PAFF 510-01 & SUS 520-01: Research Design and Methods

Binghamton University | State University of New York | Fall 2022

# Course Information

|  |  |  |
| --- | --- | --- |
| Meeting Place | Meeting Time |  |
| UDC-121 | W: 1:40-4:40 pm |  |

# Instructor Information

|  |  |  |
| --- | --- | --- |
| Instructor | Email | Office Location & Hours |
| Matthew J. Uttermark, PhD | [mutterma@binghamton.edu](file:///C:\Users\muttermark%20laptop\Downloads\mutterma@binghamton.edu) | UDC-205  W: 12:30-1:30 &  R: 4:30-5:30 |
| **Teaching Assistant** | **Email** | **Office Location** |
| Francesca Bové | [fbove1@binghamton.edu](file:///C:\Users\muttermark%20laptop\Downloads\fbove1@binghamton.edu) | UDC-236 |

# General Information

## Description

## *There are three kinds of lies: lies, damned lies, and statistics – Benjamin Disraeli (popularized by Mark Twain)*

Discourse within public affairs is filled with references to data and statistics. This course will help students understand how those data are produced and how to evaluate their validity. Specifically, students will learn to develop research questions, generate hypotheses, evaluate experiments and observational studies, measure variables, and perform statistical tests. In so doing, students will see how social scientists develop and test theories to explain phenomena. With these newly acquired skills, students will be better able to evaluate research they encounter in their professional and day-to-day lives. Additionally, the goal is to prepare students for the in-depth research and critical thinking skills needed in their future coursework.

Please be aware that this course relies on a different background than most other courses that our department offers. You do not need to be a math or computer-wiz to do well in this course – I was not when I took this course in university. However, the material in this course may not come as easily to you compared to other courses. I encourage you to set some time aside to reread the textbook, study/work with your classmates, and visit during office hours if concepts are unclear.

## Grading\*

| A 93-100 | B 83-86.99 | C 73-76.99 |
| --- | --- | --- |
| A- 90-92.99 | B- 80-82.99 | C- 70-72.99 |
| B+ 87-98.99 | C+ 77-79.99 | F < 70 |

\* A letter grade of ‘A’ is the highest grade that you can receive in this course.

**Grade Expectations** Historically – regardless of instructor – around 10 percent of students will receive a final grade of A in this course. (Another 10-15 percent of students will receive a letter grade of A-).

**Advice to Accelerated Undergraduate Students** Please note that expectations and evaluation of performance in a graduate-level course are substantially different than evaluations in an undergraduate-level course. In a graduate-level course, you are working to develop skills to think independently and problem solve on your own. These are valuable skills that employers are looking for in the public and private sector job markets. This means that assignments and course readings will, by design, have less handholding than assignments and readings that you interacted with in undergraduate level coursework. If you are having trouble engaging with material in this class, it is your responsibility to schedule and appointment and visit during office hours.

In addition, as stated in the department handbook, grades are another departure from undergraduate coursework. Work effort that earned you an ‘A’ in an undergraduate course, will only earn you a ‘B’ in a graduate-level course. Adjust your expectations accordingly. I recommend scheduling 8-10 hours per week for this class, 3 hours for lecture and the remainder for readings and assignments. It is better to schedule too much time to prep for this class than not enough. I also strongly recommend against taking course overloads while taking a graduate-level course, particularly in this class.

**Grade Rounding** As a matter of policy, the instructor does not round grades in graduate-level coursework. Please do not email the instructor at the end of the semester asking that your final grade be rounded up.

## Evaluation

**Class Engagement (10%)** This is a small class. Habitual absences will be noticed and detrimental to your final grade. Please come to class, ask questions, and be prepared to engage with the material. I encourage you to ask questions in class–especially when material is unclear. In this particular course, if you have a question on the material many of your classmates likely have the same question. Students who do not actively participate in class will not be eligible to receive higher than a C (70%) in this evaluation area.

**Assignments & Problem Sets (20%)** Students will have several assignments and problem sets over the course of the semester. These activities will serve as opportunities to practice statistical concepts covered in class. While each assignment is a relatively small portion of your final grade, it is important to work diligently on these assignment in order to do well on exams and presentations.

**Midterm (20%) & Final (25%)** There will be an online midterm and finale, administrated in-class or on Brightspace – depending on the state of COVID. Both exams will be reasonably short and are designed to test your understanding of concepts and interpretation of research and statistical analysis. The exams are open-note (e.g., hand-written or printed notes with concepts and statistical equations are allowed). Students are also allowed to use calculators. The test will be a combination of true/false, multiple choice, and short answer. More information will be provided when we come closer to the examination period.

**Community Engaged Learning Class Project (20% participation; 5% report)** We will discuss this project on the first day of class.

# Course Materials

## Required Text

Remler, Dahlia R. and Gregg G. Van Ryzin *Research Methods in Practice: Strategies for Description and Causation*. 2nd Edition. New York: SAGE Publishing.

**Please make sure to get the 2nd edition of the book.**

The publishers of the book also have a student study site at: <https://study.sagepub.com/remler2e>.

Electronic copies of the textbook are available and can be used in this class.

This book should be available for purchase in the campus bookstore, Amazon.com and Chegg.com, among other sites. In the reading schedule, this book is referred to as RMiP.

**Other readings (book chapters, journal articles) will be made available on the course site.**

Class Policies

**Makeup Work** Make-up work will be accepted in this course if a student has a university approved absence. University approved absences include:

* A documented illness (or serious illness of a dependent child).
* A death in the family.
* Call to active military duty.
* Jury duty.
* A religious or work-restricted holy days.
* Official university activities (i.e., a student athlete competing in a meet).

It is your responsibility to inform me and get documentation before the absence occurs. For example, if you are ill the day of an assignment, I require a signed note from a medical doctor dated the day of the exam. I will then work to determine how to make-up the assignment. With the exception of the midterm and final – which must be completed on time –late work submitted up to 48 hours after a deadline may receive up to half credit.

**Incomplete Grades** I do not expect to hand out a grade of “Incomplete” to any student in this course. However, a grade of “Incomplete” will only be given if there is an agreement between the instructor and the student prior to the end of the semester. The instructor reserves the right to determine a legitimate reason for assigning an incomplete grade.

**Email Policy** Please avoid emailing the instructor with questions that can be answered by reading the syllabus. The instructor will not reply to such emails. This document contains information on how your grade is calculated and what is covered each day in class. Additionally, if you wish to set up an appointment with the instructor outside of office hours, please provide a list of times to meet in the first email sent to the instructor.

**Maintaining a Respectful Classroom Environment** Binghamton University is committed to providing and maintaining a respectful environment that is conductive to safe working, learning, and living for all members of the institutional community. It is expected that all students will respect each other in their personal interactions, inside and outside of the classroom. Acts of violence, threats of violence, derogatory comments, and behavior meant to intimidate others is prohibited.

I reserve the right to have a student escorted from the classroom for persistent violations of this policy and the students final grade will reflect their lack of decorum.

**Plagiarism** Any form of cheating will NOT be tolerated. If you are caught plagiarizing any written work you will receive an automatic zero on the assignment and will be reported to the university in accordance with Binghamton policy. Plagiarism is defined as: handing in a paper you did not write, attempting to pass off someone else's work as your own, or using your own ideas, information, or phraseology of other writers without giving proper credit in your text. Self-plagiarism – handing the same written assignment for multiple courses – is also prohibited. See the university honor code details below for more information.

**Binghamton's Academic Honor Code** The academic honor system of Binghamton University is based on the premise that each student has the responsibility: (1) To uphold the highest standards of academic integrity in the student's own work. (2) To refuse to tolerate violations of academic integrity in the University community, and (3) To foster a high sense of integrity and social responsibility on the part of the University community."

I expect students to bring possible violations of the honor code to my attention as soon as possible, so that the violation may be resolved. Violations included, but are not limited to, plagiarism of work, assisting a student in obtaining unauthorized information for an assignment, project or test. A complete list of violations can be found in Binghamton's University Bulletin.

Violation of the Academic honor code can lead, but is not limited to, a lower/failing grade on the assignment or a lower/failing grade in the course. The university may take additional measures including, formal reprimand, academic probation, suspension, or expulsion from the university.

For more information on Binghamton's Academic Honesty policy, visit:

<https://www.binghamton.edu:8443/exist/rest/bulletin/2020-2021/index.html>

**Americans with Disabilities Act** If you are a student with a disability and wish to request accommodations, please notify the instructor by the second week of class. You are also encouraged to contact the Office of Services for Students with Disabilities (SSD). The SSD office makes formal recommendations regarding necessary and appropriate accommodations based on specifically diagnosed disabilities. Information regarding disabilities is treated in a confidential manner. This syllabus and other class materials are available in alternative format upon request. For more information about services available to Binghamton students with disabilities, contact:

**Services for Students with Disabilities**

Room 119

University Union

Binghamton University

Phone: 607-777-2686 (Voice, TTY)

Fax: 607-777-6893

Email: [ssd@binghamton.edu](file:///C:\Users\muttermark%20laptop\Downloads\ssd@binghamton.edu)

<https://www.binghamton.edu/ssd/index.html>

# Course Schedule

This syllabus is subject to change as necessary over the course of the semester. Regularly check Blackboard and your e-mail for updates on any changes.

| Week | Date  (Week of) | Topic | Reading | Assignments  (Due the following class) |
| --- | --- | --- | --- | --- |
| Week 1 | 08/22 | Research in the Real World | Skim:  RMiP Chapter 1  Groeneveld et al. 2015 | Ethics in Research |
| Week 2 | 8/29 | Theory, Model, and Research Questions  **Note**: Asynchronous lecture instructor out of town for conference | RMiP Chapter 2 | Theory Assignment |
| Week 3 | 9/05 | Sampling & Surveys | RMiP Chapters 5 & 7 |  |
| Week 4 | 9/12 | Secondary Data  **Note**: Asynchronous lecture instructor out of town for conference | RMiP Chapter 6 | Primary/Secondary Assignment |
| Week 5 | 9/19 | Qualitative Research | RMiP Chapter 3 | Qualitative Research Assignment |
| Week 6 | 9/26 | Measurement & Causation | RMiP Chapter 4 & 11  Stack & Gundlack 1992  Maguire & Snipes 1994 | Data Analysis Assignment I |
| Week 7 | 10/3 | **No Class:** Yom Kippur |  |  |
| Week 8 | 10/10 | Experiments | RMiP Chapters 14 & 15 | Data Analysis Assignment II |
| Week 9 | 10/17 | Observational Studies & Review | RMiP Chapter 12 |  |
| Week 10 | 10/24 | Making Sense of Numbers | RMiP Chapter 8 | **Midterm In-Class**  Data Analysis Assignment III |
| Week 11 | 10/31 | Inferential Stats | RMiP Chapter 9 |  |
| Week 12 | 11/7 | Multivariate Stats (Bivariate Regression) | RMiP Chapter 10 | Regression Assignment |
| Week 13 | 11/14 | Regression Week II (Multiple Regression) |  |  |
| Week 14 | 11/21 | Regression III (Intro to MLE and Interactions) | Berry, Golder, and Milton 2012  Dinan and Heckleman 2020 |  |
| Week 15 | 11/28 | **No Class**: Thanksgiving Break |  |  |
| Week 16 | 12/5 | Review & Project Presentation |  |  |
| Week 16 | 12/12 | Finals Week |  | Online Final |