analyses
5. Learn about the principle of converging validity in research
6. Work on the analysis of simulated data systems
7. Engage in a group work
8. Run an empirical study, collect data, conduct analysis and create a report
9. Create reports (poster and paper)

### **Required Text**

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

To save money, the tip is that older editions of the Stangor book could be used in this class, as well. (4<sup>th</sup> and 3<sup>rd</sup>)

### **Additional Readings**

At various times during the semester, additional readings will be assigned. These readings will be required, and will supplement the text and lecture. The instructor will announce and make the readings available on Blackboard, i.e., students will not be required to purchase them.

### **Required Equipment (owned or accessible)**

- High-speed internet access
- Computer with a sound card and speakers and operating system that meets current Blackboard browser requirements (Windows 7 or above, OS 10.10 or above)
- Microphone (built in or external)
- Computer camera (most laptops have a camera)

### **Required software (available for free):**

1. **SPSS:** SPSS (newest version) Statistics is a software package used for statistical analysis  
Instructions for Downloading:  
<https://www.gvsu.edu/it/softwarehardwareapps-69.htm>
2. Alternatively, (or in addition) you could use the **Virtual Lab**, GVSU web service to access to **SPSS:** [Link is here: <https://winlab.gvsu.edu/>]. You will be prompted to logon to the virtual computer (PC or Mac) with your GVSU account. You should log in using the same password that you use for Banner. Then, a remote desktop will be opened for you (as if you were using some of the GVSU lab computers). You will be able to open SPSS by going to “lab applications” on the desktop, then to “STATISTICS” and then I can choose either “IBM SPSS STATISTICS 22” or “24”.
3. “Microsoft Word” (find the installation [link](#) through GVSU IT)

### **Course Webpage**

The instructor will administer all elements of the course using GVSU’s Blackboard system. The webpage will contain pertinent course information, grades, lecture materials, announcements, readings, assignments, and exams. Students are responsible for all information provided via Blackboard. The full, detailed description of all assignments, exams, and due dates will be found in Blackboard.

To access Blackboard, go to <https://mybb.gvsu.edu/> and enter your log in and password.

Take a look at the GVSU Online Learning pages to find numerous materials about using Blackboard and online learning <http://www.gvsu.edu/online/>.

Use of Blackboard is integral to this course and students must log on a few times each week in order to complete course requirements, receive important announcements and updates, and communicate with instructors and other students about course content.

Check the current [technical requirements](#) to use Blackboard and [preferred browser information](#).

#### Technical difficulties with Blackboard

If you experience technical problems with Blackboard, contact the help desk by email or phone - [helpdesk@gvsu.edu](mailto:helpdesk@gvsu.edu) or 616-331-3513. The help website is <http://www.gvsu.edu/it/learn/>

### **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, periodicals, 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.

### **Course Requirements**

Your class grade will be determined based on your achievement on (1) Assignments, (2) Quizzes, (3) Exams and (4) Discussion forum participation.

#### **(1) Assignments [150 points]**

Each week you will be asked to complete, at least, one assignment. Assignments are directly linked to the main research project. Your general topic research project will be broken down into several steps. Each step of the research project will be covered by one assignment. Some of the assignments will be based on the group work and some will be based on individual work.

#### **(2) Quizzes [50 points]**

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

On each of the course’s quiz, you can earn the following points:

**3 points:** If you completed the quiz before its due date and your quiz initially fulfilled ALL the requirements.

**2 points:** If you completed the quiz before its due date AND you corrected your initial quiz to fulfill ALL the quiz requirements within 4 days after its due date.

**1 point:** If you didn’t complete the quiz before its due date but you did complete the quiz within one week after its due date OR if you completed the quiz before its due date but your quiz didn’t fulfill ALL the requirements and you didn’t correct your quiz to fulfill ALL the requirements within one week after the quiz’s due date.

**0 points:** If you still haven’t completed the quiz one week after its due date.

#### **(3) Discussion forum participation [50 points]**

You will be asked to participate in several discussion topics using the blackboard discussion forum. Most of the discussions will be graded. Most importantly participation in discussion forums will allow you to interact with the lecturer and other students. Information about the expected discussion role will be provided within each module.

#### **(4) Exams [200 points]**

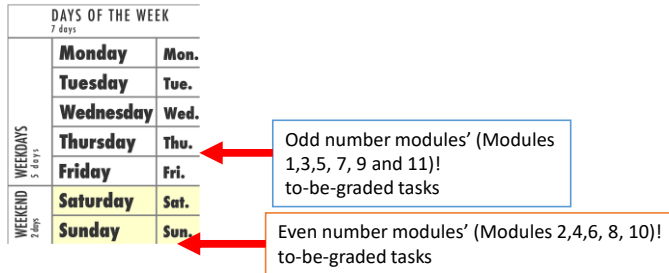
There will be three exams. Each exam is comprised of multiple-choice and open-ended questions. The exams are not cumulative. Some exam’s open-ended questions will be related to class discussions and lectures, which are not available in the book. The examples of these questions will be posted in each chapter unit paper, that I will cover during online lecture.

#### **(5) Handwritten note-taking activity [total of around 100 points]**

Recent research demonstrated that note-taking is one of the most important things a student can do to improve their learning. You will be asked to make handwritten notes (not the electronic), while watching the class online videos. To get the points you will post the notes to my inspection. In general, taking notes will help you to improve consolidation of the learning material. You will also be able to use these notes during the exam (yes- you could use your handwritten notes during the exam!). To prepare please get a note book and pencils!

### Weekly deadlines

There will be only two important deadlines within a week. In each week you will have one odd- and even-numbered learning module. They have separate deadlines: on Thursday 11:59pm for the odd numbered modules, and Sunday 11:59pm for the even-numbered modules. These deadline concerns to all submissions, that are graded [unless instructed otherwise].



### Grading

The assignments, quizzes, forum discussion and exams will collectively be worth approximately 436 points. Based on your cumulative point score the following grades will be assigned:

#### **Grade Distribution**

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

THE GRADING SCALE AS PRINTED ABOVE IS FINAL! Any changes in grading policy will be announced on the course website.

### Using LockDown Browser and a Webcam for Online Exams

The purpose of exams is to gauge whether students have successfully learned course content and skills. To support that success, exams must be administered fairly. I find that students want exactly that—they want to know that when they have studied hard for an exam, they are being fairly recognized for that work and knowledge. The suspicion that others might be “gaming the system” can be dispiriting. This is especially relevant for online courses, where there is no in-class proctor or instructor present to ensure fair testing circumstances for all concerned. To help alleviate these problems, this course requires the use of LockDown Browser and a webcam for online exams. The software simulates conditions of taking an in-person exam—it prevents students from looking at notes and course materials, and from communicating questions and answers with each other.

Although further information about this software will be provided after the course has begun, it is important to be aware up front that this is how exams will be administered, and that there are certain hardware requirements to take

exams this way. The required webcam can be built into your computer or can be the type that plugs in with a USB cable. Watch this [short video](#) to get a basic understanding of LockDown Browser and the webcam feature. A student [Quick Start Guide](#) is also available.

When taking an online exam that requires LockDown Browser and a webcam, remember the following guidelines:

- Ensure you're in a location where you won't be interrupted
- Turn off all other devices (e.g. tablets, phones, second computers) and place them outside of your reach
- Clear your desk of all external materials not permitted — books, papers, other devices
- Before starting the test, know how much time is available for it, and that you've allotted sufficient time to complete it
- Remain at your computer for the duration of the test
- If the computer or networking environment is different than what was used previously with the **Webcam Check** and **System & Network Check** in LockDown Browser, run the checks again prior to starting the test
- To produce a good webcam video, do the following:
  - Avoid wearing baseball caps or hats with brims
  - Ensure your computer or tablet is on a firm surface (a desk or table). Do NOT have the computer on your lap, a bed or other surface where the device (or you) are likely to move
  - If using a built-in webcam, avoid tilting the screen after the webcam setup is complete
  - Take the exam in a well-lit room and avoid backlighting, such as sitting with your back to a window
- Remember that LockDown Browser will prevent you from accessing other websites or applications; you will be unable to exit the test until all questions are completed and submitted

### **Netiquette**

This course will involve frequent opportunities to interact with your peers via the Blackboard Discussion Board. Although many of us have experience with e-mail, online discussion is different because we're communicating "one to many" rather than "one to one." Therefore, it's important that we maintain a sense of freedom to express our thoughts while at the same time providing a safe atmosphere for that expression. Please keep this mind as you are communicating with others.

All participants should maintain a professional attitude and manner of discussion. While spirited debate is encouraged, unprofessional behavior is not tolerated. Words often come across "more directly and harshly" in this written form of communication, since there are no facial gestures, expression or tone of voice to help convey your message fully. Your contributions should not be overly negative or personal in nature.

### **Emergencies and Schedule Conflicts**

Exams will be administered online during limited time windows on specific days throughout the semester (see tentative schedule below). Absences from these exams related to participation in a university-sanctioned event, a personal illness, a family emergency, or a major religious holiday will be excused provided that you a) give the instructor at least one week advance notice (when the conflict is foreseeable) or a timely explanation upon your return (when the conflict is unforeseeable) and b) give the instructor written documentation from an appropriate faculty member, university administrator, physician, or clergy member. Make-up exams will be administered only if an absence from the exam is excused for one of the above reasons. Note that vacation is not considered a valid excuse. You may take a make-up exam either at another time on the normal exam day, or on the soonest possible date thereafter. An unexcused absence from an exam will constitute a score of 0.

### **Accommodations for Students with Disabilities**

If there is any student in this class who has special needs because of learning, physical or other disability, please contact Disability Support Resources (DSR) at (616) 331-2490 to develop a plan of assistance that you can provide to me.

## Tentative Course Schedule

**Learning Modules** (one-chapter modules): The learning modules in Blackboard will be a foundational part of the course. Modules are where you will find instructions for each one-week segment of the course including reading assignments, video lectures, practice activities, and assignments. Modules will open up one week at a time and various assignments will be due during those windows. All previous modules will be open throughout the course.

<b>MODULE</b>	<b>DATE</b>	<b>TOPIC(S)</b>	<b>READING</b>
1 & 2	May 9-15	<b>Recap: basic research tools and concepts</b>	
		Variables, Research Designs Construct Validity, Measures – Converging validity principle	Ch. 1 Ch. 2
		Operational definition/ Scales and measures How to choose statistical analysis Research Topics & APA format for publication	Ch. 4 Appendix A
3&4	May 16-22	Guidelines for Ethical issues, Relationship between variables	Ch. 3
		<b>STEP 1: Descriptive/naturalistic observation</b>	
		Statistical Inference/ Frequentist vs. Bayesian Hypothesis testing/ Writing STEP 1 APA Reports	Ch. 9
	May 22	<b>EXAM I: Modules 1 to 4</b>	
5&6	May 23-29	<b>STEP 2: Correlational study</b> STEP2: Specifying your correlational research design Correlational Designs: Regression, Multiple regression	Ch. 9
		STEP2: Specifying your Multiple regression research design STEP 2: Informal presentations about your research project ideas, Complex Relationship between variables: Interactions	
7&8	May 30- June 5	STEP2: How to make a poster presentation Writing STEP 2 APA Reports Factorial Designs: 2-Way ANOVA	
		<b>STEP3: ANOVA research design,</b> STEP3: Specifying your experimental (ANOVA) research design  <b>Poster presentation</b>	Ch. 10 Ch. 11
	June 5	<b>EXAM II: Modules 5 to 8</b>	
9&10	June 6-12	Complex Relationship between variables: ANOVA Interactions	

		Writing STEP 3 APA: Final paper and Converging Validity	
		STEP 3: Informal presentations about your research project ideas	
11	June 12-19		
		<b>Oral Presentation</b>	
	June 21	<b>FINAL EXAM due: Modules 9 to 11</b>	

The above schedule is tentative. Any changes in the schedule will be announced in class and posted on Blackboard.

### **Disclaimer:**

All of the information included in this syllabus, including the course schedule, assignments, and grading procedure, is subject to change. Any consequential changes to this syllabus will be announced on Blackboard.

### **HOW MUCH TIME DO I NEED TO SPEND ON THIS COURSE?**

Because PSY400 is a 3-credit course, you're expected to spend a total of 108 hours on the course (3 course credits x 36 work hours per credit = 108 total work hours for the entire course, excluding attending the video lectures). If you are taking this course during the **SPRING** term: You are expected to work on this course 3 HOURS per DAY, six days a week.

### **Tips for a Successful Learning Experience**

*\*Although these might seem obvious and simple, they will make a difference*

- Read the syllabus and view all preparatory information on Blackboard
- Stay organized and track due dates
- Plan weekly study times
- KEEP UP ON THE READING AND LECTURES**
- Take your own notes on each lecture video, or write your own notes into the provided slides
- Log onto Blackboard at least 3 times per week to check announcements, discussion board, and interact with course material. Online courses require perseverance, self-discipline, self-motivation, and the ability to work independently – more so than face-to-face on-campus classes.
- Post questions, comments, and ideas on discussion board
- Ask questions of the instructor. Not just clarification questions about logistics, but content questions.

### **Academic Integrity**

This course is subject to GVSU's general requirements for courses. A full list with pointers to resources may be found at [www.gvsu.edu/coursepolicies](http://www.gvsu.edu/coursepolicies).

**Section STU 4.0 of GVSU's Student Code contains very specific information about maintaining academic integrity. It states:** "The principles of academic honesty and integrity are fundamental to a community of scholars.

The University expects that students will not engage in acts of academic dishonesty in curricular and non-curricular academic activities. Engaging in academic dishonesty compromises the integrity of university grades, and scholarship and research.

Academic dishonesty is defined as actions or behaviors that misrepresent one's contributions to or the results of any scholarly product submitted for credit, evaluation, or dissemination. This definition includes, but is not limited to, fabrication, falsification, cheating, and plagiarism. Terms are defined as the following:

- Cheating is defined as attempting to use materials, information, or study aids in any academic exercise that have not been allowed by the instructor.
- Plagiarism is defined as offering the work of someone else as one's own. The language or ideas taken from another may range from isolated formulas, sentences, or paragraphs to entire articles copied from books, periodicals, speeches or the writings of other students. Academic dishonesty compromises the integrity of grades, meaning that all academic work should be done by the student to whom it is assigned without unauthorized aid.
  1. No student shall knowingly, without authorization, procure, provide or accept any materials which contain questions or answers to any examination or assignment.
  2. No student shall, without authorization, complete, in part or in total, any examination or assignment for another person.
  3. No student shall, without authorization, allow any examination or assignment to be completed, in part or in total, by another person.
  4. No student shall knowingly plagiarize or copy the work of another person and submit it as his/her own.
  5. No student shall submit work that has been previously graded, or is being submitted concurrently to more than one course, without authorization from the instructor(s) of the class(es) to which the student wishes to submit it.
  6. The course materials are intended for curriculum and course-related purposes and are copyrighted by the University. Appropriate access to this content is given for personal academic study and review purposes only. Unless otherwise stated in writing, this content may not be shared, distributed, modified, transmitted, reused, sold, or otherwise disseminated. These materials may also be protected by additional copyright; any further use of this material may be in violation of federal copyright law. Violators of this policy will be referred to the Committee on Professionalism, Performance, and Promotion for disciplinary purposes.

If you agree with 1-6 please sign below and return a signed paper copy to Prof. Fific (post in on BB):

Student's full name \_\_\_\_\_

G# \_\_\_\_\_

### **PROCEDURES**

When the instructor feels that action beyond a failing course grade is warranted, the instructor will report the incident at [www.gvsu.edu/conduct](http://www.gvsu.edu/conduct) and request additional action via the University Conduct Process. When the alleged violation is related to the Academic Honesty - Integrity of Scholarships and Grades, the Hearing Body shall be composed of faculty members.

It is the instructor's responsibility to establish a classroom atmosphere that fosters academic honesty on the part of the students. If any instance of academic dishonesty is discovered by an instructor, they will notify the student and discuss the incident. After discussing the instance with the student, the instructor will make a decision. Depending on the instructor's judgment of the particular case, they may do nothing, impose additional course requirements, ask the student to repeat the work in question, or give a failing grade for the assignment, examination or the entire course. Any time an instructor addresses a violation of Academic Honesty with a failing grade on an assignment or in a course, they must report the incident at [www.gvsu.edu/conduct](http://www.gvsu.edu/conduct). Other incidents may be reported for tracking purposes. Reporting the incident will notify the Department Chair, the Dean of Students, and the Dean(s) of the Instructional Colleges. Reporting the incident does not automatically initiate additional action, but keeps record of the incident. Students may utilize the Academic Grievance Process to appeal a faculty initiated decision."