

## PAF 9172 Regression & Analysis II

Tues 6:05pm-9:00pm — A - 17 Lex 712

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**Office Hours:** by appointment

**Course Description:** This is a graduate level course which builds on the skills of data analysis and statistical inference learned in PAF 9170. This course exposes students to issues central to understanding and applying modern research to public management and policy making. These issues include the use of theory and models, identifying causes, experiments and quasi-experiments, the logic of control variables and the interpretation of multiple regression, measurement concepts and methods, qualitative methods, and sampling. The emphasis is on learning these ideas through practice with many different examples of real-world research and empirical evidence. Ethical, political and other contextual factors will be integrated.

**Course Format and Objectives:** As in any methods course, this class requires much work in and outside of the classroom. Active and informed participation is expected from every student. Class sessions will be a combination of lecture, discussion, and in-class exercises. Lecture material is intended to supplement, not review, the readings. Because the readings are a major source of learning, students are expected to study this material as it is assigned and to come to class ready and prepared. At the end of this course students will be able to:

- Describe the role of research in advancing knowledge and formulating policy.
- Articulate the importance of measurement, sampling, surveys, and other forms of data and recognize the trade-offs involved in measurement and sampling.
- Distinguish when to use qualitative/quantitative/or mixed methods research designs.
- Analyze a research project's methodology for its strengths, weaknesses and biases and properly use descriptive and multivariate statistical terms.
- Produce statistics to describe research results, as well as interpret and ascribe significance to those statistics.
- Analyze, evaluate, and draw valid conclusions from social science research such as policy, applied, or evaluation research.
- Design social science research such as policy, applied, evaluation, research using qualitative or quantitative methods.
- Conduct social science research such as policy, applied, or evaluation research.

**Required Text and Material:** Remler, D. K. and Van Ryzin, G.G. (2014). *Research Methods in Practice: Strategies for Description and Causation*. Los Angeles, CA: Sage Publications.

Software: SPSS and STATA will be used in the course. If the student would like to use another software such as Excel that is fine. SPSS is available at the computer labs. And if you'd like to purchase STATA, the simplest method is a 6-month lease for Small STATA software with PDF documentation (\$45) Be sure to include your Baruch email when ordering:

<http://www.stata.com/order/new/edu/gradplans/student-pricing/>

A basic calculator that can take square roots and raise number to powers is required.

Assignments, additional readings, and course-related materials will be posted at the course web page on Blackboard.

**Articles and Other Readings:** Additional readings will be posted on Blackboard. The reading must be done *before* the class during which they will be discussed. The readings are as follows:

- Kaplan, SA and KE Garrett. 2005. "The Use of Logic Models by Community-Based Initiatives." *Evaluation and Program Planning* 28: 167-172.
- East, Patricia L., Ashley Slonim, Emily J. Horn, Cyndy Trinh and Barbara T. Reyes. 2009. "How an Adolescent Childbearing Affects Siblings Pregnancy Risk: A Qualitative Study of Mexican American Youths." *Perspectives on Sexual and Reproductive Health* 41(4): 210-217.
- Warren, C., Kimani J., Kivunaga, J., Mdawida, B., Ndwiga, C., McCarthy, K., and Blanc, A. 2014. "Validating the Indicators of the Quality of Maternal Health Care, Final Report: Kenya." Nairobi: Population Council.
- Medicus Firm. 2009. "Health Reforms May Lead to Significant Reduction in Physician Workforce" an associated appendix and press notices about this.
- Harris, Judith Rich. Chapter 2 "The Nature and Nurture of the Evidence" from *The Nurture Assumption: Why Children Turn Out the Way They Do*, Touchstone, 1998.
- Goldin, Claudia. 2014. A Grand Gender Convergence: Its Last Chapter. *American Economic Review* 2014, 104(4): 1091-1119.
- Evans-Whipp, et al. 2015. "Longitudinal Effects of School Drug Policies on Student Marijuana Use in Washington State and Victoria, Australia." *American Journal of Public Health*, published online.
- Jacobs, Erin. 2012. "Returning to Work After Prison: Final Results From the Transitional Jobs Reentry Demonstration" MDRC Report. [http://www.mdrc.org/sites/default/files/full\\_626.pdf](http://www.mdrc.org/sites/default/files/full_626.pdf)
- Cattaneo, Matias D., Sebastin Galiani, Paul J. Gertler, Sebastin Martinez, Rocio Titiunik. 2009. "Housing, Health and Happiness." *American Economic Journal: Economic Policy* 1(1): 75-105.
- Sommers, Benjamin D., Sharon K. Long, and Katherine Baicker. 2014. "Changes in Mortality After Massachusetts Health Care Reform: A Quasi-experimental Study." *Annals of Internal Medicine* 160(9): 585-593

**Course and Teaching Philosophy:** This course aims to improve your thinking about research and evidence. You should finish this course with an enhanced ability to think analytically—to take apart complex multi-stage, multi-path phenomena; and to think critically—to criticize the research methods or conclusions of others.

You will often be asked to explain things in words or to make interpretations. For much of the material, including exam questions and assignments, there are no clear “right answers.” Researchers often disagree with one another. Often there is no good way to definitively answer a question. While there are often no right answers, there are wrong answers—specifically, answers that make no logical sense.

You are responsible for making sure that you understand the material. Please come to me for help as soon as you need it. Do not let yourself fall behind, because concepts tend to build on one another. If you are confused in class, please speak up and ask questions. Sometimes I will decide that we need to move on and ask you to follow up outside of class, but it is never bad to ask. Your question may help others who are confused and will help me gauge student understanding. If you take responsibility for making sure that you understand the material and seeking help when you don’t, I will take responsibility for being there to help you.

This course is a lot of work. Some students find this way of thinking unfamiliar and it takes time to “get it.” Make sure that you allow enough time for the assignments and enough time to try them once, put them aside, and return to them. Expect to spend about 6-9 hours per week, in addition to time in class, doing work for this class.

**Grading:**

<b>Grade Distribution</b>		<b>Grade Scale</b>								
		Min	Max	Grade	Min	Max	Grade	Min	Max	Grade
Class Participation	15%	97.0	100	A+	93.0	96.9	A	90.0	92.9	A-
Quizzes	10%	87.0	89.9	B+	83.0	86.9	B	80.0	82.9	B-
Practice Problems	35%	77.0	79.9	C+	73.0	76.9	C	70.0	72.9	C-
Assignments	40%	67.0	69.9	D+	63.0	66.9	D	60.0	62.9	D-
		0.00	59.9	F						

**Course Requirements:**

- **Class Participation [15%]**

- You are required to attend class. If you absolutely must miss a class, you are responsible for the material covered during your absence. You are also expected to do the readings ahead of time, participate actively during discussions, and contribute to class discussions in meaningful and thoughtful ways. Class discussion depends on your participation and engagement with the material; therefore, you will be expected to talk during class discussions. Class participation is measured by the quality of your thoughtful contributions to the class discussion. Therefore, class participation grade will be based on:

- \* Attempting to answer questions posed in class. Remember that trying and getting something wrong is an excellent way to learn.
- \* Asking questions; saying “I didn’t understand. Could you explain that again?” can be a very useful question
- \* Whether you did the reading and how well you grasped it
- \* Actively engaging in in-class exercises and discussions, offering examples

\* Attendance

Feel free to ask for feedback on how you are doing participation-wise at any time.

– **Attendance policy**

Regular class attendance and participation will be a deciding factor in your participation grade. ***Three unexcused absences will be allowed; a fourth unexcused absence will automatically lower your final grade three points.*** For example, if your final is a 93, your grade will be reduced by three points to a 90. If there are more unexcused absences, the same policy will apply subsequently, which could make you have to repeat the course. An unexcused absence refers to missing class for a non-university approved reason or personal reason other than sickness and/or a family emergency. Last minute emails and/or phone calls will not be accepted, unless in the case of a documented medical emergency. Only university-approved reasons and illness with written documentation by physician will be accepted as excused absences, and must be reported within three days of the absence date. ***Regular tardiness can be a distraction to the class and a sign of disrespect to the professor, thus three incidents will equal one unexcused absence.*** If you need to leave early, please let me know in advance at the beginning of class.

– **Problem sets and in-class group exercise**

For most classes, a problem set will be handed out in class and due the next class. These reinforce content taught already (more detail below). We will go over these problem sets in the beginning of each class.

During most classes, there will also be an in-class group exercise to help you learn and reinforce the new content of that class.

Lectures will not constitute a significant portion of the course. You are expected to have read the chapters carefully *before* class.

• **Quizzes [10%]**

- In order to ensure adequate reading of the textbook and comprehension of materials, throughout the semester you will have several quizzes (9 total). These will be 10 minute, 5 question multiple-choice quiz on the readings (both the chapters and the articles) at the beginning of most classes. The quizzes do not demonstrate having learned the material; they are designed only to make sure that you have done the reading. Some questions will require simple applications of the concepts taught. There will be no make-up sessions on quizzes, so please think twice before missing class or arriving late as the quizzes are given out at the beginning of class.

• **Problem Sets [35%]**

- There are 10 problem sets (PSs) in this class. Problem sets will be hand out at the end of class, and also posted on Blackboard under Course Documents. Problem sets should be handed in at the beginning of the next class section. Because we will discuss these, you might want to make two copies (one to hand in and another for your reference). **Problem sets may NOT be handed in late.** Note that the lowest two PS grades will be dropped.

- **Assignments [40%]**

- Throughout the semester you will have four take-home assignments, each worth 10% of your final grade. More details will be given out in class about each.

*Late assignment policy:* Assignments are due in hard copy at the end of class. Turning assignments on time is expected from all students. However, I will accept late assignment without penalty within 5 hours of its deadline (which means you have until 2:00 am to submit it on the day it is due). I understand that sometimes life happens, so if you cannot turn in an assignment by the due date indicated on the course schedule, let me know immediately. I will allow a *one time* 24 hour extension without any reason required per student. You must email me requesting the 24 hour extension before the deadline. Otherwise, students will be penalized one full grade per day after the deadline and no assignments will be accepted after three days. Late assignments will only be accepted without penalty if you have a documented excuse (e.g. illness, death in family, illness of child, unforeseeable work emergency, or is undergoing extraordinary circumstances). If that's the case, informed me as soon as possible, before the assignment is due by email.

*Assignment Collaboration Policy:* You are free to collaborate on the assignments. In fact, you are encouraged to work in groups: working in groups is an excellent way to learn. However, you must individually write up your own assignment in your own words. Frequently students (and professors!) think that they understand something, but when they sit down to try it by themselves, they realize that they do not. Writing out your assignment in your own words is how you will know that you really understand.

If I receive assignments that are verbatim copies or simple paraphrases of one another (wholly or in substantial part), I will mark both assignments down substantially (possibly to zero credit). Do not give other students electronic copies of your assignment.

## **Course Policies**

*This syllabus is subject to revisions and changes at the discretion of the Professor. Any changes will be discussed in class and posted on Blackboard so you can plan accordingly.*

**Electronic Devices:** Please do not text or use in any way your cell phone during class. If essential, you may set your phone to vibrate and leave the class to respond to *emergency* calls or texts.

Technology both within and outside the classroom should enable your learning experience, not hinder it. If you decide to use a laptop in class understand that they are to be used **ONLY** for note taking, to follow the slides, or to work on Excel/STATA when appropriate. The laptop should not be used to browse the internet, answer emails, check social media, etc. If you use the computer to surf the web on non-class related sites, know that you are doing so at your own risk. Bottom line: you are wasting valuable time. Also, be mindful of those seating close to you. Be aware that you won't be able to use your laptop for the final exam, only notes on paper will be allowed. For more information on why I discourage laptop use in the classroom, please read: Sana, Faria, Tina Weston, and Nicholas J. Cepeda. 2013. "Laptop multi-tasking hinders classroom learning for both users and nearby peers." *Computers & Education*. Vol. 62: 24-31.

**Blackboard:** Blackboard is used a lot in this class. This is how I will communicate with you. *It is your responsibility to check Blackboard on a regular basis.* You are responsible for announcements made through blackboard.

**Class Etiquette:** I expect students to be attentive during class and to be courteous and polite during discussions. You are expected to listen respectfully to me and to other students when speaking. Racism, sexism, classism, ageism, homophobia, Islamophobia, anti-Semitism, and other forms of bigotry are inappropriate to express in this class. I respect all students and viewpoints and expect you to extend the same courtesy to your classmates and to me. Disruptive students will be asked to leave and may be subject to disciplinary action.

**Academic Honesty:** *“Academic dishonesty is unacceptable and will not be tolerated. Cheating, forgery, plagiarism and collusion in dishonest acts undermine the college’s educational mission and the students’ personal and intellectual growth. Baruch students are expected to bear individual responsibility for their work, to learn the rules and definitions that underlie the practice of academic integrity, and to uphold its ideals. Ignorance of the rules is not an acceptable excuse for disobeying them. Any student who attempts to compromise or devalue the academic process will be sanctioned.”*

The entire text on Academic Integrity can be accessed online at:  
[https://www.baruch.cuny.edu/academic/academic\\\_honesty.html](https://www.baruch.cuny.edu/academic/academic\_honesty.html)

## **Student Academic Support Services**

### **Student Academic Consulting Center (SACC)**

*Location:* Newman Vertical Campus, Room 2-116

The Student Academic Consulting Center coordinate peer tutoring and academic support for Baruch College’s undergraduates. SACCs mission is to help the students succeed academically during their college years and later in their chosen professions by helping them develop the skills and knowledge necessary for workplace success. One-to-one and group tutoring sessions are available for most undergraduate courses, as are workshops designed specifically to assist students with historically challenging coursework and concepts such as MTH 2003, MTH 2205, and MTH 2207. For more information: <http://www.baruch.cuny.edu/sacc/index.html>

### **The Writing Center**

*Location:* Newman Vertical Campus, Room 8-185 and Newman Library Reference Desk

The Writing Center provides free support for undergraduate and graduate student writers at Baruch to improve their writing and English language skills. In the NVC location the Center offers 50 minute one-to-one sessions on scheduled and walk in basis (when available), as well as reader responses via email (eTutoring), online chat, and small-group workshops; at the Library, they offer both scheduled 50 minute sessions and dedicated 20 minutes walk-in session. The goal is to strengthen student’s long term writing and English language skills, often by concentrating on a specific writing assignment or project. Students from all discipline and all levels of writing and English language proficiency are welcome. The Writing Center is open whenever classes are in session, including winter and summer terms. For more information: <https://writingcenter.baruch.cuny.edu/>

### **Tools for Clear Speech**

*Location:* Administrative office at NVC 6-121

The Tools for Clear Speech is an academic support unit that improves the oral communication skills of English language learners (ELLs) and nonnative English speakers at Baruch College. Oral comprehensibility

is essential for college and workplace success, and this program offers students weekly one-to-one pronunciation tutorials, a workshop series, conversation hours, an innovative oral communication video assessment, and some of the most advanced tutorial websites and software programs available. For more information: <https://tfcs.baruch.cuny.edu/>

### **The Office of Services for Students with Disabilities**

*Location:* NVC 2-272 — Tel:646-312-4590.

Student Disability Services provides appropriate accommodations to students with disabilities to promote equal access to the college's programs and services. They advocate for and create an accessible college environment for students with disabilities, support faculty in the classroom, and provide assistive technology that empowers students to self-advocate and develop the skills necessary to succeed academically. Accommodations include but are not limited to: extended time for exams, tests in alternate formats, assistive technology, note takers, captioning, interpreters, tutoring accommodations, and changes in curriculum.

It is college policy to provide Accommodations and Academic Adjustments to students with disabilities. Any student who has a disability who may need accommodations in this class should register with Student Disability Services which is located in NVC 2-272 as early as possible. All discussions will remain confidential. For more information: <http://www.baruch.cuny.edu/studentaffairs/ossd/disabilityServices.htm>

### **Health and Self-Care**

It is important that we take care of ourselves inside and outside of class. This includes taking care of our mental, physical, and spiritual health and wellbeing. Toward that end, there are many different kind of support services on campus such as the Counseling Center, Health Services, the Campus Intervention Team and the Office of the Dean of Students. If you are concerned about yourself or a friend that is struggling, please contact the Counseling Center. All services are confidential and free of charge.

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Office of the Dean of Students for support. Furthermore, if you are comfortable in doing so, please let me know. This will enable me to take the necessary steps to provide you with the support, and resources you need. For more information:

<https://www.baruch.cuny.edu/studentaffairs/counselingCenter.htm>

<http://www.baruch.cuny.edu/studentaffairs/healthServices.htm>

<http://www.baruch.cuny.edu/studentaffairs/cit.htm>

Resources for food and shelter security:

*City Harvest:* <http://foodhelp.nyc/locations-en/>

*Safe Horizon:* <https://www.safehorizon.org/domestic-violence-shelters/>

*Nazareth Housing:* <http://nazarethhousingnyc.org/>

*New Destiny Housing:* <http://www.newdestinyhousing.org/>

## Class Schedule

Week 1	Aug 29	<b>Introduction, Research in the Real World</b> Reading: Chapter 1
Week 2	Sep 5	Lecture Topic: Theory and Models Reading: Chapter 2, Kaplan & Garrett
Week 3	Sep 12	Lecture Topic: Theory and Models (cont) Qualitative Methods Reading: Chapter 3, East et al <b>Due: PS 1 on chapter 2</b>
Week 4	Sept 19	<b>No class - Academic Calendar</b>
Week 5	Sep 26	Lecture Topic: Qualitative Methods (cont) Measurement Reading: Chapter 4 <b>Due: PS 2 on chapter 2 and 3</b> <b>Due: Assignment #1</b>
Week 6	Oct 3	Lecture Topic: Measurement (cont) Sampling Reading: Chapter 5, Warren et al <b>Due: PS 3 on chapter 4</b>
Week 7	Oct 10	Lecture Topic: Sampling (cont) Primary Data Reading: Chapter 7, and Medicus <b>Due: PS 4 on chapter 5</b>
Week 8	Oct 17	Lecture Topic: Primary Data (cont) Secondary Data Collection Reading: Chapter 6, and Big Data <b>Due: PS 5 on chapter 7</b>
Week 9	Oct 24	Lecture Topic: Causation Reading: Chapter 11, Harris <b>Due: Assignment #2</b>
Week 10	Oct 31	Lecture Topic: Observational Studies Reading: Chapter 12 <b>Due: PS 6 on chapter</b>
Week 11	Nov 7	Lecture Topic: Stats Review Reading: Chapters 8, and 9 <b>Due: PS 7 on chapter 12</b>

Week 12	Nov 14	Lecture Topic: Multiple Regression Reading: Chapters 10, 13, and Goldin <b>Due: Assignment #3</b>
Week 13	Nov 21	<b>No class - Academic Calendar</b>
Week 14	Nov 28	Lecture Topic: Multiple Regression (cont.) Randomized Experiments Reading: Chapter 14, Evans-Whipp et al <b>Due: PS 8 on chapter 13</b>
Week 15	Dec 5	Lecture Topic: Natural and Quasi Experiments Reading: Chapter 15, Jacob, Catteneo et al, Sommers et al <b>Due: PS 9 on chapter 14</b>
Week 16	Dec 12	Lecture: The Politics, Production and Ethics of Research Course Wrap Up Reading: Chapter 16 <b>Due: PS 10 on chapter 15</b> <b>Due: Assignment #4</b>

**Have a good Winter Break!**



**Student Information and Acknowledgment**  
**PAF 9172 Regression & Analysis II**  
**Fall 2017**

**Student Information**

Name:

Preferred name:

Email Address:

Major:

Academic Class:   Freshman [ ]      Sophomore [ ]      Junior [ ]      Senior [ ]

List all classes you are taking this semester:

Besides going to college, are you currently working? If so, how many hours per week?

No [ ]      Part-time I (up to 20 hrs) [ ]      Part Time II (21 hrs to 31 hrs) [ ]

Full-time I (32 hrs to 40 hrs) [ ]      Full Time II (more than 40 hrs) [ ]

Anything else you'd like me to know that might impact your performance in this class:

**Student Acknowledgment**

I have read and discussed the syllabus for "Regression and Analysis II."

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Signature

Date