

Course Title:	Research Methods
Course Code:	STAT-404
Semester:	VII
Credit Hours:	3 Credit Hours
Pre-requisites:	N/A

## Learning Outcomes

By the end of this course, students will be able to:

1. Learn the key concepts of a research and its various types.
2. Know the different kinds of survey and how to conduct them.
3. Acquire the knowledge of sample selection with the help of examples.
4. Develop a questionnaire for a real-world problem.

## Course Outline

### Unit 1

#### 1.1 Introduction to Research

Definition of Research, Types and Methods of Conducting Research, Census and Survey, Sampling frame, Types of errors in surveys (coverage, non-response, measurement, errors etc.) and methods of control of such errors, Steps for successful surveys.

#### 1.2 Types of Surveys and Methods for Conducting a Survey

Qualitative and Quantitative survey, Assessments survey, Marketing survey, Evaluation of a survey. Mail surveys, telephone surveys, face to face surveys, and drop off surveys.

### Unit 2

#### 2.1 Sample Size Selection and Construction of Questionnaire

Various methods of sample selection. Sample size and its practical difficulties. Constructing a questionnaire for different types of surveys. Scaling Techniques.

#### 2.2 Analysis and Report Writing

The analysis of data. Style and format of report writing. Preparing the report.

- **Teaching-learning Strategies:**

Class Lecture method, which includes seminars, discussions, assignments and projects. (Audio-visual tools are used where necessary)

- **Assignments-Types and Number with calendar:**

According to the choice of respective teacher.

- **Assessment and Examinations:**

According to the University's Semester Rules.

Sr. No.	Elements	Weightage	Details
1	Midterm Assessment	35%	It takes place at the mid-point of the semester.
2	Formative Assessment	25%	It is continuous assessment. It includes: Classroom participation, attendance, assignments, and presentations, homework, attitude and behavior, hands-on-activities, short tests, quizzes etc.
3	Final Assessment	40%	It takes place at the end of the semester. It is mostly in the form of a test, but owing to the nature of the course

			the teacher may assess their students based on term paper, research proposal development, field work and report writing etc.
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### **Text Books**

1. Daniel, P.S., & Sam, A.G. (2011). *Research Methodology*. Kalpaz Publications, Delhi.
2. Singh, Y.K. (2011). *Fundamental of Research Methodology and Statistics*. New Age International.

### **Suggested Readings**

1. Creswell, J.W. (2002). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. Sage Publications.
2. Salkind, N.J. (2010). *Encyclopedia of Research Design*. Sage Publications, Inc
3. Saris, W.E., & Gallhoffer, I.N. (2014). *Design, Evaluation, and Analysis of Questionnaires for Survey Research* (2nd ed.). John Wiley & Sons, Inc, Hoboken, New Jersey.
4. Panneerselvam, R. (2013). *Research Methodology*. Prentice Hall India.