Syllabus for PADM/HADM 503-001 Research Methods Fall 2019

Tuesday 6:00 - 9:00 pm, Olmsted E-236

Professor: Dr. Daniel J. Mallinson

Office: Olmsted W-160K

Office Hours: MW 10-11am, Tuesday 4-6pm

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Course Webpage https://sites.psu.edu/djmallinson/padmhadm-503/

Course Description

Consuming and producing research is an important component of professional work in public administration and policy. The main focus of this course is providing future administrators with a practical understanding of research design and statistical analysis. The course will emphasize the importance of quality research design and making methodological choices. Students will be introduced to both qualitative and quantitative data collection and analysis. They will also learn how to evaluate and critique the research designs of others.

Learning Goals and Objectives

- Goal 1: Students will be able to conduct their own research project (producer)
 - Objective 1a: Students will walk through the steps of research design: identifying research questions, selecting the appropriate analytical framework, identifying sample sizes or secondary data, selecting appropriate quantitative tools, interpreting results correctly, making the connection between results and practice
 - Objective 1b: Students will conduct basic statistical analyses and understand the assumptions of each
- Goal 2: Students will learn to be savvy consumers of empirical research (consumer)
 - Objective 2a: Students will evaluate research ranging from peer reviewed journal articles to research posted on the Internet
 - Objective 2b: Students will assess the strengths and weaknesses of research design
 - Objective 2c: Students will assess the validity and reliability of empirical results
 - Objective 2d: Students will provide suggestions for improving study design

Methods for Learning and Teaching: This course will contain a mix of lecture and practical exercises. It is vital for your own comprehension of the course material that you come to class prepared to discuss assigned readings.

Reaching Our Goals

Attendance: Your attendance in class is always expected. It is easy to fall behind in a research methods course and attending class will go a long way to helping you keep up with the course material. Please contact me via e-mail if you are unable to attend class. I will follow the University's attendance policy when it comes to excused absences. See https://handbook.psu.edu/content/class-attendance.

Students also have an obligation to notify me within the first three weeks of the semester if they will miss any class session due to a religious observance. I am pleased to do this, but will need notification in order to plan make-up work.

Preparation and Participation: I expect you to read the assigned material before class and be able to discuss what you read. I also expect you to come to class prepared with questions regarding things in the reading that were unclear.

Do Not Suffer in Silence: Please do not suffer in silence throughout the course if you are struggling. Instead, let me know — as soon as possible — what things are not making sense and we can work it out. If you are having a problem of any kind in the course, please talk to me about it as soon as possible.

Be Flexible: While the syllabus represents an agreement between us, I reserve the right to revise and modify it throughout the course, if it is necessary to achieve our goals. Situations beyond either of our control can also emerge that require changes to the course. I will notify you right away when any changes are made.

Cell Phones and Laptops: Please be respectful of your fellow students and me by silencing your cell phone during class and limiting laptop use to only class-related activity.¹

E-mail Policy: I will work to respond to e-mails by the next business day. This means that e-mails sent on the weekends will be responded to by Monday.

¹In fact, research demonstrates that students who take handwritten notes generally perform better than those that use laptops: Mueller, Pam A. and Daniel M. Oppenheimer. 2014. "The Pen Is Mightier Than the Keyboard: Advantages of Longhand Over Laptop Note Taking." *Psychological Science* 25(6): 1159-1168.

Readings

The following book is required for the course:

O'Sullivan, Elizabethann, Gary Rassel, Maureen Berner, and Jocelyn DeVance Taliaferro. 2017. Research Methods for Public Administrators. Sixth Edition. New York: Routledge. ISBN 978-0-20-585625-1.

Additional required readings will be made available on Canvas.

Lecture Slides

I will be using lecture slides throughout the course. These will be uploaded to the course website (https://sites.psu.edu/djmallinson/padmhadm-503/) and Canvas prior to each class period.

Assessing Your Progress Towards Our Goals

The following types of assessment will be used to track your progress towards meeting our course goals: weekly quizzes, homework assignments, research evaluation, and final research paper.

Each component represents the following percentage of your final grade:

Homework Assignments and Labs	35%
Survey Design Assignment	25%
Research Paper	40%
CITI Extra Credit	3%

We will use the following grade scale:

Letter	Percent		
A	94 to 100		
A-	90 to 93		
B+	87 to 89		
В	84 to 86		
В-	80 to 83		
C+	77 to 79		
\mathbf{C}	70 to 76		
D	60 to 69		
F	Below 60		

Homework Assignments and Labs: During the first half of the course, we will have a homework assignment for each chapter. These are due in the class after they are assigned. The schedule later in this syllabus lists all of the assigned homework problems. Please print your homework assignments and bring them to class for collection and review. During the second half of the class – that devoted to statistics – we will have in-class lab assignments that must be turned in by the next class period.

Survey Design Assignment: For this assignment, you will apply what we are learning in class to design your own short survey of your fellow PADM or HADM students. Instructions for this assignment can be found on Canvas.

Research Paper: As a culminating experience, each student will develop their own research study that applies much of the material we learn in class. This final project is scaffolded so that you can receive feedback on pieces throughout the course. The final paper will include:

- A statement of the research question and aims of the project
- Brief literature review
- Theory
- Specific hypotheses that will be tested
- Description of sample selection process
- Description of key measures
- Appropriate statistical analyses and interpretation

See Appendix A for details.

SARI

"The SARI@PSU program at Penn State is designed to offer Penn State researchers and scholars comprehensive, multilevel education in the responsible conduct of research, in a way that is tailored to address the issues faced by individual disciplines." More information can be found here, http://www.research.psu.edu/training/sari.

The Scholarship and Research Integrity (SARI) requirements for the Master's in Public Administration program requires students in this program to complete the following two training courses and submit the completion report to the department as a record for their graduation file. This is a graduation requirement for every student and must be completed.

- 1. Social and Behavioral Human Subjects Research (IRB) Course
- 2. Social and Behavioral Responsible Conduct of Research (RCR) Course

You will need visit this website, https://citi.psu.edu, to set up an account to reach the free online trainings and courses that are offered through the Collaborative Institutional Training Initiative (CITI) program. There are instructions available on the website in order to complete the requirement if these are needed. Students should select the two trainings listed above when prompted to do so. The average completion time of this requirement is five (5) hours, but it can be broken up and taken at students' convenience. Once you have completed this requirement, please forward a copy of the CITI online program completion form to myself and the program support staff – Autumn Wise (adw5533@psu.edu) – so we have evidence of completion for your files and for the Graduate School.

If there are any questions, please feel free to contact myself, your program Coordinator, or the support Staff.

Make-Up Grades: You are allowed to make-up academic work only in the case of excused absences. These absences may include missing class for a University-sanctioned activity (with proper documentation), illness, religious observance, or family responsibilities. If you know in advance that you are going to miss class, please contact me before the absence to make arrangements for completing the work. If you are absent for an unexpected reason, please check in with me as soon as possible. You will have one week from the day of your return to class to make up a missed assignment.

Academic Integrity

Academic dishonesty is not limited to simply cheating on an exam or assignment. The following is quoted directly from the *PSU Faculty Senate Policies for Students* regarding academic integrity and academic dishonesty: "Academic integrity is the pursuit of scholarly activity free from fraud and deception and is an educational objective of this institution. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabricating of information or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students."

All University and Penn State Harrisburg policies regarding academic integrity/academic dishonesty apply to this course and the students enrolled in this course. Refer to the following URL for further details on the academic integrity policy of Penn State Harrisburg: http://harrisburg.psu.edu/academics/academic-guidelines-and-policies. Each student in this course is expected to work entirely on her/his own while taking any exam, to complete assignments on her/his own effort without the assistance of others unless directed otherwise by the instructor, and to abide by University and Penn State Harrisburg

policies about academic integrity and academic dishonesty. Academic dishonesty can result in an assignment of "F" or "XF" as the final grade for the student.

Disability Access

Penn State welcomes students with disabilities into the University's educational programs. Every Penn State campus has a Student DisAbility Resources office. Student DisAbility Resources at Penn State Harrisburg is located in SEC 205. The Disability Services Coordinator, Alan Babcock, can be reached via email at aub15@psu.edu or phone 717-948-6025.

To receive consideration for accommodations, you must contact Student DisAbility Resources (SDR), participate in an intake interview, provide documentation of your disability, and complete a Self-Assessment. Additional information is available on the Disability Services website (http://harrisburg.psu.edu/disability-services). If the documentation supports requests for reasonable accommodations, SDR will provide you with an accommodations letter, which you will give to your professors. You will receive accommodations after you give your accommodations letters to your professors. You should share your accommodations letters with your professors as early in the semester as possible. Professors do not provide accommodations retroactively.

Counseling Services

Students may face a variety of concerns over the course of their time at PSH- depressed mood, anxiety, stress, family concerns, body image, substance use, sexuality and many others- that may interfere with their ability to focus on their studies. Counseling Services provides FREE mental health and social support for all currently enrolled students. Staff follow strict legal and ethical guidelines concerning the confidentiality of counseling. Counseling services is located in SEC 205 and can be reached by phone at (717) 948-6025. You can find more information at the Counseling Services webpage, http://harrisburg.psu.edu/counseling-services.

Educational Equity

Penn State takes great pride to foster a diverse and inclusive environment for students, faculty, and staff. Acts of intolerance, discrimination, harassment, and/or incivility due to age, ancestry, color, disability, gender, national origin, race, religious belief, sexual orientation, or veteran status are not tolerated and can be reported through Educational Equity at the Report Bias site: http://equity.psu.edu/reportbias/statement. Direct all inquiries regarding the nondiscrimination policy to our Penn State Harrisburg Office of Student Affairs at the following link https://harrisburg.psu.edu/webform/office-student-conduct-incident-report-form.

Mandated Reporting

As an instructor, one of my responsibilities is to help create a safe learning environment on our campus. I also have a mandatory reporting responsibility related to my role as an educator. It is my goal that you feel able to share information related to your life experiences in classroom discussions, in your written work, and in our one-on-one meetings. I will seek to keep information you share private to the greatest extent possible. However, per University policy AD85 (https://policy.psu.edu/policies/ad85), I am required to share information regarding sexual misconduct or information about a crime with the University including incidents of sex-based discrimination and harassment (discrimination, harassment, sexual harassment, sexual misconduct, dating violence, domestic violence, stalking, and retaliation). While faculty are ethically bound to report any information as it relates to University policy, we are also a resource and want to be sure you are aware of the services available to you.

The first resource that should you should contact is Felicia Brown-Haywood at the Penn State Harrisburg Title IX Office (E131 Olmsted Building): 717-948-6180.

Other resources that are available include:

- Penn State Harrisburg Counseling and Psychological Services, E131 Olmsted Building: 717-948-6025
- Department of Safety & Police
 - Campus Police: 717-979-7976
 - Local Police: 717-543-2200 or 911
- YWCA Confidential Domestic Violence & Sexual Assault Services: 1-800-654-1221 (available 24/7)
- Contact Helpline: 800-932-4616 (24-hour community crisis hotline)
- Pinnacle Health Harrisburg: 717-782-3131
- Penn State Harrisburg Student Health Services, 220 Capital Union Building: 717-948-61015
- Penn State Hotline: 800-560-1637 (Anonymous reporting)

Basic Needs Statement

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to life, and believes this may affect their performance in the course, is urged to contact the Office of Student Affairs (syw10@psu.edu, 717-948-6180) for support. Furthermore, please notify the professor if you are comfortable in doing so. This will enable him to provide any resources that he may possess.

Writing Tutoring and Other Academic Support

The Russell E. Horn Sr. Learning Center provides tutoring for writing assignments as well as for other aspects of the academic experience. You can make an appointment in one of the four ways listed below. An appointment is recommended, though not required.

Website	Online Scheduler	Phone	In Person
harrisburg.psu.edu/learning-center	psuh.mywconline.com	717-948-6475	SEC 201

Writing

The Learning Center provides tutoring support for writing assignments in this class. Do you need help developing your thesis and ideas? Do you need objective feedback when you're drafting or revising your papers? Do you have questions about MLA, APA, or Chicago styles? Do you want to improve your academic writing skills? The writing tutors at the Learning Center are experts at helping students improve their writing. Writing handouts are available at psu.box.com/v/WritingResources and in print in SEC 201.

Other Academic Support

Is English an additional language for you and your home language is "getting in the way?" Are you spending excessive amounts of time trying to finish your assigned readings? Are you nervous about participating in class and presenting speeches? American & Academic Literacy (AAL) appointments support international and other multilingual students with their transition to the U.S., and can help all students with their speeches. Our Academic Skills Consultants can also help with time management, organization, and study skills. Like us at facebook.com/RussellEHornSrLearningCenter/ and follow us on Twitter @PSUHLC.

Course Schedule

We will attempt to follow this schedule as closely as possible, but we may take more time on some concepts and less time on others. For this reason, a digital version of this syllabus can be found on my website. Slides used in class will also be posted on the online syllabus and Canvas before class. All changes to the schedule will be announced in class or via e-mail and the online syllabus will be constantly up-to-date. Required course readings are listed and due dates for assignments are in bold. Links to some additional readings are included in the syllabus on my website, others will be uploaded to Canvas. If you have trouble, please do not hesitate to e-mail me.

NOTE: All homework problems come from the Problems for Homework and Discussion section of each chapter. Problems marked as WWD come from the Working With Data section.

Week 1: Introductions (8/27)

- Introduction to the course and each other
- Read Jones-Rooy, Andrea. 2019. "I'm a Data Scientist and I'm Skeptical About Data." Quartz. July 24.
- Before next class, please upload to Canvas a brief reflective essay that answers the following questions:
 - What do you want to achieve in this course?
 - Why are you taking this course?
 - What, specifically, do you want to improve?
 - What do you hope this course will help you achieve in the future?

Week 2: Getting Started with Research (9/3)

- Chapter 1 Beginning a Research Project
 - Homework Problems: 1 (do not do the one page write up, we will discuss in class),
 2, 8a and 8b
- Chapter 8 Protection of Human Research Subjects and Other Ethical Issues
 - Homework Problems: 2, 3, 4, 11
- Complete your CITI training upload to Canvas for 3% extra credit and email to Autumn Wise (jfw5470@psu.edu).

Week 3: Secondary Data (9/10)

- Chapter 9 Finding and Analyzing Existing Data
 - Homework Problems: 3 (for Dauphin County), 4, WWD 1 (a-d, we'll do e in class)
- Research Worksheet Due

Week 4: Primary Data (9/17)

- Chapter 2 Designs for Description
 - Homework Problems: 2 (Use Excel), 3 (use Excel), 4a, 4b, 4c

Week 5: Primary Data (9/24)

- Chapter 3 Designs for Explanation
 - Homework Problems: 1, 2, 3, 9

Week 6: Measurement (10/1)

- Chapter 4 Measuring Variables
 - Homework Problems: 1, 3, 8
- Chapter 10 Combining Indicators: Index Construction
 - Homework Problems: 2, 3
- Annotated Bibliography Due

Week 7: Interviewing (10/8)

- Chapter 6 Contacting and Talking to Subjects
 - Homework Problems: 1 (use article on Canvas), 3, 4a, 5

Week 8: Surveys (10/15)

- Chapter 7 Collecting Data With Questions and Questionnaires
 - Homework Problems: 1, 5, 7
- Theory and Hypotheses Due

Week 9: Sampling (10/22)

- Chapter 5 Sampling
 - Homework Problems: 1, 5, 7, 10

Week 10: Data Analysis (10/29)

- Chapter 11 Univariate Analysis
 - No Homework Assignment
- Survey Design Assignment Due

Week 11: Data Analysis (11/5)

- Chapter 12 Examining Relationships Among Variables With Tests of Statistical Significance
 - Lab Assignment Due

Week 12: Data Analysis (11/12)

- Chapter 13 Examining Relationships among Variables: Contingency Tables with Measures of Association, ANOVA
 - Lab Assignment Due
- Sampling and Measures Due

Week 13: Univariate Regression (11/19)

- Chapter 14
 - Lab Assignment Due

Week 14: Thanksgiving Break (11/26)

• No Class

Week 15: Multivariate Regression (12/3)

- Chapter 14
 - Lab Assignment Due
- Analysis Plan Due

Week 16: Reporting Results (12/10)

- Chapter 15 Completing the Project and Communicating Findings
 - Lab Assignment Due

Week 17: Finals Week

• Final Research Paper Due Wednesday December 18 by 5pm

Appendices

A Research Paper

This project is meant to be the culmination of the material you learn in this course. For this assignment, you will design your own study using secondary data. This will employ the entire process of developing a research question, conceptualization, operationalization, data acquisition, data analysis, and interpretation of your results. I would advise overlapping this project with your article review assignments. Doing so achieves two things. First, it ensures that your research paper is on a topic that is currently being discussed among scholars. Second, a solid design is essential for quality research output.

The final proposal should contain the following sections:

- Statement of the research question and aims of the project
- Brief literature review
- Theory
- Specific hypotheses that will be tested
- Description of data and key measures
- Description of methodology for analyzing the data
- Results
- Policy implications
- Conclusion

The main text of the paper should be no longer than 3,000 words (excluding the title page and references). The paper should be double spaced with 12 point font.

In an effort to spread out the work for this project, and so that I can give you feedback along the way, draft pieces of the project are due throughout the semester. See the course schedule for these due dates.

A.1 Worksheet

The research worksheet can be found on Canvas. The purpose of this sheet is to make sure you are thinking about both your research topic AND the data you will need for the project. For that reason, the worksheet asks about your topic, your conceptual model, draft hypotheses for four independent variables, and your data source. It is OK if this is rough at this point, but the point is to get you thinking.

Due September 17

A.2 Annotated Bibliography

Instead of a draft literature review, I am asking you to submit an annotated bibliography. I would like this to include 10 primary sources (journal articles, books, or other research papers). Here are some resources for preparing an annotated bibliography:

- Writing an Annotated Bibliography: Purdue University's Online Writing Lab.
- Writing an Annotated Bibliography: Cornell University Library

Please make sure that you are not just giving me an abstract (i.e., a summary of each source), but you are also indicating how the source is relevant for your specific study.

Due October 1

A.3 Theory and Hypotheses

This assignment should be no more than three double spaced pages. It should present a brief theory for each of the four hypotheses that you are testing. Your theory should be informed by the literature that you have been reading on your topic, and thus that literature should be cited. Please follow the recommendations presented in class regarding quality hypothesis writing.

In terms of how to structure the theory section, I would start with briefly describing and presenting your conceptual model (present it in schematic form). Then, you should present a paragraph for each individual hypothesis with a single hypothesis statement following each paragraph. The sample paper on Canvas has examples of how to provide a paragraph for

each independent variable, though I would like you to add your schematic model and the specific hypothesis statements with each paragraph.

Due October 15

A.4 Sampling and Measures

This assignment should be 1-2 pages. The role of this part of your paper is to tell the reader where your data come from and what variables you are using. This is the "Methods" section of the sample student paper on Canvas.

Due November 12

A.5 Analysis Plan

This assignment is not part of your final paper, but it allows me to give you feedback on the statistical methods you are choosing to use for your final paper. It needs to be no longer than a page and should describe the statistical method(s) you intend to use for your data analysis. Make sure you are using methods appropriate to the levels of measurement of your chosen independent and dependent variables. Methods you can use from the course include chi-square, ANOVA, t-tests, and linear regression. Univariate methods, including figures, should also be used where appropriate, but cannot be your sole method of analysis.

Due December 3