

EDP 384 RESEARCH METHODOLOGY FOR PRACTICE

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The class will meet 4:00-7:00 PM Wednesdays in room 432 Sanchez Building.

Overview

The primary purpose of this course is to provide students who plan to practice in K-12 schools, Universities, and other applied educational settings an overview of research design and methodology appropriate for those who will be consumers of research (as opposed to those who will be producers of research). It is geared primarily toward Master's students in Counselor Education and School Psychology, but may be of interest to MA/MEd students in other programs in the College of Education. A core goal is to further students' abilities to read and understand scientific research, and to be able to develop practical implications from the research they read. The course will also focus in more depth on research methods and statistical analyses that you are likely to use in those applied settings, including single-case research designs and program evaluation methods. You will conduct a mini-project that allows you to practice these skills and demonstrate your ability to use data in making decisions.

Beyond these goals, we have considerable flexibility in what we accomplish this semester. We will discuss a number of possibilities for other topics. I encourage you to think of things that will help you in the research process and bring those ideas, questions, and requests to class.

If you complete the requirements for the class in a timely fashion you will earn a good grade for the class (A or B). If you do not complete them on time you will earn a poor grade (C or F).

Objectives:

If you participate in this seminar and work hard, you should:

1. Increase your awareness of research in your area of interest (professional and personal).
2. Improve your ability to evaluate and summarize the significance of others' research.
3. Have a conceptual understanding of research design, its relation to the purpose of research, and possible methods of analysis consistent with that design.
4. Learn to develop basic single-case designs.
5. Learn to calculate basic statistics using Excel.
6. Improve your understanding of the need for research evidence and the role of research for professionals in your field.
7. Continue to improve your presentation skills.
8. Learn to give and receive feedback on academic writing and presentation skills.

Please note that because this is a new class, I reserve the right to change the class requirements and direction as needed!

Course Format:

The course format will be a combination of brief lectures, discussions of the readings, guest lecturers, classroom exercises, and student presentations. We may also use segments of class time to work on projects, student presentations writing assignments.

Textbooks and Other Materials:

Patten, M. L. (2014). *Understanding research methods: An overview of the essentials* (9th ed.). Glendale, CA: Pyrczack.

Salkind, N. J. (2013). *Excel statistics: A quick guide* (2nd ed.).

(An alternative: Salkind, N. J. (2013). *Statistics for people who (think they) hate statistics: Excel 2010 edition* (3rd ed.). Los Angeles: Sage. This book has more information about interpreting statistics, is longer, but more expensive)

Recommended Purchase:

American Psychological Association. (2010). *Publication manual of the American Psychological Association*. Washington, DC: Author.

APA style is the most common citation format in the social sciences. It is also the required writing style for most papers in EDP (and for any masters and/or dissertation requirements at the university). The basics of this writing format will not be a focus of this course. You are strongly encouraged to consult the APA manual and APA style online resources, however.

Helpful web resources on APA style:

<https://owl.english.purdue.edu/owl/resource/560/01/>

http://library.nmu.edu/guides/userguides/style_ap.htm#withDOI

Other Materials:

You will need access to Excel on your computer to conduct the statistical analyses covered in this class. Windows users will need to install the data analysis toolpack (a part of Excel). Mac users will need to install StatPlus:Mac LE, free software available at <http://www.analystsoft.com/en/products/statplasmacle/>.

Readings

The readings listed below include required readings as well as those that you will find useful in your development as a consumer of research. When possible and legal, the readings will be posted as .pdf files on Canvas. Other readings may be added as the semester progresses.

Borckardt, J. J., Nash, M. R., Murphy, M. D., Moore, M., Shaw, D., & O'Neil, P. (2008). Clinical practice as natural laboratory for psychotherapy research. *American Psychologist*, 63(2), 77-95. (on Canvas)

Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research*. Boston: Houghton Mifflin. (A classic. On Canvas)

Department of Educational Psychology. (year you entered the program). *Student handbook: Department of Educational Psychology* [Handbook]. Austin, TX: Author.

Fraenkel, J. R., Wallen N. E., & Hyun, H. H. (2012). *How to design and evaluate research in education*. (8th ed). McGraw Hill. New York, New York.

Galvan, J. L. (2009). *Writing literature reviews: A guide for students of the social and behavioral sciences*. Pryczack Publishing. Glendale, CA.

Heppner, P. P., & Heppner, M. J. (2004). *Writing and publishing your thesis, dissertation, and research: A guide for students in the helping professions*. Belmont, CA: Brooks Cole Publishing. Chapter 6 (Writing Your Literature Review: Integration and Case Building). (Canvas)

Huck, S. W. (2012). *Reading statistics and research* (6th ed.). Boston: Pearson.

Keith, T. Z. (1988). Research methods in school psychology: An overview. *School Psychology Review*, 17, 502-520. (Canvas)

Keith, T. Z. (2008). Best practice in using and conducting research in applied settings. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology-V* (pp. 2165-2175). Bethesda, MD: NASP. (Canvas)

- Lichtman, M. (2010). *Qualitative research in education: A user's guide*. Sage Publication. Los Angeles, CA.
- Mertler, C. A., & Vannatta, R. A. (2009). *Advanced and multivariate research methods: Practical application and interpretation* (4th ed.). Los Angeles: Pyrczak.
- Platow, M. (2002). *Giving professional presentations in the behavioral sciences and related fields: A practical guide for the novice, the nervous, and the nonchalant*. New York: Psychology Press.
- Royce, D., Thyer, B. A., Padgett, D. K., & Logan, T. K. (2005). *Program Evaluation: An Introduction*. (5th ed). Brooks Cole.
- Sternberg, R. J. & Sternberg, K. (2010). *The psychologist's companion: A guide to scientific writing for students and researchers* (5th ed.). New York: Cambridge University Press.
- Strunk, W., & White, E. B. (various). *The elements of style* (any edition). New York: MacMillan.

Requirements and Expectations:

1. Class participation.
2. Develop and discuss several plausible project ideas.
3. Evaluate a research article in your area of interest and present this article in class or in a paper.
4. Two exams: one on research design and one on statistics
5. You should be prepared to discuss all writing in class.

Attendance AND participation in this class are critical, particularly as we will be relying on each other throughout the course to give feedback on the direction of our projects. It is also expected that students remain open to feedback and are able to integrate suggestions (on writing and presentation) into their work. Finally, it is very important that readings be completed before class. Quizzes on the readings will remain a possibility and integrated into the attendance/participation grade if needed (see below note on quizzes).

Assignment	Weight	Due Date
Attendance and participation	10%	Everyday!!!
Possible topics	10%	February 4
Exam 1	20%	February 25
Evaluation of research article	10%	March 25
Exam 2	20%	April 22
Mini research project	20%	April 29 & May 6
Homework	10%	various

Your exams and assignments will be averaged according to the percentages (weights) shown above. Final grades will be assigned based on the scale below:

Overall course percent	Grade
93.0% - 100%	A
90.0% - 92.9%	A-
87.0% - 89.9%	B+
83.0% - 86.9%	B
80.0% - 82.9%	B-
77.0% - 79.9%	C+
70.0% - 76.9%	C
Below 70%	F

Unless I have made a computational error, grades will not be changed after the end of the semester.

Brief Description of Assignments

Attendance and Participation

Attendance and active participation are critical and as noted by the 10%. IF you expect to miss a class please let me know ahead of time. Missing more than one week during the semester will have an impact on your grade as will repeated times coming in late.

Possible Topics for mini research project (1-2 pages)

This assignment is designed to get you started early in identifying possible topics for mini research project (see more information about the project below).

For this possible topics paper, you are simply to summarize your likely direction – both in choice and content. It is suggested that you include two potential topics. Include questions, motivations (or barriers) you may have. As stressed in class, the assignment is intended to encourage students to begin working on these projects. Obviously a literature review does not have to be conducted (or reported). However, it will be necessary to have at least conducted a preliminary review to assess the feasibility of each of the possible topics. (5 points)

Exams

There will be two exams, one focusing on research design (in-class) and one focusing on conducting simple statistical analysis via Excel (take-home). The take-home exam will be due at the beginning of the next class period.

Homework assignments

To be discussed in class

Evaluating research (presentations/papers)

Pick a research article in your area of interest and evaluate it using the criteria discussed in class. Present via a short in-class powerpoint presentation or a paper.

Mini research project (presentation/papers)

The final assignment will be your presentation of your mini-research project that you have been working on during this semester. The purpose of this project is to demonstrate your ability to collect and use data for decision-making purposes. Most of you will likely conduct a simple single-case design or a program evaluation. Some possible topics include:

1. Some sort of behavioral change in yourself or someone else. You could, for example, track your weight loss under one or more diet or exercise regimens, or teach your dog some new skill, or institute a behavior management plan for your child (putting clothes in the laundry hamper). The key to this kind of project is the repeated collection of some sort of objectively defined data so that you can demonstrate whether or not behavior change occurred.
2. Evaluation of a program (e.g., a new homework policy in a class). This type of project will generally involve a group of people, with a pretest and a posttest administered to see if it was successful.
3. For those of you who work regularly with clients over time, it would be relatively easy to add data collection to that work or practicum.

Please note, there is considerable flexibility in this assignment as long as it is approved ahead of time by the instructor.

You will present the results of your project at the end of the semester, either in a class presentation or in a 5-10 page paper. (If you presented your research article evaluation, you should do a paper; if you wrote a paper, you should do a presentation.)

Late Paper Policy

Late papers/assignments will be penalized 10 percentage points for each late day. Unless you can demonstrate that near-catastrophic events have led to a case of extreme hardship, grades of "incomplete" will not be given.

Evaluation of the Course:

At the end of the semester, a formal evaluative questionnaire regarding both the curriculum and my instruction will be administered. The information gathered from this process will be used to improve future courses and instruction. Additionally, I strongly encourage you to provide feedback to me during the semester either in person or anonymously – I am here to teach you and want to do it well!

Disability Services:

The University provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students.

Religious Holidays:

By UT Austin policy, you must notify me of your pending absence at least fourteen days prior to the date of observance of a religious holy day. If you must miss class, an examination, a work assignment, or a project in order to observe a religious holy day, you will be given an opportunity to complete the missed work within a reasonable time after the absence.

Use of E-Mail for Official Correspondence to Students

Email is recognized as an official mode of university correspondence; therefore, you are responsible for reading your email for university and course-related information and announcements. You are responsible to keep the university informed about changes to your e-mail address. You can find UT Austin's policies and instructions for updating your e-mail address at <http://www.utexas.edu/its/policies/emailnotify.php> .

Graduate Student Writing Center

The university has an outstanding support system in place for helping graduate students with writing. Their services can be reviewed at the following website. Many past students in this course have benefited from their help. <http://www.utexas.edu/student/utlc/ts/gsws/gsws.html>

EDP 384
Research Methodology for Practice
Spring, 2015

Tentative Schedule (subject to revision!)

Date	Topics To Be Covered in Class	Assignment (readings to be completed <i>prior</i> to class)
1. January 21	Introduction Getting to know you... Why research? Possibilities for the semester	
2. January 28	Possible mini-projects The real world of research Research design	Keith 1988 <i>Come in ready to discuss possible projects</i>
3. February 4	Research design	Patten, Part A <i>Write up: Bring in possible project assignment</i>
4. February 11	Research design Evaluating research	Patten, Part F
5. February 18	NASP Work on projects	
6. February 25	Research design Evaluating research Review	Patten, Part E
7. March 4	<i>RD exam</i> Searching literature	Patten, Appendix A, Part B
8. March 11	Single-case research designs (Hailey Ormand)	Lit search assignment Horner et al., 2005 (single subject research)
9. March 18	Spring Break	
10. March 25	Program evaluation	Patten: Topic 11 pp 23-25 Single case assignment
11. April 1	Basic statistics understanding, calculation via Excel Descriptive statistics	Evaluation of a research article (complete worksheet & provide article) Play around with Excel, install Data Analysis Toolpak Read Salkind 1-2
12. April 8	Correlations Reliability & validity Basic statistics via Excel	Salkind 5-6 Descriptive stats homework
13. April 15	Basic statistics via Excel <i>t</i> -tests, pretest-posttest analysis	Salkind 11-12 Correlation homework

14. April 22	Understanding basic & intermediate stats <i>Stats+ take home exam</i>	<i>t</i> -test homework
15. April 29	<i>Project presentations</i>	
16. May 6	<i>Project presentations or papers</i>	
17. May 13	Exam week – no class	