

# Summer Course on Research Methodology

## Introduction

The aim of this summer course is to impart research skills to the beginners and help to improve the quality of research by the existing researchers. The format of the course is a combination of lectures and seminars, with an emphasis on participatory and practical learning. Lectures are interactive and introduce the key conceptual issues of each method, as well as giving practical guidance. It covers the series of research methodology contents: from problem formulation, to design, to data collection, analysis, reporting and dissemination. The course has the dual aims of equipping students with conceptual understandings of current academic debates regarding different methods, and the practical skills to put those methods into practice. On this four- week intensive programme, the learners/students/scholars will be engaged with and learn from the OSOU faculties.

## Learning Objectives:

This summer course will provide students with:

- A concrete understanding of the methods of doing research, data collection and analysis, report writing
- An understanding to identify the research gaps by reviewing the existing literatures on the concerned topic and state the research questions
- Identifying the difference between qualitative and quantitative data collection methods and analysis strategies

**Duration:** One Month (26<sup>th</sup> April 2019 - 25<sup>th</sup> May 2019)

**Max. Teaching Hours:** 40 hrs (per day 2 hrs)

**Classes:** Five days in a week (max. 20 days)

**Medium of Teaching:** English

**Course Fee:** Rs. 500/- only

**Target Groups:** Open to all

**Learning materials:** Soft Copies of the materials will be provided

At the end of the course, the participants who successfully completed the course shall be provided the *certificate of participation*.

## Syllabus/Course Contents

**Unit-1:** a) **Research Ethics and the Nuances of Plagiarism;** b) **Foundations of Research:** Meaning, Objectives, Motivation, Utility - Concept of theory, empiricism, deductive and inductive theory- Characteristics of scientific method – Understanding the language of research – Concept, Construct, Definition, Variable. Social research process.

**Unit-2: Problem Identification & Formulation** – Research Questions – Literature Review Process --Hypothesis – Qualities of a good Hypothesis –Null Hypothesis & Alternative Hypothesis - Hypothesis Testing – Logic & Importance.

**Unit-3: Research Design:** Concept and Importance in Research – Features of a good research design – Types of research design- Exploratory, Explanatory, Descriptive and Experimental Research Designs – concept, types and uses - Independent & Dependent variables.

**Unit-4: Qualitative and Quantitative Research:** Qualitative research – Quantitative research – Concept of measurement, causality, generalization, and replication. Triangulation method. Measurement: Concept of measurement– what is measured? Problems in measurement in research – Validity and Reliability. Levels of measurement – Nominal, Ordinal, Interval, Ratio.

**Unit-5: Sampling:** Concepts of Statistical Population, Sample, Sampling Frame, Sampling Error, Sample Size, Characteristics of a good sample. Types of sampling: Probability and Non-probability sampling techniques, Determining size of the sample– Practical considerations in sampling and sample size.

**Unit-6: Sources, Tools and Techniques of Data Collection:** a) Primary and Secondary data, Interview Schedule: types of questions used in the schedule, Questionnaire- Types of questionnaire, steps in the construction of questionnaire, modes of administering questionnaire,

b) Interview method: Types; Selecting Respondents; Rapport; the Interview Guide; the Interview situation; recording, Conducting Focused Group Discussions (FGDs), The Case Study Method, Oral Histories, Life Histories

c) Participant Observation and Interviewing (Field work practice): Principles of Ethnographic Field Research; Participant Observer Continuum; Strategies for entering, watching, Listening and recording; exiting the Field; maintaining a field record.

**Unit-7: Data Analysis and Interpretation:** a) Qualitative data analysis: Content analysis, discourse analysis, grounded theory methodology, interpretive analysis, narrative analysis,

b) Quantitative data analysis: Descriptive Statistics: Univariate analysis: frequency tables, bar charts, pie-charts, percentages) Measures of central tendency, measures of dispersion, Skewness, Kurtosis – Bivariate distributions, Characteristics of Association, Statistical tests - Chi square, t-test, Analysis of Variance, Correlation and Regression

**Unit-8:** How to write a Research Proposal, Synopsis, Dissertation, Thesis. Report writing

**Unit-9: Use of software tools / techniques for Research:** Methods to search required information effectively, Use of SPSS for data analysis, References, Bibliography: Formats and Styles (APA, Chicago, MLA, ASA) - Reference Management Software like Mendeley, Software for paper formatting like MS Office, Software for detection of Plagiarism