

**PSY 490: Advanced Research Methods**  
**Spring 2014**  
Tuesday & Thursday, 2-3:15pm, Flipse 535

Professor: Dr. Debra Lieberman  
E-Mail: [debra@miami.edu](mailto:debra@miami.edu)

Office: Flipse 463  
Office hours: T & R: 12-2pm; by  
appointment

**Prerequisites:**

(a) 2.5 PSY GPA; (b) 15 PSY credits, including PSY 291 or 292, and 390; (c) Senior Standing; (d) PSY major

**Course Website:**

You will be able to access any on-line materials for this course on blackboard.

**Goals of this Course:**

*In this course, you will learn to conduct descriptive and experimental research in psychology.* I realize that most of you are not planning to make a career in psychology research. However, all of you, psychologists or not, are going to be bombarded with research claims, and are going to seek out answers to questions that can be answered with research, for the rest of your life. Some of those claims may not matter much to you (e.g., do people really look like their dogs?). Others will matter to you a little bit (e.g., which of these vacuums is best?). Others will matter to you a lot (e.g., does playing violent video games increase the aggressive behavior of children? Is there a link between vaccines and autism? Does gratitude increase well-being?). Therefore, an important goal of this course will be to teach you to how to *critically evaluate research claims*. This will be a skill that I hope will serve you well no matter what field you decide to enter after graduation.

*As a secondary goal of this course, we will discuss how to convey your ideas and research findings in clear, straightforward, and interesting ways.* One of the most important goals of research and science is to gain new information and convey that information to others. Although it may not always seem like research is supposed to be interesting or easy to understand (since it can often seem dull or complex), it is important for researchers to be able to explain their findings in straightforward ways that make sense to people and that, hopefully, interest them and teach them something new. If one cannot convey research in a way that is clear and compelling, one's research may have very little impact. The ability to convey your ideas in clear and appealing ways is a skill that is essential for many different fields (e.g., teaching, advertising, entertainment, law, journalism, etc.) and thus we will focus on it in this course. Even if this is the only concept that you take with you from this class, I will be very happy!

**Organization of this Course:**

You will learn about descriptive and experimental research methods through lectures, in-class assignments, and research projects. During class, we will discuss concepts relating to research methods and how to translate abstract ideas into testable hypotheses. During some class meetings we will complete hands-on exercises that will improve your understanding of experimental research methods. We will first develop and conduct a descriptive study of your choice and then develop and conduct a follow-up experiment on the same topic. This class will mainly focus on your research projects and the research report.

## **Requirements:**

Your grade in this class will be based on 4 areas of participation and assessment:

1. **Group Projects (25%).** The primary activity in the course will be the development, conduct, and presentation of a group project. Because it's much more fun to collect data on questions that interest you than on topics that your instructor forces upon you, you will do a research project in an area that is of interest to you. For the project, you will work in groups of 4-6 people. You will need to come up with a hypothesis and a research design (and get the instructor's approval on it), and then collect and analyze some data on the topic.

Your project must include a descriptive component and also a true experiment *with two fully crossed independent variables*. During the last week of the semester, groups will present its findings to the class in a poster session. Your grade on the project will be based on *creativity, rigor of the experimental methods, theoretical significance, and the presentation itself*. You will be graded by your group as well as by your instructor. The breakdown of your Group Project Grade is as follows:

Creativity and theoretical significance of research: 5%

Descriptive study methods: 5%

Experimental methods: 5%

Poster presentation: 5%

Individual investment in project: 5%

2. **Assignments (25%).** Prior to turning in your final research report, you will be asked to turn various writing assignments (e.g., a draft of your abstract, the 1<sup>st</sup> paragraph of the introduction, and a critique). These assignments will be marked as either having been completed on time or not (0 or 1). **No late assignments will be accepted.** If you have an unexcused absence on a day an assignment is due then you will not get credit for that assignment.
3. **Final Research Report (25%).** Your final paper will be an APA-style research report based on the findings of your group project. Although you did the project as a group, you will each write an *independent* paper on the project. You will prepare a concise report based on the findings of your study. More details regarding the requirements for this report will be given in class.
4. **Participation and Attendance (25%).** Throughout the quarter, we will do many activities and have many discussions as a class, as well as in smaller groups. Attendance is required. I will take attendance every day. You may miss 1 class without penalty. Each class missed thereafter reduces your attendance grade by 2%.