

# MuEd 8119: Advanced Applications of Research Methods

University of Minnesota—Spring, 2013  
Meeting time: Thursdays 4:30 to 7:00 p.m.; PHSR (Ferguson 157)

**Dr. Scott D. Lipscomb, Associate Professor**

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or via email at anytime  
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## COURSE SYLLABUS

**Course description:** A review of empirical research methods and design with emphasis on both quantitative and qualitative models. This course will involve the study of descriptive & inferential statistical techniques used as quantitative analytical tools and/or coding, categorization, and emergent approaches utilized in qualitative data analysis, affording students an opportunity to practically apply knowledge gained in previous research courses, including MuEd 8112, 8115, and 8118. Research projects proposed in any of these classes will provide the basis for data collection, analysis & interpretation, and completing a written report placing the results of this study in the context of our present state of knowledge regarding the chosen topic. Upon completion, students are *strongly* encouraged to submit the completed study for consideration for inclusion in the program of an appropriate regional or national conference; in exceptional cases, the project may even be worthy of publication in a peer-reviewed journal.

**Incoming competency of students expected by instructor:** graduate student in music, music education or other arts or permission of instructor. Students should have completed MuEd 8112, and/or 8118; students would further benefit from having taken (or taking concurrently) MuEd 8115.

### Statement of Course Objectives:

This course will provide the student an opportunity to ...

- ✓ develop an awareness of the critical role that research plays in understanding musical behavior and in setting a foundation for better teaching
- ✓ learn how research can inform teaching practice
- ✓ discover that every quality research project provides questions to be answered via future research
- ✓ receive practical, hands-on experience working with a variety of quantitative and qualitative research methods
- ✓ develop evaluative skills that will enable critical analysis of research studies found in the literature

### **Required texts (order from amazon.com or other online/local bookseller):**

[Huff] Huff, D. (1954). *How to Lie with Statistics*. NY: Norton & Co.

[P] Pallant, J. (2010). *SPSS Survival Manual: A step by step guide to data analysis using SPSS (4<sup>th</sup> ed.)* Berkshire, England: Open University Press

[C&PC] Creswell, J. W., & Plano Clark, V.L. (2011). *Designing and conducting mixed methods research, (2<sup>nd</sup> ed.)* Thousands Oaks, CA: SAGE Publications, Inc.

American Psychological Association (2010). *Publication manual of the American Psychological Association (6<sup>th</sup> ed.)*. Washington, DC: Author.

### *Recommended:*

Phillips, J. L. (1999). *How to Think About Statistics*, 6<sup>th</sup> ed. NY: W.H. Freeman and Company.

**Additional Materials & Requirements:**

- ✓ Students will be required to utilize Moodle for submission of class assignments
  - ✓ point your web browser to the Moodle portal (<http://moodle2.umn.edu>)
  - ✓ under the heading “University of Minnesota Login,” click on the “Login” button
  - ✓ enter your X500 username & password
  - ✓ once logged on, you will see a list of Moodle sites for courses in which you are enrolled, including MuEd 8119
- ✓ Students will be required to use IBM SPSS Statistics software for analyzing collected data. The software is installed on computers in student labs all across campus or available via a UMN internet connection and, therefore, is readily accessible to students.
  - ✓ PC users can access SPSS using Remote Desktop which is a built-in program in the Windows operating system.
  - ✓ Mac users will need to download the Mac-compatible version of Remote Desktop from the Microsoft web site:  
<http://www.microsoft.com/mac/downloads.mspx>
- ✓ once installed, start Remote Desktop and enter the following information into the Computer field: wts.umn.edu .... then click on the “Connect” button; a window will pop-up requesting your credentials
  - ✓ in the Domain field, type: wts.umn.edu
  - ✓ for User name and Password, use your X500 information again
    - ✓ **IMPORTANT:** for your X500 username, **you must preface the username with “ad\”** (e.g., for my username [lipscomb], I would type: ad\lipscomb)
- ✓ **IMPORTANT:** if you are accessing SPSS **from off-campus, you must use a VPN client** (Cisco’s *AnyConnect* for Windows or Mac is a free download for UMN students & faculty from: <http://www.oit.umn.edu/vpn/>)
  - ✓ Connect to: tc-vpn-1.vpn.umn.edu
  - ✓ Group: AnyConnect-UoMvpn
  - ✓ Username & Password: use X500
- ✓ If you plan to work with statistical software on-campus in one of the student computing labs, you will need storage media (USB Flash Drive is recommended) – appropriate for lab in which you plan to work – for saving your data files. It is imperative that you maintain files on media in your possession ... do **not** rely on lab server storage and **always** have a backup.
  - ✓ you can find a list of software (including SPSS) available at the various labs at: <http://www.oit.umn.edu/computer-labs/software/>
- ✓ Course materials and electronic communication will be available via Moodle. Electronic communication will also be used to contact the instructor and/or other students.

**Schedule of Assignments (subject to change)<sup>1</sup>:**

*Week One*

Course Goals & Objectives  
Research Ethics, the Institutional Review Board, & Research Foundations  
Completing an IRB form (<http://www.irb.umn.edu/social.html#.UQAplqVbzal>)

*Week Two*

**Huff** (read entire text)  
Order textbooks, so they will arrive in time to prepare for Week Three  
**FP: Formulate/Revise Research Question(s) & Proposed Research Design**  
**FP: Post Completed IRB form to Moodle**  
Introduction to SPSS; remote access to software

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<sup>1</sup> Any changes related to due dates for assignments or exam dates will be communicated to students via email.

*Week Three*

Foundations of Mixed Methods Research  
**C&PC:** Chapters 1 & 2  
Getting Started with SPSS  
**P:** Chapters 1-3

*Week Four<sup>2</sup>*

**NO CLASS (MMEA)**  
Preparing an SPSS Data File (in preparation for data collection)  
**P:** Chapters 4 & 5  
**Complete CITI training:** <https://www.citiprogram.org/>

*Week Five*

Choosing a Mixed Methods Design  
**C&PC:** Chapter 3  
**FP: Present SPSS Codebook & Identify data types**  
**Article #1 (present to class)**

*Week Six [hoping that IRB approval has been received; initiate data collection]*

Examples of Mixed Methods Designs  
**C&PC:** Chapter 4  
**FP: Begin Data Collection** (when IRB approval received)

*Week Seven*

Introducing Mixed Methods Study  
**C&PC:** Chapter 5  
**Article #2 (present to class)**

*Week Eight*

Collecting Data  
**C&PC:** Chapter 6  
Preliminary Analyses, pt. 1  
**P:** Chapters 6-8

*Week Nine*

**NO CLASS:** Spring Break

*Week Ten*

Preliminary Analyses, pt. 2  
**P:** Chapters 9-10  
**Article #3 (present to class)**

*Week Eleven*

Analyzing and Interpreting Data in Mixed Methods Research  
**C&PC:** Chapter 7  
Strength of Association Measures  
**FP: Annotated Bibliography due**

*Week Twelve*

Exploring Relationships: Correlation, Multiple Regression, & Factor Analysis  
**P:** Chapters 11, 13, & 15  
**FP: Present Preliminary Data Analysis & Interpretation**

*Week Thirteen*

Statistical Techniques for Comparing Groups  
**P:** peruse Chapters 16-22 and read selectively, depending on study needs  
**FP: Present Initial Draft of Poster**

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<sup>2</sup> Though there are a certain number of topics (i.e., specific research designs) that have been pre-selected as necessary to cover, from the 4<sup>th</sup> week of the quarter on, additional topics will be largely determined by the interests of individual class members and knowledge required to complete the proposed research projects.

**Week Fourteen**

**NO CLASS** [continue preparations for presentation of Final Project; meet with Dr. L, if needed]  
Writing and Evaluating Mixed Methods Research  
**C&PC:** Chapters 8 & 9 [use appendices as needed]

**Week Fifteen**

**FP: Oral Presentation of poster to class**

**Finals Week**

**FP: written document due at 4:30 p.m. on Wednesday, May 15<sup>th</sup>**

**Grading:**

- 10% - class participation (reading assigned materials and preparation to compose relevant, insightful questions or critical comments)
- 30% - three short papers evaluating selected research studies relevant to Final Project topic
- 10% - annotated bibliography
- 15% - Final Project poster
- 35% - Final Project paper

Course grades will be assigned according to the following scale:

>= 92 = A	>= 78 AND <80 = C+
>= 90 AND < 92 = A-	>= 70 AND < 78 = C
>= 88 AND < 90 = B+	>= 60 AND < 70 = D
>= 82 AND <88 = B	< 60 = F
>= 80 AND <82 = B-	

**University of Minnesota Grading Policy: The Meaning of a Letter Grade**

- A Represents achievement that is outstanding relative to the level necessary to meet course requirements.
- B Represents achievement that is significantly above the level necessary to meet course requirements.
- C Represents achievement that meets the course requirements in every respect.
- D Represents achievement that is worthy of credit, even though it fails to meet fully the course requirements.
- F Represents failure and signifies that the work was either 1) completed, but at a level of achievement that is not worthy of credit or 2) was not completed and there was no agreement between the instructor & student that the student would be awarded an "I."<sup>3</sup>

**Short Papers** (30% of course grade): Each student will be required to complete a thorough review & evaluation of three primary research articles related to their topic of choice during the semester (30% of grade). Each of these papers (3-5 pages in length) must use the checklist provided by Dr. Lipscomb as a basis for evaluation and clearly state the relevance to the topic of the student's Final Project. As always, citations and references are expected and must be in APA format.

**Annotated Bibliography** (10% of course grade): In addition to the required reading assignments for this course, you will be required to reference at least **a minimum of 20** additional resources that you discover in your own library/online research.<sup>4</sup> For each bibliographic entry, you are required to provide an

<sup>3</sup> Understand that the awarding of an "I" is *only* for the purpose of extreme, extenuating circumstances beyond a student's control and will *never* be awarded solely in the case in which the student failed to accomplish the work in a timely manner during the semester. An "incomplete" is assigned at the discretion of the instructor when, due to extraordinary circumstances (e.g., hospitalization) a student is prevented from completing the work for the course on time. This requires a written agreement between instructor and student concerning an explicit, agreed-upon time frame for coursework completion.

<sup>4</sup> This is a good time to explicate the importance of developing the ability to "skim" reading material. In advanced scholarly work, this capability is essential. It is not necessary to read an entire document word-for-word to get something out of the presentation, understand the context, and determine whether or not there is useful information contained therein. Once usefulness has been established, you can then focus on the most significant part and read *that* section thoroughly. If you find the article/chapter/book

annotation in a 2-paragraph format (250-word minimum per entry); the annotation must clearly communicate two things: (a) paragraph 1: a basic understanding of the content of the reading and (b) paragraph 2: your individual response to – or thoughts about – the resource and its relevance to your selected topic

**Final Project** (50% of course grade: 35% for written paper and 15% for the poster): Each student will be required to complete a small research project – including data collection, analysis, and write-up – during the course this semester. The project will be submitted in written form (12 to 15 pages) *and* an oral presentation of a poster presenting the research will be made to the instructor and your peers in class. The paper (35% of course grade) must include an introduction (background, need for the study, significance, assumptions, etc.), a clear statement of the research/guiding question(s), the design & method of data collection used (with justification), data analysis & interpretation, and a concluding discussion. Each student will be required to complete an annotated bibliography (minimum of 18 relevant sources) with citations and references in APA format. Each annotation must be a minimum of 250 words and in a consisted two-paragraph format: the first paragraph provides information regarding the content of the article and the second paragraph clearly presents the relevance to your study, including specific aspects of the previous research that is likely to find its way into your final project report.

**Poster** (15% of course grade): Each student is required to extract essential information from the written paper and create a poster presentation of the study (15% of course grade). This poster should include a clear & concise presentation of the study, using the same sections of information as the written paper (see above) ... and must include citations & references in APA format. This poster should be of the caliber presented at a regional or national conference ... and, in fact, students are encouraged to use their class project as the basis for a proposal submitted to such a conference, so they will have the experience of presenting research outcomes to peers in an effort to make a significant contribution to our growing state of knowledge within the field.

#### **COURSE GUIDELINES :**

a) Assignments are designed as part of the learning process and must be type written or word-processed. All written work must be submitted using a 10-12 pt. Times Roman-style font with 1-1.25" margins.

b) Participation in this course is important as achievement depends on having experienced the content of previous lessons. It is essential that you keep up with the content and progress of the class, participating proactively in class discussions.

#### **Technology**

A variety of technologies offer possibilities to enhance the research and learning process. For example, such technologies make systematic analysis, complex analysis, and logical presentation of findings available within a timeframe and level of professionalism that was rare in earlier decades. Both audio and video recording of field observations and interviews facilitate review and reflection, allowing the development of purposeful, reasoned, and goal-directed thinking about research and learning.

#### **Diversity**

A fundamental assumption of this class is that all communication and dialogue is based on the right of every individual to participate fully and contribute to our understanding of specific course content and diverse approaches to the subject matter in general. Diversity relates to, but is not limited to, the following: age, creed, disability, ethnicity, gender, global perspectives, international background, language background, learning differences, marital status, multicultural perspectives, national origin, public assistance status, race, religion, sex, sexual orientation, and veteran status.

**Scholastic Dishonesty:** the University expects every student to maintain a high standard of individual integrity for work done. Scholastic dishonesty is a serious offence that includes, but is not limited to, cheating on a test or other class work, plagiarism (the appropriation of another's work and the unauthorized incorporation of that work in one's own work), and collusion (the unauthorized collaboration

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particularly significant in your area of research, you can always go back and read the entire document thoroughly. [Note: Students should *not* assume, however, that skimming reading material provided in the course textbooks and/or supplementary readings is sufficient.]

with another person in preparing college work offered for credit). In cases of scholastic dishonesty, Dr. Lipscomb will initiate disciplinary proceedings against the student. Any student caught plagiarizing a written document or not appropriately crediting sources used in project work will receive a grade of "0" and disciplinary proceedings will be initiated. It's not worth the risk—don't do it!

### **University Policies**

See <http://onestop.umn.edu/onestop/faculty/Teaching/Policies.html> for a list of policies related to teaching with links to those policies. Also see <http://www1.umn.edu/usenate/usen/policies.html> for University Senate policies related to Teaching/Education.

### *Statement on accommodations*

It is University policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or to meet course requirements. Students with disabilities are encouraged to contact their instructors to discuss their individual needs for accommodations.

### *Statements on classroom conduct*

<http://www1.umn.edu/usenate/policies/classexpectguide.html>

<http://www1.umn.edu/regents/policies/academic/StudentConductCode.pdf>

### *Statement on academic misconduct*

[http://www1.umn.edu/regents/policies/humanresources/Academic\\_Misconduct.pdf](http://www1.umn.edu/regents/policies/humanresources/Academic_Misconduct.pdf)

Scholastic misconduct is broadly defined as "any act that violates the rights of another student in academic work or that involves misrepresentation of your own work." Scholastic dishonesty includes, (but is not necessarily limited to): cheating on assignments or examinations; plagiarizing, which means misrepresenting as you own work any part of work done by another; submitting the same paper, or substantially similar papers, to meet the requirements of more than one course without the approval and consent of all instructors concerned; depriving another student of necessary course materials; or interfering with another student's work.

### *Statement regarding sexual harassment*

(<http://www1.umn.edu/regents/policies/humanresources/SexHarassment.pdf>)

"Sexual harassment" means unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature when: (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or academic advancement in any University activity or program; (2) submission to or rejection of such conduct by an individual is used as the basis of employment or academic decisions affecting this individual in any University activity or program; or (3) such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working or academic environment in any University activity or program. University policy prohibits sexual harassment. Complaints about sexual harassment should be reported to the University Office of Equal Opportunity, 419 Morrill Hall.

### **Support Services**

Go to <http://www1.umn.edu/ohr/teachlearn/syllabus/specialserv.html> to see some possible support services for students.

### **Coda**

I look forward with great anticipation to this course. Rest assured that I am eager to talk to or communicate with you about any concerns you may have. You can communicate by telephone, e-mail, or in person. Don't hesitate to make an appointment to see me when needed.

**Cell phones are disruptive to this class.  
ALWAYS turn them off when entering the classroom.**

