COM 497-002
Seminar in Quantitative Communication Research Methods

Spring 2024
Classroom: Fell Hall 108
Dates & Times: Wednesdays 6:30 - 9:20 p.m.

Instructor: Kevin R. Meyer, Ph.D. Email: kmeyer@ilstu.edu
Office Phone: (309) 438-3298 Cell Phone: (309) 299-1961
Office: Fell Hall 430
Office Hours: By appointment, in-person, Mondays 10 a.m. - 1 p.m. Any time via cell phone.

Course Description and Objectives:
The purpose of this class is to teach you scholarly approaches to quantitative communication research methods, research design, data analysis, and reporting of results. According to the graduate catalog, this course is to cover an "introduction to quantitative methods of scholarly research and the critical evaluation of research in communication." This course is designed to accomplish the following objectives:
1. Provide students with a comprehensive knowledge of quantitative communication research methods.
2. Provide students with the ability to apply research skills.
3. Develop students' competence in formulating research questions and hypotheses, constructing research designs, conducting data analysis, reporting results, and analyzing implications of findings.
4. Provide students with experience in data entry and statistical data analysis.
5. Develop students' understanding of sampling, measurement, and scale development in communication research studies.
6. Cultivate students' abilities to locate, critically read, and summarize research.

Professionalism:
Learning is maximized by reading, note-taking, critical listening, cognitive engagement, and focusing one's attention by not yielding to distractions. Professionalism includes listening to others' opinions (though not necessarily agreeing with those viewpoints), actively listening to those speaking, and working together in a spirit of cooperation. We are a team working collectively to improve and learn quantitative methods. Be on time for class. Ignore cell phones, text messages, social media, or urges to surf the Internet. Respect should be demonstrated by listening, ignoring distractions, and being fully present—both physically and mentally.

Online Engagement:
Consult the Modules feature in Canvas for tasks you should complete each week. Written assignments must be submitted as Word documents in the Assignments feature on Canvas. I will *not* check or respond to Canvas inbox messages. Email me to schedule in-person appointments; or simply call my cell phone for faster conversations. If class meets via Zoom, have your *camera turned on* and be able to unmute your microphone to ask and answer questions.

Attendance Policy:

Prompt, regular attendance and active engagement are required. Come prepared to discuss and engage with the material and readings. Graduate students should not have issues with attendance and perfect attendance is expected. By enrolling in this course, you have made a commitment to being present during all seminar meetings. Being absent deprives you of valuable class lectures, discussions, and announcements. Historically, there has been a strong correlation between absences and grades; the more class periods students miss, the lower the grades they tend to earn.

Late Work Policy:

If you do not take an exam when scheduled, you will likely forfeit your points. Assignments are expected at the beginning of class on the due date. An automatic 5% of the points possible will be deducted from late assignments, with an additional 5% deducted for each 24 hours the assignment is late. If these penalties seem steep, please consider that conferences and journals do not accept late work. Assignments should be completed *prior* to documented university excused absences. As a general rule, incomplete grades will not be given.

Academic Misconduct Policy:

Students must be honest in all academic work, consistent with the *Code of Student Conduct*. All ideas are to be appropriately cited when borrowed, directly or indirectly, from a source. Inadequate citation, unauthorized and unacknowledged collaboration, and/or the presentation of someone else's work constitute plagiarism. Graduate students must develop a habit of being diligent about carefully and accurately citing sources while avoiding plagiarism of any sort.

Students found to commit intentional acts of dishonesty (including cheating on an exam, falsifying evidence, recycling work submitted for another course, or plagiarizing an assignment) will likely receive a failing assignment and course grade as well as be referred for disciplinary action to the Student Conduct and Community Responsibilities office. Reporting academic dishonesty is my professional responsibility and I do not hesitate to enforce consequences.

In this course, the use of generative AI tools such as ChatGPT or Adobe Firefly is not permitted to support the completion of any assignment. This includes, but is not limited to, using generative AI tools to ideate, pre-plan, edit, translate, or otherwise create original material you claim to be solely your creation. Use of a generative AI tool to complete assignments in whole or in part is considered academic dishonesty in this course.

Special Needs Accommodation:

Any student needing to arrange a reasonable accommodation for a documented disability and/or medical/mental health condition should contact Student Access and Accommodation Services (SAAS) in 350 Fell Hall, (309) 438-5853, or visit StudentAccess.IllinoisState.edu. I am happy to accommodate any special needs you may have, although I require documentation from SAAS for ongoing accommodations.

Course Assignments and Grades:
The grading scale is as follows: A= 100-90%; B= 89-80%; C= 79-70%; D= 69-60%; F= 59% and below. Percentages will be calculated based on points earned from:

Points Possible/Your Points

Midterm Examination	100	/_____
Final Examination	150	/_____
Research Proposal (rough draft)	50	/_____
Research Proposal (final draft)	50	/_____
SPSS Messy Data	20	/_____
Interpreting SPSS Output	10	/_____
SES Results SPSS Write-ups	50	/_____
Research Study Announcement Board	20	/_____
Total	450	/_____

Examinations:
Exams are closed book/closed notes; however, a handwritten study guide (the length and content will be specified prior to each exam) is allowed. Exams will consist of multiple choice, true/false, matching, and fill-in-the blank. The final examination is comprehensive.

Research Project:
The *Research Proposal* should consist of a title page, abstract (no more than 250 words), complete literature review (approximately 10-15 pages), research questions and/or hypotheses, partial methods section, references list, and appendix with survey instrument. You will design a research project, conduct a literature review, and construct a survey with original scales. A minimum of 35 peer-reviewed journal articles should be cited meaningfully. Write well and proofread carefully, using level headings to organize. Rough drafts and final drafts have different due dates and are assessed separately. Papers and references must follow APA style 7th ed., double-spaced in 12-point plain Times New Roman font, with 1-inch margins. To offset point deductions you might otherwise accrue (functioning somewhat like extra credit), you are welcome to obtain IRB approval, collect data, and begin data analysis.

SPSS Lab Assignments/Results Write-ups:
Students will complete a series of SPSS lab assignments using mock data from the Messy Data and SES data sets. Results write-ups must follow APA Style and example guidesheets provided.

Research Study Announcement Board:
The board is at: https://sites.google.com/site/ilstusocstudies/. Studies go up as the semester progresses, but don't wait to get started. Participate in multiple studies to earn points.

Students wishing not to participate in research studies may complete a 3-page journal article review instead; a sample is provided on Canvas.

Required Textbooks:
Both textbooks as well as required PDF readings are available through Milner Library links on Canvas. The *Publication Manual of the American Psychological Association* (7th ed.) is also strongly recommended. APA help sheets are available on Canvas.

Allen, M., Titsworth, S., & Hunt, S. K. (2009). *Quantitative research in communication*. Sage. (unlimited user license available through Milner for free at: https://i-share-isu.primo.exlibrisgroup.com/permalink/01CARLI_ISU/1vcthfe/alma9920997426605845)

Elliott, A. C., & Woodward, W. A. (2020). *Quick guide to IBM SPSS: Statistical analysis with step-by-step examples* (3rd ed.). Sage. (limited user license allowing only 3 users at a given time available through Milner for free at: https://i-share-isu.primo.exlibrisgroup.com/permalink/01CARLI_ISU/1vcthfe/alma9920865666605845)

Required PDF Readings (citations appear in the order we read them):

Gladwell, M. (2009). *What the dog saw: And other adventures.* Little, Brown and Company.
Klein, L. W. (2011, September 9). Statistical terms used in research studies: A primer for journalists. *Journalist's Resource*. http://journalistsresource.org/reference/research/statistics-for-journalists
Rosenau, J. (2011, May 31). The importance of being median [Web log post]. http://scienceblogs.com/tfk/2011/05/the_importance_of_being_median.php
Siegfried, T. (2010, March 27). Odds are, it's wrong: Science fails to face shortcomings of statistics. *Science News, 177*(7). http://www.sciencenews.org/
Meyer, K. R., Hunt, S. K., Hopper, K. M., Thakkar, K. V., Tsoubakopoulos, V., & Van Hoose, K. J. (2008). Assessing information literacy instruction in the basic communication course. *Communication Teacher, 22*(1), 22-34. https://doi.org/10.1080/17404620801926925
Simonds, B. K., Meyer, K. R., Quinlan, M. M., & Hunt, S. K. (2006). Effects of instructor speech rate on affective learning and student perceptions of instructor immediacy, credibility, and clarity. *Communication Research Reports, 23*(3), 187-197. https://doi.org/10.1080/08824090600796401
Boudewyns, V., & Paquin, R. S. (2011). Intentions and beliefs about getting tested for STDs: Implications for communication interventions. *Health Communication, 26*(8), 701-711. https://doi.org/10.1080/10410236.2011.563353
Allen, M. (2009). Meta-analysis. *Communication Monographs, 76*(4), 398-407. https://doi.org/10.1080/03637750903310386
Allen, M., Berkowitz, S., Hunt, S., & Louden, A. (1999). A meta-analysis of the impact of forensics and communication education on critical thinking. *Communication Education, 48*(1), 18-30. https://doi.org/10.1080/03634529909379149
Ledbetter, A. M., Mazer, J. P., DeGroot, J. M., Meyer, K. R., Mao, Y., & Swafford, B. (2011). Attitudes toward online social connection and self-disclosure as predictors of Facebook communication and relational closeness. *Communication Research, 38*(1), 27-53. https://doi.org/10.1177/0093650210365537
Min, S-J., & Feaster, J. C. (2010). Missing children in national news coverage: Racial and gender representations of missing children cases. *Communication Research Reports, 27*(3), 207-216. https://doi.org/10.1080/08824091003776289

Tentative Schedule

Week 1	Topic	Assignments Due
W, Jan. 17	*Philosophy of the course (rationale for labs, research project, and examinations) *Syllabus policies *Communication Research Methods Overview *How to Read Journal Articles (Bonito article example) *Assigned Activity: Brainstorm research topics	*Read Syllabus *Explore Canvas website *Secure textbooks and readings *Read Gladwell (2009) *Read Klein (2011) *Read Rosenau (2011) *Read Siegfried (2010)
Week 2	**Topic**	**Assignments Due**
W, Jan. 24	*"Introduction to Quantitative Research." *"Using Statistics in Quantitative Research."	*Read Allen et al. (2009) preface & chapters 1 & 2
Week 3	**Topic**	**Assignments Due**
W, Jan. 31	*Null Hypothesis video clips (The Double & Loch Ness) *"A Brief Tutorial for Using IBM SPSS for Windows." *"Independent Samples or Student's t Test." *IRB and Research Ethics *CITI and Cayuse login	*Read Elliott & Woodward (2020) chp. 1 & appendix A *Read Allen et al. (2009) chp. 3 *Read Meyer et al. (2008)
Week 4	**Topic**	**Assignments Due**
W, Feb. 7	*"ONEWAY Analysis of Variance." *"Factorial ANOVA." *SPSS Lab Assignment (messy data) *CITI ethics training due	*Read Allen et al. (2009) chps. 4 & 5 *Read Simonds et al. (2006) *Research Project Topics due
Week 5	**Topic**	**Assignments Due**
W, Feb. 14	*"Analysis of Covariance." *"Multivariate ANOVA." *SPSS Lab Assignment (messy data) *Qualtrics introduction and login	*Read Allen et al. (2009) chps. 6 & 7 *Read Boudewyns & Paquin (2011)
Week 6	**Topic**	**Assignments Due**
W, Feb. 21	*"Simple Bivariate Correlation." *"Multiple Regression." *Simple (R), Multiple (R^2), Multiple Hierarchical Linear Regression *"Choosing the Right Procedure to Use." *SPSS Lab Assignment (finish messy data & introduce SES data)	*Read Allen et al. (2009) chps. 9 & 10 *Read Elliott & Woodward (2020) appendix B **SPSS messy data due
Week 7	**Topic**	**Assignments Due**
W, Feb. 28	*Review for Midterm Exam	
Week 8	**Topic**	**Assignments Due**
W, Mar. 6	***MIDTERM EXAMINATION*	

Week 9	Topic	Assignments Due
W, Mar. 13	*No Class (Spring Break)	

Week 10	Topic	Assignments Due
W, Mar. 20	*Review midterm exam results *"Factor Analysis." *"Describing and Examining Data." *"Creating and Using Graphs." *SPSS Lab Assignment (SES data)	*Read Allen et al. (2009) chp. 11 *Read Elliott & Woodward (2020) chps. 2 & 3

Week 11	Topic	Assignments Due
W, Mar. 27	*"Comparing One or Two Means Using the *t*-Test." *"Correlation and Regression." *"Analysis of Categorical Data." *SPSS Lab Assignment (SES data)	*Read Elliott & Woodward (2020) chps. 4, 5, & 6

Week 12	Topic	Assignments Due
W, Apr. 3	*"Analysis of Variance and Covariance." *"Nonparametric Analysis Procedure." *"Logistic Regression." *Class may be attended via Zoom (due to CSCA Conference)	**Research Proposal rough drafts due* *Read Elliott & Woodward (2020) chps. 7, 8, & 9

Week 13	Topic	Assignments Due
W, Apr. 10	*"Meta-Analysis." *SPSS Lab Assignment (SES data) *Interpreting SPSS Output (group in-class assignment)*	*Read Allen et al. (2009) chp. 13 *Read Allen (2009) PDF article *Read Allen et al. (1999) PDF article

Week 14	Topic	Assignments Due
W, Apr. 17	*"Advanced Modeling Techniques." *Structural Equation Modeling (SEM), Model Fit Statistics, and Manifest and Latent Variables *SPSS Lab Assignment (SES data)	*Read Allen et al. (2009) chp. 12 *Read Ledbetter et al. (2011) **SPSS results write-ups due*

Week 15	Topic	Assignments Due
W, Apr. 24	*"Chi-Square Statistic." *Content Analysis	*Read Allen et al. (2009) chp. 8 *Read Min & Feaster (2010) *Research Board Participation due*

Week 16	Topic	Assignments Due
W, May 1	*Review for Final Exam *Course Evaluations	**Research Proposal final drafts due*

Finals Week	Topic	Assignments Due
W, May 8?	***FINAL EXAMINATION,* 6:40-8:40 p.m. (just a prediction?) *Exact date and time to be confirmed by Registrar	