Introduction to the Course:
Whereas Psychology 350 was designed to give you skills helpful in completing your undergraduate training, Psychology 451 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 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).

Topics of the Course:
The main topics of the course are: 1) data analysis using multiple regression & linear discriminant function models, 2) webpage development and 3) validity – interpretability and meaningfulness of research results

Additional Requirements for Those Taking Psyc451
Exams will include a larger number of essay questions taken from the same study question pool, and there will be additional story problems. There will also 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 exam scores (40%), webpage (10%) and laboratory assignments (20% -- based on homework, research papers) and lab proposal/project (30%). Please note: changes during the semester's activities may necessitate changes in grade composition. Attendance and participation in lecture and laboratory 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 laboratory assignments to get a passing grade in this course.

Exams, Re-takes and Make-up Exams
Exams will be some combination of written exams taken in the Testing center, in-lab and take-home. Re-takes will be available for all exams. Because there are re-takes, there are no make-up exams.

Lecture and Laboratory 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. The laboratory meetings will be mostly "drill and practice", working with the statistical packages, and working toward "fluidity" with the different models.

Proper Care & Treatment of your Laboratory TAs
Your TAs will generally work more hours per week on this class than do you (remember, everything you write they grade for many of you!). Some of the course material they know extremely well and use every day, while other parts they may have recently learned for the first time. Either way, they have taken on the responsibility of helping me to teach you this material!! Be nice to them and use their feedback to get better! The TAs are required to enforce the rules and policies for the laboratory detailed below!! So, don’t ask them to let you slide, excuse you, give extensions, alternatives, to get out of anything, or to do your work for you – they are not allowed to grant these requests. Come see
me and try to talk me into or out of anything you like. If I think it is in your best interest you'll get your way; if not, you won't. Remember (with apologies to Kirsten Dunst), "This is not a democracy. This is a statsocracy!!"

**Laboratory 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 and laboratory 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 commitment’s 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 rather draconian (paternalistic, fascist, whatever) rules and penalties. 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 thing: 1) be on time (both lectures and laboratories), 2) have with you what you need to do what is planned (handouts, lab assignments, 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.

**Laboratory Attendance and Assignment Policies**

- You are expected to attend all portions of each of the meetings of the specific laboratory section in which you enrolled. Also, you are responsible for all take-home laboratory assignments that are discussed during laboratory meetings or are posted on the webpage, including changes in the substance and/or requirements of those assignments.
- If you are late for a laboratory meeting or don’t have the handouts and assignments you need to fully participate in the laboratory, your TA will deduct 10% from the associated in-class and take-home assignments.
If you know in advance that you must miss all or part of a laboratory meeting, you should contact the TA at least the
day before the expected absence and make arrangements for an excused absence. You are responsible for
obtaining the in-laboratory and take-home assignments from the meeting that you miss and having it completed by
the next laboratory meeting.

If you do not make arrangements for an excused absence, you will not be able to make up any graded in-
laboratory assignments that you missed. You are responsible for obtaining the take-home assignment from the
meeting that you miss and having it completed by the next laboratory meeting.

The TA has permission to allow each student only one excused absence. Any additional excused absences must
be arranged with me and will be allowed only if it is caused by illness or if it is professionally or educationally
relevant (e.g., a job interview or attending a research conference, respectively), and if it is not attributable to poor
scheduling or planning on your part.

In-laboratory assignments will usually be handed in at the end of the laboratory meeting. On other occasions you
will be instructed to take them with you to complete, or to provide information for a related take-home assignment.

Be sure to ask if you are not sure whether to hand in an in-laboratory assignment or to take it home and hand it in
at the next laboratory meeting. In-laboratory assignments that are not handed in on time will not be graded.

All take-home laboratory assignments are due the beginning of the laboratory meeting after they are assigned. 10%
will be subtracted from you assignment grade if you hand in the assignment latter that day and 10% for each
additional week the assignment is late.

An assignment that is handed in at the beginning of the laboratory meeting during which it is due may be rewritten
and the higher score will count toward your laboratory grade. Re-writes of these take-home assignments will be
due according to the TAs announcement when returning the graded work.

A take-home assignment that is handed in late may not be rewritten.

**Academic Honesty**

The consequences for cheating on any examination or assignment, or plagiarism (e.g., the use of
unreferenced material in any laboratory 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 and laboratory assignments is somewhat less clear, and
requires more of an explanation. The purpose of the homework and many of the laboratory assignments is to give you
a chance to practice various skills (reading, interpreting, computing, 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 laboratory 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 laboratory 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 homework or laboratory 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.

**Accommodating Persons with Disabilities:**

Students with disabilities are encouraged to contact the instructor for a confidential discussion of their individual
needs for academic accommodation. It is the policy of UNL to provide flexible and individualized accommodation to
students with documented disabilities that may affect their ability to fully participate in course activities or to meet
course requirements. To receive accommodation services, students must be registered with the Services for Students
with Disabilities (SSD) office, 132 Canfield Administration, 472-3787 voice or TTY.