

# DEPARTMENT OF HOME SCIENCE

## SYLLABUS OF Ph.D. PROGRAMME



**RAMA DEVI WOMEN'S UNIVERSITY**  
Vidya Vihar, Bhubaneswar-751022, Odisha  
Website: <https://rdwu.ac.in>

# PRE-Ph.D Course Work Syllabus in HOME SCIENCE



**RAMA DEVI WOMEN'S UNIVERSITY**  
Bhoi Nagar, Bhubaneswar, Odisha – 751022, INDIA  
<https://www.rdwuniversity.nic.in>

*Ms. Parthi*  
*12.10.23*  
Controller of Examinations  
R.D. Women's University  
Bhubaneswar

## SYLLABUS FOR Ph.D. COURSEWORK IN HOME SCIENCE

All the scholars of Ph.D. program of this Department have to undergo a course work of one semester duration. On successful completion of the course work, the scholars may be eligible for registration for Ph.D. subject to final recommendation of Department Research Committee (DRC). The syllabus structures for coursework is given below.

Papers	Course Title	Credits	Marks	Pass Mark
Paper-I	Research Methodology and Computer Application (Theory & Practical)	4	100	50%
Paper-II	Advance Study in Home Science (Theory)	4	100	50%
Paper-III	Review of Related Literature (Practical)	4	100	50%
Paper-IV	Research and Publication Ethics (Theory & Practical)	4	100	50%
	<b>Total</b>	<b>16</b>	<b>400</b>	<b>50%</b>

**Effective from 2021 Academic Session**

**Duration: 1 semester (6 months), Total 400 Marks**

**Objectives:** The syllabus aims at providing practical knowledge on advance areas of research in Home Science through the practical understanding of research process and ethics:

- Methodological study of research.
- Use of statistics and computer application in the process of research.
- Reviewing literature of the proposed study.
- Seminar presentations on the thrust areas of research in Home Science.

### **PROGRAM OUTCOME**

1. The scholars will be enabled to develop research aptitude in the field of Home Science
2. The scholars will be skilled in identifying research gaps and develop research plans by reviewing literatures related to their interest area.
3. The ethical conduct of research and development activities will be inculcated among the students.
4. To obtain a critical understanding and the ability to apply theoretical, practical and scientific knowledge in the field of Home Science
5. To identify individual, national and global and environmental issues related to Home Science for diverse population.
6. Tap self-potentials through thorough knowledge and research to enhance skills for self-employment and entrepreneurship
7. Analyze the prospects for interdisciplinary research processes.
8. Appraise and promote quality of life, happiness and wellbeing of community in the context of Human Development Index and embark on action and applied research and review policy in context with the current scenario of the nation.
9. Ability to apply knowledge of human development and behavior in research across life span.
10. To get insight into the origin and traditional textile patterns from different corners of India.

### **PAPER-I**

#### **RESEARCH METHODOLOGY AND COMPUTER APPLICATION**

### **COURSE OUTCOMES**

- CO 1. To acquaint with fundamental principles and techniques of social science research.
- CO 2. To gain skills in decision making on research topics and identifying sources of research problems, and formulating hypothesis
- CO 3. To aware of the fundamentals of Research Methodology, collecting and analyzing data

CO 4. To develop competency in Literature Review, drawing inferences from data analysis and Report writing.

CO 5. To able to get expertise in tools/software like Excel, MS-Office, SPSS, Active Scholar and alike.

### **Unit-I**

- Research Proposal - Meaning, purpose, steps in designing research proposal.
- Defining Research Problem - Meaning, selecting the problem, necessity of defining the problem, technique involved in defining a problem.
- Measurement and Scaling Techniques - Measurement in Research; Measurement in Scales; Sources of Error in measurement; Tests of sound Measurement; Techniques of developing measurement tools.

### **Unit- 2**

- Data collection - Meaning and types of data collection. Collection of Primary data - Observation method, interview method, questionnaires, schedule, difference between questionnaires and schedules. Collection of Secondary data - Caution using secondary data. Selection of appropriate method for data collection.
- Sampling design - meaning, steps, types and characteristics of a good sampling design.
- Processing of Data - Processing operations (Editing, coding, Classification, Tabulation), Problems in processing.

### **Unit-3**

- Analysis of Data – Meaning, Measures of Central tendency (Mean, Median, Mode) Measures of Dispersion - Meaning, Types of dispersions (Range, mean deviation, standard deviation)
- Measures of Relationship (Correlation) - meaning, significance, types (Curvilinear or Non-Linear relationship, Partial and Multiple Correlation). Calculation of Coefficient of Correlation, Product Moment Correlation, Correlation from Rank.
- Chi-Square Test – Chi-Square as a Test for comparing variance; Chi-Square as a Non-parametric Test; Conditions for the application of Chi-Square Test.

## Unit- 4

- Interpretation and Report Writing - Meaning, techniques, precaution of interpretation. Significance of report writing, step, layout of the research report, Types, Precautions for writing research reports.
- Data Analysis through computer applications using SPSS and EXCEL Packages. Presentation structure - introduction to slides, Graphs/ Diagrams, creating presentations and adding effects.
- Preparation of Power Point presentation of synopsis/seminar paper/ review of of literature.

### Books Recommended for Reference

- Social Survey and Research - Dr. S. R. Bajpai, Kitab Ghar Kanpur
- Statistical Methods - S.P. Gupta Sultan Chand and Sons Publisher, New Delhi
- Fundamentals of Statistic - D.N. Elhance
- Ahuja, R (2009) Research Methods, Rilwat publications
- Bajpai, S.R.(201 1)Method of Social Survey and Research, Grantham Printing Press
- Creswell, J. W. (2013). Qualitative Inquiry and Research Design: Choosing Among Five Approaches, Sage
- Crotty, M. (1998). The Foundations of social research: Meaning and perspective in the research process. London: Sage.
- Denzin, N. K., & Lincoln, Y. S. (2011), The SAGE Handbook of Qualitative Research. Sage.
- Goode and Hatt. (1952). Methods in Social Research. Bombay: Macgrawhill
- Kothari C., R. (2004). Research Methodology: Methods and Techniques. New Delhi New Age International (P) Limited, Publishers.
- Neuman, W. L. (2000). Social research method s. Qualitative and Quantitative approaches (4th Ed.). Boston: Allyn and Bacon.
- .Patton, MQ. (2001). Qualitative Evaluation and Research Methods (2nd Edition). Thousand oaks, CA: Sage Publications.
- Rathod, B.P.(2010) .Strategies and Techniques in Social Science Research, ABD Pulishers
- Sharma, M (2010) Research Methodology: Assignment, Seminar Paper and Project, EBH Publishers
- Walliman, N (2015) Your Research Project Designing and Planning Your Work, Sage

## MAPPING OF COURSE OUTCOMES WITH THE PROGRAM OUTCOMES:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	5	4	2	5	2	2	5	1	4	1
CO2	4	5	2	4	2	4	1	1	2	1
CO3	4	5	2	4	2	2	1	1	2	1
CO4	2	5	2	4	5	2	1	5	2	1
CO5	2	4	2	2	2	5	1	1	2	1

## PAPER 2

### ADVANCE STUDIES IN HOME SCIENCE

- **COURSE OUTCOME**
- CO 1. To gain knowledge on basic principles of food fortifications, and food and microbial interaction.
- CO 2. To understand human health implications of organic food and role of antioxidants in preventing degenerative diseases.
- CO 3. To develop idea about origin, history and growth of Indian traditional textile.
- CO 4. To relate various concepts of consumer education, entrepreneurship and develop entrepreneurship potential.
- CO 5. To gain the in-depth knowledge on childhood assessment tools, parenting, geriatric care and families on 21<sup>st</sup> century.

#### Unit-1 Food and Nutrition

- Food Fortification: Objectives and need for food fortification; types of food fortification; Food fortification programs- iodized salt, fortification of vitamin A and D, iron fortification; fortification of infant's foods.
- Ant- Oxidants: Free radicals, Anti-oxidants and diseases. Sources of anti-oxidants. Role of anti-oxidants in combating free radicals and preventing degenerative diseases; effect of cooking on anti-oxidants.
- Organic Foods : Characteristics and importance of organic foods; Types and principles of organic farming; Difference between organic and conventional farming; Classification of organic products.
- Food Quality Assessment: Causes of spoilage. Safety & Care of Food Supply- Microbial hazards, Residue Pollutants, Natural toxicants in Foods, Food Poisoning

## **Unit-II Textiles & Clothing**

- Theories of the Origin of clothing: Modesty theory, immodesty theory, adornment theory, Protective theory
- Wardrobe Planning for the family: Colour combination in apparels of men, women and children belong to Hindu, Muslim and Christian communities for different occasions such as Marriage, death, festivals, casual wear and professional wear.
- Socio-psychological aspect of Clothing: Perception Behaviour, Choice, Motivation, Shopping behavior and satisfaction, age differences. Designs in dress- Personality, figure, the material, prevailing style, suitable decorations
- Woven Textiles from Northern and southern India- Origin, material & techniques used Rajasthan- Kota Doria Gujarat- Sujani, Tangaliya, Pachhedi Madhya Pradesh- Chandero, Maheshwari Uttar Pradesh- Brocades West Bengal- Dacca muslin, Baluchari Tangail; Shawls from Kashmir, Assam and Nagaland. Odisha's Sambalpuri, maniabandh; Maharashtra; Paithani, Himroo Andhra Pradesh and Telengana- Dharvaram, Venkatgiri, Gadwal and Naryanpet Karnataka-Iikal, Khann Tamil Nadu- Kanjeevaram

## **Unit-III Human Development and Family Studies**

- Childhood Assessment Tools and Techniques used for children's overall Developments- Physical, social, emotional, Speech and Intellectual potentials.
- Parenting and Parenthood: Meaning and significance, foundation of parenthood in Indian Family Life- Traditional and contemporary. Parental Roles- Determinants of parenting behavior; Role of father and mother. Stages of Parenthood- Prenatal stage, infancy, childhood, adolescence, adulthood and old age (grand parenting). Challenges of Parenting- Role stress, work-family balance, disagreements and conflicts between the spouses, having children with disability/chronic illness.
- Ageing and Well-Being- Demographic profile of elderly in Odisha and India. Living arrangements (intergenerational families, old age homes, institutes etc.) and new models of care giving. Overcoming mental health challenges (loneliness, depression, anxiety, dementia, other age-related diseases etc). Life style changes and holistic health (physical well-being, food choice, yoga and restorative fitness, counseling and therapy, social and interpersonal support systems). Technology and aging (use of internet, advances in health and medical treatment, gadgets supporting safety and security of elderly) Leisure time activities and innovative models of developmental intervention.
- Preparing families for 21<sup>st</sup> century- Contemporary family problems, effect, coping strategies and possible prevention. Family life Enrichment- Meaning, need and aspects of family Life enrichment. Individual's right to have a family; Family's Rights and Responsibility with reference to the environment scope of family life enrichment.

## **Unit-IV Entrepreneurship Development and Consumer Education:**



- Developing a business plan- Market survey, resource survey, entrepreneur survey, identification of business opportunity
- Some business areas for entrepreneurial venture- Agriculture, horticulture, fishery, animal husbandry, eco-tourism, retail marketing, food processing, dress designing, fashion designing.
- Introduction to Consumer Behavior- Defining consumer behavior, Nature and scope of consumer behavior, characteristics of Indian Consumers; consumer decision making. Changing Patterns of Consumer Behavior- Demographic Trends, technological trends; implications of technological trends on consumer behavior; Trends in Public Policy.
- Environmental determinants of consumer behavior- Influence of culture; Group influence on consumption. Family Buying decisions.

### **Books recommended for Reference:**

#### **Unit-1**

- B.Sreelakshmi- Food Science
- B. Sreelakshmi- Nutrition Science
- Manay,S.N and Shadaksharaswamy (2017) Foods: Facts and Principles, Third Revised Edition, New Age International (P) Publishers, NewDelhi
- Potter,N.N. and Hotchkiss, J.H (2006), Food Sciences, fifth edition, CBS Publishers and Distributors, New Delhi
- Swaminathan M (2007), Essentials of Food and Nutrition. An advanced Textbook Vol.I and II, the Bangalore Printing and publishing Co. Ltd, Bangalore.
- Davidson S.R. Passmore, J.F. Brock and A Trasw ill Human Nutrition and dietetics, English language book society and Churchill livingstone 1975
- N. Shakuntala many ama M. Shadaksharaswamy, New Age International publication Food facts and principles.
- Robinson C.H: Normal and Therapeutic Nutrition memillan and Co.
- Behum Reheana: A textbook of foods Nutrition and Dietetics, sterling publications Pvt Ltd.
- Subhangini A Joshi, Tata- McGraw Hill Publishing Company Ltd. New Delhi. Nutrition and Dietetics
- M.S Bamji, N.P Rao and V. Reddy- Oxford and IBH publishing Co. Pvt Ltd. Textbook of Human Nutrition

#### **Unit-II**

- Textile Fiber to fabric 0 Bernad P CORbamn
- Our Clothing J.N Lippincott, Newyork
- Clothing for Moderns: Mac Millan Company, New York
- Modern Textiles: L.S. Dorathy, John wiley, New York

#### **Unit-III**

- Indian families at the Cross Roads- edited book David K Carson, Cecyle K. Carson, Aparajita Chowdhury Gyan Publishing House, New Delhi
- Textbook on Child Development and Family Relationship- Dr. Aparajita Chowdhury, Published by Academic Excellence, NewDelhi
- Family Life Education in India- Perspectives, Challenges and Applications- edited book by David K Carson, Cecyle K. Carson, Aparajita Chowdhury Rawat Publication New Delhi
- Human Development- Diane E. Papalia, Mc Graw Hill Publication
- Lamb, S. E (Ed). (2012) Aging and the Indian diaspora: Cosmopolitan families in Indian and abroad. New Delhi Orient Blackswan
- Cavanaugh, J. & Blanchard- Fields F. (2011) Ault developmeny amd aging (7<sup>th</sup> ed) Stanford, C.T: Cengage Learning
- Kekar, S.(Ed). (1993) identify and adulthood. NewDelhi Oxford University Press

#### Unit-IV

- Extension Communication and Management- G.L.Ray
- Extension Education and Communication – V.K.Dubey & Indira Bishnoi
- Communication & Social Change- Chhabraf
- Social Problems & Social Disorganization- C.B Memoria

#### MAPPING OF COURSE OUTCOMES WITH THE PROGRAM OUTCOMES:

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	2	4	5	5	5	5	5	1	4	2
CO2	2	5	2	5	5	1	5	1	4	2
CO3	2	4	2	5	5	1	5	1	2	5
CO4	2	4	2	5	5	1	5	1	2	1
CO5	2	4	2	5	5	1	5	5	5	1

#### REVIEW OF RELATED LITERATURE & SEMINAR PRESENTATION

##### Credits: 04, Full marks: 100 (practical)

Each student is required to select a problem on which she has to do intensive review of related studies under the supervision of a faculty member of the department. She has to review adequate research studies related to the problem and prepare a report. The student is required to submit a report on the review carried out by her and needs to give a power point presentation before the DRC. Assessment shall be made on the basis of the following criteria.

- Relevance of the reviews.
- Finding the research gap

- Standard and quality of writing the review.
- Style of presentation
- Answering the question.

If the presentation is unsatisfactory, the DRC may direct the student to amend the review of literature and ask for a 2<sup>nd</sup> or 3<sup>rd</sup> presentation. The candidate would present two seminars before the DRC on the specific areas of research, which she will carry on for conducting her research.

### **Distribution of marks for evaluation**

1. Review of literature and presentation :50 marks (20+30)
2. Seminar presentation :50 marks (20+30)

**Total marks :100 marks**

### **COURSE OUTCOMES**

CO 1. To conduct review of related literature.

CO 2. To identify the research gap and write the review in a synchronized manner.

CO 3. To find out variables relevant to the selected research area.

CO 4. To summarize the findings of different research studies.

CO 5. To write a thematic paper on any contemporary issue in the subject.

### **MAPPING OF COURSE OUTCOMES WITH THE PROGRAM OUTCOMES:**

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	5	5	2	1	1	2	5	1	4	2
CO2	5	5	2	1	1	1	1	1	4	2
CO3	5	5	2	1	1	1	1	1	2	2
CO4	5	5	2	1	1	1	1	1	2	1
CO5	5	5	2	1	1	1	1	1	2	1

## **PAPER- IV**

### **RESEARCH AND PUBLICATION ETHICS**

**Credits: 04, Full marks: 100 (Theory-75) + (B- practical-25)**

#### **COURSE OUTCOMES**

CO 1. To learn about the philosophy of research ethics.

CO 2. To gain in-depth knowledge on different scientific conducts of research ethics.

CO 3. To aware the students on publication ethics, its violation and misconducts.

CO 4. To learn the terms and condition of open access publications.

CO 5. To gain an insight on different journal suggestion tools, different software for checking plagiarism and different predatory journals.

#### **A-THEORY**

##### **Unit-I: philosophy and ethics:**

- Introduction to philosophy: definition, nature and scope, concept, branches
- Ethics: definition, moral philosophy, nature of moral judgement and reactions.
- Intellectual honesty and research integrity
- Conflict of interest

##### **Unit-II: Scientific conduct:**

- Ethics with respect to science and research
- Scientific misconduct: Falsification, Fabrication and Plagiarism (FFP)
- Redundant publications: Duplicate and overlapping publications.
- Selective reporting and misrepresentation of data.

##### **Unit-III: Publication ethics:**

- Publication ethics: Definition, introduction and importance
- Violation of publication ethics, authorship and contributor's ship
- Publication misconduct: definition, concept, problems that lead to unethical behavior, types,

identification of publication misconduct, complaints and appeals.

- Predatory publishers and journals

## **B-PRACTICAL**

### **Unit-I: Open Access Publishing:**

- Open access publications and initiatives
- Online resource to check publisher copyright and self-achieving policies (SHERPA/ RoMEO)
- Journal finder/ journal suggestion tools viz. Elsevier finder, Springer, Journal suggester etc.

### **Unit-II: Publication Misconduct:**

- Use of plagiarism software like Turnitin, Urkund and other open-source software tools
- Software tools to identify predatory publications developed by SPPU
- Indexing databases

### **MAPPING OF COURSE OUTCOMES WITH THE PROGRAM OUTCOMES:**

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	5	4	4	1	1	2	5	1	4	2
CO2	5	5	2	1	1	1	1	1	4	2
CO3	4	4	2	1	1	1	1	1	2	2
CO4	4	4	2	1	1	1	1	1	2	1
CO5	4	4	2	1	1	1	1	1	2	1

- 3 Note related: 1
- From What Related: 2
- Nutral: 3
- Moderately Related: 4
- Highly Related: 5

