Ed 558 Educational Research for Improved Student Learning (3 sch)

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**Course Description**

Examines educational research and statistical methods in light of current research on effective teaching and schooling practices. The course is developed to enhance practicing educators' understanding and application of research findings in the classroom. Candidates will be expected to develop a proposal which applies course knowledge.

**Course Rationale**

Ed 558 is a course presenting quantitative and general research methods. Ed 555 (Teacher as Researcher) focuses on qualitative methods and depending on which course occurs first, general methods are divided as introduction and advanced. After both courses candidates apply their research knowledge in Ed 598 (Project with Reflection) in the completion of a school or classroom based research project. This course assists candidates in their ability to be lifelong learners through the development of practical research skills, their ability to move theory into practice through study applied to their own classrooms and schools, and in improving their communication skills through the preparation of a research report.

**Texts**

Morrell, P. D., & Carroll, J. B. (2010). *Conducting educational research: A primer for teachers and administrators*. Rotterdam, Netherlands: Sense Publishers.

**Internet Resources**

Course webpage <http://teaching.up.edu/edresearch>

**Course Calendar**

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| --- | --- |
| 14-Jan | Intro/Descriptive/Excel |
| 21-Jan | Correlation/Excel |
| 28-Jan | z-Scores/Excel |
| 4-Feb | Inferential |
| 11-Feb | Inferential II |
| 18-Feb | Study Design |
| 25-Feb | Chi Square |
| 4-Mar | *Spring Break* |
| 11-Mar | Power |
| 18-Mar | *CAEP* |
| 25-Mar | Excel Pres |
| 1-Apr | Excel/Fact Checking Pres |
| 8-Apr | *AERA* |
| 15-Apr | Fact Checking Pres/Review |
| 22-Apr | *Easter* |
| 29-Apr | Application |

**Technology**

This course requires extensive use of technology. It is suggested that candidates will have a laptop computer with wireless capabilities and Microsoft Office Suite. Microsoft Office is available to all UP candidates at no cost through the Pilots webpage.

The specific technology related competencies that will be developed through the course are:

* The use of Microsoft Word to include table building, editing through Track Changes, and some analysis tasks for qualitative research.
* Ability to access and use online statistical resources.
* Ability to use bibliographic tools (i.e., Zotero).
* Advanced level literature search capabilities using a variety of search engines including the UP Library access.

Direct instruction of these uses of technology will occur at appropriate points in the curriculum. Even though technology skills will not be assessed directly, each of the course assignments will assume the ability to use technology based on course instruction.

**Technology Activity:** Candidates will investigate a practical use of Excel per the [assignment instruction sheet](http://teaching.up.edu/edresearch/pages/558%20Assignments.html) and design a presentation to explain the use to the class.

**Assessment and Evaluation**: Candidates will present their Excel strategies in a formal presentation to the class. Presentations will be evaluated using the presentation rubric.

**Activities in this course are designed around applicable standards from the Teacher Leader Model Standards (TLMS).**

**TLMS Domain II: Assessing and Using Research to Improve Practice and Student Learning.**

*Course objectives aimed at developing this characteristic:*

Candidates will be able to use basic statistical procedures to analyze example data.

**Activity** I: Introduction to Statistics. After classroom presentation, candidates will work through descriptive and inferential statistical problems. Candidates will select appropriate statistical analyses to include in the methods sections of their papers.

**Assessment and Evaluation**: With the assistance of the instructor candidates will design an appropriate assessment strategy to demonstrate their knowledge of statistical procedures. With the assistance of the instructor candidates will determine what constitutes successful demonstration of knowledge on these measures.

Candidates will be able to locate and evaluate prior research around a topic of their choosing.

**Activity II**: After classroom presentation of library research strategies candidates will revise existing literature reviews from previous courses or produce new reviews based on a topic of interest that will show that appropriate journals have been found, major authors representing theoretical frameworks have been identified, and that the most current sources for the topic have been listed.

**Assessment and Evaluation**: Candidates will produce an APA style reference list of sources they have accumulated around their topic. The reference list will be reviewed for accuracy of APA style and inclusion of appropriate literature review components.

**Activity III:** Candidates will evaluate statistical claims per the [assignment instruction sheet](http://teaching.up.edu/edresearch/pages/558%20Assignments.html).

**Assessment and Evaluation**: Candidates will present their findings in a formal presentation to the class. Presentations will be evaluated using the presentation rubric.

**TLMS Domain V: Promoting the Use of Data for School and District Improvement.**

*Course objectives aimed at developing this characteristic:*

Candidates will be able to complete an APA style introduction, literature review and methods section.

**Activity III and Assessment (Key Assessment—see Taskstream below)**: After classroom presentation on the components of five-chapter design candidates will prepare a completed introduction and literature review and draft of a methods section for their research project.

**Evaluation**: Content of written work will be evaluated on the following criteria.

Introduction

* Is the introduction built on a logical argument that leads to your problem statement?
* Are the points of the argument sufficiently expanded to make the introduction easy to understand?
* Do the expanded points of the argument make reference to the context of your study and to the theoretical framework on which it is founded?
* Is the problem statement clearly stated including the appropriate components for qualitative or quantitative research questions?

Literature Review

* Based on your research question (and the outline you made for yourself to do a literature review) have all relevant areas of research been reviewed?
* Is the review organized in an understandable way?
* Has the theoretical framework for your study been identified?
* Is the review of appropriately current work in your area of study?
* At the end of the review have you summarized important points from the review that will be most important to your study?

Methods Draft

* Based on your research question have you described relevant details of the context in which the study will be done?
* Based on your research question have you described relevant details about those who you will be studying and how they got into the study?
* Have you described the tools that will be used for data collection and how they were developed?
* Have you described how data collection will be accomplished?
* Have you described how data will be analyzed once it is collected?

*Course objectives aimed at developing this characteristic:*

Candidates will be able to prepare a proposal for Institutional Review Board approval of their project.

**Activity IV and Assessment**: Following the guidelines provided for the complete of IRB proposal candidates will submit a proposal for their project to the instructor.

**Evaluation**: This activity is evaluated by the University of Portland IRB representative as an approved proposal.

Due dates for these assignments are on the course calendar

Since these assignments can vary substantially based on prior knowledge and the environment in which they are accomplished, they will be evaluated based on degree to which they address the assignment and that they are turned in on time.

**Taskstream**

All School of Education courses include key assessments that are linked to program standards and provide program feedback for continuous improvement. When you complete a course assignment that is designated as a key assessment, you are required to upload that assignment to [Taskstream](https://login.taskstream.com/signon/).

All students enrolled in a School of Education course will have access to Taskstream and an account will be automatically created for them. The student’s username will be their UP email address, including the “@up.edu” at the end. For instructions on how to login to Taskstream for the first time, please [click here](https://education.up.edu/_files/soed_documents/how-to-login-to-taskstream-for-the-first-time.pdf). For instructions on how to upload/submit a key assessment to Taskstream, please [click here](https://education.up.edu/_files/soed_documents/how-to-upload-a-course_based-assessment.pdf). Please contact Chris Greene ([greenec@up.edu](mailto:greenec@up.edu) or 503-943-8534) with any questions related to Taskstream.

**Grading**

(50%) All research writing will be done in APA style and follow suggestions for good APA writing. Since writing in any style takes practice, my major concern is that you demonstrate an effort to improve you ability with APA. This can be shown by rewriting based on suggestions from me, asking questions if you can't figure out how to write something, or working with other candidates to critique each other's work. I am looking for improvement. It is possible that you will write the perfect paper the first try but unlikely. That means that the more you write the easier it will be for me to see your progress. Pay attention to the content criteria listed under objective 3 above.

(40 %) Statistics take practice as well. I am concerned that you apply appropriate statistical design and procedures to your work. This can be demonstrated through the methods section of your paper, rewriting based on suggestions from me, and your response and participation in class to activities related to statistics. It is particularly important to have a firm understanding of descriptive statistics. Some knowledge of inferential concepts will be necessary as well. Much of this portion of the grade will be based on the demonstration of strategies learned in class including completion of the 3 application assignments.

(10%) Attendance. Because so much of this course is designed based on class activities and discussions it is important that everyone attends each class. Time missed will affect your grade. If you haven't warned me ahead of time that you will miss any of the class it will affect your grade to a greater extent. All other School of Education policies related to attendance will be followed.  
All writing will be submitted and reviewed electronically.

**Information Required in All Syllabi**

**Academic Integrity**

This is a major expectation of this and all courses taught at the University of Portland. Students are expected to complete all work and course expectations honestly according to the specifications of the instructor. Note: Field experience requirements, when applicable, are an integral part of the course and are a requirement for a passing grade in some courses. Hours are to be reported accurately, and all forms should contain the appropriate signatures. Every student should review the sanctions for cheating listed in the bulletin to understand some of the consequences for inappropriate behavior. The consequences for failure to meet the expectations of academic integrity are harsh and are described in both the Student Handbook and the University of Portland Bulletin.

**University of Portland's Code of Academic Integrity**

Academic integrity is openness and honesty in all scholarly endeavors. The University of Portland is a scholarly community dedicated to the discovery, investigation, and dissemination of truth, and to the development of the whole person. Membership in this community is a privilege, requiring each person to practice academic integrity at its highest level, while expecting and promoting the same in others. Breaches of academic integrity will not be tolerated and will be addressed by the community with all due gravity.

**Academic Regulations**

Policies governing your coursework at the University of Portland can be found in the [University Bulletin](http://up.smartcatalogiq.com/en/current/bulletin/University-Academic-Regulations).

**Assessment Disclosure Statement**

Student work products for this course may be used by the University for educational quality assurance purposes.

**Accessible Education Services**

Students who experience a disability and require an accommodation to fully participate in this class should contact the Accessible Education Services (AES) office located in Buckley Center Room 163 or call 503-943-8985. If you have an AES accommodation plan that includes academic accommodations that apply to this course, make an appointment to meet with me to discuss how your accommodation will be implemented. You are responsible for giving me sufficient notice for timely implementation of your accommodation; therefore it is recommend that you speak with me in the first week of the semester or as soon as your accommodation plan is activated. Also, you should meet with me if you have an AES Safety Plan and/or wish to discuss emergency medical information or special arrangements in case the building must be evacuated. Requests for an alternate location for exams and/or extended exam time should, when possible, be made two weeks in advance of the exam, and must be made at least one week in advance of an exam.

**Shepard Academic Resource Center (SARC)**

The Learning Commons, located in Buckley Center 163 within the SARC, provides peer assistance tutoring for writing, math, speech and presentations, languages, sciences, and business and economics.

* Writing: Go to <https://www1.up.edu/learningcommons/writing-center>. You will need to register as a user the first time you go to the website. If you cannot make any of the posted office hours, you can arrange an appointment by emailing writing@up.edu.
* Math: Math assistants are available on a walk-in basis. Please go to <https://www1.up.edu/learningcommons/math-resource-center> for a current schedule of hours math assistants are available.
* Speech & Presentations: See <https://www1.up.edu/learningcommons/speech-and-presentation-lab>. Speech assistants from the Communication Department are available by appointment only. Just send a request to [speech@up.edu](mailto:speech@up.edu).
* International Languages: Language assistance is available by appointment; go to <https://www1.up.edu/learningcommons/language-assistance> and send an email to the target language.
* Biology & Chemistry:The Chemistry Department offers peer mentoring on a walk-in and appointment basis. The Biology Department offers peer mentoring on a walk-in and appointment basis. See <https://www1.up.edu/learningcommons/sciences> for details.
* Business & Economics:In collaboration with the Pamplin School of Business, the Learning Commons offers peer learning support in Economics and Business Law by appointment only. Go to [https://www1.up.edu/learningcommons/economics-and-business](https://www1.up.edu/learningcommons/economics-and-business/index.html) for appointment information.
* Group Projects: Go to [https://www1.up.edu/learningcommons/group-project-lab](https://www1.up.edu/learningcommons/group-project-lab/) for assistance with strategies and skills for successful teamwork and appointment information.

Learning Assistance Counselor: Learning assistance counseling is also available in Buckley Center 163. The counselor teaches learning strategies and skills that enable students to become more successful in their studies and future professions. The counselor provides strategies to assist students with reading and comprehension, note-taking and study, time management, test-taking, and learning and remembering. Appointments can be made in the on-line scheduler available to all students in Moodle or during posted drop-in hours.

**Assessment of Professional Dispositions**

Demonstration of professional dispositions is a foundational expectation in all School of Education courses and will be assessed by faculty. The Dispositional Rating Form can be viewed [here](https://goo.gl/GhV4FD).

**Mental Health**

As a college student, you may sometimes experience problems with your mental health that interfere with academic experiences and negatively impact daily life. If you or someone you know experiences mental health challenges at UP, please contact the University of Portland Health and Counseling Center in Orrico Hall (down the hill from Franz Hall and Mehling Hall) at <http://www.up.edu/healthcenter> or at 503-943-7134. Their services are free and sessions are confidential, and if necessary they can provide same day appointments. Also know that the University of Portland Public Safety Department (503-943-4444) has personnel trained to respond sensitively to mental health emergencies at all hours. Remember that getting help is a smart and courageous thing to do – for yourself, for those you care about, and for those who care about you.

**Community Against Violence**

University of Portland Faculty, Staff, and Students are committed to creating a community free of interpersonal violence, in which all members feel safe and respected.  Each of us has a personal responsibility to reject violence or intimidation of any kind.  Resources for those experiencing or wishing to report violence can be found on our Community Against Violence website: <http://www.up.edu/cav>