

P.G. Department of Home Science  
University of Jammu

Ph.D coursework syllabi

(Year 2026 onwards)

Members of DRC

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**Faculty: Faculty of Science**

**Subject: Home Science**

**Course: Ph.D coursework**

Total No. of Papers: 3

Total credits to be earned: 12

Maximum marks: 300

**Programme Outcomes**

1. Demonstrate a deep understanding of fundamental and advanced concepts in Home Science
2. Apply theoretical knowledge and research methodologies to address practical problems in community development, family welfare, nutrition, or textiles.
3. Develop original research questions, design innovative studies, and create interdisciplinary approaches to solve complex issues in Home Science.
4. Evaluate research outcomes, assess the effectiveness of interventions, and critique scientific literature
5. Demonstrate ethical responsibility in research, ensuring that studies comply with ethical standards
6. Effectively communicate research findings and demonstrate leadership in academic and professional settings.

**Structure of the Ph.D coursework**

S.No	Course Code	Title of the Paper	Credits	Maximum Marks
1.	PHDHS-101	Research methodology	4 credits	100
2.	PHDHS-102	Research and publication ethics (RPE)	2 credits	50
3.	PHDHS-103	Contemporary research issues in Home Science	6 credits	150

\*The candidate will be required to secure at least 55% marks in each paper to successfully complete the coursework

**PAPER –I**  
**COURSE CODE: PHDHS-101**  
**RESEARCH METHODOLOGY**

**Credits: 4**

**Max Marks: 100**

**Course Outcomes:** Upon successful completion of the course, students will be able to:

1. Define key research terminology and the steps of the scientific method as applied in Home Science
2. Explain the significance of research in Home Science and describe various research designs relevant to the field
3. Understand the sampling techniques, data collections methods, and data analysis techniques
4. Compose a comprehensive research report and design a research proposal that outlines objectives and methodologies for Home Science research.

**Unit-I: Introduction to Research and Scientific Principles in Home Science**

- 1.1 Science, Scientific methods, and scientific approach
- 1.2 Definition and Meaning of Research, Objectives of Research
- 1.3 Importance and Applications of Research in Home Science (Human Development, Food and Nutrition, Clothing and Textiles, Family Resource Management, Extension education)
- 1.4 Basic elements of Research: Variables, Reliability, Validity

**Unit-II: Research Problem Identification, Design, and Sampling Techniques**

- 2.1 Identification of Research problem: Techniques for selection of a problem, statement of the problem, objectives, hypothesis, research questions.
- 2.2 Research Design: Meaning, need, features, types.
- 2.3 Type of Research-Quantitative and Qualitative research, timespan research, and other types.
- 2.4 Sampling Techniques: Term and designs, determining sample size, sampling error.

**Unit- III: Data Collection, Fieldwork, and Statistical Analysis in Research**

- 3.1 Methods of Data Collection for quantitative and qualitative research.
- 3.2 Field Works: Construction of tools, pretesting and use of tools.
- 3.3 Data Analysis: Qualitative and Quantitative approach to data analysis.
- 3.4 Use of statistics for analysis: Level of measurement, Parametric and non-parametric tests, analysis of difference and association.

**Unit-IV: Computer Applications, Conclusion Drawing, and Research Communication**

- 4.1 Computer Applications in Research: Learning application of statistical packages (SPSS SYSTAT)
- 4.2 Drawing Conclusions: Interpretation and Inference, Assessing result in view of theory and other research studies.
- 4.3 Writing the report: Parts of a report, the writing process.
- 4.4 Research Communication: Different forms of scientific writing, writing for grants.

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**Suggested Readings:**

1. **American Psychological Association (APA). (2020).***Publication Manual of the American Psychological Association* (7th ed.). APA.
2. **Bryman, A. (2016).***Social Research Methods* (5th ed.). Oxford University Press.
3. **Creswell, J.W. (2014).***Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). SAGE Publications.
4. **DeVellis, R.F. (2017).***Scale Development: Theory and Applications* (4th ed.). SAGE Publications.
5. **Field, A. (2018).***Discovering Statistics Using SPSS* (5th ed.). SAGE Publications.
6. **Hinton, P.R., Brownlow, C., McMurray, I., & Cozens, B. (2014).***SPSS Explained* (2nd ed.). Routledge.
7. **Kothari, C.R. (2004).***Research Methodology: Methods and Techniques* (2nd ed.). New Age International Publishers.
8. **Ranjit Kumar (2014).***Research Methodology: A Step-by-Step Guide for Beginners* (4th ed.). SAGE Publications.
9. **Silverman, D. (2016).***Qualitative Research* (4th ed.). SAGE Publications.
10. **Tashakkori, A., & Teddlie, C. (2010).***SAGE Handbook of Mixed Methods in Social & Behavioral Research*. SAGE Publications.

**Instruction for Assessment:**

**Max. marks: 100**

**Duration of Exam 3 hours**

The course will be evaluated through a semester end written examination. The question paper will contain two sections:

**Section A: Weightage 80 marks** (4 X 20 = 80): The section will have 8 questions, 2 from each unit. The candidate will be required to attempt one question from each unit. Each question will be of 20 marks.

**Section B: Weightage 20 marks** (4 X 5 = 20): The section will have 6 questions spread over the syllabus. The candidate will be required to attempt any four questions. Each question will be of 05 marks.

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## PAPER 2

**COURSE CODE: PHDHS-102**

### **RESEARCH AND PUBLICATION ETHICS (RPE)**

**Credits: 2**

**Maximum Marks: 50**

**Research and Publication Ethics (RPE)**-Course for awareness about the publication ethics and publication misconducts.

#### **Overview**

This course has total 6 units focusing on basics of philosophy of science and ethics, research integrity, publication ethics. Hands-on-sessions are designed to identify research misconduct and predatory publications. Indexing and citation databases, open access publications, research metrics (citations, h-index, Impact Factor, etc.) and plagiarism tools are introduced in this course.

#### **Course structure**

- The course comprises of six modules listed in table below. Each module has 4-5 units.

<b>Modules</b>	<b>Unit title</b>	<b>Teaching hours</b>
<b>Theory</b>		
RPE01	Philosophy and Ethics	4
RPE02	Scientific Conduct	4
RPE03	Publication Ethics	7
<b>Practice</b>		
RPE04	Open Access Publishing	4
RPE05	Publication Misconduct	4
RPE06	Databases and Research Metrics	7
	<b>Total</b>	<b>30</b>

#### Syllabus in detail

##### THEORY

- UNIT 1: RPE-PHILOSOPHY AND ETHICS (3hrs.)**
  - Introduction to philosophy: definition, nature and scope, concept, branches
  - Ethics: definition, moral philosophy, nature of moral judgements and reactions
- UNIT 2: RPE- SCIENTIFIC CONDUCT (5hrs.)**
  - Ethics with respect to science and research
  - Intellectual honesty and research integrity

3. Scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP)
4. Redundant publications: duplicate and overlapping publications, salami slicing
5. Selective reporting and misrepresentation of data

• **UNIT 3: RPE-PUBLICATION ETHICS (7hrs.)**

1. Publication ethics: definition, introduction and importance
2. Best practices/standards setting initiatives and guidelines: COPE, WAME, etc.
3. Conflicts of interest
4. Publication misconduct: definition, concept, problems that lead to unethical behavior and vice versa, types
5. Violation of publication ethics, authorship and contributorship
6. Identification of publication misconduct, complaints and appeals
7. Predatory publishers and journals

**PRACTICE**

• **UNIT 4: RPE-OPEN ACCESS PUBLISHING (4hrs.)**

1. Open access publications and initiatives
2. SHERPA/RoMEO online resource to check publisher copyright & self-archiving policies
3. Software tool to identify predatory publications developed by SPPU
4. Journal finder/ journal suggestion tools viz. JANE, Elsevier Journal Finder, Springer Journal Suggested, etc.

• **UNIT 5: RPE-PUBLICATION MISCONDUCT (4hrs.)**

**A. Group Discussions (2hrs.)**

1. Subject specific ethical issues, FFP, authorship
2. Conflicts of interest
3. Complaints and appeals: examples and fraud from India and abroad

**B. Software tools (2hrs.)**

Use of plagiarism software like Turnitin, Urkund and other open source software tools

• **UNIT 6: RPE-DATABASES AND RESEARCH METRICS (7hrs.)**

**A. Databases (4hrs.)**

1. Indexing databases
2. Citation databases: Web of Science, Scopus, etc.

**B. Research Metrics (3hrs.)**

1. Impact Factor of journal as per Journal Citation Report, SNIP, SIR, IPP, CiteScore
2. Metrics: h-index, g-index, i10 index, altmetrics

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**Instruction for Assessment:**

**Max. marks: 50**

**Duration of Exam: 2 ½ hours**

The course will be evaluated through a semester end written examination. The question paper will contain two sections:

**Section A: Weightage 36 marks** (3 X 12= 36): This section will be based on the theory portion, ie., Unit 1-3. The section will have 6 questions, 2 from each unit. The candidate will be required to attempt one question from each unit. Each question will be of 12 marks.

**Section B: Weightage 14 marks** (7 X 2 = 14): This section will be based on the practical portion, ie., Unit 4-6. The section will have 10 questions and the candidate will be required to attempt any seven questions. Each question will be of 02 marks.

**COURSE CODE: PHDHS-103**

**CONTEMPORARY RESEARCH ISSUES IN HOME SCIENCE**

**Credits: 6**

**Maximum Marks: 150**

**Course Outcomes:** Upon successful completion of the course, students will be able to:

1. Understand the latest trends, challenges, and research methodologies in the field of Home Science.
2. Acquire knowledge of current issues across key domains: nutrition, human development, resource management, textiles, and community development.
3. Design and develop a research proposal based on their area of specialization in Home Science.

**Unit 1: Introduction to Contemporary Issues in Home Science (Compulsory)**

- Overview of evolving disciplines in Home Science.
- Global and national trends in human development, foods and nutrition, clothing and textiles, extension education, and resource management.
- Socioeconomic and cultural impacts on home science research.
- The significance of interdisciplinary approaches in Home Science

*\* The candidate shall choose any one of the Unit 2 to 6, depending on the specialization at the Master's level*

**Unit 2: Human Development and Nutrition**

- Impact of nutrition on cognitive and physical development across life stages.
- Nutritional interventions during critical periods (infancy, adolescence, pregnancy, aging).
- Research on malnutrition, obesity, and their influence on child and adolescent development.
- Role of micronutrients and their connection to mental health and developmental outcomes.

**Unit 3: Human Development and Resource Management**

- The relationship between family resource management and developmental outcomes.
- Impact of financial literacy, household budgeting, and resource allocation on family well-being.
- Sustainable resource management and its role in improving life quality.
- Time management in households and its effect on personal and family development.

**Unit 4: Human Development and Textiles/Clothing**

- Psychological and social aspects of clothing choices and human identity development.
- Clothing and textiles in the context of self-expression, body image, and self-esteem.
- Research on the developmental significance of traditional textiles and cultural identity.
- Ergonomics of clothing for different life stages (children, elderly, people with disabilities).

**Unit 5: Human Development and Extension education**

- The role of community development in supporting human development, especially vulnerable populations (children, elderly, marginalized communities).
- Impact of rural and urban environments on developmental outcomes.
- Human development research in the context of poverty, social inequity, and community resilience.

- Community outreach programs targeting human development (early childhood education, adolescent development programs, elder care).

## Unit 6: Human Development

- Cross-cultural considerations in developmental research (cultural practices, family norms, child-rearing methods).
- Interdisciplinary research on mental health and emotional well-being across the lifespan.
- The role of social determinants (housing, environment, healthcare access) on developmental outcomes.
- The role of technology in parenting, education, and developmental support systems.
- Ethical dilemmas in human development research involving vulnerable populations.

### Suggested Readings:

1. **Arthur, L. B. (2018).***Clothing and Textile Arts in Human Development: Identity and Culture.* Berg Publishers.
2. **Bharati, P., & Pal, M. (2004).***Human Nutrition: The Link Between Health and Development.* Nova Science Publishers.
3. **Bronfenbrenner, U. (2005).***Making Human Beings Human: Bioecological Perspectives on Human Development.* SAGE Publications.
4. **Chatterjee, M., & Lambert, J. (2001).***Women and Nutrition: Reflections from India and Pakistan.* The Nutrition Foundation of India.
5. **Collier, B. J., & Tortora, P. (2001).***Understanding Textiles.* Pearson Education.
6. **Ebrahim, G. J. (2011).***Nutrition in Mother and Child Health.* Macmillan.
7. **Goldsmith, E. (2005).***Resource Management for Individuals and Families.* Wadsworth Publishing.
8. **Gopalan, C., & Rao, B. S. (Eds.). (2001).***Nutrition Research in South-East Asia.* National Institute of Nutrition.
9. **Gordon, B., & Ricciuti, H. (2008).***Nutrition and Cognitive Development.* Springer.
10. **Jeyarani, T. (2019).***Research Methods in Home Science.* Dominant Publishers & Distributors Pvt Ltd.
11. **Nickell, P., & Dorsey, J. M. (2016).***Management in Family Living.* Chapman & Hall.
12. **Oakley, P., & Garforth, C. (1985).***Guide to Extension Training.* FAO.
13. **Papalia, D. E., Olds, S. W., & Feldman, R. D. (2007).***Human Development.* McGraw-Hill.
14. **Saraswathi, T. S. (Ed.). (2003).***Cross-Cultural Perspectives in Human Development: Theory, Research, and Applications.* SAGE Publications.
15. **Schneider, F. (2010).***Sustainable Resource Management: Global Trends, Visions, and Policies.* Springer.
16. **Sigelman, C. K., & Rider, E. A. (2017).***Life-Span Human Development.* Cengage Learning.
17. **Singh, K., & Supe, S. V. (2008).***Extension Education in Community Development.* Oxford University Press.
18. **Sontakke, S. P. (2016).***Extension Education in Home Science.* Agrobios India
19. **Swaminathan, M. (2020).***Principles of Nutrition and Dietetics.* Bangalore Publishing.

### Instructions for Assessment

The assessment of the Paper 3 will be based on three components

S.No	Component	Credits	Marks
1.	Assignment	2	50

2.	Semester end examination	2	50
3.	Presentation based on the research proposal	2	50

1. **Assignment:** The candidate will be required to submit a written assignment on emerging interdisciplinary research topics in human development and other branches of Home Science. The assignment will be evaluated on the following parameters- content and understanding, research and analysis, structure and organization, originality, writing quality, and use of evidence and citations.

2. **Semester end examination:** The candidate will be required to appear in a written exam based on the paper, having weightage of 50 marks. The question paper will consist of Section A- Long answer type questions and Section B- Short answer type questions.

**Section A: (2X15= 30)** In section A there will be three (03) questions having weightage of 15 marks each and the candidate will be required to attempt any two.

**Section B: (4 X 5 = 20)** In section B there will be four (04) questions having weightage of 5 marks each and the candidate will be required to attempt all four questions.

3. **Research proposal presentation:** The candidate will make a powerpoint presentation of the research proposal to be submitted later in the form of synopsis. The presentation will be evaluated on the following criteria:

- \* *Clarity of research problem and objectives*
- \* *Research design and methodology*
- \* *Literature review and theoretical framework*
- \* *Presentation skills*
- \* *Originality and innovation*