Semester-II
Elective Course
3. Course Code & Title: MPC 50 03: Mixed-Methods in Health Sciences
Credit: 3

Course objectives:

This course will provide an overview of mixed-methods research mainly in the domain of public health. It will introduce students to the epistemological/philosophical underpinnings of mixed-methods approach, and examine the ways in which quantitative and qualitative research designs interact in the context of addressing a research question.

Course outcomes:

On completion of this course, students will be able to

1. Understand the epistemological/philosophical underpinnings of mixed-methods approach.
2. Learn the strengths and weaknesses of using mixed methods in order to address research problems and answers research questions.
3. Develop a research proposal employing mixed-methods approach,
4. Apply mixed-methods approach in conducting a research of public health importance.

Skills developed:

On successful completion of the course the students shall be skilled at designing and conducting mixed methods research, triangulating quantitative and qualitative methods and writing for publications in mixed methods studies.

Teaching methods: This course will have an applied focus and delivered using a variety of methods and modalities. Such as interactive classroom and online lectures, self-study, case studies, written assignment, class room exercises using computers/software, quiz, field visit, group work, field survey, class room presentations in groups etc.

Units and Topics	Teaching Methods								Mandatory Readings
Unit-I: Introduction to mixed-methods research	**L**	**FW**	**FV**	**CS**	**GW**	**SS**	**SP**	**P**	

i. Definition and important features of mixed-methods designs and when to use a mixed them in public health; ii. Advantages and disadvantages of mixed method designs; iii. Historical development of mixed method designs; iv. Philosophical underpinnings of mixed method research and pragmatism; v. Steps in designing mixed methods study; vi. Skills needed to conduct mixed methods study.	**x**				**x**	**x**			Creswell JW, Klassen AC, Plano Clark VL, Smith KC. Best Practices for Mixed Methods Research in the Health Sciences. Office of Behavioral and Social Sciences Research (OBSSR) National Institutes of Health. 2011. Creswell JW. A concise introduction to mixed methods research. SAGE publications; 2014 Mar 31. (Chapter-1: Basic Features of Mixed Methods Research) Creswell JW. A concise introduction to mixed methods research. SAGE publications; 2014 Mar 31. (Chapter-2: The Development and Advancement of Mixed Methods).
Unit-II: Mixed-methods Designs	**L**	**FW**	**FV**	**CS**	**GW**	**SS**	**SP**	**P**	
Selecting the appropriate mixed method design in health research; i. <u>Basic design:</u> Convergent parallel designs; explanatory and exploratory sequential designs; and Convergent parallel mixed methods ii. <u>Advanced designs:</u> Embedded mixed method designs; transformative designs; and multi-phase designs.	**X**			**X**		**X**		**X**	Tariq S, Woodman J. Using mixed methods in health research. JRSM short reports. 2013 May 7;4(6):2042533313479197. Creswell JW. A concise introduction to mixed methods research. SAGE publications; 2014 Mar 31. Chapter 5. Basic and Advanced Mixed Methods Designs. Creswell, John W. 2008. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Sage Publications, Inc.; 3rd edition. ISBN-10: 1412965578 Creswell JW. A concise introduction to mixed methods research. SAGE publications; 2014 Mar 31. Chapter 5. Basic and Advanced Mixed Methods Designs.

Unit-III: Integrating Quantitative and Qualitative Designs									
i. Sampling and data collection in mixed method research; ii. Strategies of integration in mixed-methods research; iii. Analyzing and interpreting data in mixed method research; iv. Quality in mixed-methods: Reliability and validity in mixed-methods research;	**L** **X**	**FW**	**FV**	**CS** **X**	**GW** **X**	**SS** **X**	**SP**	**P** **X**	Teddlie, Charles, and Fen Yu. "Mixed methods sampling: A typology with examples." Journal of mixed methods research 1.1 (2007): 77-100. Onwuegbuzie JA, Johnson RB. The Validity Issue in Mixed Research. Research in the Schools. Spring 2006;13(1):48-63. Caracelli, V. J., & Greene, J. C. (1993). Data analysis strategies for mixed-method evaluation designs. Educational Evaluation and Policy Analysis, 15(2), 195- 207. Leahey, E. (2007). Convergence and confidentiality? Limits to the implementation of mixed methodology. Social Science Research, 36(1), 149-158.
Unit-III: Writing a mixed-method study for publications	**L**	**FW**	**FV**	**CS**	**GW**	**SS**	**SP**	**P**	
i. Guidelines for writing research reports in mixed method designs in public health. ii. Important consideration of writing a proposal employing mixed-methods design in public health. iii. Important journals in mixed-methods publishing studies of public health importance. iv. Mixed-methods research in scientific papers (Notable papers employing mixed-methods designs in public health)	**X**					**X**			Leech NL, Onwuegbuzie AJ, Combs JP. Writing publishable mixed research articles: Guidelines for emerging scholars in the health sciences and beyond. International Journal of Multiple Research Approaches. 2011 Apr 1;5(1):7-24. Creswell JW, Tashakkori A. Developing publishable mixed methods manuscripts. Park, E., et al. "A qualitative study of lung cancer risk perceptions and smoking beliefs among national lung screening trial participants."

									Brault, M., et al. "Multilevel Perspectives on Female Sterilization in Low-Income Communities in Mumbai, India."

L- Lecture; FW- Field work; FV - Field Visit; CS - Case study; GW- Group work; SS- Self-study; SP- Seminar presentation; P-Practical

Evaluation

As per CBCS guidelines, this course will be evaluated for 100 marks with a Continuous Evaluation (CA) component of 40 marks and End-Semester Evaluation (ESA) component of 60 marks.

Additional Readings

1. Bryman, A. (2016). *Social research methods*. Oxford university press.
2. Teddlie C, Yu F. Mixed Methods Sampling A Typology with Examples. J Mix Method Res. Jan 2007;1(1):77-100. DOI: 10.1177/2345678906292430
3. Moffatt S, White M, Mackintosh J, Howel D. Using quantitative and qualitative data in health services research - what happens when mixed method findings conflict? [ISRCTN61522618]. BMC Health Services Research. Mar 8 2006;6. PMID: 16524479
4. Bazeley P. Editorial: Integrating Data Analyses in Mixed Methods Research Journal of Mixed Methods Research 2009; 3; 203 DOI: 10.1177/1558689809334443.
5. Onwuegbuzie AJ, Collins KM. The Role of Sampling in Mixed Methods-Research. KZfSS Kölner Zeitschrift für Soziologie und Sozialpsychologie. 2017 Oct 1;69(2):133-56.
6. Newman I, Newman D, Newman C. Writing research articles using mixed methods: Methodological considerations to help you get published. The handbook of scholarly writing and publishing. 2011:191-208.