



COLLEGE OF EDUCATION AND PSYCHOLOGY
School of Education

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| Course prefix and Number | EDUC 5301.060 |
| Course Title | Stats and Research Methods for the Learning Sciences |
| Session | Spring, 2024 |
| Course Meeting | Online |
| Office Hours | Monday and Tuesday 2:00 – 3:30 pm (& by appointment) |
| Instructor | Woonhee Sung, Ed.D wsung@uttyler.edu /CANVAS inbox 903.566.7175 BEP 243, School of Education |

Communication Policy: Students may email any time when a question arises. Please note for email messages, I typically respond within 24-48 hrs. Weekends may vary.

Course Description: This course is designed to help students learn the basis of data analysis, including the descriptive and inferential statistical procedures that are commonly used in learning sciences research. Students will gain competence in the evaluation of research reports and the development and planning of research proposals.

Student Learning Outcomes:

1. Understand basic statistical techniques and how to use them.
2. Identify and discuss different types of research methodology and their uses.
3. Evaluate research methods from published reports.
4. Review and Synthesize available literature regarding a research question.
5. Apply knowledge of research methods to the evaluation of research reports.

Required Text

Exploring research (9th Edition). Salkind, N. J. (2017)

ISBN-13: 9780134416588

or

Exploring research (8th Edition). Salkind, N. J. (2009)

ISBN-10: 020-509-3817

ISBN-13: 978-020-509-3816

Available from the UTT bookstore. The same textbook may also be available from an independent retailer, including an online retailer.

Note: Students can use both 8th Edition (2009) or 9th Edition (2017) for this course because the campus bookstore may be unable to carry the 8th Edition.

Course Policies

Canvas

Students will access class notes, assignments, grades and course information through Canvas. Any changes to the course schedule, schedule of assignments, or any special assignments will be posted on Canvas. Students are expected to regularly check Canvas for updates and to download any class handouts.

Technology Help

If you experience technical problems or have a technical question about this course, you can obtain assistance by emailing itsupport@patriots.utt Tyler.edu. When you email IT Support, be sure to include a complete description of your question or problem including:

- The title and number of the course
- The page in question
- If you get an error message, a description and message number
- What you were doing at the time you got the error message

Academic Integrity

The University's student standards of academic conduct apply to this course, as with any other course

(<http://www.utt Tyler.edu/mopp/documents/8Student%20Conduct%20and%20Discipline.pdf>). All assignments should be your original work (or original group product, where required). Working together on any graded assignment is forbidden except where otherwise stated. I will be very explicit about which assignments may be done with friends or a group throughout the course, as I do often offer assignments on which I strongly encourage collaboration. If at any point during the semester, you need help understanding this policy or are concerned that you may be breaking this policy, please contact me directly. Violations will be handled in accordance with University policy.

Assignment

All assignments are due on or before the due dates provided in the Tentative Schedule, below. Each written assignment must be typewritten and submitted in Canvas. General guideline for written assignments are:

1. On Time
2. Word-processed, double-spaced, 12 point
3. Free of typographical errors
4. Follow APA format

Late Assignments (turning in after due date). Late assignments are not accepted unless the arrangements have been made with the instructor and permitted. Assignments that are one day late will be lowered 20%. Papers that are two days late will be lowered 50%. No assignments will be accepted after 48 hours unless arrangements have been made with the instructor.

Code of Conduct

I expect students in this course to conduct themselves as university students of graduate standing. I expect students to participate in class activities. I expect students to meet assigned deadlines. I

expect students to behave in an academically honest manner. I reserve the right to penalize students who violate class policies.

Grading System

Students will be required to complete a number of assignments over the duration of the course. You may earn a total of 50-100 points based on your performance on the criteria listed below.

1. IRB Training (5%)

Students in this course will complete an online training module related to Ethical Research practices regarding Human Subjects. Detail guidelines are on the Assignment tab at Canvas. Due date of the training is posted under Week 4 module.

2. Participation and Contribution (20%)

Students will be expected to participate in online tasks and contribute to class discussions throughout the semester. Also, a couple of FlipGrid activities will be required to get the full credit of participation.

3. Quizzes about on-line lecturing (20%)

DURING taking on-line lectures for each content, you will be asked to take an online quiz. Each quiz will consist of a mix of short answer and multiple-choice questions. You will have 10 minutes for each quiz and total 9 quizzes for this course. Students will have TWO attempts for each quiz and the highest score will be kept. Quizzes must be taken by the Sunday night (see due dates on the schedule below).

4. Journal summaries and synthesis (25%)

One of the major purposes for this course is to learn how to read a research paper PROPERLY. Students will be expected to summarize 4 related journal articles and construct a synthesis paper of the connectedness of these articles. Students can choose the topic of their choice and be consistent with the topic throughout the semester. Guidelines are posted on CANVAS for each assignment. **Late work is not accepted without prior permission from the instructor.**

5. Exams – Midterm & Final (30%)

There will be mandatory midterm and final exams. The exams will consist of a mix of short answer and multiple-choice questions.

Grades will be assigned as follows:

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| A | 90 - 100% |
| B | 80-89% |
| C | 70-79% |
| D | 60-69% |
| F | Below 60% |

Last day to Withdraw from this course: March 25, 2024

| Date | Reading Chapters | Quiz/To-Dos |
|-------------|--|---|
| Week 1 | Introduction Chapter 1 | No Quiz |
| Week 2 | Chapter 2 Zoom meeting (day and time TBA) | Chapter 2 Quiz Share research interest |

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| Week 3 | Chapter 3a & 3b Zoom meeting (day and time TBA) | Chapter 3 Quiz Journal summary 1 |
| Week 4 | Chapter 4 | Chapter 4 Quiz IRB Training Due |
| Week 5 | Chapter 5 | Chapter 5 Quiz Library Research Lessons Discussion board |
| Week 6 | Chapter 6 | Chapter 6 Quiz Journal Summary 2 Yellow Slip librarian meeting |
| Week 7 | Midterm | Midterm |
| Week 8 | Chapter 7 | Chapter 7 Quiz |
| Week 9 | Spring Break | |
| Week 10 | Chapter 13 & APA format | Chapter 13 Quiz Journal Summary 3 |
| Week 11 | Chapter 8 | Chapter 8 Quiz |
| Week 12 | Chapter 9 | Chapter 9 Quiz Journal Summary 4 |
| Week 13 | Chapter 10 | Chapter 10 Quiz |
| Week 14 | Chapter 11 | Chapter 11 Quiz Journal Synthesis |
| Week 15 | Chapter 12 | Chapter 12 Quiz |
| Week 16 | Final | Final Exam Research Pool Requirement due |

Note: This syllabus is subject to change based on the needs of the class.

Technical Support

- UT Tyler Information Technology Hotline 903.565.5555 x2 or
itsupport@patriots.uttyler.edu
- 24/7 Support inside Canvas >>> Canvas Help

Course Policies

- *Class participation:* This course is designed as an online course and you are required to participate! You will have online modules which include chapter readings, participation activities, and technology projects. Each module will be available weekly. However, you should expect to spend a minimum of six hours per module. As an online student, log in multiple times a week to participate in the course. The due dates of the assignment/project are posted in CANVAS. You are responsible to check due dates and submit your work on or prior to the due date.

- *Grading Policy:* All assignments are to be submitted on or prior to the due date. **Late work is not accepted without prior permission from the instructor.** Be aware that technical difficulties or lack of Internet access or access to required technologies and software are not accepted as excuses for late work or incomplete work. Thunderstorms are not an excuse for late work. Please proofread assignments carefully so no spelling, grammatical, and/or punctuation errors exist. Points for spelling, grammatical, and/or punctuation are included in the grading scheme for each assignment.
- *Grades of "I"* will only be given when there is a compelling reason (e.g., serious illness). If you have questions or need help, email me at wsung@uttyler.edu
- *Descriptions of all projects and assignments* will be posted on Canvas. Criteria mentioned in these descriptions must be followed in order to receive full credit for your work. All assignments will be turned in through Canvas. Projects are highly encouraged to also be uploaded to your online electronic portfolio.
- *Disposition:* All students in the UT Tyler Teacher Preparation Program must adhere to the professional behaviors outlined in the UT Tyler School of Education Dispositions. These dispositions are listed at the following website:
<https://www.uttyler.edu/education/files/dispositions-all-forms.pdf>