

Syllabus – Fall 2020

Excluding materials for purchase, syllabus information may be subject to change. The most up-to-date syllabus is located within the course in HuskyCT.

Program Information

This is an introductory course designed to help graduate students understand and evaluate the educational research literature. Through participation in the course, class members will learn the basic concepts and procedures used for conducting educational research. The course is intended to help graduate students become better consumers of research; this course is not designed to prepare students to conduct research.

Course and Instructor Information

Course Title: Principles and Methods in Educational Research

Credits: 3.0

Format: Online (August 31-December 7)

Professor: George Michna, Ph.D.

Email: george.michna@uconn.edu

Telephone: (860) 486-2995

Other: Gentry Rm. 124

Office Hours/Availability: Appointments scheduled by email.

Course Materials

Required course materials should be obtained before the first day of class.

Required textbooks are available for purchase through the [UConn Bookstore](#) (or use the Purchase Textbooks tool in HuskyCT). Textbooks can be shipped ([fees apply](#)).

Required Materials:

Mertler, C. A. (2016). Introduction to educational research (2nd ed.). Thousand Oaks, CA: SAGE.

Optional Materials:

Additional readings to be provided during the course within HuskyCT

Course Description

This course will introduce you to different approaches used in conducting educational research, the criteria used to judge the quality of research, and strategies to consider when designing a research study. The course will focus on both qualitative and quantitative approaches, and will also consider mixed-methods research designs and action research approaches. By the end of the course, you should be able to critically review research and be able to make research design decisions for your own research studies.

Course Objectives

1. **Discuss historical violations of research ethics and issues related to research ethics.**
 1. List and describe ethical responsibilities of researchers when conducting research with human participants.
 2. Describe differences in ethical responsibilities between qualitative and quantitative research studies.

2. **Describe and recognize the major types of quantitative and qualitative research.**
 1. Discuss the theoretical underpinnings of quantitative and qualitative research designs.
 2. Describe and recognize: single-subject, experimental, correlational, causal-comparative, survey, historical, content analysis, ethnographic, narrative, phenomenological, grounded theory, and case study research designs.
3. **Recognize the connection between research questions, research design, and analysis.**
 1. Recognize the research designs used in experimental research and the internal and external threats associated with them.
 2. Distinguish between independent and dependent variables, continuous and categorical variables, directional and non-directional hypotheses.
 3. Describe sampling and instrumentation techniques used in collecting data.
4. **Explain measurement concepts in quantitative and qualitative research.**
 1. Explain the quantitative concepts of validity, reliability, and standard error of measurement.
 2. Recognize trustworthiness issues in qualitative research.
5. **Understand descriptive and inferential statistical concepts and techniques used with quantitative data, and analysis concepts and techniques used with qualitative data.**
 1. Explain descriptive statistical concepts and techniques: central tendency, variability, norm scores, scales of measurement, and correlation.
 2. Understand basic inferential statistical concepts and techniques used with quantitative data: chi-squares, *t* tests, analysis of variance, regression analyses.
 3. Understand the characteristics of qualitative research and the procedures for gathering and analyzing qualitative data.
6. **Locate, classify, synthesize, and evaluate published research**
 1. Demonstrate that you have become a discriminating consumer of published research articles by using research to inform problems of practice and develop future research studies.
 2. Articulate the importance of exploring research in your specific discipline

Course Outline and Calendar
Course Requirements and Grading

The Proposed outline may be modified slightly during the semester:

Week	Date	Topics	Assignments & Readings Due Dates
1	8/31	Course Intro What Is Educational Research?	Chapter 1 Discussion #1: Introduction Post
2	9/7	Overview of the Educational Research Process Identifying a Research Problem	Ch. 2 & 3
3	9/14	Ethics in Educational Research	Ch. 4 Reflection #1
4	9/21	Reviewing Related Research Literature; The Intent of the Study (Statements of the Problem; Research Questions & Hypotheses)	Ch. 5 Discussion #2
5	9/28	Qualitative Research Designs: Recognizing the Overall Plan for a Study	Ch. 6
6	10/5	Qualitative Research Designs: Identifying How Qualitative Information is Gathered	Ch. 11

			Discussion #3
7	10/12	Qualitative Research Designs: Data Analysis, Findings, and Implications	Ch. 11 Reflection #2
8	10/19	Group Project #1: Qualitative Proposal Mid-Semester Reflection	Ch. 10 Group Project #1
9	10/26	Quantitative Research Designs: Recognizing the Overall Plan for a Study	Ch. 7 Discussion #4
10	11/2	Quantitative Research Designs: Identifying How Qualitative Information is Gathered	Ch. 12
11	11/9	Quantitative Research Designs: Data Analysis, Findings, and Implications	Ch. 13 Discussion #5
12	11/16	Mixed Methods Research	Ch. 8 Reflection #3: Characteristics of Mixed-Methods Research
13	11/23	NO CLASS – THANKSGIVING RECESS	
14	11/30	Action Research	Ch. 9
15	12/7	Group Project #2: Quantitative or Mixed-Methods Proposal	Ch. 10 Group Project #2

Summary of Course Grading:

Course Components	Weight
Class Participation/Self-Checks (10)	10%
Discussion Posts (5)	15%
Group Assignments (2)	30%
Reflection Assignments (3)	45%

Class Participation/Self-Checks (10%)

Please read the assigned readings before our class meetings—the quality of our class discussions and class activities depends on your being acquainted with the readings. Some weeks we will have a knowledge check, rather than a discussion post (on a couple weeks you will have both). You should take the knowledge check as many times as necessary until you receive full credit (1 point). After taking the knowledge check, review your answers and the feedback before retaking it. Knowledge checks should be completed by the **Sunday of each week by 11:59 pm EST.**

Discussion Posts (15%)

Your initial response to the discussion forum is to be made by the **Wednesday of each week by 11:59pm EST** so other classmates have an opportunity to read and respond to your post. Some discussion posts have the feature that you cannot read other posts until you have submitted your original post. In some cases, you will not be able to edit your post after it is submitted. You will create new threads for some forums and only respond to threads for other forums. There will be a total of five (5) discussion posts during the course.

It is expected that you read each original thread for the current week. Each discussion post requires at least one response to another's post. Your response post must be made by the **Sunday of each week by 11:59 pm EST.** Throughout the semester try your best to respond to a variety of classmates. Some weeks you will complete a self-check instead of discussion posts. You will receive points in those weeks for the self-checks.

The discussion forum provides a space for conversation rather than a running list of responses. To facilitate this, read all of the postings when you sign on, then thoughtfully respond, using the readings, personal experience, and other research to support your assertions. Feel free to use this space to reflect and ask questions as well. Try to end your post with a question to help keep the conversation going.

The instructor will evaluate the quality of your posts using the following criteria:

- Score point 1 — Grade of C - Student messages explore the topic or issue by identifying and organizing relevant facts, formulating conclusions, and presenting them.
- Score point 2 — Grade of B - In addition to (1), students provide examples related to the topic and interact in a dialogue that involves supporting or challenging ideas that others have proposed.
- Score point 3 — Grade of A - In addition to (2), students initiate new threads of related discussion in the context of the current discussion dialogue. Students explain how a new or previous concept connects to the current concept or how their daily experiences relate to class content and discussion.

Group Assignments (30%)

Utilizing the topic/subject discussed during this course, you will work with your classmates to design two research proposals—one qualitative, and the other quantitative. Groups will collectively author a research proposal providing persuasive evidence that a need exists for the proposed study. In addition to providing a rationale, the proposal must describe detailed methodology for conducting the research consistent with requirements of the professional or academic field and a statement on anticipated

outcomes and/or benefits derived from the study's completion. The only elements missing from the research proposal are the findings of the study and the analysis of those results.

The research proposal must conform to APA style. Each group will use the assigned Google Drive folder during the proposal writing process and post a final copy of the proposal to HuskyCT.

Reflection Assignments (1-2 pages each; 45%)

You will be asked to complete three (3) reflection assignments during the course. These assignments will be used to check for understanding of key concepts and progress toward course objectives. Your assignment must be posted to HuskyCT by **Sunday 11:59 pm EST**. More information will be provided about these reflection assignments and the specific due dates.

Reflective Journal Entries will be graded using the below rubric:

Criteria	No Evidence (0 points)	Unsatisfactory (1 point)	Satisfactory (2 points)
Knowledge/Content	Content is not relevant or accurate. No details.	Content is not always related to the topic. Many inaccuracies. Few supporting details.	Content is informative and accurate. Reflection contains supporting details.
Understanding of Content	Demonstrates no understanding of the concept(s) being assessed.	Demonstrates a limited understanding of the concept(s) being assessed.	Demonstrates understanding of the concept(s) being assessed.
APA Style & Writing Mechanics	Many APA, spelling, or grammatical errors. Serious organizational issues.	Some APA, spelling, grammatical errors and/or organizational problems.	No APA, spelling and grammatical errors. Organized reflection

Grading Scale:

Grade	Letter Grade	GPA
93-100	A	4.0
90-92	A-	3.7
87-89	B+	3.3
83-86	B	3.0
80-82	B-	2.7
77-79	C+	2.3
73-76	C	2.0
70-72	C-	1.7
67-69	D+	1.3
63-66	D	1.0
60-62	D-	0.7
<60	F	0.0

Due Dates and Late Policy

All course due dates are identified in the Course Syllabus. Deadlines are based on Eastern Time; if you are in a different time zone, please adjust your submittal times accordingly. *The instructor reserves the right to change dates accordingly as the semester progresses. All changes will be communicated in an appropriate manner.*

I understand that emergencies and unexpected events happen in our lives. Therefore, extensions for class requirements will be granted only on a case-by-case basis and will depend upon the extenuating circumstances.

Feedback and Grades

I will make every effort to provide feedback and grades in one week. To keep track of your performance in the course, refer to My Grades in HuskyCT.

Student Authentication and Verification

The University of Connecticut is required to verify the identity of students who participate in online courses and to establish that students who register in an online course are the same students who participate in, complete the course activities and assessments, and receive academic credit. Verification and authentication of student identity in this course will include:

1. Secure access to the learning management system using your unique UConn NetID and password.
2. Three (3) asynchronous video activities where students will show their identification and will engage in discussions related to significant student work enabling the instructor to confirm the student identity and link it to their course participation

Student Responsibilities and Resources

As a member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important [standards, policies and resources](#), which include:

- The Student Code
 - Academic Integrity
 - Resources on Avoiding Cheating and Plagiarism
- Copyrighted Materials
- Credit Hours and Workload
- Netiquette and Communication
- Adding or Dropping a Course
- Academic Calendar
- Policy Against Discrimination, Harassment and Inappropriate Romantic Relationships
- Sexual Assault Reporting Policy

Students with Disabilities

The University of Connecticut is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please let me know immediately so that we can discuss options. Students who require accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, (860) 486-2020 or <http://csd.uconn.edu/>.

Blackboard measures and evaluates accessibility using two sets of standards: the WCAG 2.0 standards issued by the World Wide Web Consortium (W3C) and Section 508 of the Rehabilitation Act issued in the United States federal government." (Retrieved March 24, 2013 from [Blackboard's website](#))

Software/Technical Requirements (with Accessibility and Privacy Information)

The software/technical requirements for this course include:

- HuskyCT/Blackboard ([HuskyCT/ Blackboard Accessibility Statement](#), [HuskyCT/ Blackboard Privacy](#))

[Policy](#))

- [Adobe Acrobat Reader](#) ([Adobe Reader Accessibility Statement](#), [Adobe Reader Privacy Policy](#))
- Microsoft Office (free to UConn students through uconn.onthehub.com) ([Microsoft Accessibility Statement](#), [Microsoft Privacy Statement](#))
- Dedicated access to high-speed internet with a minimum speed of 1.5 Mbps (4 Mbps or higher is recommended).
- WebCam

For information on managing your privacy at the University of Connecticut, visit the [University's Privacy page](#).

NOTE: This course has NOT been designed for use with mobile devices.

Help

[Technical and Academic Help](#) provides a guide to technical and academic assistance.

This course is completely facilitated online using the learning management platform, [HuskyCT](#). If you have difficulty accessing HuskyCT, you have access to the in person/live person support options available during regular business hours through the [Help Center](#). You also have [24x7 Course Support](#) including access to live chat, phone, and support documents.

Minimum Technical Skills

To be successful in this course, you will need the following technical skills:

- Use electronic mail with attachments.
- Save files in commonly used word processing program formats.
- Copy and paste text, graphics or hyperlinks.
- Work within two or more browser windows simultaneously.
- Open and access PDF files.

University students are expected to demonstrate competency in Computer Technology. Explore the [Computer Technology Competencies](#) page for more information.

Evaluation of the Course

Students will be provided an opportunity to evaluate instruction in this course using the University's standard procedures, which are administered by the [Office of Institutional Research and Effectiveness](#) (OIRE).

Additional informal formative surveys may also be administered within the course as an optional evaluation tool.