**Research Methods (PSY 392)**

Term 2, 2018-2019

Bill Dragon

Office: 106c Law Hall

Office Hours: 12:00 – 1:00 PM Monday - Friday or by appointment

Phone: 895-4281

email: wdragon@cornellcollege.edu

**Class/Lab Hours**

Monday-Friday 9:00-11:00 am

Monday-Thursday 1:00-3:00 pm

**Textbooks**

Elmes, D. G., Kantowitz, B. H., & Roediger, H. L. (2012). *Research methods in psychology* (9th ed). Belmont, CA: Thomson WadsworthLearning. [https://www.amazon.com/Research-Methods Psychology-David Elmes/dp/1111350744/ref=sr\_1\_fkmr0\_1?ie=UTF8&qid=1475001038&sr=8-1-fkmr0&keywords=Elmes%2C+D.+G.%2C+Kantowitz%2C+B.+H.%2C+%26+Roediger%2C+H.+L.+%282012%29.+Research+methods+in+psychology+%289th+ed](https://www.amazon.com/Research-Methods%20Psychology-David%20Elmes/dp/1111350744/ref=sr_1_fkmr0_1?ie=UTF8&qid=1475001038&sr=8-1-fkmr0&keywords=Elmes%2C+D.+G.%2C+Kantowitz%2C+B.+H.%2C+%26+Roediger%2C+H.+L.+%282012%29.+Research+methods+in+psychology+%289th+ed)

Wilson-Donges, G. (2015). SPSS for Research Methods: A basic guide. New York: W.W. Norton & Company, Inc. <https://www.amazon.com/gp/product/0393938824/ref=ox_sc_sfl_title_5?ie=UTF8&psc=1&smid=ATVPDKIKX0DER>

Hacker, D., & Sommers, N. (2016). A Pocket Style Manual: APA Version (7th edition). New York:

Beford St. Martin’s.

**Goals**

This course is designed to familiarize you with many of the facets of research design and interpretation. You will learn not only the correct procedures to follow in conducting an experiment; you will also learn the effect faulty design and procedures have on the scientific enterprise.

The lab component of this course is designed to give you hands-on experience with data collection, data analysis, and the interpretation of research results. Everyone will participate in two lab projects and will write a paper on each project in APA format. This experience is an invaluable tool for understanding experimental design.

The course will enable you to critically evaluate the reports of research you read. This ability will aid you selecting articles for your senior seminar paper. The course will also give you an ability to design your own research project. Therefore, this course will benefit those who will conduct further research either at Cornell or in graduate school and those who will occasionally evaluate the relevance of research findings they encounter in their personal or professional life.

**Educational Priorities and Outcomes:** This course supports the Educational Priorities and Outcomes of Cornell College with emphases on knowledge, communication, ethical behavior, inquiry, reasoning and intercultural literacy. In this course you will apply psychological (knowledge) to your research projects and the interpretation of your findings. In the design and analysis of the study you will have to think creatively (inquiry) and you will need to demonstrate logical thinking skills (reasoning) while collecting, evaluating, and interpreting the data. Your written paper will require you to clearly explain the process of your entire research project as well as your findings. In addition, because you will be collecting data from the writing of people in a real life setting we will consider the academic and professional standards for conducting research (ethical behavior). Finally, the concepts of Research Methods were mostly developed using the norms and practices of western civilizations. Whenever possible the issue of generalizing research methods to more diverse cultural groups will be considered in this course.

**Grading**

Grades will be determined on a percentage basis using:

94% A 84% B 74% C 64% D

90% A- 80% B- 70% C- 60% D-

87% B+ 77% C+ 67% D+ 59% F

These percentages will be based on the total points possible in the course. The exams will account for 60% of your final grade. The lab report will account for the other 30% of your final grade.

**Exams Lab Report** **Additional Assignments**

1 = 30% First ½ = 15% IRB Certificate = 5%

2 = 30% Second ½ = 15% Resume/Vitae = 5%

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Total = 60% Total = 30% Total = 10%

**Exams**

There will be two exams. The exams will cover material presented in class, labs, and in the text during the time period designated on the reading schedule below. Exams will be given only on the date indicated below and will start promptly. The exams will be 120 minutes in length and will be composed of objective questions (50%) and essays (50%). Some of the questions will involve statistical calculations. Make-ups will be given to students who have missed one of the scheduled exams for an approved reason. All make-ups will consist of several essays and will involve statistical calculations. Exams must be made up within two days of the actual exam date.

# Empirical Research Reports

There will be one empirical research paper. The paper is due at 5:00 PM on the dates indicated on the reading schedule below. You must submit these via electronic copy by this time to the Moodle link for this assignment. Any papers turned in after that time (i.e., 5:01 PM) will be considered late. A paper that is late will be reduced 10% for each hour it is late (e.g., 6:01 PM = -20%). Therefore, plan your time accordingly. You do not need to wait until the analysis is completed to begin writing your paper. A quick start on the introduction will spread the writing over several days and prevent a last minute **CRUNCH**. Please note that **each** paper may contain **20 to 25 pages** of technical writing, so you will not be able to start the paper the night before it is due (or even a few days before it is due). You need to start immediately.

**Academic Honesty (Written by Dean Dieker)**

*Cornell College expects all members of the Cornell community to act with academic integrity.  An important aspect of academic integrity is respecting the work of others.  A student is expected to explicitly acknowledge ideas, claims, observations, or data of others, unless generally known.  When a piece of work is submitted for credit, a student is asserting that the submission is her or his work unless there is a citation of a specific source.  If there is no appropriate acknowledgement of sources, whether intended or not, this may constitute a violation of the College’s requirement for honesty in academic work and may be treated as a case of academic dishonesty.  The procedures regarding how the College deals with cases of academic dishonesty appear in The Compass, our student handbook, under the heading “Academic Policies – Honesty in Academic Work.”*

**Students with Disabilities (Written by Dean Dieker)**

*Students who need accommodations for learning disabilities must provide documentation from a professional qualified to diagnose learning disabilities.  For more information see* [*cornellcollege.edu/disabilities/documentation/index.shtml*](http://www.cornellcollege.edu/disabilities/documentation/index.shtml)

*Students requesting services may schedule a meeting with the disabilities services coordinator as early as possible to discuss their needs and develop an individualized accommodation plan.  Ideally, this meeting would take place well before the start of classes.*

*At the beginning of each course, the student must notify the instructor within the first three days of the term of any accommodations needed for the duration of the course.*

**Class Attendance**

Although attendance will not be taken during morning class it is obviously very important that you attend every class period since the exams will be drawn from this material. The labs are different story. You will receive a *one percent grade reduction of our final grade for each missed lab period*. The labs require a group effort to code and analyze the data and anyone missing hurts everyone in the class. Plan to be ready to work.

**Please be prompt:** Latecomers are very disruptive to everyone and may force us to continue beyond normal ending time and chronic tardiness in either the morning or afternoon sessions will receive a one percent final grade reduction.

In addition, there are several behaviors that will absolutely not be tolerated in class:

* SMOKING (the campus is now smoke free, so please abide by Iowa State Law….outside as well as inside the building)
* EATING (do not bring food into classroom, all food must be consumed outside of the classroom)
* CRAFTS (your hands should be busy taking notes)
* MOBILE PHONES or any other personal electronic devices (e.g., iPods) must be turned **off** in your bags/backpacks while you are in the classroom.

Laptop computers may be used during class time if doing so does not disturb nearby students and may **only** be used for note-taking (e.g., no twitter, email checking, web surfing, profile updating, game playing). You will lose the privilege of using a laptop any use other than note-taking.

**Date Text Chapter and/or Activity for the Day**

**Sept.**  24 (M) Install lap top APP/ install SPSS

25 (T) Elmes: Basics of Experimentation (7)

26 (W) Elmes: Experimental Design (9)

27 (Th) Elmes: Complex Design (10)

28 (F) Elmes: Conducting Ethical Research (4)

**Oct**. 01 (M) Elmes: Statistical Appendix A

02 (T) Elemes: Statistical Appendix B

03 (W) Elmes: Quasi-Experimental Designs (12)

04 (Th) Elmes: Relational Research (6)

**05 (F)** **Midterm Exam (All material since the first day of class**)

**First part of the** **Empirical Research Report Due: 5:00 PM**

08 (M) Dragon: Multifactor ANOVA (Within)

Wilson-Doenges: SPSS Data Entry Basics (1)

Wilson-Doenges: SPSS Getting a Feel for your Data (2)

09 (T) Dragon: Multifactor ANOVA (Mixed, Covariance)

10 (W) Wilson-Doenges: SPSS Correlation, Reliability, Chi-Square (3)

Wilson-Doenges: SPSS Differences between Means (4)

11 (Th) Dragon: Simple Regression

Wilson-Doenges: SPSS Multivariate Experiments (5)

**12 (F)**  Dragon: Multiple Regression

**Second part of the** **Empirical Research Report Due: 5:00 PM**

15 (M) Dragon: Moderation and Mediation

Wilson-Doenges: SPSS Multiple Regression (6)

16 (T) Wilson-Doenges: SPSS Nonparametric Statistics (7)

**17 (W) Final Exam (all material since the Midterm Exam) + Resume/Vitae**