Course title: Research Methods for Public Policy			
Course code: PPS 115	**No. of credits:** 3	**L-T-P:** 39-04-04	**Learning hours:** 45
Pre-requisite course code and title (if any): None			
Department: Department of Policy & Management Studies			
Course coordinator(s): Dr. Chandan Kumar		**Course instructor(s):** Dr. Chandan Kumar	
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Course type: Core		**Course offered in:** Semester 1	

Course description

This course is designed to orient students to essential research methods helpful for understanding and conceptualizing policy research and tools for administrative decision-making. Policy research often employs the methods of social science disciplines. The course aims to create a firm base on basic quantitative and qualitative research methods and tools, their appropriate application in policy research and to help students build perspectives based on robust evidence. This course comprises five modules: the first module discusses the basic features of research, with special reference to policy research; the second module provides crosscutting methods; the third and fourth modules provide an overview of qualitative and quantitative analytical methods, respectively; and the fifth module focuses on organizing and documenting analytic evidence.

Learning objectives:

- To orient students to basic and unique features of research in public policy.
- To enable students to design and carry out an independent study using quantitative or qualitative or mixed-method approaches.
- To help students develop the ability to select appropriate methods and tools for quantitative and qualitative data analyses and to draw inferences.
- To support students in developing or strengthening their skills in organizing, synthesizing, and documenting analytical evidence in the form of research/technical reports.

Course content

Module	Topic	L	T	P
1.	**Basic Features of Research in Public Policy** • Unique Features of Research in Public Policy • Basis Steps of Policy Analysis and Research for Evidence-based Policymaking • Research Ethics	6	0	0
2.	**Research Design, Data, and Measurement Approaches & Tools** • Study Design for Policy Research: Cross-Sectional Study, Time-Series Study, Longitudinal design, Systematic Review, Meta-Analysis, Experimental Research Study, Case Study • Identifying and Gathering Secondary Data: Public or Private Sources of Data, Bibliographic Databases, Literature Review, Legal Searches, Management Records • Primary Data Collection Approaches/Methods for Policy Information: The Investigative Approach, Survey Method, In-depth Interview, Focus-Group Discussion, Observation • Definition and Measurements of Theoretical Concepts & Constructs; Types of Data; Scales of Measurements; Reliability and Validity • Population, Sampling, and Subjects: concept of population and sample, various approaches to the sampling, central limit theorem, issues in sample size selection, and basic sampling designs • Preparation of Survey Instrument: Considerations for Quality Questionnaire Design	12	0	0

3.	**Qualitative Research Approach and Analysis** • Qualitative Research Approaches: Grounded Theory; Ethnography; Discourse Analysis and Critical Discourse Analysis; Phenomenology. • Analysis and Interpretation of Qualitative Data: Transcribing and listening; Organizing the Data; Coding and Categorizing; Interpreting the Data; Evaluating the Interpretation; Being Reflexive about the Interpretation; Some Specific Analytical Issues. • Use of Software for Qualitative data analysis: e.g., ATLAS.ti, NVivo, etc.	7	2	2
4.	**Quantitative Data Analysis** • Univariate Analysis: Frequencies, Measures of Central tendency, Measures of Dispersion • Combining Indicators and Constructing Indices • Examining the Relationship between and among Variables with Tests of Statistical Significance: Introduction to Hypothesis Testing; Type of Statistical Errors; Level of Significance; Confidence Interval; Statistical vs. Practical Significance; some commonly used Statistical Tests • Correlation and Regression Analysis • Use of Statistical Software for Data Analysis: e.g., SPSS, Stata, R, etc. (along with Microsoft Excel).	12	2	2
5.	**Communicating/Documenting the Analysis** • Organization of the Report • Presentation of quantitative data into meaningful tables • Using Graphics to communicate • Interpretation and Discussion of results • Acknowledging the limitations of the study	2	0	0
	Total	**39**	**4**	**4**

Evaluation criteria:

Course grades will be based on the following criteria:

- **Minor Test-1:** Short-Answer Type Questions/Quizzes/MCQs (20%)
- **Minor Test-2:** Presentation & Submission of Excel-based Exercises on Quantitative Data (30%)
- **Major Test:** Presentation and submission of a Research study proposal (50%); the students are required to select any policy research question, and develop a research proposal, which will be submitted and presented as a part of the major/final test. The structure of the research proposal for a policy research study includes:
    - Introduction
    - Research Questions
    - Objectives
    - Methodology: Research hypothesis; Study design; Study setting; Reference and study population; Sample size; Sampling method; Exclusion criteria (if any); Specify the measures/variables; Study tools/instruments; Technique/Process of using the instruments and making the measurements; Pilot study, Data analysis plan
    - Expected Outcomes
    - Study Timeline

  Indicators for evaluation: (a) Identification of research problem; (b) Framing research questions, objectives, and hypothesis (if any); (c) Description of components under methodology section; (d) Conceptualizing expected outcomes and timeline; (d) Content, language, clarity; (e) Reference style and number of references cited

Learning outcomes

1. Upon completion of the course, candidates would be able to systematically identify the policy research questions and conceptualize them to carry out a scientific investigation (All evaluations)
2. Knowledge of quantitative and qualitative research methods and their usage will help participants appropriately apply such methods in their research inquiries that they'll carry out in the following semesters as well as in the future (All evaluations)
3. Participants would get the ability to develop a research proposal based on objective(s) which require(s) investigation using quantitative, qualitative, or mixed method approach (Major Test)

Pedagogical approach

Classroom lectures, excel-based data analysis, and invited talks from guest speakers, especially those working in the development sector who could provide exposure to different sorts of quantitative or qualitative analysis carried out by them on real-world data.

Suggested Readings

Module 1:

- Ewing, R., & Park, K. (Eds.) (2020). *Basic Quantitative Research Methods for Urban Planners*. New York & London: Routledge.
- Gelman, A., & Cortina, J. (Eds.) (2009). *A Quantitative Tour of the Social Sciences*. Cambridge, UK: Cambridge University Press.
- Gravetter, F. J., & Wallnau, L. B. (2014). *Essentials of Statistics for the Behavioral Sciences, 8th Edition*. Belmont:Thomson Wadsworth.
- Howlett, M. (Ed.) (2023). *The Routledge Handbook of Policy Tools*. London & New York: Routledge.
- Patton, C. V., Sawicki, D. S., & Clark, J. J. (2016). *Basic Methods of Policy Analysis and Planning, 3rd Edition*. London & New York: Routledge.
- Weimer, D. L., & Vining, A. R. (2017). *Policy Analysis: Concepts and Practice, 6th Edition*. New York & London: Routledge.

Module 2:

- Creswell, J. W., & Creswell, J. D. (2018). *Research Design. Qualitative, Quantitative, and Mixed Methods Approaches, 5th Edition*. California: SAGE Publication, Inc.
- Rassel, G., Leland, S., Mohr, Z., & O'Sullivan, E. (2021). *Research Methods for Public Administrators, 7th Edition*. New York & London: Routledge.
- Rosenbaum, P. R. (2017). *Observation and experiment: an introduction to causal inference*. Massachusetts: Harvard University Press.
- Roy, T. K., Acharya, R., & Roy, A. K. (2016). *Statistical Survey Design and Evaluating Impact*. Delhi: Cambridge University Press.
- van Thiel, S. (2022). *Research Methods in Public Administration and Public Management: An Introduction, 2nd Edition*. London & New York: Routledge.

Module 3:

- Daymon, C., & Holloway, I. (2011). *Qualitative Research Methods in Public Relations and Marketing Communications, 2nd Edition*. London & New York: Routledge.
- Kachuyevski, A., & Samuel, L. M. (Eds.) (2018). Doing Qualitative Research in Politics: Integrating Theory Building and Policy Relevance. Cham, Switzerland: Palgrave Macmillan.
- Merriam, S. B., & Tisdell, E. J. (2016*). Qualitative Research: A Guide to Design and Implementation, 4th Edition*. San Francisco, CA: Jossey-Bass (John Wiley & Sons, Inc.).

Module 4:

- Gupta, S. P. (2021). *Statistical Methods, 46th Edition*. New Delhi: Sultan Chand & Sons Educational Publishers.
- Kirk, R. E. (2008). *Statistics: An Introduction, 5th Edition*. Belmont: Wadsworth Publishing Co., Inc.
- Peck, R., Olsen, C., & Devore, J. L. (2016). *Introduction to Statistics and Data Analysis, 5th Edition*. Boston, MA,USA: Cengage Learning.
- Woodbury, G. (2002). *An Introduction to Statistics, 8th Edition*. Pacific Grove, CA, USA: Duxbury.

Module 5:

- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques, 2nd Revised Edition*. New Delhi:New Age International Publishers.
- Maimon, E., & Yancey, K. B. (2020). *A Writer's Resource: A Handbook for Writing and Research, 6th Edition*. New York: McGraw-Hill Education.
- Mligo, E. S. (2016). *Introduction to Research Methods and Report Writing: A Practical Guide for Students and Researchers in Social Sciences and the Humanities*. Eugene, Oregon: Wipf and Stock Publishers.

Additional information: Up to 5 candidates will be accommodated from other courses/disciplines after discussion with the course coordinator

Student responsibilities Attendance: At least 75% attendance will be necessary to be able to appear for the final exam.
Course prepared by: Dr. Chandan Kumar
Course reviewers 1. Dr. Mathew Gayman, Associate Professor, Department of Sociology, Georgia State University, Atlanta, Georgia, United States of America. **2.** Dr. Neeti, Associate Professor, Centre for Climate Change, Azim Premji University, Bengaluru, India.