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:

2. Role of statistics and research in Home Science Discipline.
   - Objectives of research: Explain, control and prediction.
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 Stab 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**

3. Dunn, F.V. & Others. (Ed.) Disseminating research: Changing practice, N.Y. Sage


