**Psychology 2317.002**

**Quantitative Methods of Psychology**

**Spring 2019**

**TTH 3:30-4:50pm**

**GAB 105**

**Instructor:** Lee Bedford, M.S.

**Office:**  Terrill Hall 215, Cube 43

**Office Hours:** By Appointment

**Email:** [LeeBedford@my.unt.edu](mailto:LeeBedford@my.unt.edu)

**Contacting the Instructor:**

E-mail is the best way to get in contact with me, and I generally will reply within 36 hours (often more quickly). **DO NOT contact the instructor or TA via Canvas! We will not respond.**

**TA:** Caitlyn Carey

**Email:** CaitlynCarey@my.unt.edu

**Office:** TH 215, Cube #37

**Office Hours:** Tuesdays 12:00-3:00pm

**Statistics Tutors:**

There are two dedicated tutors specifically for Quantitative methods. These tutors are free, and have drop in hours (although scheduling an appointment can be beneficial). Use them! They can assist with homework or lecture questions, and can go over the quizzes with you. They will be available throughout the semester.

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| **Statistics Tutors** | **Email** | **Office** |
| Kelzie Beebe | KelzieBeebe@my.unt.edu | TH 215 Cube #45 |
| Allison Laajala | AllisonLaajala@my.unt.edu | TH 215 Cube #24 |

**Course Description**:

This course is part of the Department of Psychology’s core program for majors. Students will be introduced to the basic concepts of quantitative research in the discipline of psychology. Techniques appropriate for the treatment of psychological data will be presented and students will be required to demonstrate mastery of these techniques.

The course will focus on topics ranging from data presentation to the concept of central tendency, from frequency distributions to null hypothesis testing and basic correlational theory. Students will have ample hands-on experience with data manipulation and will learn to use a pc-based statistical package (SPSS) to analyze data.

This course meets the prerequisite for Experimental Methods in Psychology (2950) and is designed to prepare students to work with experimental data.

**Course Prerequisite**: MATH 1680 or MATH 1681

**Course Objectives:**

1. Students will develop a solid base of knowledge about basic statistical concepts
2. Students will be able to complete fundamental statistical analyses
3. Students will acquire the ability to understand and explain to others the statistical analyses in reports of psychological research
4. Students will become familiar with the basic operation of a standard computer package for statistical analysis
5. Students will be prepared for more advanced courses in statistical methods

**Course Requirements:**

1. Good Attendance & Class Participation 20%
2. Weekly In-class Quizzes 25%
3. Homework Assignments 20%
4. A Cumulative Final Exam 20%
5. Statistics Lab 15%

**Required Texts:**

Aron A, Coups E, & Aron E (2013). Statistics for psychology, 6th edition. Upper Saddle River; NJ:

Prentice-Hall, Inc.

**Knowledge of Mathematics:**

This course does not emphasize mathematics. There will be many calculations, but these require no more than rudimentary high school algebra. The emphasis of this course is on understanding the CONCEPTS of statistical methods.

You are encouraged to use calculators for both assignments and exams. A simple calculator that adds, subtracts, divides, multiplies and takes square roots is all that is necessary.

**Attendance, Participation, & Homework:**

Students are expected to attend each lecture and lab, reflect upon each of the reading assignments, and actively engage in discussions about the assigned readings and related concepts. Attendance will be taken at each class and lab. Homework will be collected weekly during class on **Thursdays**. Since answers are provided in the textbook, you will not receive grades on your homework. However, your teaching assistant will review them. You will simply be marked for having completed the homework or not. Since quizzes will be based on material in the textbook, students are encouraged to be diligent in completing the homework and to make use of labs to prepare. In addition, the statistic tutors are available for additional help.

Attendance is kept by an assigned seating chart and is taken at differing times each class period. If the

student is not in their correct seat at the time attendance is taken, the student will be marked as absent. It is the student’s responsibility to ensure they are sitting in the right seat each class.

**Statistics Lab:**

Stats labs are mandatory. You are expected to attend stats lab. Labs are an opportunity to ask specific questions and clarify subject matter presented during lecture and to develop skills in SPSS (a statistical software package). Additionally, your TF will work through stats problems with you during lab.

**Quizzes:**

We will have weekly classroom quizzes (including the syllabus quiz). **You will be allowed to drop your lowest quiz grade**. The quizzes will cover material in the text as well as material presented in class. **Students will need Scantron sheets (the green ones with 100 questions) and #2 pencils for all quizzes unless otherwise specified.**

**The quizzes will begin at the start of the class session. If you arrive late YOU WILL NOT BE ALLOWED EXTRA TIME.**

* Makeup quizzes are only permitted in extreme circumstances under the following conditions:

1. *Documented UNT event* (e.g., sports team away game documented by the Dean of Students).
2. *University-related conference*

* If you miss a quiz for any other reason, you will not be allowed to take a make-up quiz. You will receive a grade of zero for that quiz.
* Students must obtain the instructor’s permission to make up the quiz via email and then arrange to make up the quiz with the TA. Quizzes must be made up within 1 week of the original quiz date; otherwise, a grade of zero will be assigned.
* The instructor reserves the right to determine what qualifies as an extreme circumstance warranting a make-up quiz.

**Final Exam:**

A final exam will be administered during finals week. This exam will be cumulative. 75 questions, Multiple Choice. Students who receive A’s (90 or above) on **ALL** of their weekly quizzes will be exempt from the final exam.

**Extra Credit Research Participation:**

Experimental participation is allowed for up to 20 points via faculty running experiments during the duration of the course, and 20 points for other opportunities throughout the semester. Students who do not wish to volunteer will be provided an equivalent alternative (such as a paper or written review of research articles) for an equal number of extra credit points that substitute for research participation credit. Also, no student under 18 can participate as a subject in research unless a parent or legal guardian signs the consent form.

**Questions regarding SONA should be sent to untsonarep@yahoo.com.**

Students may also earn a maximum of 5 extra credit points by meeting with one of the stats tutors any time before 3/1/19. Students must sign the tutoring log and let the TA know they attended tutoring.

**COURSE REQUIREMENTS/GRADES**

**Grade Breakdown:**

Attendance & Participation - 100 pts.

Homework - 100 pts.

Statistics Lab - 75 pts.

Weekly Quizzes - 125 pts.

Final Exam - 100 pts.

**Grading Scale:**

A = 90-100% 450-500 points

B = 80-89% 400-449

C = 70-79% 350-399

D = 60-69% 300-349

F = 0-59% < 300

**Note: I do not round up grades. For example, a final class average of 89.999 earns you a B.**

**\*\*\*Words of advice\*\*\***

**You cannot expect to do well in this class if you are not here.** Throughout the semester, you are expected to attend class, arrive on time, and stay for the duration of the class. If you do miss class, it is **your responsibility** to obtain notes/handouts and find out about any schedule changes that may have been made. It is not my responsibility to get you the notes that you missed, so **please do not email me asking for notes**. Out of courtesy to both your instructor and TA, please refer to your fellow classmates for such information.

Grades are not given or assigned to you by an instructor, you ***earn*** them. It is your responsibility to study, attend class, come to office hours, complete extra credit, etc. to earn the grade you want!

**Cell Phones and Laptops:**

Cell phone ringers must be turned off during class. Laptop computers are allowed for note taking purposes, as long as their presence does not disturb other students in the class. Try to avoid Facebook, Twitter, email, etc. – remember, the people behind you can see everything you do ☺

**UNIVERSITY POLICIES:**

**Academic honesty: Cheating and plagiarism** **will NOT be tolerated**.

Any student caught cheating or misrepresenting the origins of assignments will be subject to University Policy, which may include expulsion from the class and/or the University. Students are directed to read the Student Code of Conduct and Discipline section in the Undergraduate Catalog. Please refer to UNT’s full policy for more details regarding student academic misconduct, penalties, and disciplinary action: <http://vpaa.unt.edu/academic-integrity.htm>

**Reporting Grades:**

It is **against** University policy for me to divulge grade information via e-mail or telephone. If you have concerns about your grade at any point in the semester, please schedule an appointment to meet with me. It is also **against** University policy for me to discuss your grades with anyone other than you, the student, unless a signed waiver is on file.

**University ADA Policy-Students with Disabilities:**

The University of North Texas is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 92-112 – The Rehabilitation Act of 1973 as amended. With the passage of new federal legislation entitled Americans with Disabilities Act (ADA), pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

As an instructor, I am required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at [www.unt.edu/oda/apply/index.html](http://www.unt.edu/oda/apply/index.html). Also, you may visit the Office of Disability Accommodation in the University Union (room 321) or call (940) 565-4323.

**Please present your written request for accommodations as soon as possible to allow for making arrangements in a timely manner.**

**University Policy on Student Behavior in the Classroom:**

Student behavior that interferes with an instructor’s ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Center for Student Rights and Responsibilities to consider whether the student's conduct violated the Code of Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc.  The Code of Student Conduct can be found at [www.unt.edu/csrr](http://www.unt.edu/csrr).

\*\*\***Any student caught cheating will receive an “F” for the course. \*\*\***

**TENTATIVE COURSE SCHEDULE\***

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| **Date** | **Day** | **Class Topic** (begins on date indicated) | | **Reading Due** | | **Assignment Due** |
| 1/15 | T | Introduction/Syllabus | |  | |  |
| 1/17 | TH | Displaying the Order in a Group of Numbers | | Ch. 1 | | Syllabus Quiz  Set 1 (Ch. 1) |
| 1/22 | T | Central Tendency and Variability | | Ch. 2 | | Quiz (Ch. 1) |
| 1/24 | TH |  | |  | | Practice Problems Set 1 (Ch. 2) |
| 1/29 | T | Inferential Statistics – Z scores, Normal Curve, Sample vs Population & Probability | | Ch. 3 | | Quiz (Ch. 2) |
| 1/31 | TH |  | |  | | Practice Problems Set 1 (Ch. 3) |
| 2/5 | T | Introduction to Hypothesis Testing Part I | | Ch. 4 | | Quiz (Ch. 3) |
| 2/7 | TH |  | |  | | Practice Problems Set 1 (Ch. 4) |
| 2/12 | T | Hypothesis Testing | | Ch. 5 | | Quiz (Ch. 4) |
| 2/14 | TH |  | |  | | Practice Problems Set 1 (Ch. 5) |
| 2/19 | T | Statistical Significance, Effect Size & Statistical Power | | Ch. 6 | | Quiz (Ch. 5) |
| 2/21 | TH |  | |  | | Practice Problems Set 1 (Ch. 6) |
| 2/26 | T | Introductions to T-tests: Single Sample & Dependent Means | | Ch. 7 | | Quiz (Ch. 6) |
| 2/28 | TH |  | |  | | Practice Problems Set 1 (Ch. 7) |
| 3/5 | T | The T-test for Independent Means | | Ch. 8 | | Quiz (Ch. 7) |
| 3/7 | TH |  | |  | | Practice Problems Set 1 (Ch. 8) |
| 3/12 | T | Spring Break – No Class | |  | |  |
| 3/14 | TH |  | |  | |  |
| 3/19 | T | Intro to Analysis of Variance Part 1 | | Ch. 9 | | Quiz (Ch. 8) |
| 3/21 | TH |  | |  | |  |
| 3/26 | T | Intro to Analysis of Variance Part 2 | |  | | No Quiz |
| 3/28 | TH |  | |  | | Practice Problems Set 1 (Ch. 9) |
| 4/2 | T | Factorial Analysis of Variance Part 1 | | Ch. 10 | | Quiz (Ch. 9) |
| 4/4 | TH |  | |  | |  |
| 4/9 | T | Factorial Analysis of Variance Part 1 | |  | | No Quiz |
| 4/11 | TH |  | |  | | Practice Problems Set 1 (Ch. 10) |
| 4/16 | T | Correlation | | Ch. 11 | | Quiz (Ch. 10) |
| 4/18 | TH |  | |  | | Set 1 (Ch. 11) |
| 4/23 | T | Prediction | | Ch. 12 | | Quiz (Ch. 11) |
| 4/25 | TH |  | |  | |  |
| 4/30 | T | Review |  | | Quiz (Ch. 12) and Set 1 (Ch.12) | |
| 5/2 | TH | No class |  | |  | |
| 5/7 | T | Final Exam – Comprehensive – 1:30-3:30pm NOT 3:30-4:50pm |  | |  | |

**\*NOTE: I reserve the right to change the schedule based on class interest, material comprehension, and personal fondness for the particularly interesting stuff. Any changes to this syllabus will be communicated to you in class and via Blackboard Learn.**

**REMEMBER: You are responsible for bringing a scantron and number 2 pencil to each quiz and exam.**