Baruch COLLEGE | MARXE SCHOOL OF PUBLIC AND INTERNATIONAL AFFAIRS | CUNY

PAF 9270: Data Collection and Description Spring 2024

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Expect quick email replies Monday-Friday 9-4.

Class Day(s) and Hours: Mondays 6:05pm to 9pm
Class Location: Vertical Campus 55 Lexington Avenue at 24th Street, 4th Floor, Room 4-175
The first two classes will be in the computer lab room 6-125, see page 5.

Drop-In Hours: Tuesdays 11am-12pm. No appointment necessary, join the Zoom meeting ID 816 8507 5706, passcode 097045.

Appointments: Send an email or speak with the instructor to request an appointment. Type "9270" somewhere in the email. Same-day and short-notice appointments are often accommodated Mondays-Fridays. If you want one-on-one Excel help, we can set up a Zoom where you share your screen.

Course Description & Learning Goals

Data Collection and Description (PAF 9270) is the first course in the research methods sequence. This class teaches students how to collect qualitative and quantitative data for domestic and international policy or practice purposes and how to analyze and present data for descriptive purposes. It also teaches students how to interpret existing descriptive analyses to extract relevant and accurate information. The course will introduce the following topics: research questions and concepts, descriptive vs. causal research, case-oriented vs. variable-oriented approaches, sampling, data cleaning, and data collection for organizations. Students will develop the following specific skills: using spreadsheets, univariate and bivariate descriptive statistics, data visualization, conducting interviews and qualitative observation, analyzing and coding qualitative data, and designing and assessing measures including survey questionnaires.

Upon completion of PAF 9270 course students will be able to:

1. Determine how to collect qualitative and quantitative data to serve a specific domestic or international policy or practice purpose and conduct basic data collection.
2. Describe basic research concepts, including generalizability, descriptive and causal research, variable types, causal mechanisms, populations and samples, case-oriented research, and variable-oriented research.
3. Analyze, interpret, and present qualitative and quantitative data for descriptive purposes, using common workplace software.
4. Critically evaluate existing descriptive analyses of both qualitative and quantitative data and be able to draw conclusions that are valid and useful for policy, program, management, and related purposes.
5. Identify and use reports, databases and dashboards.

Monday Class Meetings: The class is designed for students to learn all topics efficiently during class sessions. We will introduce concepts, practice with datasets and Excel, and go through interactive exercises and practice problems pertaining to the topics on the page 5 schedule. We may also skip around to different topics. Examples of how the course content is used in practice are provided in the classroom, not necessarily through assignments. Slides and handouts used during class meetings are posted on Blackboard after class.

Topic Videos and Slides: Course topics are listed on page 5. There are videos and audio-free slides for each topic on Blackboard. Students who wish to work ahead, review a topic, or otherwise learn outside of class meetings can use the videos.

Class Attendance Policy:

- Attendance at the first class meeting is required. After that, attendance is encouraged but not required. Those students who learn best and earn the highest grades typically attend class.
- Evidence of consistent attendance and class participation can raise a student's semester grade in an amount to be determined at the end of the semester.

Excel (required): Most assignments require Microsoft's Excel. Baruch provides access to Excel for students. Use computers on campus, or go to Office 365 through BCTC: https://bctc.baruch.cuny.edu/students/office365/. For help accessing software, contact BCTC 646-312-1010 or helpdesk@baruch.cuny.edu.

Grades

5% Assignment 1 Upload on time
80% Timely assignment uploads and incorporation of feedback into revisions*
15% Final Exam, grade based on % of questions answered correctly; cumulative, in classroom

During the semester, assignments will be assessed with narrative reports and feedback rather than as letters or numbers.

Each upload will be marked with "5555". Read the feedback and ignore the number; this number will not change regardless of assignment revisions, completion or improvement.

After you upload an assignment, the instructor will provide feedback on the following Thursday or sooner.

How are you doing so far? The instructor will write a Mid-Term Check-In report and an End-Term Assessment report. Before the Mid-Term Assessment, students should complete two assignments with sufficient time to receive and incorporate revisions and any revisions. The End-Term Assessment is based on final feedback for all assignments.

- Assignment 1 Upload: Students are required to upload assignment 1 by the due date (see page 5). The assignment should be complete or nearly complete. It's ok if there are errors or a few skipped questions. The assignment can be revised and reuploaded later. This part of the semester grade is based on uploading a reasonable effort on time. Due date is on page 5.
- Mid-Term Check-In: Students should have uploaded two of the four required assignments by the mid-term check-in date (see page 5), and should have started incorporating instructor feedback into revisions. For a semester stronger grade, upload all components of assignments 1 and 2 before the mid-term check-in along with a revision that incorporates the instructor's feedback on one or both assignments.
- End-Term Assessment: Students who *complete* all assignments will pass the class. Students who incorporate the instructor's feedback into revisions will receive higher grades.
- Final Exam: The exam content is cumulative. Students may use one page of hand-written notes, both sides, any colors. Students may use a simple calculator. All exam questions are multiple choice or short answer. Excel is not required.

*Overall letter grades for the semester: Students who upload assignments early in the semester and upload revisions that incorporate instructor feedback throughout the semester, showing progress in learning the material, will receive an A or B grade. Students who complete all assignments, with few to 0 skipped questions, and who do not incorporate instructor feedback, will receive a C grade or better. Students who do less may fail the class. "*Timely*" assignments are uploaded approximately according to the schedule shown on page 5, which allows time to learn the material, receive feedback, and incorporate feedback into any revisions. "*Complete*" assignments include attempts to address all parts of the assignment with no skipped questions.

Assignments:

- There are four assignments.
- Hand in assignments by uploading files to Blackboard.
- The instructor uses Blackboard to give feedback.
- All assignments can be revised.
- **Re-upload revised assignments until the instructor's feedback suggests there is no more room to improve**.
- Students may upload any assignments at any time. All uploads are read, and feedback is provided on the following Thursday or sooner.
- Assignments cover the topics listed on page 5, also listed on each assignment.
- Always interpret numbers to say what they mean, even if the interpretation is obvious or similar to an earlier question. Use the Nonprofits Example (on Blackboard) as a guide.
- All data and codebooks are on Blackboard in the Assignments folder.
- **If your assignment is incomplete but you want to know if you're on the right track, upload your incomplete assignment.** You can always finish it before the end of the semester.
- Do not email your assignment to the instructor. The only way to hand it in is by uploading it to Blackboard.

If unfortunate circumstances prevail, please do not send accident reports, doctors notes, etc. to the instructor. Instead, let the instructor know whether you feel you can continue with the class, or if you would like to discuss options.

Can't find the instructor's feedback? The instructor will type feedback to all uploaded assignments in the "Feedback to Learner" area of Blackboard on the Thursday after you uploaded or sooner. If you can't see my notes, try https://youtu.be/qFTq_bKpQX8 or contact BCTC, ask in class, or email alexis.perrotta@baruch.cuny.edu.

Collaboration and Academic Integrity:

Students are encouraged to study together, however each person must produce their own work and students may be asked to show how it was generated. **Choose your own variables, and write your own sentences.** Do not hand in work done by anyone else with your name at the top. By participating in this course students agree to fully support Baruch College's policy on Academic Honesty.[1] Students presenting atypical work may be asked for explanation or demonstration of skills. Copying, plagiarism and cheating will result in a grade penalty. A report of suspected academic dishonesty may be sent to the Office of the Dean of Students.

[1] Baruch College Student Development & Counseling. (2002, August). *Academic Honesty.* https://www.baruch.cuny.edu/academic/academic_honesty.html.

Monday Class Meeting Dates, Topics, Suggested Upload Schedule

1. Jan 29[+] Excel - - meet in the computer lab Room 6-125
2. Feb 5 Measures & Units of Analysis - - meet in the computer lab Room 6-125

Assignment 1 Upload due Monday Feb 12 (no class that day)*

3. Feb 22 Thursday Percents, Rates with a Base, Percentiles Regular Classroom 4-175
4. Feb 26 Central Tendency, Spread, Types of Studies, *Outliers*
5. Feb 28 Wednesday Crosstabulation; X and Y

Upload Assignment 2

6. Mar 4 Crosstabs with Column Percents and Bivariate Relationships

Mid-Term Check-In March 7

7. Mar 11 Correlation and scatterplots; *Control variables*

Upload Assignment 3

8. Mar 18 Cleaning Data; Visualization, *Dashboards* – meet in computer lab Room 6-125
9. Mar 25 Sampling, Sampling Gone Wrong Regular Classroom 4-175
10. Apr 1 Surveys, Measurement Gone Wrong
11. Apr 8 Qualitative 1: overview and interview; *Causal mechanisms*
12. Apr 15 Qualitative 2: field notes and coding

Upload Assignment 4

13. May 6 Time Series Data

All Revisions Uploaded

All Assignments/Revisions Due for End-Term Assessment May 9 at 10am

14. May 13 Semester Review

Final Exam May 20 6-9pm

[+]If you cannot attend class on Jan 29, email alexis.perrotta@baruch.cuny.edu "9270"

* Assignment 1 has a firm due date. Assignment revisions (all assignments) will not be accepted after May 9. All other upload dates on this page are suggested. Respond to feedback by uploading revisions throughout the semester.

All topics listed above have videos and slides on Blackboard unless *italicized.*

Basics

To get a share, rate, proportion, or **percent,** divide the number of cases (also called units of analysis) with the characteristic by the total number of cases (part ÷ whole). Whatever you want the percent "of" is the "whole".

Example:

> Birmingham City collected about ***$2,000,000 from fines and fees*** revenue last year.
>
> $81,000 was from libraries (fines for returning library books late).
>
> What percent **of** ***Birmingham fines and fees revenue*** was from libraries?
>
> $81,000 / $***2,000,000*** = .04 or 4%

To get any **rate** "per ____ units of analysis", multiply the percent by ____ .
To get a rate "per 10,000 people", multiply the percent by 10,000.

Example:

> For every $100 of ***fines and fees revenue*** collected, how much came from libraries?
>
> .04 * $100 = $4
>
> or
>
> 4% * $100 = $4
>
> For every $100 collected from fines and fees, $4 was from library fines.
> Or, for every $100,000 collected from fines and fees, $4,000 was from library fines.
> That's not how much was actually collected from library fines, it's just expressing the 4% a different way.

To get ***percentage point*** **difference**, subtract one percent from another percent.

To get the **percent difference** between any two numbers, whether or not they are already percents, use the formula (A – B) ÷ B

Percentiles are the percent of cases (also called units of analysis) with that value or a lower value.
For example, if the 10th percentile value is 800 pounds, then 10% of cases are 800 pounds or less.
Median is the same thing as **50th percentile**.

Mean is calculated by adding up all the values and dividing by the number of cases.
Mean is the same thing as **average**.

Resources and General Policies

Tutoring: Baruch Academic Support details will be posted on Blackboard when available.

Non-Discrimination:

All complaints under CUNY's Policy On Equal Opportunity And Non-Discrimination should be reported to Baruch's Office of Diversity, Compliance & Equity Initiatives at: Diversity@baruch.cuny.edu.

The schedule on page 5 follows Baruch's **Academic Calendar,**
https://www.baruch.cuny.edu/registrar/registration/academic-calendar.html.

Students with Disabilities:

Please tell the instructor about any disability which requires accommodation. It is college policy to provide accommodations and academic adjustments for students with disabilities. Any student with a disability who may need accommodations in this class is requested to speak directly to Student Disability Services as early in the semester as possible. All discussions will remain confidential.[2] disability.services@baruch.cuny.edu.

For additional information, please visit:
https://provost.baruch.cuny.edu/facultyhandbook/disabilities_provostsmemo/

The Writing Center:

The Writing Center offers free, professional writing support for all undergraduate and graduate students at Baruch, through one-to-one consultations, workshops, peer review groups, written feedback, online resources, and a journal of outstanding student writing. We support faculty through classroom visits, in-class workshops, referral forms, and workshop lesson plans, and we're always available for conversations about teaching and writing. More information is available at http://writingcenter.baruch.cuny.edu/, by calling (646-312-4012), or by emailing the Center at writing.center@baruch.cuny.edu.[3]

Campus Intervention Team:

The Campus Intervention Team (CIT) works together as a support system to provide assistance to students in crisis. Any member of the college community can reach out to the CIT to report a concern about a student. Additional information is available at: https://studentaffairs.baruch.cuny.edu/campus-intervention-team/, or by contacting them at: cit@baruch.cuny.edu or 646-312-4570.

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[2] McCarthy, Jim. (2019, November 21). *Memo from Provost regarding services for students with disabilities.* Retrieved from https://provost.baruch.cuny.edu/facultyhandbook/disabilities_provostsmemo/

[3] Baruch College. (2017, July 30). *Academic Support Services for Baruch Students.* Retrieved from https://provost.baruch.cuny.edu/facultyhandbook/academicsupportservices/

CUNY's Crisis Text Line is free, 24/7 support for those in crisis. Text CUNY to 741741 from anywhere in the US to text with a trained Crisis Counselor.

Marxe Advisement:

A full range of academic advisement services are provided to Marxe students to ensure the successful completion of their degree programs. Visit their website at: https://marxe.baruch.cuny.edu/academics/marxe-advisement/ or email them at: mspia.advisement@baruch.cuny.edu.

Career Services:

Launching a career or transitioning into a new one is a journey—and the Marxe Career Services office is here to guide you. From career consultations to on-campus recruiting, the Marxe community gets access to individualized services to help land a dream job in the public sector. Career counselors are here to support you through every stage of your career, as you evaluate your professional goals, develop a plan, and pursue opportunities.
Visit their website at: https://marxe.baruch.cuny.edu/student-opportunities/career-services/ or email them at: mspia.careerservices@baruch.cuny.edu.

This class uses the standard Baruch grade cut-offs for graduate instruction as shown here.

A	92.5–100.0
A-	90.0–92.4
B+	87.5–89.9
B	82.5–87.4
B-	80.0–82.4
C+	77.5–79.9
C	73.0–77.4
C-	70.0–72.9

Master of Public Administration (MPA) Competencies

1) To lead and manage in the public interest.
2) To participate in, and contribute to, the policy process.
3) To analyze, synthesize, think critically, solve problems and make evidence-informed decisions in a complex and dynamic environment.
4) To articulate, apply, and advance a public service perspective.
5) To communicate and interact productively.

APPENDIX: CURRICULUM MAPPING

PAF 9270: Data Collection and Description	
MPA Program Learning Goals (see Marxe website for all learning goals within degree)	Corresponding Course Goals
Competency #3: Critical Thinking and Analysis - Program Learning Goal A: Analyze, evaluate, and draw valid conclusions from social science research such as policy, applied, or evaluation research. *[Introduce]*	Analyze research findings presented in newspaper articles and reports from nonprofits and government agencies by identifying the units of analysis, variables and statistics presented.
Competency #3: Critical Thinking and Analysis - Program Learning Goal B: Design social science research such as policy, applied, or evaluation research using qualitative or quantitative methods. *[Introduce]*	Invent examples for the practical use of statistics, and discuss how quantitative and qualitative data collection and analysis are used on the job.
Competency #3: Critical Thinking and Analysis - Program Learning Goal C: Conduct social science research such as policy, applied, or evaluation research. *[Introduce]*	Create statistics from datasets.
Competency #3: Critical Thinking and Analysis - Program Learning Goal D: Apply social science or evaluation research findings to public policy questions and decision-making situations. *[Introduce]*	Analyze tables, graphs and scatterplots created to address or illustrate public policy concerns and public opinion, and interpret statistics from those products.
Competency #4: Public Service Perspectives - Program Learning Goal A: Identify varied and conflicting values or needs within the public sphere and understand the implications they have on	Discuss how the choice of variables, units of measurement and statistics can serve varying agendas even as they represent the same distributions.

management and/or policy decisions. *[Introduce]*	
Competency #5: Communications - Program Learning Goal A: Prepare clear, concise, well-organized, accurate and persuasive written materials that are tailored to an audience's level of experience and needs. *[Introduce]*	Interpret statistics by writing complete, coherent sentences.