

<b>Course title: Qualitative research methods and technical writing</b>				
<b>Course code:</b> WSW 179		<b>No. of credits:</b>	<b>L-T-P:</b> 14-14-28	<b>Learning hours:</b> 56
<b>Pre-requisite course code and title (if any):</b> None				
<b>Department:</b> Department of Regional Water Studies				
<b>Course coordinator(s):</b> Fawzia Tarannum			<b>Course instructor(s):</b> Fawzia Tarannum	
<b>Contact details:</b> fawzia.tarannum1@terisas.ac.in				
<b>Course type:</b> Core			<b>Course offered in:</b> Second semester	
<b>Course description</b> This course introduces students to the basics of qualitative research methods and equip them with the skills, techniques, and knowledge required to sensitively design, carry out, read, analyse and report qualitative research. As part of the course we reflect upon the nature of qualitative research required for resource management with specific focus on water resources management. The course also includes practical sessions on critical analysis of published papers and mock projects to provide students with hands on opportunity to comprehend terms like data type, sampling, survey tools, data analysis, research ethics and data interpretation. Alongside, the course shall provide exposure to proposal and research report writing and communication skills through presentations, readings, discussion and practical clinics. The course demands extensive reading and considerable time investment by the students to engage in discussions, work on assignments and conduct individual fieldwork.				
<b>Course objectives</b>				
<ul style="list-style-type: none"> <li>• To introduce students to the broad tenets of qualitative research.</li> <li>• To develop skills in the use of tools and techniques required for conducting qualitative research.</li> <li>• To plan, conduct, present and discuss qualitative research study.</li> <li>• To appreciate the need for interdisciplinary research for water resources management and understand the ways in which qualitative research can be integrated with quantitative research.</li> <li>• To enable students to apply the skills to writing proposals and research/project reports.</li> </ul>				
<b>Course content</b>				
<b>Module</b>	<b>Topic</b>	<b>L</b>	<b>T</b>	<b>P</b>
1.	<b>Introduction to qualitative research</b> This module helps in understanding the concept and types of research with special attention on qualitative research. It will also include ethics of research and IRB processes. Through this module, students will be able to understand the individual values of the researcher relating to honesty and frankness and personal integrity. The module will also help to orient the students regarding the researcher's treatment of other people involved in the research, relating to informed consent, confidentiality, anonymity and courtesy. Further, the course will draw focus on the differentiation between qualitative and quantitative research with proper exemplification of various studies related to water resources management. <ul style="list-style-type: none"> <li>• Types of research</li> <li>• Qualitative Vs quantitative research</li> <li>• Need and application of qualitative research in water resources management</li> <li>• Ethics of research</li> <li>• Practical exercises (reading and discussion)</li> </ul>	2	2	4
2.	<b>Designing research proposal</b> Through this module the student shall be familiarized with the various steps involved in developing a research proposal. The student shall be asked to identify a research problem and develop a proposal. <ul style="list-style-type: none"> <li>• Defining the research problem</li> <li>• Developing research objectives and questions</li> <li>• Literature review</li> <li>• Choosing the appropriate methods</li> <li>• Sample and sampling methods</li> <li>• Ethical considerations and researcher's role</li> </ul>	2	2	6

	<ul style="list-style-type: none"> <li>Expected research impact</li> </ul>			
3.	<p><b>Qualitative research tools and techniques</b></p> <p>This module focuses on techniques for data collection in qualitative research. The method of preparation of interview and discussion guides, and questionnaire for survey shall be discussed in this module. The students will be encouraged to think on the research problem that they have proposed in the previous module and develop a plan for the field work.</p> <ul style="list-style-type: none"> <li>Ethnography, case study, participant observation</li> <li>Structured, semi-structured and in-depth interview</li> <li>Focus Group Discussion</li> <li>Survey and Questionnaire Design</li> <li>Participatory Rural Appraisal (PRA)</li> <li>PRA Field Exercises (Transect walk, resource mapping, institution and stakeholder mapping)</li> <li>Developing a matrix according to sample type and nos.</li> <li>Practical exercise (field work and data collection)</li> </ul>	4	4	10
4.	<p><b>Qualitative data collection and analysis</b></p> <p>This module focuses on qualitative data collection and analysis through practical exercises on transcription and content analysis. Subjectivity in interpretation and evaluator biases and its impact on research outcomes are also explained.</p> <ul style="list-style-type: none"> <li>Developing data collection and management plan</li> <li>Steps of analysing qualitative data</li> <li>Analysis of text and documents</li> <li>Using software to analyse data</li> </ul>	2	2	
5.	<p><b>Technical writing and research communication</b></p> <ul style="list-style-type: none"> <li>Plagiarism and similarity</li> <li>Understanding different styles of writing</li> <li>Writing project report, dissertation, proposal, blogs and newspaper articles <ul style="list-style-type: none"> <li>Audience, purpose and strategy</li> <li>Use of infographics (tables, graphs, charts and visuals)</li> <li>Reference styles – Using referencing software</li> <li>Understanding the peer review process</li> </ul> </li> <li>Writing Detailed Project Report (DPR)</li> <li>Preparing presentation and presentation skills</li> <li>Practical exercise - Developing articles, blogs etc. through class assignments, developing research reports</li> </ul>	4	4	8
		14	14	28

**Evaluation criteria:**

- Test 1: Research proposal design: 20% (At the end of Module 1 and 2)  
Students will be asked to define a research problem related to water, draft research objectives and research questions, define the research methodology and sampling technique that they would use for studying the research problem and spell out the expected outcomes of the research.
- Test 2: Class assignment (literature review) :20%  
Students would carry out and write the literature review chapter for the research topic that they have identified.
- Test 3: Research report writing :40% (At the end of modules 3,4 and 5)  
Students shall write a detailed report on the research work carried out by them. The report will have an introduction, literature review, methodology, results and discussion, conclusion and references as different sections.
- Test 4 : Final Presentation: 20%  
Students will have to make a 15 minutes presentation of their work. It would have a format similar to a

research proposal defence.

### **Learning outcomes**

At the end of the course, students will be able to,

- independently design and conduct a qualitative research
- describe, distinguish and apply qualitative research tools like interviewing, focus group discussions, participant observation, participatory rural appraisal etc.
- organise, analyse and interpret data
- write research proposals and reports

### **Pedagogical approach**

The pedagogical approach taken for the course is a combination of lectures, writing workshops and field exercises with an emphasis on participatory and practical learning.

### **Course Reading Materials**

- Bryman, Alan. (2012) Social Research Methods, Oxford University Press, New Delhi
- Corbetta P. (2003) Social Research, Theory, Methods and Techniques, Sage Publication, New Delhi
- Cresswell JW (2014) Research Design, Qualitative, Quantitative and Mixed Method Approach, Sage: New Delhi
- Czaja, R. and Blair, J., 2005, Designing surveys: A guide to decisions and procedures, 2nd edition, Thousand Oaks and London: Pine Forge.
- Flick, Uwe. (2014) The Sage Hand Book of Qualitative Data Analysis (Edited). Sage: New Delhi
- Grosh, M. and Glewwe, P., 2000, eds., Designing household survey questionnaires for developing countries: Lessons from 15 years of the living standards measurement study. Washington, D.C.: World Bank.
- Groves, RM., Floyd Fowler J. Jr., Couper MP., Lepkowski James M., Singer E., Tourangeau R. 2009, Survey methodology, 2nd edition, Hoboken: Wiley.
- Hammersley, M., 1992, What's wrong with ethnography? London: Routledge. Scheyvens R. and Storey, D., 2003, eds., Development fieldwork: A practical guide, London: Sage (chapter 4).
- Kothari CR (2004) Research Methodology, Methods and Techniques, New Age International Publication Limited: New Delhi
- Robson C., 1993, Real world research: A resource for social scientists and practitioner researchers. Oxford: Blackwell (chapter on analysing qualitative data).
- Sarantakos, S. (1998) Social Research. Macmillan Press: Australia
- Walliman, N. (2011) Research Methods, The Basics. Routledge: UK
- Silverman D. 2006, Interpreting qualitative data: Methods for analysing talk, text and interaction, 3rd edition, London: Sage

### **Student responsibilities**

- All readings circulated before class must be read by the students for class discussions.
- Assignments and course work must be attempted as per instructions before coming for practical clinics.
- Attendance is compulsory for all sessions

**Prepared by:** Dr. Fawzia Tarannum, Department of Regional Water Studies and Dr. Swarup Dutta, Department of Policy Studies

### **Course reviewers:**

Dr. Mercian Daniel, Program Manager (Mental Health), The George Institute for Global Health, New Delhi  
Dr. Manasi Mishra, Head, Research & Knowledge Management, Centre for Social Research (CSR)