

Course Meeting Time & Location: M,W,F 10:30-11:20 Burnett 233

Cal's Help – Email & Zoom

Manda' Help Hours Mon, Wed, Fri 12:30-1:30 in 222 Burnett Hall

Course Materials: All course materials are available on-line at: <http://psych.unl.edu/psycrs/>

Objectives & Strategies: Whereas Psychology 350 was designed to give you skills helpful in completing your undergraduate training, Psychology 450 is designed to better prepare you for the very rigorous training you will receive in graduate school, or the challenges of employment in Psychology or some related field, and to practice all of it, a lot.

You might not be planning a career as a research psychologist, and many professional psychologists do not themselves contribute to the research literature. However, all psychologists must be competent "consumers" of the psychological literature in their area of expertise, whether it be clinical, counseling, consulting, educational, law-psyc, I/O, human resources, human factors, or some other area of psychology.

Also, most jobs held by professional psychologists require a substantial amount of data analytic skill and report writing ability, whether it be to document decision making, to obtain funding, to provide evidence for the efficacy of service delivery, or to contribute to the professional literature.

In addition, the ability to produce competent, theoretically relevant empirical research is usually the "ticket for admission" to a career as a professional psychologist. Completion and presentation of your own independent research (say, an Honors Thesis or presentation/poster at a student research conference) is often helpful evidence that you can "do research" when applying to graduate school. Most Ph.D. programs require at least two empirical research projects (the Master's thesis and the Ph.D. dissertation).

Classroom Climate: We have to be able to talk forthrightly about the topics of this class. And to explore the history, current, and likely future approaches of our trade! Some obvious sensitive topics are the variables & labels we use to define our target populations and describe who is in our samples. In particular we have to be sure we are aware of the standards and preferences in our own research/application communities, as well as differences across communities. Our class will welcome students from multiple colleges and programs, not all of whom use either the same "descriptive categories" nor the same "labels" for those categories. And there will be several other sensitive parts (e.g., researcher motivations & bias). So, we gotta find, as a group, a balance between "comfort & coverage". Be sure to let me know when we're bumping up against one of the other! Here's a thoughtful bit offered by the Chair of Psych, "The pandemic and our current political polarization mean that stress is high for everyone. We obviously can't change that but showing empathy and compassion for each other can help. Listen to one another, be aware of other people's needs, and cut each other slack."

Everyone who attends this class is entitled to feel welcome and to feel safe from intimidation, insult, bullying, harassment, or discrimination of ANY sort and safe from unwelcome sexual contact or advances. We will consistently treat each other with respect and support. Both agreement and disagreement drive learning, understanding and successful application, and both are best done with mutual respect, patience and occasionally grace.

Emphasis: With respect to design issues, we will pay special attention to the "rules of evidence" for the quantitative analysis of cause-and-effect relationships and the important differences between experimental, quasi-experimental, and nonexperimental designs. With respect to data analytic issues, we will particularly pay attention the family of ordinary least-squares techniques that includes analysis of variance and linear regression. We will emphasize the pragmatics of hypothesis testing, data analysis and the communication of findings, at a level that is more like "driver's education" and less like "mechanical engineering."

As data collectors and data analysts, we have a particular obligation to avoid treating the data and results from our samples as "representing everybody". In particular, we need to avoid generalizing results from majority-dominated samples as if they were "universal" or "sufficient". We must always ask, "From whom were the data sampled." In fact, we will expand the usual meaning of "sampling" to include not only "who?" but also "where, when, and how?"

Topics of the Course:

1) experimental, quasi-experimental and non-experimental research designs, 2) data analysis using ANOVA & ANCOVA models, 3) communication of research results, interpretation and integration in written and oral formats.

Additional Requirements for Those Taking Psyc850

There will be higher minimum standards for the complexity & integration of the literature review, design, and analyses for the individual research project.

Course Grade

Your grade will be based upon 70% assignments and 30% project. Please note: changes during the semester's activities may necessitate changes in grade composition). Attendance and participation will be noted and used in the assignment of the final grades, especially decisions about "borderline cases". Grades will generally be assigned using the ranges: 89-80 = B, 79-70 = C, 69-60 = D, and 59-0 = F. Also, "+" grades will be assigned for the upper two percentage points of each grade range (e.g., 88-89% = B+). And "-" grades will be assigned for the lower two percentage points of each grade range (e.g., 90-92% = A-).

Please note: You must complete all assignments to get a passing grade in this course.

Lecture Meetings

The lectures will be a combination of instruction and demonstration, as well as review and discussion of the various complexities and difficulties that naturally arise while learning material such as this. These meetings will be mostly "drill & practice", working with the statistical packages, and working toward "fluidity" with the different models and will also involve us moving next door into room 234 to complete hands-on assignments using SPSS to analyze data.

Data Analysis Project

The data analysis project will be to propose and complete an analysis of a research question using the appropriate application of one of the statistical models covered in this class (details will be given in class/lab). You will either use one of the databases that will be made available for your use or one that you supply with my permission. The result of the project will be a research report and either a poster or a multimedia presentation. The hope is that you will apply to present your project at one of the undergraduate conferences held locally or regionally.

Course Workload and Suggestions

When taking Psychology 350, you might have been told that little of the material in that course was difficult, but that the difficulty of the course came from the sheer amount of material and the need to remember and apply large portions of it at any one time. By contrast, much of the material covered in the present course ***is just plain hard!!!*** Also, there is much material and you will need to remember and apply large portions of it at any one time. Many of the topics, examples, and assignments are the same ones that I use in the graduate research design and analysis course, because the purpose of this course is to get you to that "graduate" level of performance. For some of you, this will be the last formal presentation of this information you ever receive. For others, this is your best opportunity to prepare yourself for the rigors and demands of graduate school. With these things in mind...

- You should expect to "do something" for each class meeting. It may be reading, data analysis homework, "story problem" homework, web-based exercises, reviewing your notes, preparing for exam reviews, report writing, whatever. Sometimes this will require only an hour or two, other times it will require more.
- While the "mastery system" (see ABOUT THE "RE-TAKE" OPTION..., below) allows you to re-do exams and some assignments, time will be a limiting factor. You should try very hard to get it right the first time, and only rely upon "do overs" when your best efforts are insufficient. At those times, you should be sure that you prepare for the "re-do" (and don't be shy about asking me for help!!). Don't expect that the second "do" will, by itself, guarantee an improved score.
- I suggest that you do not take this course as part of a "really busy semester". While I realize that you have other classes and other commitments beyond schoolwork, to take full advantage of the learning opportunity provided by this course (and getting the A to prove you have done so) will require a considerable commitment of your time and energy.
- **BOTTOM LINE:** Plan to make this course "part of your life" for the next few months! Think about the material daily. Figure ways to apply the skills you are learning to other psychology courses. Actively change and broaden the way you think about measurement, sampling and data analysis – the assumptions, the goals, etc.

If you can't give me at least 15 hours a week (and sometimes a bit more), save yourself – get out now!!

With Apologies...

What follows are a whole bunch of policies and consequences. I don't like schedules and deadlines, and I really don't like having this many rules, but they seem to be necessary to get all of you through a demanding body of material. Basically it all boils down to three things: 1) be on time (both lectures and assignments, 2) have with you what you need to do what is planned (handouts, etc.), and 3) get your work done on time.

Lecture Attendance and Assignment Policies

- You are expected to attend all of each of the lecture meetings. Also, you are responsible for all take-home assignments that are discussed during lecture meetings or are posted on the webpage, including changes in the substance and/or requirements of those assignments.
- If you must miss all or part of a lecture meeting, you should contact me at least the day before the expected absence and make arrangements for an excused absence. You are responsible for obtaining any take-home assignment from the meeting that you miss and having it completed by the next lecture meeting. You will not be able to make up any in-class assignment, but will not be penalized for missing that assignment.

Academic Honesty

The consequences for cheating on any examination or assignment, or plagiarism (e.g., the use of unreferenced material in any writing assignment) will be: 1) failure in the course, and 2) referral of the matter to the office of Student Life for possible action by the Judicial Board as provided for in the UNL Student Handbook.

The issue of academic dishonesty for homework assignments is somewhat less clear, and requires more of an explanation. The purpose of the assignments is to give you a chance to practice various skills (reading, interpreting, computing, and writing). Thus, it makes good sense for you to work together with other members of your class. However, the final product you submit must be your own work and in your own words.

An example or two should help: You are strongly encouraged to get together with your classmates perform the SPSS analyses of most of the analysis assignments. However, when you write your answers on the homework sheets, put them in your own words. Similarly, you will probably find it useful to get together and discuss how to best incorporate the information from a set of readings into the Introduction of an assigned paper, and you are encouraged to do so. However, when you write that introduction do your own writing.

Evidence of dishonesty on any assignment (including exact or very similar phrasing, order of topics, examples, computational examples, patterns of mistakes, etc.) will be addressed via a two step process: The first time "an incident" occurs we will discuss it and you will have the opportunity to re-do the homework assignment. Any additional "incident" will lead to: 1) failure in the course, and 2) referral of the matter to the office of Student Life for possible action by the Judicial Board as provided for in the UNL Student Handbook.

Important University Policies regarding course attendance, Academic Honesty, Services for Students with Disabilities, Mental Health Resources, Final Exam Schedule, Emergency Procedures, Diversity and Inclusiveness, and Sexual Misconduct:

Please be sure to click on this following [link](#) so that you are familiar with these important University-wide policies. Contact Manda or Cal to discuss any of these, should they apply.

Instructional Continuity Plan:

Should the University cancel classes due to inclement weather, please be sure to log into our Canvas class to learn how we plan to cover the material that was scheduled for that day. We will indicate our continuity plan in course Announcements and in a class-wide email on the day the course is cancelled due to weather.

Finally, here's the thing!

There is much we are supposed to accomplish in this course ! If you need something, please ask. There are going to be office hours M-W-F in person with Dr. Williamson and by email & Zoom with Dr. Garbin.

If you feel uncomfortable about something from the class, something I've said, another student has said, something we read, etc. please bring it up with me or in class, so we can talk it through, sort things out, apologize when necessary and continue as a learning community.

Things in your life will crop up to reduce & delay your time and efforts toward this class... Its gonna happen and we WILL find ways to work around whatever you encounter. Remember that less-than-timely requests for help are also very welcome! Sometimes we get behind and can waste huge amounts of time trying to "recover on our own" when a couple reminders or a couple questions answered from us will get you on your way so you are "spending time" not "wasting it"! Ask! Please!