

EDUC 779:

Survey Research

Spring 2014

Tuesdays, 7:00 - 9:50 p.m. 170 EML

3 Credit Hours

Welcome & Introduction

Welcome to EDUC 779: Survey Research. This course is intended to allow the design and implementation of a research instrument appropriate to your degree, and this semester should prove to be a great experience for everyone involved! The following pages provide an overview of the expectations, policies, and procedures for participants in this course as well as information concerning the learning opportunities that you will experience, along with information on how such work will be evaluated.

The syllabus has been organized in a visual format that will hopefully make the content more accessible, but let me know if you would like a simpler format with just the basic information. In the meantime, I encourage you to reflect upon the pictures to identify how they relate to the course content.

"Somewhere, something incredible is waiting to be known."

- Carl Sagan, Astronomer

Course Outcomes

Upon successful completion of the course, students will be able to:

- Conceptualize and conduct an instrument development research study in an articulated field of study;
- 2. Understand and adhere to Institutional Review Board policies concerning the ethical conduct of research for the protection of human participants;
- 3. Analyze and interpret data from an instrument development study;
- 4. Demonstrate an awareness of professional publications and the process for publishing in scholarly journals; and
- 5. Demonstrate the ability to communicate both orally and in writing.

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Course Instructor:



Chris M. Ray, Ph.D. 216A Family Life Center Fargo, ND 58108-6050 (701) 231-7417 Chris.Ray@ndsu.edu

Office Hours: By Appointment

Description

The purpose of this course is to have an in-depth analysis of theory, method, and technique for conceptualizing and conducting quantitative research, instrument design, and methodology.

Class Format

The course will be taught primarily face-to-face using the IVN system and may be supplemented with online work using Blackboard and Blackboard Collaborate.

Additionally, course readings will be posted on Blackboard, and all assignments are expected to be submitted using the Blackboard digital drop box as described below.

Teaching Style

Conducted as a seminar course, most of the class sessions will be an in-depth discussion of the readings within the context of student and instructor research, supplemented with individual and group activities, both in and out of class. These discussions will be based on student-generated concerns and responses to focus questions developed by the instructor on the content of the course.

This course is structured so that you have the freedom to learn as deeply and as broadly as you choose. You will be invited to collaborate in the process of student evaluation and will have an opportunity to continue to improve any professional product you are developing for this class. This course will involve both individual work in the form of specific assignments and group work for the culminating project.

Readings & Course Materials

Textbooks (Required):

Fowler, F. J., Jr. (2014). Survey research methods (5th Ed.).
Thousand Oaks, CA: Sage Publications, Inc.

DeVellis, R. F. (2012). Scale

Development: Theory and

Applications (3rd ed.). Los

Angeles, CA: Sage Publications.

Graff, G. & Birkenstein, C. (2010).

They Say, I Say: The Moves That

Matter in Academic Writing (2nd

ed.). New York, NY: W. W. Norton

& Company.

Reference Materials:

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

Additional Readings:

The above texts are intended to provide an overview of the topics covered in the course. Supplemental readings will be assigned, which will be posted on BlackBoard and may include recent research.



Blackboard Site

A course website has been created on the Blackboard learning system. You can log in to Blackboard at: http://bb.ndsu.nodak.edu/. The most current version of the course schedule will be maintained on this site, so it is important that you check the site regularly. You will also be responsible for announcements and assignments made available via Blackboard and will

be required to submit assignments to this website for instructor feedback and grading. The instructor is only responsible for grading assignments that are submitted properly through the Blackboard digital drop box by the deadline listed in the syllabus.

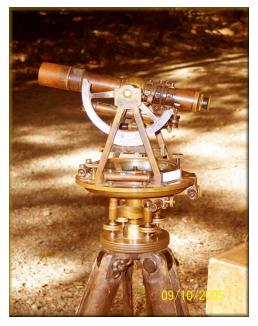
You may also be able to access a number of other useful resources such as internet links, copies of course documents and other resources, and Blackboard Collaborate.

IVN Broadcast

This course serves students across North Dakota, Minnesota, and beyond. Therefore, live videoconference connections (IVN) are provided to students in remote locations. By attending this course, students imply consent for their image and voice to be recorded and broadcast via IVN and online videostreaming for later playback. Class recordings are streamed live and will be maintained for at least one week. Recordings can be accessed online through the "Tegrity Classes" link on the Blackboard course site. The

"Research is formalized curiosity. It is poking and prying with a purpose."

> Zora Neale Hurston, Folklorist and writer



instructor will provide information for accessing Tegrity course recordings as necessary upon request. Use of class recordings are for the sole use of participants in this course and

recordings should not be distributed in any format beyond course participants without consent of the instructor in accordance with the NDSU Student Handbook, guidelines for the use of intellectual property, and copyright law.

Those attending this class at an off-campus site are responsible for arriving 5-10 minutes before the start of class to participate in the technical roll call. This ensures equipment, audio, and video are functioning properly when class begins. Should you experience difficulties during the class, please call the host site at (701) 231-8523. You should also ensure that you know how to mute/unmute the microphone, maneuver the camera, and how to restart the equipment if asked to do so.

Course Learning Opportunities

Attendance & Participation

Expectation:

You are expected to prepare for and attend all class sessions and to participate in class discussions. Should you find an extreme circumstance that prevents you from attending class, arrangements must be made before class begins. Appropriate make-up work is mandatory or any absence will result in one letter grade for the course lower than the grade you normally earned. While this will typically include watching the course video stream if available, this will be only a partial fulfillment of the make-up work for the missed class. Missing more than two class sessions will result in a 10% deduction of the final grade you otherwise earned.

Expectation:

Each session, one student may be randomly selected to summarize the assigned reading(s) at the start of the class period. As such, you are expected to sufficiently comprehend the readings to be able to provide a coherent, 5-10 minute overview of the material if you are selected.

Invitation:

As you consider the possibilities for understanding planning in various integrated ways, you are invited to bring in relevant topics or articles of new knowledge and understanding to present to the class members. This is not graded but is a necessity for collegiality, collaboration and other professional skills of researchers and practitioners in education.

Lessons & Puzzles

Expectation: Preparation for each session includes an integrative reflection of the assigned readings (Lesson) and a question to pose for discussion (Puzzle). These will be written (no more than one single-spaced page in total, excluding references) and turned in at the end of each class session for credit.

Format of Lessons: For each lesson learned, you should quote from the textbook or journal article the section of text that includes the lesson. In one or more paragraphs, you should discuss in your own words (1) why this lesson is the most important one gleaned from the

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material, (2) what that lesson means to you, <u>and</u> (3) why that lesson is important to your field of study or practice. Appropriate APA citation of quoted versus paraphrased material must be used.

Format of Puzzles: For each puzzle, you must identify (1) pertinent issues omitted by the authors, (2) key research remaining to be done, or (3) concepts or methodologies that require clarification not included in the textbook or journal article.

The instructor will review the first L&P assignment. A rubric for self-assessment of future "Lessons and Puzzles" submissions is available on Blackboard. The L&Ps in total will comprise 10% of your course grade. You have the opportunity to rewrite any of your "L&P" assignments within one week of the discussion should you find ways to improve your work after the discussion.

IRB Application

Expectation: To model ethical and responsible conduct of research in education, you are expected to develop and submit an application for the Institutional Review Board for the Protection of Human Participants (IRB) prior to collecting data for your culminating project. As students are not permitted to serve as Principle Investigators per NDSU IRB policies, the instructor will serve as the PI (with you serving as Co-PI) unless you are working in consultation with another faculty member at NDSU. (Note: To ensure appropriate effort on the part of the student, prior approval from the course instructor is required.) The IRB application is due by March 11th and will comprise 10% of your grade.

Instrument Development

Expectation: You are expected to work as part of a research team to develop a culminating project for this course that demonstrates the breadth and depth of your knowledge regarding the development and implementation of instruments to measure educational topics or constructs. During the second course meeting, we will divide the class into groups of two or three students according to research interests. You will work with the same research team throughout the course to address a particular problem in the field of education.

While you will be given a wide degree of latitude to make this project both personally and professionally relevant, students pursuing a Master's degree or an Ed.D. are expected to develop a survey based upon practical professional interests while students pursuing a Ph.D. are required to develop a theoretically-grounded instrument. The instrument development process will constitute 45% of your total course grade and will consist of five primary components, each constituting 10% of your total course grade:

<u>Topic Statement:</u> Your team will develop an initial statement of interest (3-5 pages, including references) indicating both your group's topic and your interest in exploring it further. The topic statement is due on January 28, 2014 and will constitute 10% of your total course grade.

Framework: The instrument plan should explain the intended purpose and context of the survey or measurement scale through an identification of the research problem and questions. It should identify the type of instrument to be developed, the topics or constructs that will be included, and provide a complete schedule from design to reporting of research results. The instrument plan is due on February 11, 2014 and will constitute 10% of your total course grade.

<u>Draft Instrument:</u> The instrument draft should include a pre-notice letter, a research invitation, a consent form, and a fully formatted instrument with an introduction, complete instructions, and a minimum of 20-30 questions (as appropriate to the topics or constructs being measured). The draft instrument is due on February 25, 2014 and will constitute 10% of your total course grade.

Research Plan: The research plan should include revised versions of your topic statement and framework and describe the research design and its appropriateness for your context. It should include the procedures for securing the sampling frame, specify the sampling plan and sample size, and describe the limitations and address all sources of error. The research plan is due on March 4, 2014 and will constitute 10% of your total course grade.

<u>Authorship Agreement:</u> As a team, you will be expected to discuss and submit an authorship agreement indicating each team member's level of commitment and responsibility to the research project, which should be a factor in completing your course grade expectation sheet. The authorship agreement is due on April 15, 2014 and will constitute 5% of your total course grade.

Technical Manual

Expectation: You are expected to develop a technical manual that provides detailed information concerning the instrument that you developed and administered for this course. The manual should consist of the following sections at a minimum:

<u>Preface</u>: The preface should contain a title page, author information page, abstract, table of contents, and list of tables and figures.

Introduction: The introduction section should provide the background, problem, and purpose or aim of your instrument, including the practical or theoretical need.

<u>Literature Review</u>: The literature review should detail the importance of the topics or constructs being examined.

Research Methods: The methods

section should provide a description of the research methods employed for both the pilot and the primary data collection.

Results: The results section should provide any analyses from the pilot study and the primary data collection, including information concerning the instrument's reliability and validity.

<u>Discussion:</u> The discussion should indicate how: (a) the survey was able to address the practical questions, or (b) how the instrument contributes to existing theory, including how it should be used for future theoretical research.

<u>References</u>: A complete list of references utilized in the technical manual should be provided.

Appendices: The appendices should contain any additional information that is deemed relevant that does not fit elsewhere. This includes a copy of the IRB approval letter, a copy of the original instrument used in the pilot and any revised instruments used during the primary data collection or as revised upon the conclusion of statistical analyses, and a codebook detailing any numbers, words, or phrases used during data entry or analysis.

A draft of the technical manual will be due on April 22, 2014 and the final manual will constitute 20% of your total course grade.

Presentation

Expectation: You are expected to deliver a presentation to the class based upon your course project that would be suitable for submission to a professional conference. While specific guidelines will be discussed later in the semester, the presentation will consist of a 15-20 minute (maximum) oral presentation along with up to five minutes for questions. As time management of presentations is necessary to respect the rights of colleagues and copresenters, exceeding the established timeframe will result in an automatic deduction of the presentation maximum score. In the case of group projects, all members of the research team must be actively involved in the presentation. The project presentations will be held on April 29th and May 6th, 2014 and will constitute 10% of your total course grade.

Reflective Essay

<u>Expectation</u>: You are expected to complete a reflective essay at the conclusion of the course (to occur no later than May 14th) and will constitute 5% of course grade. Your essay should address each of the following:

- The course description and objectives;
- The overall content of the course;
- The significant authors or resources you examined, including citations and references;
- The assignments you completed;
- The significance of the course to your degree program, work experience, and/or professional goals;
- How your views of the course content evolved during the course or why they didn't evolve;
- The strengths and limitations of the submitted work, including how you might change them later;
- How/why you changed your products as a result of instructor feedback and/or self-reflection; and
- What this course experience as a whole reveals about you as a learner.



Individual Projects

The final project will typically be completed in groups of 2-3 students. If the project will be the basis for your thesis dissertation work, however, an individual project may be discussed with the instructor. This must be approved by the instructor.

Out of respect to the instructor

Grade Expectation

Expectation: You are expected to submit a course grade expectations sheet along with a detailed justification of the grade earned on each project that discusses any major revisions to projects after receiving feedback from the instructor or others. Your grade expectation sheet should be submitted to the instructor upon completion of the course (to occur no later than May 14th).

Note: In an effort to balance the course expectations across degree levels, Master's students automatically receive five points, or half of one letter grade, added to their cumulative course grade.

Invitation

Invitation: You are strongly encouraged to select a topic for your course project that is both personally and professionally meaningful, including topics that can be used as the basis for future research or other productive, scholarly endeavors. Should you wish to pursue the project after the conclusion of the course, including presenting or publishing the results, the instructor will provide additional guidance and feedback upon request.

<u>Invitation</u>: Even if you choose not to present elsewhere, you are strongly encouraged to present your project at the College of Human Development & Education's Research Showcase to be held on April 16th, 2014.

Grading Policies

Deadlines

and other students in the class, assignments are due at times specified on the syllabus or as extended by the instructor. (Note: The instructor will not modify assignment deadlines to be earlier than stated on the original syllabus.) Unless otherwise specified, assignments are due by the start of class (4:30 p.m.) and any assignment time-stamped after that time, even by a minute, is considered late. All assignments should be submitted through Blackboard's "submit assignment" link. Except in the case of a verifiable emergency, assignments will lose 20% of their point value per calendar day late. In the case that an assignment is

submitted in multiple parts, it will be counted as if the entire assignment is submitted at the time of the latest time-stamp.

Self-Evaluation

Although self-evaluation and peer evaluation are a significant portion of your growth and development in this course, the instructor does final grading of the assignments. Upon the receipt of your Grade Expectation form, which will be after all other work for this class is fully complete, any inconsistencies between your expectation for a grade and the grade assigned will be discussed with the instructor. Interviews about grades and course assignments will be conducted with all students (in project teams) during finals week.

Writing Quality

Because all education professionals are expected to communicate well in writing, written assignments will be graded on their technical quality as well as content. All written assignments should be proofread carefully for spelling, grammar, and syntax. First drafts of assignments are rarely appropriate in graduate-level courses.

APA Style

As all work in this class is expected to utilize APA (6th edition) style, learn and practice it early.



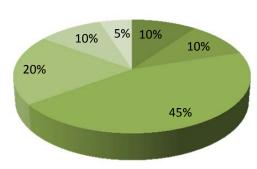
Course Grades

Course grades will be calculated as follows:

An A is 93% or above of all possible points with no absences, high quality work and thinking, and consistent contributions to each session, a B is 85 to 92%, a C is 77 to 84%, a D is 69 to 76%, and an F is less than 69% of all possible points and typically indicates a semester in which you didn't have the time or energy to devote yourself to learning the depth and breadth of the course topics.







Course Policies & Procedures

Incompletes

Use a realistic estimate when predicting the time you will need to complete the course activities and requirements. Although the option of taking an incomplete ("I") is available to you at the end of the semester should you encounter an emergency or other unexpected events, it *may* mean that you will receive one letter grade decrease in your course grade.

If you find that you are falling behind or are experiencing difficulty in completing course assignments, please discuss the situation with the instructor as soon as possible so that mutually-negotiated accommodations can be made that will enable you to fulfill the requirements of the course and to avoid having to take an incomplete. University policy dictates that incomplete grades can only be given if at least two-thirds of the course requirements have been completed by the end of the grading period.

Intellectual Property

■ Reflection Paper

Words and ideas are the intellectual property of the individuals who originated them. Thus, whenever you quote more than three words in sequence from any single source, you must enclose those words in quotation marks. Cite in parentheses the author of the book or article, the year of publication, and the number of the page on which the words were written (e.g., Boque & Hall, 2003, p. 25). Whenever you paraphrase or summarize another source without direct quotations, you must ensure that it is cited properly. Include the complete citation of the sources in your references at the end of your paper. Failure to follow these procedures will result in loss of points on any paper in which such failure occurs. Furthermore, failure to follow these procedures may be viewed as plagiarism and, thus, a violation of university policies that pertain to academic integrity.

Academic Integrity

All work in this course must be completed in a manner consistent with standards suitable to members of an academic community. The following specific policies apply:

- "Right and Responsibilities of Community: A Code of Student Behavior (2008, August) available from the dean of Student Life (MU 250) or on the NDSU Student Life website;
- The College of Human Development and Education's Professional and Academic Honor Codes; and
- NDSU University Senate Policy, Section 335: Code of Academic Responsibility and Conduct.

Notice: The instructor reserves the right to report academic integrity violations and assign a grade of "F" for the assignment or for the entire course as appropriate.

Drop/Add Policy

The standard drop/add policy for classes will be followed as determined by the Office of Registration and Records:

(http://www.ndsu.edu/bisonconnection/registration/policies/registration/)

Students with Disabilities

Any student with disabilities or other special needs who requires accommodations to enhance learning and promote success in this course is invited to share these concerns or requests with the instructor as soon as possible. In many cases, accommodations can be arranged such that the learning experience of all students is enhanced.

Students in the Military

Veterans and student soldiers with special circumstances or who are activated are encouraged to notify the instructor in advance.

Possible Changes

This syllabus is your contract for production in the course. If changes are made to it they will be announced in class and posted on the course website as soon as possible. No changes increasing requirements will be made without unanimous consent of the entire class as these might adversely affect your grade.

Sexual Harassment

Please see the following link to review university policy and procedures regarding sexual harassment:

(http://www.ndsu.edu/fileadmin/policy/162.pdf)

Religious Observances

Students have a right to expect that religious observances, practices, and beliefs will be respected and reasonably accommodated. Upon prior notification to the course instructor, students in this course will be excused from class or other scheduled academic activities to observe religious holy days. To that end, students will be permitted a reasonable amount of time to make up the material or activities covered in their absence and will not be penalized because of religious observances.

Classroom Environment

The university classroom is expected to be a psychologically secure environment for the healthy exchange of ideas, an environment where all participants can fully engage in conversations that keep the avenues of discourse open in an effort to maximize learning through the construction of new knowledge.

To this end, an environment that nurtures individual and group differences and encourages engaged, honest discussions will be supported. Together, we will strive to create an environment where everyone feels comfortable to share and explore ideas. In the course of discussions, it is quite possible that disagreements will arise. Such disagreements should be welcomed in the spirit of critical exchange, but everyone is expected to be respectful of other points of view, whether we agree with them or not.

Further, derogatory comments based on age, ability, race, ethnicity, class, gender or gender identity, sexual orientation, or nationality will not be tolerated in this class.



Tentative Course Schedule

Session	Topic	Readings & Due Dates
1 – January 14	Welcome & Course Overview	None
2 — January 21	Survey & Scale Development	Graff & Birkenstein 1-3; Fowler 1; DeVellis 1-2; Supplemental; Lessons & Puzzles Due Weeks 2-14
3 – January 28	Research Frameworks	Graff & Birkenstein 4-7; Supplemental; Topic Statement Due
4 – February 4	Item Development	Graff & Birkenstein 8-10; Fowler 6-7; Supplemental
5 – February 11	Instrument Design	Graff & Birkenstein 11-12,14; DeVellis 5; Supplemental; Framework Due
6 – February 18	Error, Reliability, and Validity	Fowler 2; DeVellis 3-4; Supplemental
7 – February 25	Sampling & Nonresponse	Fowler 3-4; Supplemental; Draft Instrument Due
8 – March 4	Research Ethics	Fowler 11; Supplemental; Research Plan Due
9 – March 11	Data Collection	Fowler 5, 8; IRB Application Due
March 18	Spring Break – No Class	None
10 – March 25	Data Preparation & Analysis	Fowler 9; Supplemental
11 – April 1	Data Analysis	Fowler 10; DeVellis 6; Supplemental
12 – April 8	Reporting Research Results	Fowler 12; Supplemental
13 – April 15	Concluding Thoughts	Fowler 13; DeVellis 8; Authorship Agreement Due
14 – April 22	Peer Review	Supplemental; Technical Manual Due (Draft)
15 – April 29	Presentations	None
16 – May 6	Presentations	None
17 – May 12-14 (Finals Week)	Individual/Group Meetings	Reflective Essay Due; Grade Expectation Sheet Due



COURSE OUTCOMES MAP

utcome

Conceptualize and conduct an instrument development research study in an articulated field of study.

Course Topics

- 2. Survey & Scale Development
- 3 Research Frameworks
- 4. Item Development
- 5. Instrument Design
- 6. Error, Reliability & Validity
- 7. Sampling & Nonresponse

Topic Due: 1 Frame

Due: 2/11/14

Draft Instrume

Due: 2/25/14

utcome

Understand and adhere to Institutional Review Board policies concerning the ethical conduct of research for the protection of human participants. se Topics

- 8. Research Ethics
- 9. Data Collection

ssment

Research Plan Due: 3/04/14

IRB Training (Not Graded)

Due: 3/11/14
IRB Application
Due: 3/11/14

utcome

Analyze and interpret data from an instrument development study using available software.

Course Topics

- 10. Data Preparation
- Data Analysis

ssessment

Technical Manua Due: 4/22/14

utcome 4

Demonstrate an awareness of professional publications and the process for publishing in scholarly journals.

ourse Topics

- 12. Reporting Research
- 13. Concluding Thoughts

essment

Author Agreement

Technical Manual Due: 4/22/14

tcome 5

Demonstrate the ability to communicate both orally and in writing.

ourse Topics

14. Peer Review 15/16. Presentations

sessment

Technical Manua Due: 4/22/14

Due: 4/29/14 or 5/06/14