

School of Public Affairs and Administration, Rutgers University - Newark

## **Applied Research Design (20:834:562)**

Summer 2020

May 26th, 2020 - August 12th, 2020

Location: online

DRAFT: This syllabus is subject to change

Updated May 29th

### **Instructor Information**

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Virtual office hours by appointment only

### **COURSE DESCRIPTION**

Building on the skills of data analysis and statistical inference learned in Applied Statistics (561), this course exposes students to issues central to understanding and applying research-based evidence to public affairs and administration. These issues include the use of theory or models, measurement concepts and methods, qualitative and quantitative modes of observation, identifying causes, the logic of control variables, and the design of experiments and quasi-experiments. The emphasis is on learning these ideas through practice with many different examples of real-world research and empirical evidence.

The course will be taught online using Canvas.

### **REQUIRED TEXTBOOK AND MATERIALS**

Remler, D. K., & Van Ryzin, G. G. (2014). Research methods in practice: Strategies for description and causation (Second Edition). Sage Publications.

In addition to the lecture notes and textbook readings, a few supplementary readings will be assigned. These readings will be available on Canvas.

We will mostly rely on Excel for the statistical part of the course. Students can also use MYSTAT (SYSTAT), Stata, SPSS, or another more specialized statistical software package if they prefer. You can download software packages at <https://software.rutgers.edu/>

### **COURSE EVALUATION**

Students are expected to keep up with assigned readings, view the lectures and other videos, and to participate actively in online discussions. There will be three projects, weekly reading quizzes, online discussions and other exercises. Grades will be based on the following:

Class Discussion	20%
Quizzes	20%
Project 1	20%
Project 2	20%
Project 3	20%

Each of these requirements is explained in more detail below.

**DISCUSSIONS (20%).** Students are expected to participate actively in online discussions, which are an important part of the class each week, and their participation will be evaluated and graded. Each student are expected to post an initial thread and respond to at least three other students in each discussion assignment.

**READING QUIZZES (20%).** Brief quizzes will be given to assess your comprehension of the assigned readings for each week. It is important to read the materials for class carefully and on time. There will be 10 quizzes in total.

**PROJECTS (60%).** Students must complete and submit three projects (each worth 20% of your total grade). The instructions for each project can be found on Canvas. Be sure to read all instructions carefully and complete all parts of the project. Generally, projects should be prepared in the form of a professional memo and will be graded according to their presentation quality as well as its analytical substance. Students may consult with each other on assignments, but the work handed in must be the student's own, original work. Late assignments will be downgraded.

**Grading.** Final grades in this course will be assessed using the following breakdown:

Letter Grade	Definition	Numerical Equivalent
A	Outstanding	89.5-100
B+	Very Good	84.5-89.49
B	Good	79.5-84.49
C+	Intermediate	74.5-79.49
C	Satisfactory	69.5-74.49
F	Failing	<69.5

## **COURSE POLICIES**

The syllabus serves as a general outline. I reserve the right to deviate from any part of the plan as necessary. Students will be notified of any such modifications.

**GENERAL EXPECTATIONS.** This a graduate-level course and so students are expected to be motivated to read and study the assigned textbooks and other materials carefully before class. This includes doing exercises from the textbook on your own to test your understanding of key concepts and methods. Regular participation in discussions and keeping up with all readings and assignments is essential to doing well in this course.

**COMMUNICATION.** Communication about class schedules, requirements, and assignments or readings may be made via e-mail or Canvas, so it is expected that students will check their accounts regularly.

**SUBMITTING ASSIGNMENTS.** Assignments should be submitted to the Canvas rather than e-mailed. Be sure your name and the submission date are on the assignment (and do not backdate).

**LATE ASSIGNMENTS.** Assignments are generally due at 11:59 pm of the due date. Except for significant extenuating circumstances (e.g., medical, family, etc.), late assignments will be downgraded by 10% the first day and 5% each additional day thereafter. If you know in advance that you have a serious conflict in your schedule, you are encouraged to contact the professor before the assignment is due to discuss any plan to hand in the work late.

**REVISING AND RESUBMITTING ASSIGNMENTS.** Students who receive a grade of less than a B (3.0) for an assignment AND who hand in the original assignment ON TIME will be given an opportunity to revise and resubmit the assignment. A change of grade will be made only for assignments that demonstrate a significant improvement through the student's own effort (making only minor corrections or edits in response to the professor's written feedback on the initial assignment will not be sufficient for a change of grade). This policy does not apply to the final assignment. Resubmissions must be made through Canvas within one week after the initial graded assignment has been returned to the student. The maximum grade possible for resubmission is a B (3.0).

**GRADE DISPUTE.** Grade disputes will be handled according to the SPAA MPA Student Handbook. If you think you have been graded unfairly or in error, you are encouraged to discuss it with the professor before initiating any sort of formal dispute process. I don't "negotiate" grades, but misunderstandings and mistakes do happen occasionally.

**WRITING STYLE.** In terms of the writing style of your assignments, you may use either APA or Chicago style, but please be consistent within the document. In-text citations are preferred to footnotes or endnotes. Writing clarity and quality are considered in grading. Please use a standard font such as Arial, Calibri, or Times New Roman. Pages should use 1-inch margins, double-spaced, with 12 point fonts. If you think you need help with your writing, talk to the professor. There are resources on campus to help you. Also feel free to contact SPAA's writing coach, Terry Hall, at [tlh135@scarletmail.rutgers.edu](mailto:tlh135@scarletmail.rutgers.edu).

INCOMPLETES AND GRADE CHANGES. Students are expected to complete all of their assignments and other requirements by the official end of the term. Grades will be based on work received by the professor at this time. A grade of incomplete (IN) will only be given to students with legitimate medical or family emergencies who have discussed their situation with the professor prior to the end of the term. Incomplete work submitted for a change of grade after the term will be accepted at the discretion of the professor and only with prior arrangement and agreement.

ACADEMIC INTEGRITY. Students must follow the school's integrity policy: <http://academicintegrity.rutgers.edu> Please be aware that plagiarism and any forms of cheating will never be excused under any circumstances – I check assignments for originality using plagiarism detection software. Violation of these policies leads to immediate failure of the course.

## DISABILITY ACCOMMODATION

Rutgers University Newark (RU-N) is committed to the creation of an inclusive and safe learning environment for all students and the university as a whole. RU-N has identified the following resources to further the mission of access and support:

**For Individuals with Disabilities:** The Office of Disability Services (ODS) is responsible for the determination of appropriate accommodations for students who encounter barriers due to disability. Once a student has completed the ODS process (registration, initial appointment, and submitted documentation) and reasonable accommodations are determined to be necessary and appropriate, a Letter of Accommodation (LOA) will be provided. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at [ods.rutgers.edu](http://ods.rutgers.edu). Contact ODS at (973)353-5375 or [ods@newark.rutgers.edu](mailto:ods@newark.rutgers.edu).

**For Individuals who are Pregnant:** The Office of Title IX and ADA Compliance is available to assist with any concerns or potential accommodations related to pregnancy. You may contact the Office of Title IX and ADA Compliance at (973)353-1906 or [TitleIX@newark.rutgers.edu](mailto:TitleIX@newark.rutgers.edu).

**For Individuals seeking Religious Accommodations:** The Office of the Dean of Students is available to verify absences for religious observance, as needed. Contact the Dean of Students at (973)353-5063 or via email at [DeanofStudents@newark.rutgers.edu](mailto:DeanofStudents@newark.rutgers.edu).

**For Individuals with temporary conditions/injuries:** Students who have experienced a temporary condition or injury that is adversely affecting their ability to fully participate should submit a request via <https://temporaryconditions.rutgers.edu>.

**Absences:** Per University Policy 10.2.7, you are responsible for communicating with your instructors regarding absences. The Office of the Dean of Students is available to verify extended absences. Contact the Dean of Students at (973)353-5063 or via email at [DeanofStudents@newark.rutgers.edu](mailto:DeanofStudents@newark.rutgers.edu).

**For English as a second language (ESL):** Students experiencing difficulty in courses due to English as a second language (ESL) should contact the Program in American Language Studies via email at [PALS@newark.rutgers.edu](mailto:PALS@newark.rutgers.edu) to discuss potential supports.

**For Gender or Sex-Based Discrimination or Harassment:** If you have experienced any form of gender or sex-based discrimination or harassment, including sexual assault, sexual harassment, relationship violence, or stalking, know that help and support are available. If you wish to report an incident, you may contact the Office of Title IX and ADA Compliance at (973)353-1906 or via email at [TitleIX@newark.rutgers.edu](mailto:TitleIX@newark.rutgers.edu). You may also submit an incident report using the following link: [tinyurl.com/RUNReportingForm](http://tinyurl.com/RUNReportingForm). If you wish to speak with a staff member who is confidential and does **not** have a reporting responsibility, you may contact the Office for Violence Prevention and Victim Assistance at (973)353-1918 or via email at [run.vpva@rutgers.edu](mailto:run.vpva@rutgers.edu).

## NETIQUETTE

- In all of your interactions, remember there is a person behind the written post.
- Pause and reflect on a post that is uncomfortable before responding. Consider the root of your emotional reaction.
- Remember, we are discussing ideas and disagreements that are not personal in nature. Take care in crafting your response to demonstrate your disagreement with the idea, not the person.
- Do not participate in "flaming." Flaming is inflammatory comments that are hostile and insulting and do not contribute to the learning process. Choose not to respond to "flames" to support a better learning experience for everyone.
- Be careful with humor and sarcasm. Because the visual cues are absent, many people cannot tell if your comments are meant seriously or facetiously.
- Contribute to a meaningful discussion by presenting your "best self" in the course environment: Take the time to explain your ideas respectfully and completely. However, also keep brevity in mind. You want to make your point clearly, but also make it concisely.
- If a peer misinterprets your meaning, acknowledge this without being rude or defensive. It can be challenging to communicate some ideas in writing. This is your opportunity to practice clarifying your ideas to others.
- Do not post in all caps. This is the equivalent of SHOUTING at someone and is not acceptable.

## COURSE CALENDAR

Week 1: Introduction and Overview		
Dates	Activity	Due Date
May 26 - May 31	Review Syllabus	May 26
	Module 1 Readings and Resources	May 27

	Module 1 Lectures (Supplementary)	May 27
	Assignment: Student Introductions	May 31
	Group Discussions <ul style="list-style-type: none"> <li>● Syllabus and Requirements.</li> <li>● Lectures, Readings and Resources</li> </ul>	Initial Post: May 27 Final Post: May 29
	Class Discussions <ul style="list-style-type: none"> <li>● Lectures, Readings and Resources</li> </ul>	Post Report-out: May 29 Initial Post: May 30 Final Post: May 31
<b>Week 2: Theory and Models</b>		
<b>Dates</b>	<b>Activity</b>	<b>Due Date</b>
<b>Jun 1 – Jun 7</b>	Module 2 Readings and Resources	Jun 4
	Module 2 Lectures (Supplementary)	Jun 4
	Quiz: Module 2 Readings	Jun 7
	Project 1: Logic Model <ul style="list-style-type: none"> <li>● Read Project 1 Instructions</li> <li>● Post Questions in Project 1 Class Discussion</li> </ul>	Project 1 Due: Jun 21
	Class Discussions <ul style="list-style-type: none"> <li>● Lectures, Readings and Resources</li> <li>● Logic Model Exercise</li> <li>● Project 1: Logic Model</li> </ul>	Initial Post: Jun 4 Final Post: Jun 7
<b>Week 3: Qualitative Research</b>		
<b>Dates</b>	<b>Activity</b>	<b>Due Date</b>
<b>Jun 8 - Jun 14</b>	Module 3 Readings and Resources	Jun 11
	Module 3 Lectures (Supplementary)	Jun 11
	Quiz: Module 3 Readings	Jun 14
	Class Discussions <ul style="list-style-type: none"> <li>● Lectures, Readings and Resources</li> <li>● Qualitative Analysis Exercise</li> <li>● Project 1: Logic Model</li> </ul>	Initial Post: Jun 11 Final Post: Jun 14
<b>Week 4: Measurement</b>		
<b>Dates</b>	<b>Activity</b>	<b>Due Date</b>
<b>Jun 15 - Jun 21</b>	Module 4 Readings and Resources	Jun 18
	Module 4 Lectures (Supplementary)	Jun 18
	Quiz: Module 4 Readings	Jun 21
	Project 1 Logic Model Due	Project 1 Due: Jun 21

	Class Discussions <ul style="list-style-type: none"> <li>• Lectures, Reading and Resources</li> <li>• Measurement Exercise</li> </ul>	Initial Post: Jun 18 Final Post: Jun 21
<b>Week 5: Sampling in the Real World</b>		
<b>Dates</b>	<b>Activity</b>	<b>Due Date</b>
<b>Jun 22 - Jun 28</b>	Module 5 Readings and Resources	Jun 25
	Module 5 Lectures (Supplementary)	Jun 25
	Quiz: Module 5 Readings	Jun 28
	Project 2: Survey Design <ul style="list-style-type: none"> <li>• Read Project 2 Instructions</li> <li>• Post Questions in Project 2 Class Discussion</li> </ul>	Project 2 Due: Jul 19
	Class Discussions <ul style="list-style-type: none"> <li>• Lectures, Readings and Resources</li> <li>• Sampling Exercise</li> <li>• Project 2: Survey Design</li> </ul>	Initial Post: Jun 25 Final Post: Jun 28
<b>Week 6: Primary Data and Survey Research</b>		
<b>Dates</b>	<b>Activity</b>	<b>Due Date</b>
<b>Jun 29 - Jul 5</b>	Module 6 Readings and Resources	Jul 2
	Module 6 Lectures (Supplementary)	Jul 2
	Quiz: Module 6 Readings	Jul 5
	Class Discussions <ul style="list-style-type: none"> <li>• Lectures, Readings and Resources</li> <li>• Survey Research Exercise</li> <li>• Project 2: Survey Design</li> </ul>	Initial Post: Jul 2 Final Post: Jul 5
<b>Week 7: Secondary Data</b>		
<b>Dates</b>	<b>Activity</b>	<b>Due Date</b>
<b>Jul 6 - Jul 12</b>	Module 7 Readings and Resources	Jul 9
	Module 7 Lectures (Supplementary)	Jul 9
	Quiz: Module 7 Readings	Jul 12
	Class Discussions <ul style="list-style-type: none"> <li>• Lectures, Readings and Resources</li> <li>• Secondary Data Exercise</li> <li>• Project 2: Survey Design</li> </ul>	Initial Post: Jul 9 Final Post: Jul 12
<b>Week 8: Causation</b>		
<b>Dates</b>	<b>Activity</b>	<b>Due Date</b>
<b>Jul 13 - Jul 19</b>	Module 8 Readings and Resources	Jul 16
	Module 8 Lecture (Supplementary)	Jul 16

	Quiz: Module 8 Readings	Jul 19
	Project 2 Survey Design Due	Project 2 Due: Jul 19
	Class Discussions <ul style="list-style-type: none"> <li>● Lectures, Readings and Resources</li> <li>● Facebook Linked to Flunking?</li> </ul>	Initial Post: Jul 16 Final Post: Jul 19
<b>Week 9: Observational Studies</b>		
<b>Dates</b>	<b>Activity</b>	<b>Due Date</b>
<b>Jul 20 - Jul 26</b>	Module 9 Readings and Resources	Jul 23
	Module 9 Lectures (Supplementary)	Jul 23
	Quiz: Module 9 Readings	Jul 26
	Project 3: Review of Published Studies <ul style="list-style-type: none"> <li>● Read Project 3 Instructions</li> <li>● Post Questions in Project 3 Class Discussion</li> </ul>	Project 3 Due: Aug 11
	Class Discussions <ul style="list-style-type: none"> <li>● Lectures, Readings and Resources</li> <li>● Study Shows Link Between Gun Ownership and Homicide</li> <li>● Project 3: Review of Published Studies</li> </ul>	Initial Post: Jul 23 Final Post: Jul 26
<b>Week 10: Randomized, Natural and Quasi Experiments</b>		
<b>Dates</b>	<b>Activity</b>	<b>Due Date</b>
<b>Jul 27 – Aug 2</b>	Module 10 Readings and Resources	Jul 30
	Module 10 Lectures (Supplementary)	Jul 30
	Quiz: Module 10 Readings	Aug 2
	Class Discussions <ul style="list-style-type: none"> <li>● Lectures, Readings and Resources</li> <li>● Camden Gun Buyback</li> <li>● Project 3: Review of Published Studies</li> </ul>	Initial Post: Jul 30 Final Post: Aug 2
<b>Week 11: Research, Policy and Administration</b>		
<b>Dates</b>	<b>Activity</b>	<b>Due Date</b>
<b>Aug 3–Aug 9</b>	Module 11 Readings and Resources	Aug 6
	Module 11 Lectures (Supplementary)	Aug 6
	Quiz: Module 11 Readings	Aug 9
	Class Discussions <ul style="list-style-type: none"> <li>● Lectures, Readings and Resources</li> <li>● Does Rail Transit Investment Encourage Neighborhood Retail Activity?</li> <li>● Project 3: Review of Published Studies</li> </ul>	Initial Post: Dec 6 Final Post: Dec 9



<b>Week 12: Wrap-up and Supplementary Materials</b>		
<b>Dates</b>	<b>Activity</b>	<b>Due Date</b>
<b>Aug 10 - Aug 12</b>	Module 12-13 Readings, Lectures and Resources (Supplementary)	N/A
	Project 3 Review of Published Studies Due	Project 3 Due: Aug 11