RUTGERS
Graduate School of Education

Educational Psychology
Graduate School of Education
Rutgers, The State University of New Jersey
10 Seminary Place
New Brunswick, NJ 08901-1183

www.gse.rutgers.edu/ep
EP@gse.rutgers.edu

848-932-0846
Fax: 732-932-6829

Rutgers, The State University of New Jersey

15:262:625:01 Design Research Practicum
Spring 2017
Mondays 4:50 PM - 7:30 PM
Academic Building 1100

Instructor: Eli M. Silk	Email: eli.silk@gse.rutgers.edu
Office Phone: 848-932-0827	Office Location: GSE 321B
Office Hours: By arrangement (after class time each week is possible, but not before)	Prerequisites or other limitations: Admission in the Ed.D. program at Rutgers GSE.
Mode of Instruction: ___ Lecture _X_ Seminar ___ Hybrid ___ Online ___ Other	Permission required: __ No _X_Yes Directions about where to get permission numbers: Office of Academic Services, Ericka Diaz, ericka.diaz@gse.rutgers.edu

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentations: https://ods.rutgers.edu/students/documentation-guidelines. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: https://ods.rutgers.edu/students/registration-form.

Course Description

Course Catalog Description:

The purpose of this course is to provide students with an experiential opportunity to begin conducting their own research. The primary goal will be for students to plan, implement, and analyze a series of small-scale pilot studies. The course will be held in a workshop format in which students will present regularly and get feedback from the instructor and their peers. The students will learn to justify their methodological choices by drawing from and citing prior published research. These methodological choices include the use of particular samples, measures, procedures, research designs, and analysis plans. Students will also get experience analyzing their data and presenting the results both in written and oral form.

RUTGERS

Goals:

The learning goals for this class, along with how they will be assessed, are as follows:

Learning Goal	How the Goal will be Assessed
Learn how to write a successful dissertation proposal.	Writing draft of method section of dissertation proposal.
Develop the knowledge base of theory and empirical research needed to justify the design of a DLE dissertation study.	Discussions of readings. Writing draft of method section of dissertation proposal.
Gather pilot data and use the results to improve your dissertation project.	Presentations on plans and activities for piloting data, and analyses of the results. Written reports on piloted data.

Required Texts:

There is no required textbook to purchase for this course. All of the required articles and chapters will be posted online on the class Sakai website.

Important Note: This syllabus, along with course assignments and due dates, are subject to change. Any major changes will be clearly noted in a course announcement in class and on the course website.

RUTGERS

Grading Policy

Evaluation of Written Work:

Grading Breakdown by Course Assignment:

1.	Attendance and Participation	15%	Weekly
2.	CITI Module Basic Course	5%	Due 2/13
3.	First Pilot Project Data Collection, Analysis, and Write-up	20%	Due 3/20
4.	Second Pilot Project Data Collection, Analysis, and Write-up	20%	Due 5/1
5.	Dissertation Proposal Method Section Draft	20%	Due 5/8
6.	IRB Proposal Submission Draft	20%	Due 4/10

Other Ungraded (Optional, but Suggested) Assignments:

To-Do/Goals List	Due 1/30
First Pilot Project Proposal	Due 1/30

Grading Scale:

- A = 90-100
- B+ = 85-89
- B = 80-84
- C+ = 75-79
- C = 70-74
- F = Below 70

Academic Integrity:

Any violation of academic honesty is a serious offense and is therefore subject to an appropriate penalty. Refer to http://academicintegrity.rutgers.edu/integrity.shtml for a full explanation of policies.

Course Requirements

Website:

http://sakai.rutgers.edu

Attendance Policy:

Because this is a small seminar it is critical for your own learning and the learning of your peers that you attend all classes, arrive on time, and stay engaged throughout the class time. If you have to miss a class or be late for any reason, you must contact me ahead of time. Failure to do so will result in a lower attendance and participation grade.

RUTGERS

Evaluation

1. Attendance and Participation

You are expected to attend class on time and be actively engaged in discussions each week. We will discuss your various projects, assigned readings, and other aspects of collecting and analyzing data. I expect that your participation in class discussions will show that you have read all required assignments, and are actively trying to connect them to your own project and to the project's of your classmates. Most class discussions will involve discussing components of each other's projects, and so it is essential that you are active in providing critical but supportive feedback to your classmates to help them move their projects forward. You will also be expected to select a few readings for the class to read and discuss together.

Every week, I expect that you will have made some progress on your pilot work. On some weeks, you will be expected to share your progress as a designated presenter. Sometimes you may use that time as a working session in which you pilot data instruments with the rest of the class as test participants. Other times you should make a formal presentation about the current state of your research design, data, and analysis from your pilot work.

2. CITI Module Basic Course

GSE students must have their human subjects research approved by the Rutgers University Arts and Sciences (ArtSci) IRB (https://orra.rutgers.edu/artsci). As a first step in this process, you will be expected to complete the Collaborative Institutional Training Initiative (CITI) Basic Course. For more information on how to create an account on the CITI website, how to affiliate yourself with Rutgers, and how to complete the Basic Course, see the following website:

https://orra.rutgers.edu/citi

3. First Pilot Project Data Collection, Analysis, and Write-up

This assignment involves:

1. Planning a pilot project;
2. Developing all materials, documents, and activities needed for the pilot project;
3. Implementing the pilot project;
4. Making presentations on pilot project plans and results in class; and
5. Handing in a formal write-up of the pilot project.

Assessment will NOT be based on whether the results come out as you hope or expected. Instead, your work will be evaluated on:

(i) How well prepared and well grounded in the literature the pilot activities are;
(ii) How well aligned your questions and methods are with each other; and
(iii) How thoroughly you consider the results and learn from them.

You should use this as an opportunity to try out different ideas that you are considering, and also to see how you might analyze the data to test your ideas.

It is acceptable in this first pilot project to only use small portions of your designed learning environment or even to do no intervention at all and simply focus on piloting measurement instruments (e.g., pre- or post-tests, surveys, interview protocols, etc.). Also for this first pilot project, it is acceptable (although not required) to use the class (me and your classmates) as your participants and to use class time during your designated presentation time (Round 1) to implement your pilot project.

4. Second Pilot Project Data Collection, Analysis, and Write-up

This assignment involves all the same things as the first pilot project. I encourage you to use this second project to build off the results of the first pilot project and to improve or refine your methods or materials. You may also use this second pilot project as an opportunity to expand your pilot work into other aspects of your dissertation project that you may not have gotten to in the first pilot project (e.g., more of your designed learning environment).

For this second pilot project, you are encouraged (although not required) to use participants and to conduct the activities outside of class. You can still think broadly about where to find participants, such as family, friends, or colleagues. However, the closer you can get to testing your work with the actual population that you intend to use for your dissertation work, the better this pilot work will be for you.

5. Dissertation Proposal Method Section Draft

Your will be expected to provide write-ups of your work throughout the course in planning, implementing, and analyzing your pilot studies. These write-ups will help to form the basis for a draft of the Method section of your dissertation proposal. I will provide feedback on your pilot study reports, including suggested revisions for incorporating into your dissertation proposal method section draft.

6. IRB Proposal Submission Draft

This involves preparing a proposal to submit to the IRB so that you can understand the process and what is required. When you submit the IRB will be between you and your dissertation chair, but note that the Rutgers IRB provides the following guidelines on pilot work:

> *7. **Pilot Studies.** A pilot study is typically defined as an initial or smaller-scale investigation or a study to either test out new experimental designs (including survey or instrument development) or methods of treatment. Pilot studies are synonymous with feasibility studies, where the investigation proposed is planned to identify various issues (e.g., relating to design of an instrument, analysis of power concerns and recruitment strategies) to determine that the larger study of the same subject matter has the greatest potential to successfully test the intended research hypotheses. Pilot studies involving human subjects are considered human subject research and require IRB review. A*

researcher planning to conduct a pilot study must provide sufficient details to address how a smaller scale investigation is worth pursuing with a goal of obtaining results that may add to the generalizable knowledge while minimizing any anticipated risks to the subjects. There must be a well-detailed literature review and most importantly, the researcher must justify the need for the number of subjects required.
(Source: https://orra.rutgers.edu/irb-review)

Reading List

Readings will be tailored to students' interests and needs, and will be assigned one week in advance. There are no required texts, as readings will be distributed as PDFs on the class website. However, a useful text to have is the American Psychological Association (APA) publication manual:

American Psychological Association (2013). *Publication manual of the American Psychological Association, Sixth Edition.* Washington, DC: American Psychological Association.

Each major assignment should be formatted using the formal standards articulated by APA publication manual for a manuscript. Those standards include, but are not limited to:

- Times New Roman, 12 point font
- One inch margins on all sides
- Page numbers
- Cover page that includes title, course, student, professor, date
- Left alignment with default spacing between words and letters
- Double spaced lines with only one hard return between indented paragraphs
- Proper in-text citations and a separate bibliography or reference section

Refer to the APA manual for further details. Also, the following website is a good resource, although it is not as complete as the manual: https://owl.english.purdue.edu/owl/resource/560/01/

Presentation Schedule

Each student will be the designated presenter 4 times throughout the course. This will be an opportunity for you to collect pilot data from the rest of the class and to present results of your pilot projects. Although I expect that you have worked hard to develop your ideas, you can and should use these sessions to get feedback on your ideas or materials, and to work through analyses. The schedule for presentations will be worked out in the first few weeks of class:

1. Round 1 - Collect data or propose your data collection methods for first pilot
2. Round 2 - Present analysis for first pilot and get feedback on ideas for second pilot
3. Round 3 - Collect data or propose your data collection methods for first pilot
4. Round 4 - Present analysis from second pilot and get feedback for the future

RUTGERS

Course Schedule by Week

Week	Topics	Readings	Assignments	Presenters
1: 1/23	Intro to Course Goals & Planning	No readings		
2: 1/30	Surveys and Questionnaires	(Entwistle & McCune, 2004) (Schellings, 2011)	*To-Do/Goals List* *First Pilot Project Proposal*	
3: 2/6		*Student-Chosen Readings* (9) (10)		*Round 1 Begins* (1) (2) (3) (4)
4: 2/13	Cognitive Interviewing	(Karabenick et al., 2007) (Koskey, Karabenick, Woolley, Bonney, & Dever, 2010)	*Complete CITI Modules*	(5) (6) (7)
5: 2/20		*Student-Chosen Readings* (7) (8)		(8) (9) (10) *Round 1 Ends*
6: 2/27	Focus Groups	(Ryan, Gandha, Culbertson, & Carlson, 2014) (Nadal et al., 2015)		*Round 2 Begins* (1) (2) (3) (4) (5)
7: 3/6		*Student-Chosen Readings* (5) (6)		(6) (7) (8) (9) (10) *Round 2 Ends*
Spring Break				
8: 3/20	Protocol Analysis	(Fox, Ericsson, & Best, 2011) (Greene et al., 2015)	*First Pilot Project Write-up*	*Round 3 Begins* (1) (2) (3) (4)

Week	Topics	Readings	Assignments	Presenters
9: 3/27		*Student-Chosen Readings* (3) (4)		(5) (6) (7)
10: 4/3	Mental Models & Conceptual Change	(Vosniadou, 1994) (Vosniadou, Ioannides, Dimitrakopoulou, & Papademetriou, 2001)		(8) (9) (10) *Round 3 Ends*
11: 4/10		*Student-Chosen Readings* (1) (2)	*IRB Submission Draft*	
12: 4/17	Experience-Sampling Method	(Csikszentmihalyi & Larson, 1987) (Shernoff & Vandell, 2007)		*Round 4 Begins* (1) (2) (3) (4) (5)
13: 4/24	TBD	TBD		(6) (7) (8) (9) (10) *Round 4 Ends*
14: 5/1	TBD	TBD	*Second Pilot Project Write-up*	
15: 5/8	TBD	TBD	*Proposal Method Section Draft*	

Bibliography

Csikszentmihalyi, M., & Larson, R. (1987). Validity and reliability of the experience-sampling method. *Journal of Nervous and Mental Disease*, *175*(9), 526–536.

Entwistle, N., & McCune, V. (2004). The conceptual bases of study strategy inventories. *Educational Psychology Review*, *16*(4), 325–345. https://doi.org/10.1007/s10648-004-0003-0

Fox, M. C., Ericsson, K. A., & Best, R. (2011). Do procedures for verbal reporting of thinking have to be reactive? A meta-analysis and recommendations for best reporting methods. *Psychological Bulletin*, *137*(2), 316–344. https://doi.org/10.1037/a0021663

Greene, J. A., Bolick, C. M., Jackson, W. P., Caprino, A. M., Oswald, C., & McVea, M. (2015). Domain-specificity of self-regulated learning processing in science and history. *Contemporary Educational Psychology*, *42*, 111–128. https://doi.org/10.1016/j.cedpsych.2015.06.001

Karabenick, S. A., Woolley, M. E., Friedel, J. M., Ammon, B. V., Blazevski, J., Bonney, C. R., … Kelly, K. L. (2007). Cognitive processing of self-report items in educational research: Do they think what we mean? *Educational Psychologist*, *42*(3), 139–151. https://doi.org/10.1080/00461520701416231

Koskey, K. L. K., Karabenick, S. A., Woolley, M. E., Bonney, C. R., & Dever, B. V. (2010). Cognitive validity of students' self-reports of classroom mastery goal structure: What students are thinking and why it matters. *Contemporary Educational Psychology*, *35*(4), 254–263. https://doi.org/10.1016/j.cedpsych.2010.05.004

Nadal, K. L., Davidoff, K. C., Davis, L. S., Wong, Y., Marshall, D., & McKenzie, V. (2015). A qualitative approach to intersectional microaggressions: Understanding influences of race, ethnicity, gender, sexuality, and religion. *Qualitative Psychology*, *2*(2), 147–163. https://doi.org/10.1037/qup0000026

Ryan, K. E., Gandha, T., Culbertson, M. J., & Carlson, C. (2014). Focus group evidence: Implications for design and analysis. *American Journal of Evaluation*, *35*(3), 328–345. https://doi.org/10.1177/1098214013508300

Schellings, G. (2011). Applying learning strategy questionnaires: Problems and possibilities. *Metacognition and Learning*, *6*(2), 91–109. https://doi.org/10.1007/s11409-011-9069-5

Shernoff, D. J., & Vandell, D. L. (2007). Engagement in after-school program activities: Quality of experience from the perspective of participants. *Journal of Youth Adolescence*, *36*, 891–903. https://doi.org/10.1007/s10964-007-9183-5

Vosniadou, S. (1994). Capturing and modeling the process of conceptual change. *Learning and Instruction*, *4*(1), 45–69. https://doi.org/10.1016/0959-4752(94)90018-3

Vosniadou, S., Ioannides, C., Dimitrakopoulou, A., & Papademetriou, E. (2001). Designing learning environments to promote conceptual change in science. *Learning and Instruction*, *11*(4–5), 381–419. https://doi.org/10.1016/S0959-4752(00)00038-4