Fundamentals of Evaluation, Measurement & Research
EMR 5400

Course Syllabus

Spring Term 2014 (January 6, 2014 - April 26, 2014)

Instructor
Gary Miron
Professor, Educational Leadership, Research & Technology
College of Education, WMU
3865 Sangren Hall
Cell phone: 269- 599-7965
Office phone 269-387-5122
e-mail. <gary.miron@wmich.edu>
Skype: Gary.Miron

Office Hours
I am very flexible to meet by appointment. You can usually find me in my office in the ELRT department on the third floor of Sangren Hall (3865). Otherwise you are welcome to call my cell. If you wish to schedule a private conversation by phone, skype, or live chat, you can do this by e–mail or phone. If you think your question(s) have a wider appeal, please use the course discussion board so that all students can benefit from the exchange.

Required Texts

Recommended Supplemental Texts

Other articles and reading materials may be provided or suggested during the course. In addition to these texts, it is recommended that each participate have access to a computer with Skype capability. Preferably, you will need a headset with microphone and a digital video camera.
Course Description

EMR 5400 is a 3 credit hour graduate level course designed to develop skills in the fundamentals of evaluation, measurement, and research. The course will introduce participants to many of the essential components necessary to carry out and evaluate social science research. Topics include philosophy of science, finding and formulating research problems and questions, literature reviews and searches, basic concepts in measurement, sampling, ethical treatment of human subjects and qualitative and quantitative research methods and designs, and program evaluation. During the course, each participant is expected to prepare a research proposal/literature review.

Instructional Objectives

Participants will demonstrate knowledge of the following:
1. The purpose and nature of scientific research.
2. How knowledge gained from scientific research differs from other types of knowledge.
3. The difference between research and evaluation.
4. How to formulate and articulate research problems.
5. The different types and uses of variables in a research study.
6. The methods and techniques for establishing and evaluating reliability and validity.
7. How to critically access and review literature relevant to a particular research problem.
8. How to write a literature review.
9. The relationship between research questions and particular research designs.
10. The most common forms of quantitative and qualitative approaches to research in education and the social sciences.
11. The strengths and shortcomings of these approaches to research.

Modes of Instruction

Weekly classroom session, supplemented with some online course delivery, asynchronous discussion, and individual assignments.

Need for Accommodations

Any student with a documented disability (e.g., physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the professor and the appropriate Disability Services office at the beginning of the semester. The two disability service offices on campus are: Disabled Student Resources and Services 269-387-2116 and the Office of Services for Students with Learning Disabilities 269-387-4411.

Diversity Statement

The Department of Educational Leadership, Research and Technology and the Evaluation, Measurement & Research graduate program maintain a strong and sustained commitment to the diverse and unique nature of all learners and high expectations for each student.

Expectations

- Students are expected to attend scheduled class sessions and to fully participate during the diverse classroom activities. If you are sick, snowed in, or away on business you are expected to contact a classmate with a laptop and arrange to participate electronically via Skype. If your
health or other circumstances limit your ability to participate electronically, then contact the instructor via phone and/or email before class or as soon thereafter as possible.

☐ Please turn cell phones/pagers and other electronic communications devices to silent mode (or off) during class.

☐ When sending e-mails regarding the class, please use my university e-mail address and remember to include “EMR 5400” in the start of the subject line.

☐ The usual expectations exist regarding Academic Honesty, the Student Code of Honor (i.e., do not represent as your own work the work of others, cite all sources appropriately, etc.) and general academic policies on such issues as diversity, religious observation, student disabilities, etc. The policies can be found at <http://catalog.wmich.edu> under Academic Policies, Student Rights and Responsibilities. Unless I am advised otherwise, by an administrator in a supervisory position, these policies will all apply as they are presented.

☐ When citing research or including references in your writing assignments, please follow guidelines from the American Psychological Association Publication Manual. Otherwise, details for specific writing requirements will be listed in a separate handout that describes the writing assignments.

☐ In order to receive the greatest benefit from your participation in this course, you are expected to read the course text, related documents, journal articles, and complete all quizzes and assignments. Documentation of your mastery of the course content is demonstrated through chapter quizzes, assignments and the development of a research or evaluation proposal and a related literature review.

☐ Be prepared to discuss problems and readings both in class and on the elearning discussion board. You may e-mail any questions to me or if it is a question that your classmates will benefit from, post your question to the discussion board under the heading “questions.” This will allow for your classmates to help in answering the question. It is your responsibility to gain clarification when this is needed.

☐ Students with special needs who foresee the need for accommodation or those with known conflicts with any course session should see me at the beginning of the course, or as needs/expectations change during the course.

WMU Plagiarism and Academic Honesty Syllabus Statement

Students who take this class must be prepared to submit electronic copies of some or all assignments. The University expects that all students will be evaluated and graded on their own work. If you use language, data, or ideas from other sources, published or unpublished, you must take care to acknowledge and properly cite those sources. Failure to do so may constitute plagiarism or other violation of University academic honesty policies (refer to the Undergraduate or Graduate catalogs for details).

To detect and deter plagiarism, encourage responsible student behavior, improve student learning, and ensure greater accountability, assignments for this class may be submitted for textual similarity review to Turnitin.com and/or other resource. Use of the Turnitin.com service is subject to the Terms and Conditions of Use posted on the Turnitin.com website. Papers that are submitted to Turnitin.com become part of the Turnitin.com database (student identities are protected) solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Terms and Conditions of Use posted on the Turnitin.com site. Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism.
If you wish to request that your paper(s) not be included in the Turnitin.com reference database, I need to receive your request in writing prior to submission of any course assignments; the paper(s) can then be processed and reviewed accordingly. The results of a Turnitin.com originality report or other resources may be used as evidence to charge you with plagiarism or other offense. If that is the case, you will be given the opportunity to respond per the regular institutional process and procedures that govern student academic conduct (http://osc.wmich.edu/academicintegrity/).

**Grading**

Professionalism in all course-related endeavors and active online participation is expected. All work will be evaluated based on accuracy, adherence to guidelines and due dates, thoroughness, evidence of effort, evidence of professionalism, evidence of data integration, coherence, and appearance. Be sure to check, proof, and edit all work submitted. It is important to keep up with participation in the discussion board to allow for fellow students to follow suite.

To successfully complete this course, students are expected to do the following:

1. Complete all scheduled reading and participate actively in class discussions.
2. Complete all quizzes.
3. Complete and turn in all course assignments. A tentative list of course assignments and due dates are detailed in this Syllabus.
4. Write a research or evaluation proposal/literature review.

Course grades are based on total points awarded based on participation, quizzes, course assignments, and final course project. Your point total percentage is determined by dividing your total point total including extra credit points into the highest total number of points earned, excluding extra credit points and multiplying by 100. So if you have earned 325 points and 5 extra credit points your total points = 330. If the highest point total excluding extra credit is 350 points your % is (330/350) *100 or 94%.

Letter grades will be assigned by the following scale:

- 100 - 94.0 points  A
- 93.9 - 89.0 points  BA
- 88.9 - 84.0 points  B
- 83.9 - 79.0 points  CB
- 78.9 - 74.0 points  C
- Below 74 points  E

Incompletes will only be considered in the most dire of circumstances.

There will be seven written homework assignments throughout the semester. The purpose of each assignment is to prepare the student for the final project which is a completed proposal. Each assignment will have a detailed instruction sheet and rubric posted on E-learning. This is simply an overview.

**Course Participation**

Participants are expected to be actively engaged in the class. Participation will be evaluated based on (i) attendance, (ii) level and quality of engagement in classroom & on-line discussions, (iii) electronic posting of questions each week on reading assignments, and (iv) group presentations of your assignments.
Each student will have four opportunities to present his/her working research which are connected to the assignments. The workgroups will consist of 3-4 students. Each group will remain the same throughout the semester in order to provide the greatest feedback. You will be required to present (5-10 minutes) your problem statement, literature search results, introduction and methodology at various times throughout the semester. This is a time for each student to receive constructive feedback and ideas on how to improve his/her research throughout the semester. It is also a time for you to see the work that your peers are doing.

A total of 80 points will be attributed to participation: 40 points assigned after mid-term, and 40 points for participation assigned at end of course.

**Chapter Quizzes**

The purpose of the weekly quiz is to ensure that each student can confidently contribute to the class discussions each week. The time period allocated to complete the quiz varies depending on the number of questions (usually between 5 and 20 questions). You only have one attempt to complete the quiz, so plan accordingly. You may use your book or notes but you will have a limited amount of time to complete the quiz. Except for the first week, the quiz will be available from Tuesday at 8 a.m. until Monday at 5:30 pm each week. The questions will be multiple choice, true/false or fill in the blank. To ensure success on the chapter quizzes, critical reading of the textbook and comprehensive review of the posted course material is required.

**Course Assignments**

All course assignments are to be sent to the elearning dropbox for submission. You must submit your assignment before the elearning dropbox closes at 11:59 pm on the due day. All course assignments write-ups (when appropriate) are to be typed in APA style. One exception to the APA requirements is that I require you to use single space rather than double space text.

There will be a total of 8 course assignments. More details regarding each one of these assignments will be made available during the course.

- CITI HSIRB Training 1 (10 points)
  - Assignment #1 – Introduction Paper (10 points)
  - Assignment #2 – Article Critique (20 points)
  - Assignment #3 – Problem Statement (20 points)
  - Assignment #4 – Literature Search Findings (20 points)
  - Assignment #5 – Literature Review (20 points)
  - Assignment #6 – Introduction (20 points)
  - Assignment #7 – Methods (20 points)
  - Assignment #8 – Difference between research & evaluation (10 points)

**Final Course Project**

The final course project will involve a research or evaluation proposal as well as an accompanying literature review. This will be worth a total of 50 points, and will be due on April 21, 2014. Specific instructions regarding the final course project will be provided during the course.

Final Project (50 points).
Late & Careless Work

Timely completion and the quality of your work will contribute to your overall course grade. In fairness to all, a penalty of a half point will be imposed for any late course assignment. Re-writes requested by the instructor will also be subject to a minimum half point deduction. Extenuating circumstances will be considered with proper documentation.

If you require help with your writing, please contact the WMU Writing Center [1060 Moore Hall, tel. 387-4615, e-mail: <meghan.m.dykema@wmich.edu>]. The Writing Center provides short courses and individualized support which can help strengthen your writing. This is an important and valuable service that is paid for with your tuition dollars.

Submission of Assignments and Digital Drop-Box

Unless otherwise noted, participants are required to submit assignments to the elearning dropbox in Microsoft Word or WordPerfect file format. If you are unable to meet this requirement, please inform the instructor immediately. The Word or WordPerfect attachment requirement allows for easy handling from the course instructor back to the students (with feedback included within the attached document).

The file names should identify the course assignment numbers as well as your first and last name; use the following file naming example as a guide: hw1-GaryMiron.doc. **No spaces should be used in the file name.** Please do not e-mail the instructor to check on the status of an assignment placed in the digital drop box.

The following information MUST be included at the top of all assignments dropped into the Digital Drop Box:
1. Your first and last name & email address
2. EMR5400
3. Course Assignment #/Subject
4. Date

Example
Gary Miron, gary.miron@wmich.edu
EMR5400
Hwk#7: Detailed Lit Review Outline
March 16, 2014
Tentative Reading Topics

Described below are the tentative list of topics to be covered each week. The dates provided offer a general timeline for your reading and reflect when the chapter tests generally open.

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Chapter</th>
<th>Additional Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 6</td>
<td>Introduction to course, Nature of educational research</td>
<td>Chapter 1</td>
<td></td>
</tr>
<tr>
<td>Jan 13</td>
<td>The research process: From proposal to publication</td>
<td>Chapter 2</td>
<td>Assg 1 due, review of Research Path modules completed, and Quiz 1</td>
</tr>
<tr>
<td>Jan 20</td>
<td><strong>No class – Martin Luther King Day</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 27</td>
<td>Ethics in educational research and Reviewing the literature</td>
<td>Chapters 3 - 4</td>
<td>Assg 2 due and Quiz 2</td>
</tr>
<tr>
<td>Feb 3</td>
<td>Selecting a sample</td>
<td>Chapter 6, pgs 165-185</td>
<td>CITI Training Certificate due and Quiz 3</td>
</tr>
<tr>
<td>Feb 10</td>
<td>Collecting data with tests and self-report measures; Presentation of problem statement in workgroup</td>
<td>Chapter 7, pgs 192-202, 209-225</td>
<td>Assg 3 due, Workgroup 1, and Quiz 4</td>
</tr>
<tr>
<td>Feb 17</td>
<td>Collecting data with questionnaires and interviews</td>
<td>Chapter 8</td>
<td>Assg 4 due and Quiz 5</td>
</tr>
<tr>
<td>Feb 21</td>
<td>Collecting data through observations and content analysis; Presentation of literature review in workgroup</td>
<td>Chapter 9</td>
<td>Workgroup 2 and Quiz 6</td>
</tr>
<tr>
<td>March 3</td>
<td><strong>No class – Spring Break</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>March 10</td>
<td>Non-experimental designs (descriptive and causal-comparative designs)</td>
<td>Chapter 10, pgs 298-314</td>
<td>Assg 5 due and Quiz 7</td>
</tr>
<tr>
<td>March 17</td>
<td>Non-experimental designs (correlational designs); Presentation of introduction in workgroup</td>
<td>Chapter 11, pgs 331-345</td>
<td>Workgroup 3 and Quiz 8</td>
</tr>
<tr>
<td>March 24</td>
<td>Experimental research designs</td>
<td>Chapter 12 and Chapter 13 (pgs 415-431)</td>
<td>Assg 6 due and Quiz 9</td>
</tr>
<tr>
<td>March 31</td>
<td>Qualitative research designs; Presentation of methodology in workgroup</td>
<td>Chapter 15, pgs 488-508 and additional readings</td>
<td>Quiz 10 and Workgroup 4</td>
</tr>
<tr>
<td>April 7</td>
<td>Qualitative research designs;</td>
<td>Chapter 15, pgs 488-508 and additional readings</td>
<td>Assg 7 due</td>
</tr>
<tr>
<td>April 14</td>
<td>Statistical techniques</td>
<td>Chapter 5</td>
<td></td>
</tr>
<tr>
<td>April 21</td>
<td>Final project due by 5:30 pm</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>