

Research Methods – EDME/HIED 580
Late Fall 2014

Professor: Ron Burwell, Ph.D.
Email: rburwell@messiah.edu

Course Dates: Oct. 26 – Dec. 20
Cell Phone: 717-525-3391

Faculty Availability: via email; phone. In general, you may expect a response to email or phone messages within 24 hours. It may also be possible to schedule an appointment via phone or Skype. Contact me to request an appointment.

Contact: I will be checking in on the course several times per day during the work week (unless otherwise notified). I am also very willing and happy to communicate individually with students as needed. My preferred means of contact is via email. If your questions apply to the class and may be of value to other students please post them on the General Course Discussion so that everyone can benefit from the answers. If you contact me individually, my commitment is to respond to you in 24 hours or less on weekdays. If you have an urgent question on the weekend, you may contact me on my cell phone (717) 525-3391.

Faculty Expectations of Students:

Orientation: At the beginning of the course the student is expected to read the entire course syllabus, familiarize him or herself with the course calendar and practice navigating the content in each of the Canvas tabs used in this course.

Announcements: Please make sure that you read the announcements every time you log in to the course. These will be updated regularly with important course information. Any time I post an announcement I will also send an email notification for the announcement.

Instructional Time: In an eight-week course, students will spend approximately 5.25 hours (on average) per week engaging in tasks that are classified as instructional (roughly equivalent to classroom seat time). Instructional tasks include watching required videos, watching and reading PowerPoints, reading class notes provided by the instructor, completing exams, reviewing instruction related to field experience, as well as reading posts and submitting posts online in the Discussion Posts.

Non-Instructional Time: In an eight-week course, students will spend between 8 and 10 hours (on average) per week engaging in tasks that are classified as non-instructional. Non-instructional tasks include reading the course materials, completing assignments, unsupervised group work, practice quizzes, preparing Discussion Post responses, field placement hours and conducting research.

Asynchronous/Synchronous learning: This course will require primarily asynchronous learning, which means that students can work independently at their own pace within certain schedule constraints/limitations. The instructor may schedule one or more synchronous learning experiences (using Conference in Canvas). These will be optional and are primarily oriented to review materials in preparation for the tests. You should perform a systems check

with our student computer services office prior to your first session to make sure your equipment is functioning properly.

Course Description

This course provides an introduction to research methodology as it applies to the field of education. The focus of the course is on the fundamental principles of educational research including the formulation of research questions/hypotheses, sampling methods, quantitative, qualitative and mixed research designs, statistical methods, ethical and legal considerations, research report writing and the use of research to solve problems. The course also provides students with the skills needed to critically evaluate published research as informed consumers and a framework for designing a proposal for research study in an area of interest. *[Effective Fall 2014, this course replaces EDME 545 and HIED 560].*

Course Objectives

By the end of the course, students will:

- a. be able to identify the importance of research in education
- b. understand the nature of research methods including qualitative and quantitative approaches
- c. have a basic introduction to which statistical methods are suited for conducting research and program evaluation
- d. be able to articulate the principles, methods and types of research that fit the needs of various types of education including needs assessment and program evaluation
- e. demonstrate the ability to create a research design which could guide the study of a topic in education.
- g. evaluate the ethical and cultural dimensions of proposed research studies in education.

Textbook

Required:

Creswell, J.W. (2008). *Educational Research: Planning, conducting, and evaluating quantitative and qualitative research* (5th ed.). Upper Saddle River, NJ: Pearson.

American Psychological Association. (2009). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.

Course Requirements

Weekly Schedule: At the beginning of each week, I will post an announcement that will give an overview of your requirements for that particular week. These are already posted in the calendar of the syllabus, but I am trying to make sure everyone is clear on the weekly assignments. Also, be sure to read through the entire course schedule so you can plan ahead for assignments. It is your responsibility to keep up with the requirements and due dates. The general rule of thumb for on line classes (3 credits) is that you will spend at least 42 hours on instructional time (attending class; listening to mini-lectures; reviewing PowerPoint files; posting responses to Discussion Posts; reviewing other resources available on the course website). Non-instructional time (homework; assignments) may vary from student to student but will require hours in addition to the instructional time.

Weekly Participation: Each week I will send out an announcement with a list of the week’s assignments (see above). Once you complete the week’s tasks, you should send me an email letting me know. If you complete all of those tasks for the week, you will get 10 points. The maximum total for this is **80 points**.

Discussion Posts: There will be a series of six discussion questions posted under the Discussion tab in Canvas (also in each week’s Module). One question will be presented each week on weeks 1 through 3 and weeks 5 through 7 [Note: there will be no required Discussion postings on weeks when there are tests (weeks 4 and 8)]. Students will be expected to post an **original response** to the question by 11:55 pm on Wednesday of the week and **follow up responses** to at least two other students by 11:55 pm on Saturday of that week. In addition, minimally all students will respond to any questions posted by other students about their comments. Original responses are to be between 300-350 words and are to include references to the readings for the week. Students who respond to more than two students, respond to follow up questions, incorporate outside readings into the responses, and demonstrate a clear comprehension of the material will receive higher grades. Grading will be as follows: Understanding and analysis of the readings (15 points), responses to other students that contributed to better understanding of course materials and facilitated additional conversation (5 points), correct APA style (3 points), incorporation of outside sources (not our required readings) (2 points). A grading rubric will be posted to help students understand the grading procedure for the Discussion Posts.

PowerPoint Presentations: (covering materials in the Creswell text and other information) Students will review the PowerPoint Presentations provided in the course web site. The information provided is considered part of the class time and is intended to assist students with materials helpful in case mastering the readings. In general, the Power Points will also be related to the recorded lectures that are part of the resources for the class.

Lectures – Audio Files: In addition to Power Points, there are MP3 audio files of class lectures that students are expected to listen to. Both MP3 audio files and PowerPoints can be found in the Modules in Canvas. These lectures correspond in most cases to chapters in the textbook and many of the Power Points. They should be reviewed according to the following schedule:

Week	Lectures – Audio Files	PowerPoints
Oct 26 to Nov 1	Overview of Course Introduction to Research and Quantitative vs Qualitative Research	Introduction to Research Quantitative vs Qualitative Research Chapter One
Nov 2 to Nov 8	Ethics in Research Identifying a Research Problem	Ethics in Research Chapter Two
Nov 9 to Nov 15	Reviewing the Literature	Chapter Three
Nov 16 to Nov 22	Research Questions and Research Hypotheses	Chapter Four
Nov 23 to Nov 29	Quantitative Research Sampling	Chapter Five and Chapter Six Sampling

Nov 30 to Dec 6	Qualitative Research	Chapter Seven and Chapter Eight Interviewing
Dec 7 to Dec 13	Reporting Research	Chapter Nine
Dec 14 to Dec 20	Mixed Methods	Chapter Sixteen

Research Activities: Students will be expected to complete seven research activities. See attached sheets for more information. The seven research activities are also posted on the course web site.

Exams: There will be two exams in this course. The first exam will be given during week four and will cover materials covered during the first four weeks of the course. The second exam will be given during week eight and will cover material covered during the last four weeks of the course. Exams will be composed of short essay questions and will be timed. Students will be given examples of possible essay questions prior to each exam. Each exam will be worth 100 points.

Grading

Discussion Postings (Discussion Board Questions) 150 (25x6=150 points)

Research Activities

Research Problem	30	
Consent Form	20	
NIH Human Subjects Training	30	
Literature Review	75	Grade Scale:
Quantitative Analysis	30	A 93-100% B- 80-82%
Qualitative Analysis	30	A- 90-92% C+ 77-79%
Mini-research Design	100	B+ 87-89% C 73-76%
Exams (2 x 100 = 200 points)	200	B 83-86%
Weekly Participation	80	
<i>Total Points Possible</i>	<i>745</i>	

Course Policies

Extra Credit: Generally extra credit points are not awarded in this course.

Late Assignments – All assignments are due by 11:55 pm EST on the due date assigned. Check the Course Schedule (see below) and also the schedule in Canvas. A 5% deduction in the points available for each assignment will occur for each day an assignment is late (unexcused). Failure to complete any assignment by the end of the course could result in the student failing the whole course.

Assignments – All assignments will be returned to the student for review of the assigned grade (with the exception of Discussion Posts). In most cases there may be comments attached to the assignment. A grading rubric will be attached to the Literature Review and the Mini-Research Design. If students have questions about the grade assigned they may wish to contact the professor to discuss the grade. Students may also ask for clarification about a grade through email to the professor within three days of receiving the grade for any assignment. Assignments can be submitted through the Assignments tool in Canvas or as attachments to email.

Written Work- It is **imperative** that your written work meet graduate level standards. Papers submitted digitally should meet the same criteria that hard copy papers must meet. Any paper you submit should look like you would want it to look if it were printed out. Please follow these guidelines:

- A typical page of writing is 12 pt font, double-spaced, with one-inch margins. Only a full page of writing counts as a page.
- Use APA style for citations and referencing. This is a useful resource on APA style: <http://owl.english.purdue.edu/owl/section/2/10/>
- All papers must have your name and the name of the assignment at the top, or on a title page.
- All papers should have titles.
- Longer papers normally require headings, following APA guidelines.
- Grammar, spelling and punctuation are very important. Edit your paper well.
- Lack of clarity in writing, lack of coherence in organization or reasoning, and redundancy which extends the paper beyond its substance will all result in a lower grade. Creating and following an outline when you write can help you avoid some of these problems.

Program Policies:

Academic Integrity

The [Academic Integrity Policy for Graduate Students](#) is found in the graduate student handbook. Primary responsibility for knowledge of and compliance with this policy rests with the student.

Americans with Disabilities Act

Any student whose disability falls within ADA guidelines should inform the instructor at the beginning of the semester of any special accommodations or equipment needs necessary to complete the requirements for this course. Students must register documentation with the Office of Disability Services. Contact: DisabilityServices@messiah.edu, (717) 796-5382.

Library and Librarian Assistance

The Library is an obvious source of information for research, presentations and projects. Currently, Beth Mark is the specific library liaison assigned to education programs. Although any librarian is trained and prepared to assist you, Beth works specifically with the educational area and is most familiar with the resources and databases that relate to this field. Do not hesitate to contact her if you are having trouble locating specific sources for your assignments, as she is more than willing to help you. For her specific work schedule, contact her directly at bmark@messiah.edu or by calling (717) 796-1800 ext. 3590. [Click here for resources and databases that relate to this field](#)

Writing Center

The [Writing Center](#) is available to any graduate student who has a desire to improve his/her writing. The role of the center is to provide feedback (not editing) on written work. Feedback alerts you to the kinds of errors you are making, lets you know when something is not clear, and suggests that you have not fully supported an argument. Feedback does NOT correct your grammatical errors, rewrite your sentences, or provide you with the specific points to support your argument. Ultimately, it is your responsibility to find and use the resources you need to improve your writing but connecting with our Writing Center, either online or face-to-face, is a good place to start.

Hardware and Software Recommendations

Student [technology recommendations](#) are found on the Information Technology Services website. These guidelines have been put in place to best equip you to have an optimal technological experience in our online programs.

Minimum Computer Skills Requirements

Students must possess basic computer skills and have regular access to a computer with the Minimum System Requirements in order to participate fully. Specifically, students who enroll in an online course must have basic computer skills including:

- A working knowledge of word processing
- Navigate the internet using different search engines
- Email (Compose, Attach, Send, Read)
- Utilize Microsoft Office programs (Word & PowerPoint)
- Copy and Paste

Technical Support for Students

[Technological support](#) is available to all students during the days and times listed on the Information Technology Services homepage. Students also have access to technical support (i.e. tutorials, help functions, etc.) through the College's portal, MCSquare, and through the College's Learning Management System.

Statement of Copyright Protection

"The materials in this Messiah College course are only for the use of students enrolled in this course for purposes associated with this course and may not be further disseminated."

Statement of Confidentiality

"Students may be asked to post written work and to engage in written dialog with other class members within an LMS. The student should be aware that although confidentiality within the course environment is encouraged, it is possible that users in and outside the course may have access to course content."

To assure ease and trust, we are asking everyone to comply with some simple rules. Use good [Netiquette](#). Also be respectful and considerate of one other. We can all benefit by having a secure, trustworthy site to share ideas, ask questions, and make announcements related to the graduate program in education and our professions.

Course Schedule

Date	Topic	Reading Due	Assignments Due
Week 1 10/26 – 11/1	The process of research Quantitative vs. qualitative research	<ul style="list-style-type: none"> • Creswell: Ch. 1 	<ul style="list-style-type: none"> • Week 1 Post • Assignment One Research Problem (Nov 1)
Week 2 11/2 – 11/8	Identifying a research problem Ethics of Research - IRBs	<ul style="list-style-type: none"> • Creswell: Ch. 2 • Creswell: pages 146 - 148 	<ul style="list-style-type: none"> • Week 2 Post • Assignment Two Consent Form (Nov 8) • Assignment Three NIH Training (Nov 8)
Week 3 11/9 – 11/15	Reviewing the literature	<ul style="list-style-type: none"> • Creswell: Ch. 3 	<ul style="list-style-type: none"> • Week 3 Post • Assignment Four – Literature Review (Nov 15)
Week 4 11/16 – 11/22	Research questions and hypotheses	<ul style="list-style-type: none"> • Creswell: Ch. 4 • Review chapters 1 through 4 for Test#1 	<ul style="list-style-type: none"> • TEST#1 due by Nov 22
Week 5 11/23 – 11/29	Collecting and analyzing quantitative data	<ul style="list-style-type: none"> • Creswell: Ch. 5 and 6 	<ul style="list-style-type: none"> • Week 5 Post • Assignment Five Analysis of Quantitative Data (Nov 29)
Week 6 11/30 – 12/6	Collecting and analyzing qualitative data	<ul style="list-style-type: none"> • Creswell: Ch. 7 and 8 	<ul style="list-style-type: none"> • Week 6 Post • Assignment Six Analysis of Qualitative Data (Dec 6)
Week 7 12/7 – 12/13	Reporting and evaluating research	<ul style="list-style-type: none"> • Creswell: Chp. 9 	<ul style="list-style-type: none"> • Week 7 Post • Assignment Seven Mini-Research Design (Dec 20)
Week 8 12/14 – 12/20	Completing the project and course	<ul style="list-style-type: none"> • Creswell: Chp. 16 (or alternate) • Review chapters 5 through 9 for test#2 	<ul style="list-style-type: none"> • Test#2 due: Dec 20

Assignments – Brief summaries

There are a total of seven (7) assignments in this course. Below are brief summaries of each assignment. More detailed instructions for each of these assignments are found in the **Assignments** section in Canvas. Note: Assignments will be due on Saturday (11:55 pm).

Assignment 1 - Research Problem

Each student is to develop a potential research problem related to the area of your graduate studies. This will take the form of a single, carefully written paragraph that describes the research question/topic that you wish to address.

Points = 30

Due date = Nov 1

Assignment 2 – Consent Form

For the research problem in assignment 1, each student will create a “**Consent Form**” that is appropriate for your proposed research. You are encouraged to adopt an example from either Messiah College (cf., College Web) or your textbook.

Points = 20

Due date = Nov 8

Assignment 3 – NIH Human Subjects Training

Each student is required to complete the on-line training course offered by the National Institutes of Health (NIH) for those doing research on human subjects. The course takes between two to three hours to complete and when finished you will receive a certificate of completion. A copy of the certificate will be forwarded to your instructor.

Points = 30

Due date = Nov 8

Assignment 4 – Literature Review

For this project each student will complete a short (4-5 pages) paper based upon reading and analysis of three articles related to a possible research topic [see assignment#1]. The actual topic is open but will likely be related to your track (e.g., special education, TESOL, higher education, etc.)

Points = 75

Due date = Nov 15

Assignment 5 – Analysis of Quantitative Research Data

You will work with a set of data that seeks to answer questions related to performance in an English composition class. By analyzing the output from a statistics program you will be able to determine a possible screening protocol to place appropriately college students in composition classes.

Points = 30

Due date = Nov 29

Assignment 6 – Analysis of Qualitative Research Data

For this assignment you will code a set of responses by ten different people regarding what they consider to be the “ultimate” vacation. You will develop codes that capture reasons for taking a vacation, activities on vacation and possible locations for vacations.

Points = 30

Due date = Dec 6

Assignment 7– Mini Research Design

You will be expected to write a paper presenting a research design for a possible research project. In many cases this will involve materials from earlier assignments (e.g., assignments 1, 2 and 3). This hypothetical research project could serve the needs of an organization or it could be a proposal for a possible graduate thesis (cf. HIED 565 / EDME 531).

Points = 100

Due date = Dec 20

EDME/HIED 580 Education Research Course Outline/Schedule

*Instructional Time (IT) 42 hrs / 3 credits

*Non-Instructional (N-IT)"Homework"

Week	Assignments	Hours*	
		IT	N-IT
Oct 26 – Nov 1	The Research Process; Quantitative vs. Qualitative Research		
	Read Creswell, Chps. 1		3
	Power Points & Audio Class Lectures	4	
	Read, Post and Respond in Discussion Post Week 1	2	
	Assignment One – Introduction & Research Problem		2
Nov 2 – Nov 8	Identifying a Research Problem; The Ethics of Research		
	Read Creswell, Chp. 2		1
	Power Points & Audio Class Lectures	4	
	Read, Post and Respond in Discussion Post Week 2	2	
	Assignment Two – Consent Form		2
	Assignment Three – NIH Human Subjects Training	3	
Nov 9 – Nov 15	Reviewing the Literature		
	Read Creswell, Chp. 3		1.5
	Power Points & Audio Class Lectures	4	
	Read, Post and Respond in Discussion Post Week 3	2	
	Assignment Four – Literature Review		8
Nov 16 – Nov 22	Research Questions and Hypotheses		
	Read Creswell, Chp. 4	1.5	
	Power Points & Audio Class Lectures	4	
	Review Creswell, Chp. 1 to 4		3
	Test#1 – Creswell Chp. 1 to 4, PPTs& Audios - Feedback	2	
Nov 23 – Nov 29	Collecting and Analyzing Quantitative Data		
	Read Creswell, Chps. 5 & 6		3
	Power Points & Audio Class Lectures	4	
	Read, Post and Respond in Discussion Post Week 5	2	
	Assignment Five – Quantitative Data Analysis		5
Nov 30 – Dec 6	Collecting and Analyzing Qualitative Data		

	Read Creswell, Chps. 7 & 8		3
	Power Points & Audio Class Lectures	4	
	Read, Post and Respond in Discussion Post Week 6	2	
	Assignment Six – Qualitative Data Analysis		5
Dec 7 – Dec 13	Reporting and Evaluating Research		
	Read Creswell, Chp. 9		1
	Power Points & Audio Class Lectures	4	
	Read, Post and Respond in Discussion Post Week 7	2	
	Assignment Seven – Research Design Proposal		8
Dec 14 – Dec 20	Completing the Project & the Course		
	Assignment Seven – Complete Research Design Proposal		8
	Read Creswell, Chp. 16 or alternate		1
	Power Points & Audio Class Lectures	2	
	Review Creswell, Chp. 5 to 9		3
	Test#2 - Creswell Chp.5 to 9; Chp. 16 or alternative; PPTs& Audios - Feedback	2	
	Course Evaluation Due	.5	