EDP 381C (10685) RESEARCH METHODOLOGY FOR PRACTICE

SPRING, 2016 (Wed. 4-7pm, Sanchez 524)

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The easiest and most preferred way to contact me is via email

The class will meet 4:00-7:00 PM Wednesdays in room 524 Sanchez Building.

Overview

The primary purpose of this course is to provide students who plan to become practitioners in K-12 schools and other applied educational settings an overview of research design and methodology. The emphasis is on increasing those skills necessary to become knowledgeable consumers of research, rather than those skills necessary to become 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 critically 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 some 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 process of developing proficiency in understanding research findings, and to bring those ideas, questions, and requests to class.

Objectives:

If you prepare for and attend class, actively participate in the class, and you 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 I reserve the right to change the class requirements and direction as needed!

Note: Some of the writings, discussions, lectures, films, or presentations in this course may include material that may conflict with the beliefs of some students. Please review the syllabus carefully to see if the course is one that you are committed to taking. If you have a concern, please discuss it with me at your earliest convenience.

Course Format:

The course format will be a combination of brief lectures, discussions of the readings, possibly guest lecturers, classroom exercises, and student presentations. We may also use segments of class time to work on projects, student presentations writing assignments. Canvas will be used as much as possible to share information and resources about the course, and for you to submit assignments, projects, etc. That said, because I am new to Canvas, there may be times when we may have to rely on traditional email, attachments, etc.

Please note that text messages and other forms of communication (e.g., Instagram, Snapchat, Facebook, etc.) other than Canvas, email and telephone will NOT be acceptable means of communication for this course.

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), and for most professional presentation and publication purposes. Yet, the particulars of APA style will not be a focus of this course. You are strongly encouraged to consult the APA manual and APA style online resources if you do not purchase the APA Publication Manual.

Helpful web resources on APA style:

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

http://library.nmu.edu/guides/userguides/style_apa.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/statplusmacle/.

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 attendance and 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. Complete two exams: one on research design and one on statistics
- 5. Be prepared to discuss all assignments in class.

Attendance (including on time arrival) 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 3
Exam 1	20%	February 24
Evaluation of research article	10%	March 23
Exam 2	20%	April 20
Mini research project	20%	April 27 & May 4
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%	А
90.0% - 92.9%	A-
87.0% - 89.9%	B+
83.0% - 86.9%	В
80.0% - 82.9%	B-
77.0% - 79.9%	C+
70.0% - 76.9%	С
Below 70%	F

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

Brief Description of Requirements

Attendance and Participation

Attendance and active participation are critical, as noted by the weight given to these factors (i.e., 10% of your grade). If you expect to miss a class because of an unavoidable professional commitment please let me know ahead of time, and provide me with appropriate documentation of the unavoidable commitment, or a family/personal emergency, and you will not be penalized. Missing more than one class during the semester will have an impact on your grade as will repeated tardiness.

Possible Topics for mini research project (2 pages)

This assignment is designed to get you started early in identifying possible topics for your 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-three potential topics. Include questions and motivations (or barriers) you have or can anticipate. As stressed in class, the assignment is intended to encourage students to begin working on these projects. Obviously a comprehensive literature review does not have to be conducted (or reported). However, it will be necessary for me to conduct a preliminary review to help you assess the feasibility of each of the possible topics.

<u>Exams</u>

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 that will be discussed in class. Present via a short in-class powerpoint presentation (10-15 min. maximum).

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:

- 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). For purposes of this course, the key to this kind of project is the repeated collection of objectively defined data so that you can demonstrate whether or not the intended 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 (e.g., as part of a 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 in a 10-15 min. class presentation, and summarized 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. No accommodations can be provided unless formally approved by that Office.

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 you will be given an opportunity to complete the missed work within a reasonable time after the absence.

Use of Canvas and/or E-Mail for Official Correspondence to Students

As noted earlier, I will be using Canvas as much as possible for back and forth communication and resource-sharing with you. Therefore, you are responsible for checking Canvas and your university email regularly. You also are responsible for keeping the university informed about changes to your e-mail address, and to ensure that you are receiving email. You can find UT Austin's policies and instructions for updating your e-mail address at http://www.utexas.edu/its/policies/emailnotify.php.

As noted earlier, text messages and other forms of communication (e.g., Instagram, Snapchat, etc.) other than Canvas, email and telephone will NOT be utilized for course information, including submissions.

Graduate Student Writing Center

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

EDP 381C Research Methodology for Practice Spring, 2016

Tentative Schedule (subject to revision!)

Date	Topics To Be Covered in Class	Assignment (readings to be
		completed <i>prior</i> to class)
1. January 20		
	Getting to know you	
	Why research?	
	Possibilities for the semester	
2. January 27	Possible mini-projects	Keith 1988
	The real world of research	Come in ready to discuss
	Research design	possible projects
3. February 3	Research design	Patten, Part A
		Write up: Bring in possible project assignment
4. February 10	Research design	Patten, Part F
	Evaluating research	
5. February 17	Work on projects	
6. February 24	Research design	Patten, Part E
-	Evaluating research	
	Review	
7. March 2	Research Design exam Searching literature	Patten, Appendix A, Part B
8. March 9	Single-case research designs	Lit search assignment
		Horner et al., 2005 (single subject
		research)
9. March 16	Spring Break	
10. March 23	Program evaluation	Patten: Topic 11 pp 23-25
		Single case assignment
11. March 30	Basic statistics understanding,	Evaluation of a research article
	calculation via Excel	(complete worksheet & provide
	Descriptive statistics	article)
		Play around with Excel, install
		Data Analysis Toolpak
		Read Salkind 1-2
12. April 6	Correlations	Salkind 5-6
	Reliability & validity	Descriptive stats homework
	Basic statistics via Excel	
13. April 13	Basic statistics via Excel	Salkind 11-12
	<i>t</i> -tests, pretest-posttest analysis	Correlation homework

14. April 20	Understanding basic & intermediate stats <i>Statistics take home</i>	<i>t</i> -test homework
15. April 27	Project presentations	
16. May 4	Project presentations	
17. May 6		Statistics take home exam due at 6pm