**The Traditional Syllabus**

**PSY101: Introduction to Research and Statistics**

T/TH 9-10:30, Rm 348 Adams Hall

**Instructor Contact Information:**

A.U. Thoritarian, Professor, 210 Adams Hall. Office Hours: 1-2 Mondays only, authoritarian@xxx.edu. If you have questions, please consult the syllabus first, and if you cannot find the answer, ask questions in class; only email when there is a critical need.

**Course Description:**

This overview courses provides students with vital information for understanding and designing research studies in the field, and covers types of research designs (experimental, non-experimental, qualitative), sampling methods, measurement issues and methods, and common descriptive and inferential statistics. Every class period will begin with a short multiple choice quiz over material covered in the previous class. Quizzes cannot be made up if students are late or miss class.

**Prerequisite**: Students must have passed Stat 124 to be successful in this course.

**Textbook**: I.M. Dull (2014). Dummies guide to research methods in ten tedious chapters. NY: Pabulum Press.

**Course Objectives**

At the end of the semester, students will be able to:

1. create testable hypotheses and research questions and select the right research design for the question/hypothesis.
2. select the appropriate sampling frame for a study
3. avoid violating ethical standards for research
4. select the appropriate statistical tests for different types of data
5. conduct descriptive statistical tests and describe them in text and graphical formats
6. calculate chi square, t-tests, and ANOVAs and describe them in text and graphical formats.
7. Interpret statistical findings and identify study limitations as well as recommendations for future research, practice, or policy.

**Grading:**

The final grade is based on performance on the daily quizzes (worth 4 points each; the lowest quiz score is dropped), and three multiple-choice exams. The two midterms are worth 15 points each, and the comprehensive final is worth 28 points. The final grade is based on a curve, with the top 15% of scores receiving an A, the next 25% a B, the next 30% after that a C, the next 15% a D, and the bottom 10% will fail the class. Quizzes and tests are closed book, closed notes. The instructor will let students know if a calculator is allowed for any given quiz or exam; some calculation will be required in the second half of the class. All quiz and exam scores will be posted in the online website for the course. Do not ask me to calculate your grade so far: all the information you need is on the website and you are expected to know how to determine your own progress in the course.

**Course Policies:**

* No electronics are allowed in this classroom. You must have written permission from the instructor to tape-record lectures.
* Absences are not tolerated; any student who misses more than 3 classes will fail this course. Similarly, if you are late and miss the quiz, they cannot be made up. Quizzes will be completed in the first 15 minutes of class, so if you arrive 5 minutes late, you will have only 10 minutes to complete the quiz.
* **PLAIGARISM AND CHEATING ARE STRICTLY PROHIBITED** and grounds for dismissal from the class.
* Students with inadequate writing or math skills should seek help from the Tutoring Center.

**Course Content Outline**

***Week Topic Reading Assignment***

Week #1: introduction to research designs Read Chp 1

Week #2 research ethics Chp 2

Week #3 experimental designs Chp 3 & 4

Week #4 non-experimental designs chp 5

Week #5 Midterm 1 on Tuesday/sampling on Thursday

Week #6 sampling chp 6

Week #7 measurement methods/issues chp 7

----------------------------------------------------------------------------------------------------------------------

**The Social-Justice Oriented Syllabus**

**PSY101: Introduction to Research and Statistics**

**A Guide to Success**

T/TH 9-10:30, Rm 348 Adams Hall

**Who am I as your instructor?**

Welcome to the class! My name is Ima Proachable and my pronouns are she, her, and hers. I am a professor of psychology. My research interests are in community organizing related to improving mental health in vulnerable communities and I have been teaching research methods for about ten years. You can find me in 210 Adams Hall. I hold open student hours from 10:30-11:30 on every Tues/Thurs and by appointment. I am happy to answer your questions during student hours or by appointment. You can email me at jprof@XXX.edu.

**What is this class about?**

In this class, we will work collaboratively to learn skills for understanding research articles, and for designing research studies in the field. In class, we will discuss the types of research designs (experimental, non-experimental, qualitative), sampling methods, measurement issues and methods, and common descriptive and inferential statistics that are used in our field. There are many technical terms and some jargon in our field, and you will learn and practice some of those terms and concepts in this class. Although not all of you are interested in becoming researchers, you will be more effective in your jobs if you are able to translate research findings to your practice or policy work. This semester we will focus on how research can be used as a tool to remedy social injustices. Many of the principles of ethics in our field of psychology are related to respect and social justice, and one principle is devoted to that:

**Principle D: Justice**   
Psychologists recognize that fairness and justice entitle all persons to access to and benefit from the contributions of psychology and to equal quality in the processes, procedures and services being conducted by psychologists. Psychologists exercise reasonable judgment and take precautions to ensure that their potential biases, the boundaries of their competence and the limitations of their expertise do not lead to or condone unjust practices. (APA Code of Ethics, 2002)

Each class period will combine short lectures with hands-on group and individual activities that allow you to practice new skills and seek out new information. Collaborative group activities will allow you to explore topics of interest to your group and apply what you are learning in the field. I know that some students come to this class with some anxiety about learning research skills and statistics, but we will take it slow and have lots of practice along the way.

Prerequisite: Stat 124

**Student learning outcomes or what will I learn by the end of the course?**

By the end of the semester, I expect that you will have increased knowledge and skills to:

1. confidently read and understand research articles
2. create testable research questions and identify the research design to answer the question
3. recognize and apply social justice implications of research articles in our field
4. become more comfortable with the statistical tools of our field
5. apply knowledge of research to other aspects of our field, such as policy, theory, and practice.

**What will I need to read and do to be successful?**

There is a main textbook for the class that provides basic information about research design and statistics. This book, ***Using Research to Right Wrongs*** by Justicia Krusader from Inspiration Press offers lots of examples of how research has been used in unethical ways, and models how it can be used for the greater good. You will also work in small groups on a topic that your group chooses, and will read about 10 research studies on that topic. The group will critique elements of the research studies, so that by the end of the semester, you will be familiar with the common structure and sections of research reports, as well as their limitations. No single research report offers “the truth” about any topic, and you will learn how to evaluate the claims made by authors of these reports. Our hands-on work in class will be much more productive if you do the readings before coming to class—you will have better questions and get more out of the class that way. Finally, we will have occasional guest speakers in the class. These speakers are engaging in research in local communities and you will be assigned to read one article by each speaker prior to their visit to class. There will be 3-4 speakers/assigned articles this semester.

**How will I be graded? What kinds of assignments/exams are there in this class?**

We all have different learning styles and strengths, so this class uses several different types of assignments that use those different skills. In each class period, you will participate in an activity based on the topic of the day that allows you to evaluate your proficiency in the topic, explore your values, or practice a skill. Some of these daily activities are done individually, and some as part of a small group. Each activity is worth two points for a total possible 32 points over the semester. Instead of cumulative exams, we will seven shorter quizzes of 5 points each (total 35 points) schedule across the semester. As part of a small group, you will produce a 8-10 page group paper on the topic of your groups choice that summarizes research quality and findings of 10 research articles. This paper will be done in two drafts, with 10 points assigned to the first draft. You will get feedback from another group, and from me, and produce a final draft, worth 17 points. Finally, your group will prepare a short presentation on your work to share in class, worth 5 points. Your final grade will be based on a 100 point scale, where 90-100 is an A; 80-89 is a B; 70-79 is a C, 60-69 is a D, and below a 60 is a non-passing grade. Most students who hand in all the assignments and participate fully in the group project do well in the class.

**What do I expect of you?**

I expect that you will be engaged in the class and participate fully. I expect that you will treat each other with respect, and that if you have conflicts with another student, or with me, you will come to me with some ideas about how to resolve the conflict. If you must miss a class for any reason, I ask that you contact me prior to your absence. Although due dates are firm, if there are circumstances beyond your control, we may be able to negotiate extensions. If you feel you are not doing as well in this class as you wish, please come to see me and we can talk about finding other resources and support for you.

To provide a distraction free zone during the class, I request that you put away your cell phones and laptops/tablets for the duration of class. Research shows that students learn material better when they take notes by hand, and when they are completely focused on the class rather than multi-tasking.

The ethical code of our profession states that we respect the intellectual property and ideas of others by giving them full credit when we cite their work. The definition of plagiarism is citing other people’s work without giving them credit. It is not ethical or respectful to others to cut and paste their work, or merely change around the words. You will learn material much better if you translate what you read into your own words, and give credit to the original work by learning how our field cites that work. There is a chapter in our textbook on citation to guide you.

Our university has many resources that you can draw from. I highly recommend that you take advantage of whatever services will best assist you. The final page of this syllabus lists those services. The university also has many policies that guide student conduct. These can be found at [link].

**What can you expect from me?**

I value questions—if you have a question about some aspect of the class, chances are that someone else has the same question. Feel free to ask me in class or open student hours.

I do my best to complete grading of quizzes and written assignments in a timely fashion. I try to return papers/ quizzes within one week, but sometimes other obligations get in the way.

I value lively discussion and do not expect students to always agree with me. It is great practice to learn to challenge others and back up your challenges with data and logical arguments. Research is advanced by challenging assumptions and seeking out new ways of doing things. I will respect everyone’s contributions to the class, but may challenge you to provide evidence to back up your statements (you can ask me to do the same).

**What questions will we explore in this class?**

The following is a rough guide to the topics/concepts that we will be discussing. Sometimes we may focus on current events that are related to research methods/statistics that may take us off topic a bit, so consider this a roadmap rather than a detailed plan.

|  |  |  |
| --- | --- | --- |
| *Week* | *Questions we will explore* | *Readings to prepare for class* |
| *1* | What is research and how is it used in our field to improve the lives of individuals and communities? | Chapt 1 |
| *2* | What is the difference between quantitative and qualitative research? | Chapt 2; Garcia & Washington, 2015 |
| *3* | What is an experimental design and why is it so valued in our field? | Chapt 5 |