

Four Year Under Graduate Programme (FYUGP)

As per provisions of NEP- 2020

Vinoba Bhave University Hazaribag



Subject: Home Science

To be implemented from the Academic year 2022-23

(From session 2022-26)

Syllabus for Semester- I

AIMS OF BACHELOR'S DEGREE PROGRAMME IN HOME SCIENCE

The broad aims of Bachelor's degree programme in Home Science is intended to provide:

- Broad and balance knowledge in Home Science in addition to understanding of key concepts, principles, and theories of Human beings.
- To develop student's ability and skill to acquire expertise over solving both theoretical and applied home related problems.
- To provide knowledge and skill to the student's thus enabling them to undertake further studies in multidisciplinary areas that can be helpful for self-employment/entrepreneurship.
- To provide an environment that ensures cognitive, language development of students in a holistic manner.
- To provide the latest subject matter, both theoretical as well as practical, such a way to foster their core competency and discovery learning.
- To mold a responsible citizen who is aware of most basic domain-independent knowledge, including critical thinking and communication.
- To enable the graduate, Student can be benefitted by getting jobs in various fields like government sector, working with NGOs, Jobs as an extension workers education etc. and also they can feel the sense of entrepreneurship as well.

POGRAMME LEARNING OUTCOME

The student graduating with the Degree B.A.(Honours/Research) in Home Science should be able to:

- **Core Competency:** To enhance the capacity of students to understand universal and domain specific value in Home Science.
- To learn about the discipline of Home science as a holistic field of study covering multiple facts and requirements of human beings in day to day living.
- To enhance their skills in major areas of Home Science.
- To explore avenues of self employments & entrepreneurship.
- To promote research, innovation favoring all the disciplines in Home Science.
- **Disciplinary knowledge and skill:** A graduate student are expected to be capable of demonstrating comprehensive knowledge and understanding of both theoretical and experimental/applied Home Science knowledge in various field.
- **Skilled communicator:** The course curriculum incorporates basics and advanced training in order to make a graduate student capable of expressing the subject through technical writing as well as through oral presentation.
- **Critical thinker and problem solver:** The course curriculum also includes components that can be helpful to graduate students to develop critical thinking ability by way of solving problems using basic knowledge and concepts.

- **Sense of inquiry:** It is expected that the course curriculum will develop an inquisitive characteristic among the students through appropriate questions, planning and reporting experimental investigation.
- **Team player:** The course curriculum has been designed to provide opportunity to act as team player by contributing in laboratory, field-based situation and industry.
- **Skilled project manager:** The course curriculum has been designed in such a manner as to enabling a graduate student to become a skilled project manager by acquiring knowledge about project management, witting, planning, study of ethical standards and rules and regulations pertaining to scientific project operation.
- **Digitally literate:** The course curriculum has been so designated to impart a good working knowledge in understanding and carrying out data analysis, use of library search tools, and related computational work.
- **Ethical awareness/ reasoning:** A graduate student requires to understand and develop ethical awareness/reasoning which the course curriculum adequately provide.
- **Lifelong learner:** The course curriculum is designed to inculcate a habit of learning continuously through use of advanced ICT technique and other available techniques/book/journals for personal academic growth as well as for increasing employability opportunity.

COURSES OF STUDY FOR INTRODUCTORY REGULAR FYUGP IN HOME SCIENCE

SEMESTER I/II/III INTRODUCTORY REGULAR COURSE 1 Paper

INTRODUCTORY REGULAR COURSE (IRC)

(Credits: Theory -03, Practicals-0)

The INTRODUCTORY REGULAR COURSE (IRC) of Home Science is to be studied by the Students opting major subject other than Home Science.

Students opting Home Science as major subject have to select a subject associated with Home Science as **INTRODUCTORY REGULAR COURSE**.

Marks: 25 (5 Attendance & others +20 SIE: 1.5 Hr) + 75 (ESE:3Hrs) = 100	Pass Marks: Th (MSE+ ESE)= 40
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Instruction to Question Setter

Semester Internal Examination (SIE 20+ 5 =25 marks):

The Semester Internal Examination shall have two components. (a) One Semester Internal Assessment Written Test (SIA) of 20 Mark (b) Class Attendance Score (CAS) including the behavior of the student towards teachers and other students of the college of 5 marks.

End Semester Examination (ESE 75 marks):

There will be two group of question **Group A is compulsory** which will contain three questions. **Question No 1. will be very short answer type** consisting of five questions of 1 mark each. **Question No 2 & 3 will be short answer type of 5 marks each. Group B will contain descriptive** type seven questions of fifteen marks each, out of which any four are to be answered.

Note: There may be subdivisions in each question of group B.

Introductory Home Science

Theory 45 Lectures

Course objective

This course is designed

- To expose the students to the basic Principles Home Science.
- To introduce the first course.

Program Specific Outcomes

On completion of this course, the students will be able to understand

- Students have an ability to understanding Human development, Food & Nutrition and Textile and Clothing.
- Understanding the need and importance of studying human growth and development across the life span.
- Understanding and identify the biological and environmental factors affecting human development.
- Understanding the basic concept of food and Nutrition role of various nutrient, nutritional deficiency diseases.
- To develop and understanding about concept & scope of textile and clothing.
- Understanding the importance, classification and properties of fiber.

Unit -I Introduction to Human Development

15H

- History and Interdisciplinary nature of Human development
- Concept and need to study of Human development
- Concept of Growth and Development, stages and principles of Growth and Development
- Determinants of Development - heredity and environment.

- Importance and scope of Human development

Unit –II Developmental aspect of Early Childhood year 10H

- Physical and Motor development
- Social and Emotional development
- Cognitive and language development

Unit- III Food and Nutrition 10H

- Food- Meaning, classification and Function, Food Groups
- Nutrition- Concept of nutrition,
- Nutrient – Macro and Micro nutrient, sources, deficiency diseases

Unit – IV Textile and Clothing 10H

- Introduction to clothing and textile
- It's importance in day to day life
- Scope
- Classification of textile fiber on the basis of their sources
- Primary and secondary properties of fiber.

References:

- 1) Alexander T. Paul road and Berrard human: Development psychology. D.Van Nosthand Co, New York, 1980.
- 2) Antony, M.J (1985), Women's Right: Dialogue, New Delhi.
- 3) Desai. N. & patel, V. India Women: Change and Challenges in the International Decade: Popular Prakashan Bombay
- 4) Garg, Grace, J... Human Development, Prevtice HaH inc. N. Jersey.
- 5) K., Robert: Human Development A life span Prospective, allyn Baleen Inc. Boston.
- 6) Kerwis, MD. : The Psychology of Human aging theory Research of Practice, Allyen & Bacon Inc. Bosteen.
- 7) Neeta Agarwal. Dr.A.K.Kamma Tripathi, Manav Vikas, Agarwal Publicaion (Hindi version).
- 8) Patni Manju & Sharma, Lalita; Grah Praband star Publicaion Agra
- 9) R.Bhatia& C Arora(1999): Introducaion to Clothing & Textile, printed by Macho primtery Raopura, Baroda.
- 10) R.Mudambi, Food Science New age International Limited publication.
- 11) Stewart, A.C & Frideman S.: Child Development infancy through Adolescence- Wiley International ed.1987.
- 12) Singh Brinda Aahar Vigyan panchsheel prakasan, Jaipur.
- 13) SriLaxmi B. Nutrition Science, new age international , Limited publication .
- 14) Vikery, F.E.: Creative Programming for older Adults, Association Press, Chicago.

15) Verma, Pramila: Vastra Vigyan Avam Paridhan-Madhya Pradesh Hindi Granth Academy, Bhopal.

16) Verma, Preeti & Dr. D.N. Srivastava. Bal Manovigyan Avam Vikas (Hindi version).

Major course- MJ1:

Marks: 15 (5 Attendance & others + 10SIE: 1HR) +60(ESE :3HRS)= 75

Pass Marks: Th (MSE+ESE)= 30

Instruction to Question Setter

Semester Internal Examination (SIE 10+ 5 =15 marks):

The Semester Internal Examination shall have two components. (a) One Semester Internal Assessment Written Test (SIA) of 15 Mark (b) Class Attendance Score (CAS) including the behavior of the student towards teachers and other students of the college of 5 marks.

End Semester Examination (ESE 75 marks):

There will be two groups of questions. **Group A is compulsory** which will contain three questions. **Question No 1. will be very short answer type** consisting of five questions of 1 mark each. **Question No 2 & 3 will be short answer type of 5 marks each.** **Group B will contain descriptive** type five questions of fifteen marks each, out of which any three are to be answered.

Note: There may be subdivisions in each question of group B.

Food and Nutrition

Theory: 60 Lectures

Program Outcomes

On completion of this course, the students will be able to understand

- To understand of basic concepts of food & nutrition, role of various nutrients & their requirements, role of deficiency & excess and metabolism of nutrients.
- To learn about nutritional contributions of different foods & different methods of improving nutritional quality of food.
- To understand basic knowledge of cell, tissue, blood enzyme and hormones.

Program Specific Outcomes

On successful completion of this course the student will be able to know:

- Food , Nutrition & Health:
- Different nutrient.
- Digestion, absorption of nutrient.

Course content

1) Food , Nutrition & Health: 12 lecture

Meaning & definition of food meaning * meaning & definition of nutrition, situation of nutrition, meaning definition & dimensions of health, function of food, relationship between food, nutrition & health (* Meaning of nutrients)

2) Carbohydrate, Protein & Fat: 16 lecture

Composition, classification, function, sources, effects of deficiency, effects of excess of carbohydrates, daily requirement of carbohydrates in different age groups. Compositions classification functions, sources, effects of deficiency and excess of protein, daily requirements of protein in different age groups, composition, classification, function, effects of deficiency and excess of fats, daily requirement of fats in different age groups

3) Vitamins, Minerals & water: 11 lecture

Classification of vitamin, function, sources, effects of deficiency and excess of water soluble vitamins (vitamin 'B' & 'C') & fat soluble vitamins (vitamin 'A' 'D' 'E' 'K'). Daily requirements of vitamin in different age groups. Functions, sources, effects of deficiency & excess of minerals i.e Iron, calcium, iodine, daily requirements of minerals in different age groups function, sources & diffidence of water.

4) Digestion & Absorption of food: 6 lecture

Digestion & absorption process. Digestion enzymes of carbohydrate, protein, & fats. Digestion & absorption process of carbohydrates, protein & fats

References:

- Kumari Asha aahar evam poshan vigyan Agarawal publication.
- R.Mudambi, Food Science New age International Limited publication.
- Singh Brinda Aahar Vigyan panchsheel prakasan, Jaipur.
- SriLaxmi B. Nutrition Science, new age international , Limited publication.
- Verma Pramila Aahar evam poshan vigyan Bihar granth academy patna.

HOME SCIENCE PRACTICAL – MJ 1 LAB

Marks : Pr (ESE: 3Hrs)= 25

Pass Marks: Pr (ESE) =10

Instruction to Question Setter for

End Semester Examination (ESE) :

There will be one practical Examination of 3 Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment (1) =15marks

Practical Record notebook =05marks

Viva-voce =05marks

PRACTICAL

Credits 02hrs/ 30 lectures

Programme Specific outcomes

- 1) To acquire skills in food preparation techniques.
- 2) To use appropriate methods of cooking for preparation of specific food products.

Course content

- I) Prepare recipes rich in nutrients –Protein, vitamins and minerals
- II) Prepare and present a file containing food stuffs rich in various nutrients
- III) Prepare: (a) Height & weight chart of growing children (b) Pictorial chart of motor duet for the child of zero to one year.
- IV) Characteristics features of children's cloths & Books.
- V) Recommended Dietary allowances of different nutrients in different age group.

References:

- Kumari Asha aahar evam poshan vigyan Agarawal publication.
- R.Mudambi, Food Science New age International Limited publication.
- Singh Brinda Aahar Vigyan panchsheel prakasan, Jaipur.
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