

Home Science

Code No. 321

Introduction

Home Science is concerned with the home, health and happiness of all members of the family and community. It is the art of managing resources efficiently combined with the science of achieving a healthier and happier home. This subject supports the personal enrichment and professional development. It integrates the application of various sciences and humanities to improve human environment, family nutrition, management of resources and child development.

Home Science is a subject for all now, because everyone has a dream of having a perfect home life. The days are gone that household activities were the responsibility of women folk. Now both men and women share the responsibilities in all affairs of the home. It empowers the learner to achieve all round development in different pursuits of life. It opens up endless avenues for the learners to settle as a self employed persons or posses any desirable jobs in established organizations including the NGOs.

Rationale

At no time in history the demands of humans begins have been as diverse as they are today. The individuals are constantly faced with problems of change. They have to make continuous adjustment to their life style that tests their decision making skills.

Home Science teaches an individual to develop knowledge and skills in order to interact better with their environment that includes the family, food clothing and home. The basic aim of studying Home Science is to efficiently use the goods and services available for improving the quality of human life.

Home Science as a subject is of great social significance as it affects an individual's way of living, eating, raising young ones, etc., which in turn affects the welfare and stability of the family and the society at large. Besides grooming individuals for better living, the study of Home Science also opens up vistas of future vocational pursuits

Objectives

After completing this course, the learner will be able to:

- develop skills that help in bringing a positive change in daily life style and solving problems;
- develop creative thinking and a rational approach towards everyday life;
- develop scientific temper and a spirit of inquiry; and
- sensitivity to values of ethical living.

Scope and job opportunity

The scope of Home Science extends far beyond the 'home' and is not limited to cooking, laundry,

needlework and home decoration. In fact it is the only subject which prepares young learners for the two most important goals in their lives – looking after their home and family and preparing for a career or vocational life. The areas covered in Home Science are vast and varied. There are jobs available if the learner wish to work out side home and as wage employment or the learner can start his or her own enterprise e.g. boutique, production unit, laundry service etc. There are various opportunities available for Home Science students and some of the broader options are mentioned below:

- Catering
- Food preservation/bakery / confectionery
- Interior decoration
- Arts and crafts
- Housekeeping and laundry services
- Dress designing, garment construction: textile science
- Teaching
- Communication and extension
- Resource managers and consumer education

Eligibility conditions

Age: 15Years

Qualification: 10th pass

Medium of instruction: Hindi, English, Urdu, Bengali, Gujarati and Odia

Duration of the course: 1 Year

Weightage

Theory: 80 Marks

Practical: 20 Marks

Tutor Marked Assignment (TMA): 20% Marks of theory

Scheme of studies: Theory (240hours), practical (30hours), TMA (self paced)

Scheme of evaluation: Theory paper 80 marks (3 hours), practical 20 marks (3hours), internal assessment (TMA) (20% of theory marks).

Pass criteria: 33% in each component.

Course content

S. No.	Module/ Topics	Duration (in hours)	Module Approach/ Description	Description of practicals	Weightage (marks)
1.	Core Moduels		Home is a place, which provides comfort and meets an individual's need for safety, security, identity and a sense of belongingness. This module provides an understanding of designing and arranging the environment at home in such a manner that it promotes healthy physical and social development of individuals. It also creates awareness about the various vocational areas in the subject of Home Science.		
2.	The Art and Science of Managing Home Approach	20	<p>L 1 Home Science concept</p> <ul style="list-style-type: none"> • scope • employment opportunities <p>L2 Family, Health and Security</p> <ul style="list-style-type: none"> • definitions • types of family • importance of health • factors contributing to health • methods of providing safety and security at home <p>L3 Ethics in Daily Living</p> <ul style="list-style-type: none"> • definition and need • problems faces • code of ethics • raising ethical standards 		4
3.	Food and Nutrition	45	Good health is dependent on the food that we eat. Our diet consists of a variety of food that can be prepared by applying simple knowledge of food and nutrition. This module covers important topics like food, nutrition,		16

			meal planning and preparation. This knowledge helps to alter food habits that can contribute to ensuring good health.		
4.			<p>L4 Food, Nutrition and Health</p> <ul style="list-style-type: none"> • definition and functions of food • sources and requirements of nutrients, deficiency of nutrients • relationship between food, nutrition and health <p>L5 Meal Planning</p> <ul style="list-style-type: none"> • food groups • balanced diet • meal planning • factors influencing meal planning • planning balanced meals for the family • definition, need and types of therapeutic diet • diet in common diseases <p>L6 Nutritional Status</p> <ul style="list-style-type: none"> • definition • assessing nutritional status • causes and prevention of malnutrition • recognizing deficiency disorders: Vitamin A, Iron and Iodine • causes and prevention of the above deficiency disorder <p>L7 Purchase and Storage</p>	<ol style="list-style-type: none"> 1. To preserve seasonal foods 2. To prepare and evaluate dishes using the following methods of food enrichment such as: Combination Fermentation Germination 3. To collect different food items that is available at home and categorizes them under various food groups. 	

			<p>of Food</p> <ul style="list-style-type: none"> • selection of food • food spoilage • safe handling of food • methods of storage <p>L8 Preparation of food</p> <ul style="list-style-type: none"> • importance of pre-preparation and preparation of food • methods of cooking • conservation and enhancement of nutrients • hygienic food handling in the kitchen <p>L9 Food Preservation</p> <ul style="list-style-type: none"> • importance • principles • household methods of preservation 		
5.	Resource Management	45	In these days of stress, home is a person's last refuge from the chaos of outside world. One can feel well adjusted if one possesses the knowledge of optimal use of all the resources in one's environment to achieve satisfaction. 'Doing things right' within the available resources is the aim of this module. This module aims at teaching a creative and systematic approach to an improved life.	16	
6.			<p>L10 Family Resources Management</p> <ul style="list-style-type: none"> • definition, steps and motivating factors • decision making • Definition, sources and characteristics • types of resources, 	<p>4. To identify sources of pollution in one's area and to suggest remedial measures.</p> <p>5. To take one's own family as an example and</p>	

		<ul style="list-style-type: none"> optimal use of resources <p>L11 Time and Energy Management</p> <ul style="list-style-type: none"> significance of making a time plan energy management and fatigue principles of work simplification methods of saving time and energy <p>L12 Space Management</p> <ul style="list-style-type: none"> meaning and need significance of work areas space organization for various activities <p>L13 Income Management</p> <ul style="list-style-type: none"> meaning of income, expenditure and investment expenditure plan income and expenditure record investing money wisely generating additional income <p>L14 Energy Conservation</p> <ul style="list-style-type: none"> meaning and need environmental degradation role of individuals and government in creating an eco-friendly environment <p>L15 Environment</p>	<p>6. List the household and related task performed by each member</p> <p>7. Analyse the work patterns according to age and gender differences in responsibility</p> <p>8. Comment on this division of tasks</p> <p>(i) To record the expenditure for one's own family for a month</p> <p>(ii) To evaluate the family's pattern on expenditure and on the basis of the evaluation prepare a budget for the family.</p>	
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			<p>Management</p> <ul style="list-style-type: none"> • Meaning and need • Environment • Effect of environment • Role of individual and government in creating an eco-friendly environment <p>L16 Household Equipment</p> <ul style="list-style-type: none"> • selection and use • care and maintenance <p>L17 Consumer Education</p> <ul style="list-style-type: none"> • definition • problems faced by consumers • consumer protection laws and redressal • role of standardization marks, labeling and packaging • consumer rights and responsibilities 		
7.	Human Development	45	<p>Since every one is a product of environment, their well-being is affected by both external and internal factors. External factors constitute people around you and the housing, food; clothing equipment etc. internal factors are physical, mental, emotional and psychological health. This module explains the role of a family that acts as a life support system and helps to adapt to the changes occurring within and around an individual.</p>		16
8.			<p>L18 Growth and Development (0-5 years)</p> <ul style="list-style-type: none"> • definition and principles of development • development during 	9.	<p>To observe children in the age group of 1yr 6 months – 3yrs for their language</p>

			<p>infancy and childhood</p> <ul style="list-style-type: none"> • physical, motor, socio-emotional, cognitive and language development • behaviour problems in children <p>L19 Growth and Development (6-11 years)</p> <ul style="list-style-type: none"> • characteristics of physical, motor, socio-emotional, cognitive and language development <p>L 20 Adolescence</p> <ul style="list-style-type: none"> • definition and physical development • sexual maturation and sex education • characteristics of physical, motor, socio-emotional, cognitive and language development • problems faced by adolescents <p>L 21 Concerns and Issues in Human Development</p> <ul style="list-style-type: none"> • position of the girls child in society • juvenile delinquency • child lab or • socio-economically disadvantaged children • major physical disabilities • mental retardation • safe motherhood • HIV/AIDS 	<p>achievements</p> <p>10. To observe a child in the age group of 1-2 yrs and record how he/she expresses anger and fear.</p> <p>11. To visit a nearby nursery school and observe and three children for their social behaviour</p> <p>12. To obtain a teenager's view about the physical changes and social and emotional problems faced during adolescence.</p>	
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9.	Textiles and Clothing	45	<p>“Clothes make a man” and help to create personal identity and build self-confidence. Using well constructed garments from textiles that are composed of fibres, yarns and finishes enhance the personality and present ability of individuals. This modules aims to given an understanding of the properties of textiles. This knowledge is important for fabricating, constructing, selecting, using and caring for the textiles in daily use.</p>	16	
10.			<p>L21 Introduction to Fabric Science</p> <ul style="list-style-type: none"> • meaning and scope of fabric science • fibre-definition, classification and properties <p>L22 Yarn and its Construction</p> <ul style="list-style-type: none"> • definition and yarn processing • properties and types of yarns • textured yarns <p>L 23 Fabric Construction</p> <ul style="list-style-type: none"> • techniques of fabric construction • weaving • knitting <p>L 24 Textile Finishes</p> <ul style="list-style-type: none"> • meaning and importance • types of finishes and their properties • dyeing and printing <p>L 25 Selection of Textiles and Clothing</p> <ul style="list-style-type: none"> • selection of textiles for different and use • selection of clothing • quality assurance – 	<p>13. To weave plain and it will weave using strips of paper</p> <p>14. To collect six samples each of fabrics made by these two weaves</p> <p>15. To remove curry, blood, mud, ink and tea/ coffee stains from white cotton fabrics</p> <p>16. To launder the following materials;</p> <p>Cotton – ‘A’ line frock/ pillow case/ petticoat / pyjama</p> <p>Silk –blouse /scarf</p> <p>Wool –cardigan/cap/ scarf</p> <p>Synthetic –shirt/saree/ pant</p>	

			<p>indicators and mal-practices</p> <p>L 26 Care and Maintenance of textile</p> <ul style="list-style-type: none"> • Steps in laundering • Characteristics of auxiliaries – soap, detergents, blue and starch • Identification and removal of stains • Dry cleaning • Storage of clothes 		
11.	Optional Moduels	30			12
12.	House-keeping-6 A	<p>Every individual enjoys living in a clean environment, which includes homes place and community. The knowledge of housekeeping enables the individuals to promote and maintain cleanliness, and derive psychological satisfaction by promoting aesthetics at home and workplace. The module is aimed at imparting knowledge in housekeeping for everyday activities and also facilitates in taking up housekeeping related jobs.</p>			
13.			<p>L26 Introduction to Housekeeping</p> <ul style="list-style-type: none"> • meaning • importance • areas of housekeeping • functions of a housekeeper • personal grooming of the housekeeper <p>L 27 Cleaning and cleaning materials</p> <ul style="list-style-type: none"> • cleaning materials and equipment • methods of cleaning • types of cleaning <p>L 28 Maintenance of Premises</p>	<p>17. To care for, maintain and clean wooden, floor, brass, aluminum, silver and plastic</p> <p>18. To use waste material for preparing useful household items</p> <p>19. To practice cleaning the following (to be done under adult supervision only)</p> <ul style="list-style-type: none"> • An electric Fuse • 3 pin plug of an 	

		<ul style="list-style-type: none"> • maintenance of different surfaces • common household repairs <p>L 29 Aesthetics at Home</p> <ul style="list-style-type: none"> • flower arrangement • floor and wall decoration • accessories 	electric iron	
14.	Creative Hand Embroidery- 6 B	<p>Hand embroidery is an ancient art of our country and in the present time embroidered clothes have become a fashion both among girls and boys. Embroidery enriches and clothes that you wear. This vocational module is aimed at providing knowledge and skill to venture into the area of creative hand embroidery for beautifying one's own clothing or to take up embroidery as a vocation.</p>		
15.		<p>L30 Introduction to Creative Hand Embroidery</p> <ul style="list-style-type: none"> • historical perspective • meaning • materials and tools <p>L31 Design</p> <ul style="list-style-type: none"> • types of design (geometric, stylized, abstract) • enlargement /reduction of design • transfer of design • placement of design <p>L32 Colour</p> <ul style="list-style-type: none"> • Prang's colour wheel • properties of colour • colour schemes <p>L33 Embroidery Stitches</p> <ul style="list-style-type: none"> • common hand embroidery stitches • running stitch, stem, stitch, chain, stitch, cross stitch, herringbonestitch, blanket stitch, French knot, long and short stitch. 	<p>To make a colour wheel</p> <p>To prepare samples of various embroidery stitches</p> <p>To do enlargement and reduction of motifs created.</p>	