

Proposed Title: PSY 2020 - Research Methodology: Laboratory and Field Research Techniques

Credit Hours: 4

Proposed Changed: Added requirement that Psychology majors receive a "C" or better for the prerequisite courses PSY 2010 - Research Methodology: Introductory Statistics in Psychology and the associated PSY 2040 lab.

Rationale: Psychology is an empirical science and a thorough understanding of statistics is critical to the success and progression toward graduation of Psychology majors

Current Catalog Description: General introduction to research methods in psychology with an emphasis on basic strategies for empirically identifying causal and correlational relationships. Topics will include laboratory and field techniques, quasi-experimental and non-experimental models, and the ethical issues involved in research. Every semester. Lecture 3 hours, laboratory 1 hour. Corequisite: PSY 2020 laboratory or department head approval. Prerequisites: PSY 1010, PSY 2010, and PSY 2040 or department head approval.

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Sample syllabus appears below:

15-083 (b)

Research Methodology: Laboratory and Field Research Techniques, **, Section **

COURSE: PSY 2020, Section *, CRN *
TITLE: Research Methodology: Introductory Statistics in Psychology
CREDIT: 3 credit hours
CLASS SCHEDULE: 1:40 – 2:55 pm, Tuesdays and Thursdays
CLASS LOCATION: GROT 317

FACULTY: Dr. ***
OFFICE PHONE: 423-425-****
OFFICE LOCATION: 350G Holt Hall (Psychology)
OFFICE HOURS: Tuesdays from 3:00 – 4:30 pm or by appointment most other days of the week..

PREREQUISITES AND COREQUISITES: To be successful in this course, you are required to also be registered for a section of PSY 2020L the laboratory component to this course. Prerequisites for this course also include: PSY 1010, PSY 2010 with a grade of "C" or better, and PSY 2040 with a grade of "C" or better, or department head approval.

COURSE DESCRIPTION: General introduction to research methods in psychology with an emphasis on basic strategies for empirically identifying causal and correlational relationships. Topics will include laboratory and field techniques, quasiexperimental and non-experimental models, and the ethical issues involved in research. Every semester.

In this course you will learn about scientific research in psychology, why it is important, how it should be conducted, and how it can be interpreted. You will be exposed to multiple research methods, the application of statistical principles, and the need to be critical evaluators of phenomena in your world. Once you have completed this course you should have the knowledge, skills, and abilities necessary to continue a career in psychology and/or lead a more critically examined life in general. The course objectives, therefore, are that when you leave this course you will be able to:

- Conduct your own research in an appropriate fashion (using the proper methodology, sampling, and analytical techniques for the issues you are studying)
- Understand the critical importance of context or setting when doing research
- Interpret the findings of your research and work done by other psychologists
- Critique the work of yourself and others in a constructive fashion
- Understand the strengths and weaknesses of various techniques for empirically testing hypotheses regarding psychological phenomena

Please note: Students will vary in their ability to master all of these objectives. Those who are most successful will be those who follow course guidelines, attend classes, complete all assigned work, and try their best to meet course expectations.

COURSE LEARNING OUTCOMES: Upon completion of PSY 2020, students will be able to:

- 1) Apply conceptual understandings of basic psychological research methodology principles to real-world situations.
- 2) Demonstrate clear methodological thinking regarding psychology-related research scenarios.
- 3) Explain methods concepts using appropriate vocabulary.
- 4) Recognize the strengths and limitations of the research methodologies in existing studies

- 5) Identify and discuss the ethical and practical challenges associated with research involving human participants.
- 6) Develop and design their own research study plan from the ground up (i.e., from idea to complete methodology plan).

EVALUATION/ASSESSMENT: I do not "give" grades; you earn them from completing your exams, lab assignments, papers, and by participating in class. All writing will be graded in terms of completeness, accuracy, and clarity. At the end of the semester your grade will be based on your performance on the above course evaluation components:

Grade	Total % range earning this grade
A	90 – 100%
B	80 – 89%
C	70 – 79%
D	60 – 69%
F	< 60%

Classroom courtesy: Succeeding in this course will require more than your passive presence in the classroom. Make these classes a priority: Tuesday and Thursday afternoons are your opportunities to learn about statistical methods within psychology and the behavioral sciences. To ensure that everyone has the best opportunity to learn this material, please make every effort to be on-time to class. If you must leave a class meeting at any point, please do not disrupt others.

Class notes: Via our course Blackboard site, I will provide weekly starter slides and narrative how-to guides (when appropriate) regarding the class materials for each week. It is your responsibility to take notes during each class and to ask questions along the way if/when you need help understanding topics that you find difficult. You will need my handouts and your class notes to complete your assignments and do well on the course exams. Please make sure to visit our course UTOnline site before each class for a copy of that day's slides; these materials may help you take efficient notes during class.

Reading: Chapters from your text will be assigned readings each week. At times, supplemental readings will also be made available. You are expected to complete all reading *before* you arrive at each week's class meeting. *This is for your own benefit*, as research has shown that students who read and try to understand new material before attending lectures are more likely than non-readers to (a) learn from the actual lecture and (b) retain that information better when they are eventually tested.

Examinations (Exam 1 = 15%, Exam 2 = 15%, Final Exam = 15%)

All three course exams are based on the material leading up to them -- this means that they are all cumulative. Please realize though, that each exam will be more heavily weighted toward the immediate preceding material that has not yet been tested. Exam questions will come from what I present in class and what you read in your text. The best way to prepare for these exams is to read the assignments on time, attend all classes, ask lots of questions, take good notes, and study several days leading up to each exam. I will try to leave some time open for review sessions prior to each exam. All three exams will be administered during regularly scheduled class times.

If you know in advance that you will have to miss one of the scheduled exams, *make sure to let me know immediately and before the exam*. Otherwise you could end up earning 0 points for that particular exam (and this *will* hurt your final grade). Make-up exams will only be permitted if the absence is excused and

supporting documentation (e.g., a doctor's note) is provided. The make-up will be scheduled as soon as possible and at my convenience.

Lab assignments (25%): Your full participation in a lab session linked to this course (i.e., 202-5##) is a requirement in order for you to pass this course. Details regarding the labs and grading procedures for this portion of the course will be provided by your lab instructor.

Paper (20%) & Poster (10%): More details on these components of your grade will be provided soon in your lab associated with this class. We can also discuss any questions/concerns you have about these details in our weekly class meetings here. For now, please note the following important assignment due dates:

- Required lab group meeting with your lab advising professor in Week 5
- Full group project proposal due to your project faculty mentor in Week 8
- Required lab group meeting with your lab advising professor in Week 13
- Complete draft of personal research manuscript due to your project faculty mentor and lecture professor by 5 pm Monday, April 18th.
- Final version of personal research manuscript due to your lecture professor by 5 pm Tuesday, April 26th (5 pm Friday, April 29th if you submitted a full version to your lecture professor by April 18)

This paper is a very important component of your final course grade. Also important is your final poster presentation, which you will be responsible for as a group. This presentation will be on Reading Day and more details will be provided in your lab. Make plans to be in attendance for this final presentation as all of you will be responsible for putting on a good presentation and answering visitors' questions. At least one of your group members must be in attendance for the entire poster presentation at the end of the semester.

CLASS PARTICIPATION/ATTENDANCE POLICY: Attendance is required. Unexcused absences will count against your final grade (i.e., -1 point for every missed class). Attending every class meeting will ensure you have done your best to learn the material and prepare for all course quizzes and examinations. Bring your questions and some recollection of the assigned readings to each class meeting (along with your text and note-taking materials). You will be participating in the "learning process". I will do my best to clearly present the information using your text and other materials to clarify the main topics. This is yet another reason for you to attend every lecture.

LATE ASSIGNMENT SUBMISSION/MAKE-UP POLICY: Assignments not submitted on time will earn a failing grade. Late assignments will not be accepted without pre-approval from the instructor.

REQUIRED TEXTBOOK/RESOURCES:

- Weathington, B. L., Cunningham, C. J. L., & Pittenger, D. J. (2010). *Research methods for the behavioral and social sciences*. Hoboken, NJ: John Wiley & Sons, Inc.
- American Psychological Association (2009). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author. [make sure you get the 2nd printing of this edition; the first printing had errors]
- Szuchman, L. T. (2005). *Writing with style* (4th ed.). California: Wadsworth/Thomson Learning. [for the lab]

These books have been ordered and should be available for you at the UTC bookstore. Make sure you purchase the correct edition of each book by the end of the first week of classes. Your primary text is

likely to only be available through the bookstore (first printing is January), so don't waste time trying to find it elsewhere.

COMMUNICATION: To enhance student services, the University uses your UTC email address for all communications. Please check your UTC email on a regular basis. If you have problems with accessing your UTC email account, contact the Call Center at 423/425-4000. Course-related communications will also be transmitted via e-mail and through our UTC Learn site; make sure to check both frequently.

ACCOMMODATION STATEMENT: If you are a student with a disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) and think that you might need special assistance or a special accommodation in this class or any other class, call the Disability Resource Center (DRC) at 425-4006 or come by the office, 102 Frist Hall.

COUNSELING CENTER STATEMENT: If you find that personal problems, career indecision, study and time management difficulties, etc. are adversely impacting your successful progress at UTC, please contact the Counseling and Career Planning Center at 425-4438.

COURSE SCHEDULE/TOPICAL OUTLINE: Included as an appendix to this syllabus (so keep reading).

TEACHING/LEARNING STRATEGIES: This course is taught with a mix of lecture, presentation, and in-class group discussions. A significant amount of learning also occurs through students' own reading, writing, and self-exploration of the course topics and materials.

HONOR CODE PLEDGE: As a student in this course, you are expected to adhere to the following (from the UTC Student Handbook):

I pledge that I will neither give nor receive unauthorized aid on any test or assignment. I understand that plagiarism constitutes a serious instance of unauthorized aid. I further pledge that I exert every effort to ensure that the Honor Code is upheld by others and that I will actively support the establishment and continuance of a campus-wide climate of honor and integrity.

Some papers and other written assignments in this class will be submitted through UTC Learn's text-matching software (SafeAssign) for review of originality and intellectual integrity. When you submit these papers online, you agree to have your paper included in the institutional repository of digital papers. If the results of the review indicate academic dishonesty, disciplinary action may be taken against you (the student) as outlined in the UTC Student Handbook.

COURSE URL: <http://www.utc.edu/learn> -- use your UTCID and password to access

COMPUTER REQUIREMENTS: Internet access, UTC Learn, word processing and spreadsheet software (preferably Microsoft Office software, as it is the most flexible and functional for our purposes in this class).

Tentative Course Schedule

Dates			Topics	Readings
Week 1	Jan.	11	Introduction Statistics Review	Chap. 1 Appendix A
Week 2	Jan.	18	Research ethics Foundations of research Overview of empirical methods	Chap. 2 Chap. 3 Chap. 4
Week 3	Jan.	25	Writing the research report Reviewing the literature & forming hypotheses <i>Exam 1 Review</i>	Chap. 5 Chap. 6
Week 4	Feb.	1	<i>Exam 1</i>	
Week 5	Feb.	8	Sampling Assessments, Surveys, & Observation	Chap. 7 Chap. 8
Week 6	Feb.	15	Research Design	Chap. 9
Week 7	Feb.	22	Correlational Research	Chap. 10
Week 8	Mar.	1	Between-Subjects Designs Between-Subjects Research (single variable) <i>Exam 2 Review</i>	Chap. 11 Chap. 12
Week 9	Mar.	8	<i>Exam 2</i>	
Week 10	Mar.	15	<i>No class – Spring Break</i>	
Week 11	Mar.	22	Between-Subjects Research (factorial designs)	Chap. 13
Week 12	Mar.	29	Correlated Groups Designs	Chap. 14
Week 13	Apr.	5	Special Research Designs	Chap. 15
Week 14	Apr.	12	Categorical Data Mixed-Methods Research	Chap. 16 Chap. 17
Week 15	Apr.	19	<i>Final Exam Review</i>	
Week 16	Apr.	26	Poster Presentations University Center 10:00 am – 12:00 pm	
Week 17	May	3	<i>Last day to turn in final lab project paper</i> <i>Final Exam</i> 5:30 – 7:30 pm <i>In our normal classroom</i>	

Please note: This schedule may change slightly due to extenuating circumstances, but not without mutual agreement being reached between the instructor and students. Updates will be announced in class and posted on UTOnline, so pay attention and check that site frequently!