

# Syllabus for Ph. D Course work

## RESEARCH METHODS

Objectives:

- To understand the significance of statistics and research methodology in Home Science research
- To understand the types, tools and methods of research and develop the ability to construct data gathering instruments appropriate to the research design.
- To understand an
- To apply the appropriate statistical technique for the measurement scale and design.

**Contents:**

1. Science, Scientific methods, scientific approach.
2. Role of statistics and research in Home Science Discipline.  
Objectives of research: Explain, control and pre-diction.
3. **Types of Research:** Historical, descriptive, experimental, case study, Social research, participatory research.
4. **Definition and identification of a Research Problem**
  - Selection of research problem
  - Justification
  - Theory, hypothesis, basic assumptions, limitations and delimitations of the problem.
5. **Types of variables**
6. **Theory of probability**
  - Population and sample
  - Probability sampling : Simple random, systematic random sampling, two stages and multi stage sampling, cluster sampling
  - Non-Probability sampling : purposive, quota and volunteer sampling / snowball sampling
7. **Basic principles of Research Design**
  - Purpose of research design: Fundamental, applied and action, exploratory and descriptive, experimental, survey and case study, ex-post factor.

- Longitudinal and cross sectional, co-relational

## **8. Data Gathering Instruments :**

- Observation, questionnaire, Interview, Scaling Methods, Case study, Home Visits, reliability and validity of measuring instruments.

## **Scientific Writing**

### **Objectives:**

- To be able to appreciate and understand importance of writing scientifically.
- To develop competence in writing and abstracting skills.

### **Contents**

#### **1. Drafting titles, Sub titles, tables, illustrations**

- Tables as systematic means of presenting data in rows and columns and lucid way of indicating relationships and results.
- Formatting tables: Title, Body Sub Column, Column Head, Spanner Head, and Box Head.
- Appendices: use and guidelines.

#### **2. The writing process**

- Getting started
- Use outline as a starting device
- Drafting
- Reflecting, re-reading
- Checking organization
- Checking headings
- Checking content
- Checking clarity
- Checking grammar
- Brevity and precision in writing
- Drafting and re-drafting based on critical evaluation

#### **3. Parts of dissertation / research report / article**

- Introduction

- Review of literature
- Methods
- Results and discussion
- Summary and abstract
- References
  - **Ask questions related to:** content, continuity, clarity, validity internal consistency and objectivity during writing each of the above parts.

## 6. Writing for Grants

- The question to be addressed
- Rationale and importance of the question being addressed
- Empirical and theoretical framework
- Presenting pilot study / data or background information
- Research proposal and time frame
- Specificity of methodology
- Organization of different phases of study.
- Expected outcome of study and its implications
- Budgeting
- Available infra-structure and resources
- Executive summary

## **Computer Skills include M.S. Office and information regarding SPSS**

### **Review of literature**

#### **References**

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4. Harman, E & Montages, I. (Eds.) (1997). The thesis and the book, New Delhi : Vistar.
5. Locke, L.F. and others (1987). Proposals that work: A guide for planning dissertations & Grant proposals (2<sup>nd</sup> Ed.) Beverly Hills: Sage.

6. Richardson, L. (1990). Writing strategies. Reaching diverse audience, California : Sage.
7. Stenberg, R. J. (1991). The psychologist's companion: A guide to scientific writing for students & researchers. Cambridge: CUP.
8. Thyer, B.A. (1994). Successful publishing in scholarly journals. California: Sage.
9. Wolcott, H.F. (1990). Writing up qualitative research, Newbury Park: Sage.
10. Bandarkar, P. L. and Wilkinson T. S. (2000): Methodology and Techniques of Social Research, Himalaya. Publishing House, Mumbai.
11. Bhatnagar, G.L. (1990): Research Methods and Measurements in Behavioural and Social Sciences, Agri Cole Publishing Academy. New Delhi.