

**Research Methodology: Introductory Statistics in Psychology**  
**Fall 2015**  
**Psychology 2010-03 42327**

All information on this syllabus is subject to change.

**Instructor:** Michael D. Biderman

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**Office Hours and Location:** Holt 350 F T 1:30-2:30 W: 2:30-3:30 R: 1:30-2:30

**Course Meeting Days, Time, and Location:** TR 12:15-1:30 Holt 304

**Course Catalog Description:** Descriptive and inferential statistics with computer analysis of data from psychological and other social sciences. Traditional and modern descriptive techniques, correlation and regression analysis, probability concepts, inferential techniques on means through analysis of variance, power analysis, and selected nonparametric techniques are presented. The use of state-of-the-art computer programs for analysis of data is emphasized in the PSY 2040 laboratory which is required for Psychology majors.

**Course Student Learning Outcomes:** Students should become familiar with common statistical concepts and procedures and be able to use those concepts and procedures appropriately in the analysis of data.

**Course Pre/Co Requisites: Prerequisite:** Math ACT subscore  $\geq 22$  or any approved general education mathematics course or department head approval. **PSY 2040 is a required corequisite for Psychology majors.**

**General Education Statement:** This course has been certified as satisfying the general education requirement for statistics.

**Difficulty.** This is a very hard course.



**Course Calendar/Schedule: Revised on 9/17/15****Details may change depending on the nature of our interactions**

<u>Date</u>	<u>Chapter</u>	<u>Focus on / Skip</u>
8/18	Syllabus	
8/20	Ch 1: Introduction to Statistics	
8/25		
8/27	Ch 2: Frequency Distributions	
9/1		
9/3	Ch 3: Measures of Central Tendency and Variability	
9/8		
9/10	Ch 4: Standard Scores and the Normal Distribution	
9/15		
9/17	Ch 5: Sampling and Probability	
9/22		
9/24		
9/29	<b>Test 1</b>	
10/1	Ch 6: Introduction to Hypothesis Testing	
10/6	Ch 7: The Single-Sample t Test	
10/8	Ch 8: Independent –Samples t Test	
10/13	Ch 9: The Paired-Samples t Tests	
10/15		
10/19	<b>LAST DAY TO DROP WITH A W</b>	
10/20	<b>Fall Break</b>	
10/22	Ch 10: Between-Subjects, One-Way Analysis of Variance	
10/27		
10/29	Ch 15: Nonparametric Statistical Tests: Chi-Square	
11/3		
11/5	<b>Test 2</b>	
11/10	Ch 13: The Pearson Correlation Coefficient	
11/12		
11/17	Ch 14: Simple and Multiple Linear Regression	
11/19		
11/24	Ch 12: Factorial Analysis of Variance	
11/26	<b>Thanksgiving</b>	
12/3	<b>Final Exam – Thursday, 10:30 – 12:30</b>	
	Emphasis on all material after Test 1	

**Important Date: Last Day to drop with a W: Monday, October 19**

**LaunchPad Chapter Quizzes.** You will be required to complete a chapter quiz each worth 5 points over the text, roughly one per chapter, roughly one per week. Due dates will be announced at least 1 week in advance of the date.

You will be allowed two late chapter quizzes with no penalty. After that, you will be penalized .5 pt. per day for taking a quiz late. To avoid penalty on the first two late tests, you must take the makeup quiz before the graded quizzes are handed back.

**Policy for Late/Missing Work:** You are expected to complete or turn in homework assignments and take tests at the scheduled times. If you know you cannot take a test at the scheduled time, please contact me about missing beforehand. If you miss a test without notifying me beforehand you will be expected to explain your absence satisfactorily before your request to take a make-up exam will be considered. **Tests must be made up within one to two days of the scheduled date.** No test can be made up after the results have been distributed. Makeup tests may not be identical to those taken at the regular time.

**Homework and in-class assignments.** There will be many homework and in-class assignments given out during the course of the semester. Due dates will be announced, and it is expected that you'll turn in completed assignments on the due dates. **However, homework will be accepted until the beginning of the class period in which it's returned to those who turned it in on time.**

Homework must be submitted on the appropriate answer sheet.

Homework generated using a computer must be in "portrait" mode, not in "landscape" mode.

Homework must be submitted **on paper** at the designated time.

Submissions not conforming to the above guidelines will be penalized.

**Documentation.** To protect yourself in cases where you and I might disagree on how many points you received for a test or assignment please keep all materials until the end of the semester.

**About the PSY 2040 ab** The lab meets in Holt 302. The lab is a separate 1-hour course for which you will receive a letter grade. The lab will involve exercises you will conduct in the lab along with a take-home assignment for each lab. Half of your lab grade will be determined by attendance and participation in class. The other half will be determined by how well you do on the take-home assignments. Specifics are outlined in the lab syllabus. The lab is a co-requisite for psych majors. I recommend it as a co-requisite for all students.

**Experimental participation.** There may be an opportunity to earn extra credit from participation in research conducted by faculty or students or from special homework assignments or projects assigned by me. This extra credit will be accessed through the Sona Experiment Management System. Remind me to give you handouts showing how to access this system. (If I forget, they are available on my web site: [www.utc.edu/michael-biderman](http://www.utc.edu/michael-biderman)) Each Sona "credit" is worth 1 point toward your grade. **The limit on the number of points worth of extra credit earned this way is 10. This limit does not apply to extra credit earned for class attendance (see below).**

**Calculators.** You should have a calculator with square root capability for the course. You do not need a "statistical" calculator for the course. Smart phone calculators are allowed providing you put your phone on the table when using its calculator function.

**Computer use.** You will spend a lot of time using computers in the Psychology Computer Lab in Holt 302 during this course. It is the meeting room for all Psychology 2040 labs. No purchase of software is required for the course, although SPSS is available as part of UT's site license. I recommend that you get SPSS for your own computer.

To get SPSS for your own computer, go to <https://webapps.utk.edu/oit/softwaredistribution/>

**Preparation.** You can't treat this course as a reading course. **I will assume that you will have read the material to be covered prior to our covering it. You should review previous notes prior to each class.**

**Food/Drinks/Talking/Cell phones, Computers in class.** Food and drink in class are NOT encouraged. Under no circumstance will you be allowed to consume food or drink if that consumption bothers others. Please do not carry on conversations with anyone during class.

**You may not use cell phones during class.**

**Use of computers is allowed only if used to display or take notes related to lecture. (If you're laughing while on your computer or the person behind you is laughing, that's a sign you're not looking at lecture notes.**

**No guns allowed in class.**

**No headphones/earbuds/iPhones,iPods, or similar electronic equipment allowed during class.**

**Lecture notes.** I will put my lecture notes on my web page prior to each class. I will also **try** to record each lecture and put the video of the lecture (lecture notes with my voice) on my web page. I encourage you to print the lecture notes and bring them to class. Use the recordings as you wish.

**Communication with me.** Email is best. If you send me an email, be sure to sign it.

**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 special accommodations in this class or any other class, call the Disability Resource Center (DRC) at 425-4006 or come by the office, 108 University Center.

**Counseling Statement:** If you find that you are struggling with stress, feeling depressed or anxious, having difficulty choosing a major or career, or have time management difficulties which are adversely impacting your successful progress at UTC, please contact the Counseling and Personal Development Center at 425-4438 or go to [utc.edu/counseling](http://utc.edu/counseling) for more information.

**Veterans' Statement:** The office of Veteran Student Services is committed to serving all the needs of our veterans and assisting them during their transition from military life to that of a student. If you are a student veteran or veteran dependent and need any assistance with your transition, please refer to <http://www.utc.edu/greenzone/> or <http://www.utc.edu/records/veteran-affairs/>. These sites can direct you the necessary resources for academics, educational benefits, adjustment issues, veteran allies, veteran organizations, and all other campus resources serving our veterans. You may also contact the coordinator of Veteran Student Programs and Services directly at 423.425.2277. THANK YOU FOR YOUR SERVICE

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1. <http://www.macmillanhighered.com/launchpad/corty2e/577555>

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