

HDFS 880: Research Design & Measurement
Human Development & Family Studies
Michigan State University
Fall 2019: Thursdays, 12:40pm-3:30pm
Course Location: 210A Berkey Hall

Instructor: Megan K. Maas, Ph.D.
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Office: 13D Human Ecology
Office Hours: by appointment only

Course Objectives:

HDFS 880 is an introductory course in research methodology for the behavioral and social sciences. We will focus on a variety of topics from understanding research paradigms and theories to designing a study to match a research question to completing an IRB protocol to establish a study. This class will lay the foundation for your program of research and for the rest of the HDFS quantitative methods sequence. Upon completion of this class, you will be able to (1) identify a theoretical framework for your research topic, (2) discern a specific and parsimonious research topic, (3) comprise appropriate hypotheses that match your research question(s), (4) understand several quantitative, qualitative, and mixed method study designs, and (5) identify crucial elements from various research components (e.g., variable types, the cycle of science, types of hypotheses).

Course Requirements:

1. Purchase textbooks:
 - a. Wallace, Walter (1971). *The Logic and Science of Sociology*. Chicago, IL: Aldine
 - b. Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage
2. Ensure D2L access and proficiency: D2L will be the portal for submitting and receiving all course materials. Not all internet browsers and versions are compatible with D2L, please check early in the first week of the course to verify that you can access all course content on D2L. It is assumed that you know how to access content and operate within D2L.
3. Attend class and participate: Attendance and participation will facilitate an immersive experience that is *necessary* for success in this class. If you should miss a class, it is your responsibility to obtain notes from a classmate. Class notes will not be provided by the instructor. There will be no formal PowerPoint slides. You will receive participation points for actively participating in class discussions, posting and replying to the D2L

discussion board, and in-depth discussion of the reading. The pedagogy of this class is inspired by the effectiveness of a flipped classroom. This means that students are expected to learn all the course concepts through reading and watching videos outside of the classroom. In the classroom, we will clarify, expand, integrate, and apply course concepts to real-world scenarios and your own topics of research inquiry.

4. Back-up your work regularly: Computer malfunctions are commonplace. If you need an extension because of a malfunction, you will be asked to submit drafts of your work. In other words, backup your documents frequently and store them on multiple devices (e.g., e-mail a copy to yourself, save drafts on a computer and/or an external drive such as a thumb drive).
5. Turn assignments in on-time: Late submissions of course assignments are not accepted. However, there are life circumstances (e.g., emergency surgery, family bereavement) where requests for extension can be accommodated. Requests for late submissions **MUST** be pre-approved in accordance with Michigan State University Policies and Procedures for Graduate education. Circumstances such as medical emergencies or other family situations (e.g., death of a family member) will require documentation of life exigencies. Personal vacations or business trips are not circumstances that are university recognized reasons for assignment extensions – we all have personal and professional lives that require us to attend to multiple issues. Plan accordingly. Students seeking a grief absence should be directed to the Grief Absence Request Form found on the RO home page (<https://reg.msu.edu/>) under `Student Services - Grief Absence Request Form` OR to StuInfo (<https://stuinfo.msu.edu/>) under `Academics - Enrollment Information and Services - Grief Absence Request Form.` Per policy, graduate students who should see their major professor and notify course instructors are directed to do so when they access the form.
6. Be respectful in the classroom: A classroom environment that is optimal for growth is based on mutual respect between instructors, students, and peers. Behaviors that include: shopping, social media use, text messaging, arriving late/leaving early, checking email, surfing the Internet, sleeping, etc. are disrespectful and distracting to the instructor and your fellow classmates. Please do not engage in these behaviors in class. Engagement in these behaviors in class could result in loss of participation points, as it is impossible to participate if one is also engaging in the above disruptive behaviors.

Coursework:

1. Participation points: Your points in this category will be based upon your presence in class (physically as well as mentally), your contribution to the discussion (including presentation of any assigned readings), and your discussion posts on D2L when we are unable to meet in-person. We will be discussing and applying the concepts in your readings and videos in an applied manner in-class.

2. Assignments: You will have 5 assignments where you will have the opportunity to demonstrate your ability to think critically about your research questions and how to approach them. You will also be assessed on your ability to critique others' research questions and their approaches. Assignment descriptions and submission boxes will be provided on D2L.

	Due Date	Points	Description
1	9/12	15	Reflection on your research interests and ideas
2	10/8	15	Reflection on the measurement of a variable of interest
3	11/7	15	Thoughtful and comprehensive peer review
4	11/27	30	Final draft of the IRB protocol
5	12/5	25	Final presentation of your study design

3. Quizzes: The most important aspect of this course is *learning* all about research and comprehending the information in such a way that you can apply it in real-world scenarios. This will ensure that the information retained during the semester will serve as a solid foundation for the development of your own program of research. In lieu of in-class exams or take-home long-answer exams, online quizzes will be used to assess your understandings of the fundamentals of research. These quizzes are open-book/note/internet, multiple choice, and you will have 3 days and 3 attempts to achieve 100%.

	Date	Content
Quiz #1	9/17-9/19	Weeks 1-3
Quiz #2	9/30-10/2	Weeks 4-5
Quiz #3	10/14-10/16	Weeks 6-8
Quiz #4	11/11-11/13	Weeks 9-11
Quiz #5	11/25-11/27	Weeks 12-13

Grading:

Points	Grades
Assignments 100 pts	93%-100% = 4.0
Quizzes 50 pts	88%-92% = 3.5
Participation 50 pts	83%-87% = 3.0
Total 200 pts	78%-82% = 2.5

Academic integrity:

Participation in this course assumes that you will adhere to the statements set out in the statement as well as the University Policy on academic integrity. Academic honesty: Article 2.3.3 of the Academic Freedom Report states, "The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards." This course adheres to the policies on academic honesty as specified in General Student Regulations 1.0, Protection of Scholarship and Grades; the all-University Policy on Integrity of

Scholarship and Grades; and Ordinance 17.00, Examinations (See Spartan Life: Student Handbook and Resource Guide and/or the MSU Website: www.msu.edu).

If the instructor suspects a student has violated the University policy on academic integrity, the instructor will proceed as guided by University policy. The student will be approached by the instructor. For advisory purposes, the instructor may also consult faculty members who serve on departmental, College or University committees that address academic integrity, the department chairperson, the academic dean, or the Ombudsman; in all of these interactions, the instructor will keep the student's identity confidential. The goal of these consultations is for the instructor to seek guidance to aid her in arriving at a decision about whether the suspicion merits an allegation of academic misconduct. The student may or may not be informed that the instructor is seeking advisement pertaining to a situation involving the student (the student's identity will not be disclosed). The student may be contacted by the instructor for the purpose of arranging a meeting to discuss the circumstances that prompted suspicion.

After consulting the University policy, there may still remain details that you may need further clarification on. You are encouraged to seek answers to your questions from an appropriate source. For more information on the University policy, first consult the online handbook. If you have any remaining questions and the instructor cannot adequately address them, the instructor will refer you to a knowledgeable source. The Office of the Ombudsman is a knowledgeable and neutral source (and students may post confidential inquiries with this office, see <https://www.msu.edu/~ombud/> for more details), and can also serve as a point of first contact.

Statement on disability and accessibility:

Michigan State University seeks to ensure that its programs are accessible to all persons. Students in need of special assistance or an accommodation regarding any of the course requirements as outlined in the syllabus and other course content are advised to notify the instructor immediately. We will meet privately to discuss a resolution of your matter, which may or may not include an appropriate referral. Confidentiality will be maintained regarding these discussions. Reasonable accommodations are available for students with a documented disability. All accommodations must be approved through the Disability Resource Center. If you have a disability and may need accommodations, we recommend that you begin the process as soon as possible. In other words, submit the documentation needed to support your learning needs as soon as possible to ensure that accommodations are presented in a timely manner. For more information on University policy and accommodations, please consult the Resource Center for Persons with Disabilities: www.rcpd.msu.edu.

Statement on diversity:

Michigan State University and the Department of Human Development and Family Studies affirm the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited

HDFS 880: Course Schedule

Week	Date	Topic
1	8/29	Introduction to research: Who am I as a researcher?
2	9/5	Research paradigms and theory: How do I develop my research question?
3	9/12	Human subjects and research ethics: How do I approach my study? VIRTUAL CLASS MEETING
		What's due? 9/9: Research reflection (Assignment #1) 9/9: Research reflection post 9/12: Peer reflection response
4	9/19	Sampling technique and generalizability: Who should be in my study?
		What's due? 9/17-9/19: Quiz #1
5	9/26	---
6	10/3	Operationalization and measurement: What are my variables?
7	10/10	Quantitative survey methods
		What's due? 10/7-10/9: Quiz #2
8	10/17	Experimental and observational designs
		What's due? 10/16: Measure reflection (Assignment #2)
9	10/24	Longitudinal designs
		What's due? 10/21-10/23: Quiz #3
10	10/31	Generating and testing hypotheses
11	11/7	IRB protocols: VIRTUAL CLASS MEETING
		What's due? 11/4: IRB protocol draft 11/7: IRB protocol peer review (Assignment # 3) 11/7: IRB protocol peer review zoom session
12	11/14	Program evaluation and community-based participatory research methods
		What's due? 11/11-11/13: Quiz #4
13	11/21	Qualitative and mixed methods designs
		What's due? 11/27: Revised IRB protocol (Assignment #4)
14	11/28	THANKSGIVING-NO CLASS
		11/25-11/27: Quiz #5
15	12/5	What's due? 12/5: Mini-proposal presentations (Assignment #5)

HDFS 880: Reading and Watching List

Week	Date	Read	Watch
1	8/29	<ol style="list-style-type: none"> Wallace: Chapter 1 Schwartz, M. A. (2008). The importance of stupidity in scientific research. <i>Cell Science</i>, 121. Access here. 	Topic Selection
2	9/5	<ol style="list-style-type: none"> Wallace: Chapters 1 & 6 Creswell & Creswell: Chapters 1 & 3 	Theoretical Framework
3	9/12	<ol style="list-style-type: none"> Creswell & Creswell: Chapters 6 & 7 Flicker S, Guta A. (2008). Ethical Approaches to Adolescent Participation in Sexual Health Research. <i>Journal of Adolescent Health</i>, 42, 3-10. Margolin G, Chien D, Duman SE, Fauchier A, Godis EB, Oliver PH, Ramos MC, Vickerman KA. (2005). Ethical Issues in Couple and Family Research. <i>Journal of Family Psychology</i>, 19, 157-167. 	How do I develop a good RQ?
4	9/19	<ol style="list-style-type: none"> Wallace: Chapters 2 & 3 Creswell & Creswell: Chapter 8 Kendall C, Kerr LRFS, Gondim RC, et al. (2008). An Empirical Comparison of Respondent-driven Sampling, Time Location Sampling, and Snowball Sampling for Behavioral Surveillance in Men Who Have Sex with Men, Fortaleza, Brazil. <i>AIDS Behavior</i>, 12, 97-104. Mitchell (2010). Are Divorce Studies Trustworthy? The Effects of Survey Nonresponse and Response Errors. <i>Journal of Marriage and Family</i>, 72, 893-905. Levine et al. (2011). Formative Research on MySpace: Online Methods to Engage Hard-to-Reach Populations. <i>Journal of Health Communication</i>, 16, 448-454. Walker (2005). SPECIAL ISSUE: Theoretical and Methodological issues in Studying Families. <i>Journal of Marriage and Family</i>, 67. [For reference only] 	Population and Sample
5	9/26	-----	
6	10/3	<ol style="list-style-type: none"> Wallace: Chapter 4 Creswell & Creswell: Chapter 8 	Variables Variables Part 2 What are the variables in my research question?
7	10/10	<ol style="list-style-type: none"> Graham JM, Christiansen K. (2009). The reliability of romantic love: A reliability 	Stats Intro

		<p>generalization meta-analysis. <i>Personal Relationships</i>, 16, 49-66.</p> <ol style="list-style-type: none"> Betancourt TS, Bass J, Borisova I, Neugebauer R, Speelman L, Onyango G, Bolton P. (2009). Assessing local instrument reliability and validity: a field-based example from northern Uganda. <i>Social Psychiatry & Psychiatric Epidemiology</i>, 44, 685-692. Balsis S, Gleason MEJ, Woods CM, Oltmanns TF. (2007). An Item Response Theory analysis of DSM-IV personality disorder criteria across younger and older age groups. <i>Psychology and Aging</i>, 22, 171-185. Kuntsche and Labhart (2013). ICAT: Development of an Internet-Based Data Collection Method for Ecological Momentary Assessment Using Personal Cell Phones. <i>European Journal of Psychological Assessment</i>, 29,140–148. Kozee HB, Tylka TL, Augustus-Horvath CL, Denchik A. (2007). Development and Psychometric Evaluation of the Interpersonal Sexual Objectification Scale. <i>Psychology of Women Quarterly</i>, 31, 176-189. 	<p>Valid and Reliable Instruments</p>
8	10/17	<ol style="list-style-type: none"> Lefkowitz, E. S., Boone, T. L., Au, T. K. F., & Sigman, M. (2003). No sex or safe sex? Mothers' and adolescents' discussions about sexuality and AIDS/HIV. <i>Health Education Research</i>, 18, 341-351. Henson RK, Roberts JK. (2006). Use of Exploratory Factor Analysis in published research: Common errors and some comment on improved practice. <i>Educational and Psychological Measurement</i>, 66, 393-416. McCambridge J, Witton J, Elbourne DR. (2014). Systematic review of the Hawthorne effect: New concepts are needed to study research participation effects. <i>Journal of Clinical Epidemiology</i>, 67, 267-277. 	<p>Choosing a research design</p> <p>Observational coding</p> <p>NCFR Family Studies Video [ON D2L]</p> <p>Ethics and Experimental Research</p>
9	10/24	<ol style="list-style-type: none"> Karney & Bradbury (1995). Assessing longitudinal change in marriage: An introduction to the analysis of growth curves. <i>Journal of Marriage and Family</i>, 57, 1091-1108. Murry (2013). Contributions of family 	<p>Modeling Multiple Time Scales of Development</p>

		<p>environment and parenting processes to sexual risk and substance use of rural African American males: A 4-year longitudinal analysis. <i>American Journal of Orthopsychiatry</i>, 83, 299–309.</p> <p>3. Burchinal & Clarke-Stewart (2007). Maternal employment and child cognitive outcomes: The importance of analytic approach. <i>Developmental Psychology</i>, 43, 1140–1155.</p> <p>4. Weigold et al. (2013). Examination of the Equivalence of Self-Report Survey-Based Paper-and-Pencil and Internet Data Collection Methods. <i>Psychological Methods</i>, 18, 53–70.</p>	
10	10/31	<p>1. Wallace: Chapter 5</p> <p>2. Creswell & Creswell: Chapter 7</p>	Hypotheses
11	11/7	<p>1. Pena ED. (2007). Lost in Translation: Methodological Considerations in Cross-Cultural Research. <i>Child Development</i>, 78, 1255-1264.</p> <p>2. Horner P, Sanders L, Martinez R, et al. (2014). “I Put a Mask on”: The Human Side of Deportation Effects on Latino Youth. <i>Journal of Social Welfare and Human Rights</i>, 2, 33-47.</p>	IRB Protocols
12	11/14	<p>1. Bonell CP, Hargreaves J, Cousens S, Ross D, Hayes R, Petticrew, Kirkwood BR. (2011). Alternatives to randomization in the evaluation of public health interventions: design challenges and solutions. <i>Journal of Epidemiology & Community Health</i>, 65, 582-587.</p> <p>2. McCambridge J, Kypri K, Elbourne D. (2014). In randomization we trust? There are overlooked problems in experimenting with people in behavioral intervention trials. <i>Journal of Clinical Epidemiology</i>, 67, 247-253.</p> <p>3. Catallo C, Jack SM, Ciliska D, MacMillan HL. (2013). Mixing a Grounded Theory Approach with a Randomized Controlled Trial Related to Intimate Partner Violence: What Challenges Arise for Mixed Methods Research? <i>Nursing Research and Practice</i>. 2013.</p> <p>4. Perkinson L, Freire K, Stocking M. (2017). Using Essential Elements to Select, Adapt, and Evaluate Violence Prevention Approaches. Centers for Disease Control and Prevention. Available here</p> <p>5. Dawson G, Rogers S, Munson J, et al. (2010). Randomized, Controlled Trial of an Intervention for Toddlers with Autism: The Early Start Denver</p>	Fidelity and Integrity in Interventions

		Model. <i>Pediatrics</i> , 125. 6. Consort statement: http://www.consort-statement.org [For reference only]	
13	11/21	<ol style="list-style-type: none"> 1. Creswell & Creswell: Chapters 9 & 10 2. Carotta CL, Bonomi AE, Lee MA, Terrell LA. (2018). It's (Not) Over: Relationship Instability and Recovery Between Victims and Detained Domestic Abusers. <i>Journal of Interpersonal Violence</i>, 33, 1679-1699. 3. Doering-White J, Horner P, Sanders L, Martinez R, Lopez W, Delva J. (2016). Testimonial engagement: undocumented Latina mothers navigating a gendered deportation regime. <i>Journal of International Migration and Integration</i>, 17, 325-340. 4. Kiter Edwards ML. (2004). We're Decent People: Constructing and managing family identity in rural working-class communities. <i>Journal of Marriage and Family</i>, 66, 515-529. 5. Sim J. (1998). Collecting and analyzing qualitative data: issues raised by the focus group. <i>Journal of Advanced Nursing</i>, 28, 345-352. 6. Lightfoot E, McCleary JS, Lum T. (2014). Asset Mapping as research tool for community-based participatory research in Social Work. <i>Social Work Research</i>, 38, 59-64. 7. Holliday CN, Morse SM, Irvin NA et al. (2018). Concept Mapping: Engaging urban men to understand community influences on partner violence perpetration. <i>Journal of Urban Health</i>. 8. Yonas MA, Burke JG, Rak K, Bennett A, Kelly V, Gielen AC. (2009). A picture's worth a thousand words: Engaging youth in CBPR using the creative arts. <i>Progress in Community Health Partnerships: Research, Education and Action</i>, 3, 349-58. 	Fundamentals of focus group research
14	11/28	THANKSGIVING-NO CLASS	
15	12/5	Final Presentations	
16	12/11	FINALS WEEK-No FINAL ☺	

* These are tentative dates, subject to change, the Instructor reserves the right to make changes to the syllabus and schedule as necessary. Students will be notified in advance of any change.