CI582: Advanced Research Methods in Education  
Department of Curriculum and Instruction, Southern Illinois University-Carbondale  
Fall 2016  

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Course Goals and Objectives  

This course will provide students opportunities to:  
1. identify, research, and present a research problem/topic;  
2. identify, review, corroborate, and synthesize literature on a research problem/topic;  
3. develop research questions to address a topic/problem;  
4. determine and articulate the most appropriate research design for investigating or testing a research question or hypothesis;  
5. summarize and critique research studies published in journals; and  
6. develop a strong outline and draft for the first three chapters of a dissertation or thesis prospectus.  

Course Requirements (*Submitted to LIVETEXT)  

1) *Research Introduction/Purpose/Problem Presentation (100 points, individuals): For this assignment, you will present to the class an introduction to the problem or topic of your study. Specifically, you will want to clarify your study’s 1) focus, 2) theoretical rationale, 3) significance, and 4) research questions. (CI-SLO: 1a, 2a, 2b)  

2) *Literature Review Table and Conceptual Framework (100 points, individuals): For this assignment you will identify 15-20 articles related to your thesis/dissertation/research topic and develop a conceptual framework from the articles you will corroborate and synthesize with a table/graphic organizer. You will use this table to write the first draft of your literature review that evaluates and synthesizes (i.e., *strings of pearls* need not apply) these articles. (CI-SLO: 1c, 2a, 2b)  

3) *Methods Section Draft (100 points, individuals): By the end of the semester, you will turn in a draft for your methods section. Specifically, you need to include: 1) introduction and research question(s) or hypotheses, 2) research methodology, 3) proposed sample, 4) results from pilot testing (optional), 5) proposed data gathering procedures, and 6) proposed method of data analysis. (CI-SLO: 1c)  

4) *Article Critiques (100 points, individuals): Over the course of the semester, you will be asked to evaluate two of three articles related to the educational research concepts we cover in class. For each article I assign, I will provide focus questions and concepts to guide your critique. (CI-SLO: 1a, 2a, 2b)  

5) Class Participation (100 points, Individuals). Class participation will include the following factors:  
   Attendance, including being on time and staying for the duration of the class meeting time. Unexcused absences/tardiness will result in points deducted. Email or call me in advance to notify me of an absence and to determine whether that absence will be excused.  
   Active participation in small- and full-group activities and preparation outside of class for those activities.  
   Written assignment responses of high quality and completed before class begins when they are due.
Grading Scale
500 pts. possible: A (450-500); B (400-449); C (350-399); D (300-349); F (299 or below)

Course Readings


Course Overview and Readings

1) Tuesday, August 23: Introduction to Course

2) Tuesday, August 30: Educational Research and Standards
   *Reading*: 1) Creswell – Chapter 1, and 2) Hiebert – Relationships between Research and the NCTM Standards

   *Preparation for Class Discussion: Research and the Common Core Standards*

   To complete this task, you will need to focus on Chapter 1 of the Creswell textbook and the Hiebert (1999) reading. In each of the shaded cells of the table provided (i.e., A2, A3, B1, & C4), develop a research question and a brief description of an aligning research strategy related to mathematics education. In addition, complete a question and design strategy for one additional non-shaded cell (e.g., A1).

3) Tuesday, September 6: The Literature Review
   *Readings*: 1) Creswell – Chapter 2 and 2) Mills – A Review

   *Preparation for In-Class Activity: Tracing Mills’ Synthesis*

   Bring to class your completed handout from D2L related to the Mills (2010) reading.

4) Tuesday, September 13: Theory in Educational Research
5) Tuesday, September 20: No Class (Individual Student Meetings Instead)

**Discussing Your Literature Review**

In lieu of meeting during our regularly scheduled class time, you will meet individually (or in small groups) with me to discuss the literature you are finding thus far related to your topic. The goal for this meeting is to get you prepared for the literature review table and written draft due in the upcoming weeks. To make the most of this meeting, I strongly recommend that you have read a majority of the articles you are using for your review and construct a draft for the table (not necessarily completely filled out) that helps you synthesize these articles.

6) Tuesday, September 27: TBA

7) Tuesday, October 4: Ethics in Research, Human Subjects Committees, and IRBs

**Readings:** 1) National Institutes of Health (NIH) Training Module and 2) Hemmings – Great Ethical Divides

**Preparation for Class: NIH Training Module**

To receive full participation points for this class, bring a copy of your certificate of completion for the NIH Module ([http://phrp.nihtraining.com/users/login.php](http://phrp.nihtraining.com/users/login.php))

**Due: Article Critique Option #1 (Note: You need to complete only 2 of 3 options.)**

Tuesday, October 11 – Fall Break (No Class)

8) Tuesday, October 18: Conceptual Frameworks

**Readings:** 1) Perea et al. – What Drives Consumers to Shop Online? and 2) Seixas – Schweigen!

**Preparation for In-Class Activity: Using a Conceptual Framework**

Use the concepts provided in Perea et al’s conceptual framework to identify/categorize what has been changed in a recent design update for online shopping at Amazon.com.

9) Tuesday, October 25: Research Introductions, Purpose Statements, and Research Questions

**Readings:** 1) Creswell – Chapter 5, 2) Creswell – Chapter 6, 3) Creswell – Chapter 7, and and 4) Lee et al. - Examining the Relationship

**Due: Research Introduction/Purpose/Problem Presentation – Part 1**

10) Tuesday, November 1: Quantitative Procedures

**Readings:** 1) Creswell – Chapter 8

**Due: Research Introduction/Purpose/Problem Presentation – Part 2**

**Due: Literature Review Table and Draft**

11) Tuesday, November 8: Qualitative Procedures

**Readings:** 1) Creswell – Chapter 9 and 2) Achinstein & Barrett – (Re)framing Classroom Contexts

12) Tuesday, November 15: Mixed Methods Procedures

**Readings:** 1) Creswell – Chapter 10 and 2) Hsu et al. – Using Audioblogs

**Due: Article Critique Option #2 (Note: You need to complete only 2 of 3 options.)**

13) Tuesday, November 22: A Cry in the Wilderness – Rural Schools and Communities

**Readings:** 1) Strange et al. – Why Rural Matters, 2) Arnold et al. – A Look at the Condition of Rural Education Research, and 3) Article of Choice from JRRE

**Preparation for Class: JRRE Article**

In addition to the first two readings assigned for class, find an additional article of your choice from Penn State’s Journal of Research in Rural Education ([http://www.psu.edu/dept/jrre/](http://www.psu.edu/dept/jrre/)). Be prepared to discuss how the article you selected relates to the issues and concerns addressed in tonight’s readings and your own research interests.

14) Tuesday, November 29: Methods Spotlight – Design Research

**Readings:** 1) Barab & Squire – Design-Based Research, 2) diSessa & Cobb – Ontological Innovation, and 3) Anderson & Shattuck – Design-Based Research

**Due: Methods Section**

15) Tuesday, December 6: TBA

**Due: Article Critique Option #3 (Note: You need to complete only 2 of 3 options.)**

**FINALS Week (December 12-16)**

**Please Note:** To better meet the needs of students and this course, this syllabus is subject to minor changes. If any changes are made to course readings or assignments, you will be notified as soon as possible.
IMPORTANT DATES
Semester Class Begins: 08/22/2016
Last day to add full-term course (without Dean’s signature): 08/28/2016
Last day to withdraw from the University with a full refund: 09/02/2016
Last day to drop a full-term course for a credit/refund: 09/04/2016
Deadline to apply to graduate at the end of this term: 09/16/2016
Last day to drop a full-term course (W grade, no refund): 10/30/2016
Commencement: 12/12/2016

FALL SEMESTER HOLIDAYS
Labor Day Holiday 09/05/2016
Fall Break 09/08 – 09/10/2016
Veterans Day Holiday 11/11/2016

WITHDRAWAL POLICY – Undergraduate only
Students who officially register for a session must officially withdraw from that registration in a timely manner to avoid being charged as well as receiving a failing grade for those classes. An official withdrawal must be initiated by the student, or on behalf of the student by the academic unit, and be processed by the Registrar’s office. For the proper procedures to follow when dropping courses and when withdrawing from SIU visit: http:// registrar.siu.edu/students/withdraw.html

INCOMPLETE POLICY – Undergraduate only
An IN grade may be assigned when, for reasons beyond their control, students engaged in passing work are unable to complete all class assignments for the course. An INC must be changed to a completed grade within one full semester (undergraduates), and one full year (graduate students), from the close of the term in which the course was taken or graduation, whichever occurs first. Should the student fail to complete the remaining course requirements within the time period designated, the incomplete will be converted to grade of F and such grade will be computed in the student’s grade point average. For more information visit: http:// registrar.siu.edu/grades/incomplete.html

REPEAT POLICY
An undergraduate student may, for the purpose of raising a grade, enroll in a course for credit more than once. For students receiving a letter grade of A, B, C, D, or F, the course repetition must occur at Southern Illinois University Carbondale. Effective for courses taken Summer 2013 or later, only the most recent (last) grade will be calculated in the overall GPA and count toward hours earned. This policy will be applied to all transferable credit in that only the last grade will be used to calculate grade point average. Only those courses taken at the same institution are considered repeats under this policy. See full policy at: http:// registrar.siu.edu/students/repeatclasses.html

GRADUATE POLICIES
Graduate policies often vary from Undergraduate policies. To view the applicable policies for graduate students, please refer to the graduate catalog at: http:// graduateschool.siu.edu/about-us/grad-catalog/index.html

DISABILITY POLICY
Disability Support Services provides the required academic and programmatic support services to students with permanent and temporary disabilities. DSS provides centralized coordination and referral services. To utilize DSS services, students must contact DSS to open cases. The process involves interviews, reviews of student-supplied documentation, and completion of Disability Accommodation Agreements. http:// disabilityservices.siu.edu/

PLAGIARISM
Student Conduct Code http://err.siu.edu/student_conduct_code/

SAFETY AWARENESS FACTS AND EDUCATION
Title IX makes it clear that violence and harassment based on sex and gender is a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, etc. If you or someone you know has been harassed or assaulted, you can find the appropriate resources here: http://safe.siu.edu

SALUKI CARES
The purpose of Saluki Cares is to develop, facilitate and coordinate a university-wide program of care and support for students in any type of distress—physical, emotional, financial, or personal. By working closely with faculty, staff, students and their families, SIU will continue to support a culture of care and demonstrate to our students and their families that they are an important part of the community. For information on Saluki Cares: call (618) 453-1492, email siucares@siu.edu, or http://salukicare.siu.edu/index.html

SIU’S EARLY WARNING INTERVENTION PROGRAM (EWIP)
Students enrolled in courses participating in SIU’s Early Warning Intervention Program might be contacted by University staff during a semester. More information is found via Core Curriculum’s Online Webpage: http:// corecurriculum.siu.edu/program-overview/

EMERGENCY PROCEDURES
We ask that you become familiar with Emergency Preparedness @ SIU. Emergency response information is available on the University website, on the Emergency Preparedness @ SIU website, and through text and email alerts. To register for alerts visit: http://emergency.siu.edu/

INCLUSIVE EXCELLENCE
SIU contains people from all walks of life, from many different cultures and sub-cultures, and representing all strata of society. Nationalities, ethnicities, lifestyles, and affiliations. Learning from and working with people who differ is an important part of education as well as an essential preparation for any career. For more information visit: http://www.inclusivexcellence.siu.edu/

LEARNING AND SUPPORT SERVICES
Help is within reach. Learning support services offers free tuition on campus and math labs. To find more information please visit the Learning and Support Services website:
Tutoring: http://tutoring.siu.edu/
Math Labs: http://math.siu.edu/courses/course-help.php

WRITING CENTER
The Writing Center offers free writing services to all SIU students and faculty. To find a Center or Schedule an appointment please visit: http://write.siu.edu/

AFFIRMATIVE ACTION & EQUAL OPPORTUNITY
Our office’s main focus is to ensure that the university complies with federal and state equity policies and handles reporting and investigating of discrimination cases. For more information visit: http://diversity.siu.edu/

MILITARY COMMUNITY
There are complexities of being a member of the military community and also a student. Drill schedules, calls to active duty, complications with GI Bill disbursement, and other unforeseen military and veteran related developments can complicate academic life. If you are a member of the military community and in need of accommodations please visit Veterans Services at http://veterans.siu.edu/

Additional Resources:
ADVICEMENT: http://advisement.siu.edu/
SIU ONLINE: http://online.siu.edu/
SALUKINET: http://salukinet.siu.edu/
MORRIS LIBRARY HOURS: http://library.siu.edu/

Provost Website: http://provost.siu.edu/