

Course title & Code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
RESEARCH TOOLS AND DATA ANALYSIS DSE 13	4	3	0	1	12 th Pass	NIL

Learning Objectives

The learning objectives of this course are as follows:

- Understand the process of designing and administration of quantitative and qualitative tools of data collection.
- Explore the application of various statistical techniques for quantitative data analysis and required procedures of qualitative data analysis.
- Demonstrate the use of statistical and qualitative software for data management, analysis and interpretation.

Learning Outcomes

At the end of the semester, the student will be able to:

- Design the tools of data collection for the research and gain confidence in its administration.
- Demonstrate the skills in identifying the nature of data, appropriate statistical methods and use of SPSS software for data analysis.
- Undertake the relevant procedure for qualitative data analysis and use of NVIVO and/or Atlas TI and updated software for data management, analysis and interpretation.

SYLLABUS of DSE 13

Unit I : Quantitative Tools of Data Collection

15 Hours

Unit Description: This unit will provide a detailed orientation and hands-on experience about the tools of data collection in Quantitative research.

Subtopics:

- Interview Schedule – Designing, administration, advantages and Limitations.
- Questionnaire – Designing (paper and digital) uses, advantages and limitations, Interview Schedule vs. Questionnaire.
- Rating scales – Types (Likert, Thurston and Guttman) – Selection and administration; Checklist - Designing,

administration, advantages and Limitations.

- Prepare a project work/case- study reflecting essential content in this unit.

Unit II : Qualitative Tools of Data Collection

15 Hours

Unit Description: This unit will provide a detailed orientation and hands-on experience about the development and use of qualitative tools of data collection.

Subtopics:

- Interview Guide - objective, scope, designing, administration, advantages and limitations.
- Focus Group Guide and Case Study guide - objectives, scope, designing, administration, advantages and limitations.
- Observation Guide, Ethnography and Life Story Interview - objectives, scope, designing, administration, advantages and limitations.
- Prepare a project work reflecting essential content in this unit.

Unit III: Quantitative Data Analysis

15 Hours

Unit Description: This unit will orient students about process and various strategies to analyse quantitative data. Students will also be familiarised with the use of statistical software for relevant analysis.

Subtopics:

- Introduction to SPSS – Creating Data and Variable view, Tables and figures, performing analysis.
- Descriptive Statistics – Measures of Central Tendency (Mean, Median and Mode), Measures of Dispersion (Range, Quartile Deviation, Mean Deviation, Standard Deviation and Coefficient of variance) – Selection, relative advantages and limitations.
- Hypotheses testing and Inferential statistics – t-Test, Chi-Square, Factor Analysis, Regression and Correlation - Selection, relative advantages and limitations.
- Prepare a project work in SPSS reflecting essential content in this unit.

Unit IV: Qualitative Data Analysis

30 Hours

Unit Description: This unit will orient the students about various strategies used for analysing qualitative data.

Subtopics:

- Content Analysis and Framework Analysis – Concept, process, significance, selection, advantages and limitations.

- Conversation Analysis, Discourse Analysis, Thematic Analysis and grounded theory - Concept, process, significance, selection, advantages and limitations.
- Introduction to qualitative Software NVIVO and/or Atlas TI and updated software – Key terms, Workspace, Advantages and limitations.
- Project work reflecting analysis in any of the above subtopics

Practical component – Unit I-IV application based

Essential Readings

- ATLAS.ti. (n.d.). Manuals and documents. Retrieved December 11, 2024, from <https://atlasti.com/manuals-and-documents#user-manuals>
- Atkinson, P., & Delamont, S. (2011). Qualitative research methods. New Delhi: Sage.
- Babbie, E. (2014). The basics of social research (6th ed.). New Delhi: Wadsworth.
- Bazeley, P., & Richards, L. (2000). The NVivo qualitative project book. London: Sage.
- Bordens, K. S., & Abbott, B. B. (2018). Research design and methods: A process approach (10th ed.). New York: McGraw-Hill.
- Bryant, A., & Charmaz, K. (Eds.). (2019). The SAGE handbook of current developments in grounded theory. SAGE Publications Ltd. <https://doi.org/10.4135/9781526436061>
- Charmaz, K. (2006). Constructing grounded theory: A practical guide through qualitative analysis. London: Sage Publications.
- Christensen, L. B., Johnson, R. B., & Turner, L. A. (2014). Research methods, design, and analysis (12th ed.). New York: Pearson.
- Crano, W. D., Brewer, M. B., & Lac, A. (2015). Principles and methods of social research (3rd ed.). New Delhi: Routledge.
- Creamer, E. G. (2021). Advancing grounded theory with mixed methods (1st ed.). Routledge. <https://doi.org/10.4324/9780429057007>
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches. New Delhi: Sage.
- Davies, C. (2008). Reflexive ethnography: A guide to researching selves and others. New York: Routledge.
- Delamont, S. (2004). Ethnography and participant observation. In C. Seale, G. Gobo, & J. Gubrium (Eds.), Qualitative research practices (pp. 217–229). London: Sage.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (2017). The SAGE handbook of qualitative research (5th ed.). SAGE Publications.
- Glaser, B. G. (1992). Basics of grounded theory analysis: Emergence vs. forcing. California: Sociology Press.

- Hammersley, M. (2017). What is ethnography? Can it survive? Should it? *Ethnography and Education*, 7823(March), 1–17. <https://doi.org/10.1080/17457823.2017.1298458>
- Jackson, K., & Bazeley, P. (2019). *Qualitative data analysis with NVivo* (3rd ed.). Qeri, Inc., Colorado: Western Sydney University, Australia.
- Katz, J. (2019). On becoming an ethnographer. *Journal of Contemporary Ethnography*, 48(1), 16–50. <https://doi.org/10.1177/0891241618777801>
- Kumar, R. (2018). *Research methodology: A step by step guide for beginners*. Sage.
- Krysik, J. L., & Finn, J. (2010). *Research for effective social work practice* (2nd ed.). New York: Routledge.
- Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. New York: Guilford Press.
- Maietta, R.C. (2006, October). Best practices: Delve a little deeper into your research. Inside Atlas.ti-Your Quarterly Newsletter, 2006/2. Berlin, Germany: ATLAS.ti Scientific Software Development GmbH. Retrieved from <http://www.atlasti.com/newsletter20062003.html>
- Oktay, J. S. (2012). Introduction to grounded theory and its potential for social work. In *Grounded theory (Pocket Guides to Social Work Research Methods)*. Oxford Academic. <https://doi.org/10.1093/acprof:oso/9780199753697.003.0001>
- Rubin, A., & Babbie, E. R. (2011). *Research methods for social work*. Belmont: Brooks Cole.
- Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (Eds.). (2013). *Qualitative research practice: A guide for social science students and researchers*. Sage.
- Sharma, R. (2010). A step-by-step guide to students: How to avoid plagiarism. *Journal of Education Research*, 4(2).
- Singh, Y.K. (2006). *Fundamentals of research methodology and statistics*. New Age International.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications.
- Sweet, S. A., & Grace-Martin, K. (2012). *Data analysis with SPSS: A first course in applied statistics* (4th ed.). Pearson.
- Treiman, D. J. (2009). *Quantitative data analysis: Doing social research to test ideas*. San Francisco: Jossey-Bass.
- Wieser, C., & Pilch Ortega, A. (Eds.). (2020). *Ethnography in higher education*. Springer VS Wiesbaden. <https://doi.org/10.1007/978-3-658-30381-5>

Suggested Readings

- Bandalos, D. L. (2018). *Measurement theory and applications for the social sciences*.

- Barry, C.A. (1998). Choosing qualitative data analysis software: Atlas/ti and Nudist compared. *Sociological Research Online*, 3(3). Retrieved from <http://www.socresonline.org.uk/socresonline/3/3/4.html>
- Bourdieu, P. (1977). *Outline of a theory of practice*. Cambridge: Cambridge University Press.
- Briggs, D. J. (2009). A practical guide to designing a poster for presentation. *Nursing Standard*, 23(34).
- Brower, R. (2006, September). Using qualitative analysis software in public administration research: An illustration and review. Paper presented at the Southeast Conference on Public Administration, Athens, Georgia.
- Coley, S. M., & Scheinberg, C. A. (2008). *Proposal writing: Effective grantsmanship*. Sage.
- Devi, P. S. (2017). *Research methodology: A handbook for beginners*. Notion Press.
- Dey, I. (1999). *Grounding grounded theory: Guidelines for qualitative inquiry*. San Diego, CA: Academic Press.
- Elliott, N., & Higgins, A. (2012). Surviving grounded theory research method in an academic world: Proposal writing and theoretical frameworks. *Grounded Theory Review*, 11(2).
- Forsey, M. (2010). Ethnography as participant listening. *Ethnography*, 11(4), 558–572. <https://doi.org/10.1177/1466138110372587>
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- Gregar, J. (1994). *Research design (qualitative, quantitative, and mixed methods approaches)*. Book published by SAGE Publications, 228.
- Guz, A. N., & Rushchitsky, J. J. (2009). Scopus: A system for the evaluation of scientific journals. *International Applied Mechanics*, 45(4), 351–362.
- Iloh, C., & Tierney, W. (2014). Using ethnography to understand twenty-first century college life. *Human Affairs*, 24, 20–39.
- Martin, W. E., & Bridgmon, K. D. (2012). *Quantitative and statistical research methods: From hypothesis to results*. San Francisco: Jossey-Bass.
- O'Reilly, K. (2009). *Key concepts in ethnography*. Los Angeles: Sage.
- Pandey, P., & Pandey, M. M. (2021). *Research methodology tools and techniques*. Bridge Center.
- Rajaretnam, T. (2015). *Statistics for social sciences*. New Delhi: Sage.
- Ridder, H. G. (2014). Book review: *Qualitative data analysis: A methods sourcebook* (Vol. 28, No. 4, pp. 485–487). Sage UK: London, England: Sage publications.
- Rosmarakis, E. S., Soteriades, E. S., Vergidis, P. I., Kasiakou, S. K., & Falagas, M. E. (2005). From conference abstract to full paper: Differences between data presented in conferences and journals. *The FASEB Journal*, 19(7), 673–680.
- Singh, S. (Ed.). (2003). Teaching qualitative research with QSR software. *Qualitative Research Journal*. Retrieved from http://www.latrobe.edu.au/aqr/journal/special_AQR2003.pdf, p. 134–134.
- Stocking, G. (1983). The ethnographer's magic: Fieldwork in anthropology from Tylor to Malinowski. In G. Stocking (Ed.), *Observers observed: Essays on ethnographic field work* (pp. 70–120). Madison: University of Wisconsin.

Note: Examination scheme and mode shall be as prescribed by the Examination Branch, University of Delhi, from time to time.

DISCIPLINE SPECIFIC ELECTIVE COURSE – (DSE-): SCHOOL SOCIAL WORK