

Home Science

Code No. 216

Introduction

Home Science subject is very dynamic and trains the learners as an individual as well as makes them resourceful enough to cope with self development, their family and their external environment. It encompasses five major components i.e. Food and Nutrition, Textiles and Clothing, Resource Management, Human Development and Communication and extension.

It is an art as well as science. When it deals with decorating house, cooking food, designing any cloth, using soft skills to communicate, it is an art but when it involves principles of nutrition, growth and development of children, textile science, even human behaviour, it is science. All this learning leads to a healthier and happier homes. 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.

It empowers the learner to achieve all round development in different pursuits of life and opens endless avenues for the learners to settle as self employed persons or possess any desirable job in established organizations.

Rationale

Home science is an area of knowledge which is essential for learners, both male and female, to understand and handle more efficiently their personal life, resources and interpersonal relationship in life. This body of knowledge also develops in them skills that enable them to deal with day to day problems and ultimately establish them as more competent and productive members of the family and community at large.

A large number of vocations emerge out of the field of Home Science. This is of particular importance to the learners who pass out of secondary school as it helps them to identify their future vocation and area of study.

As a vast majority of learners enrolled with the National Institute of Open Schooling are in the age group of 15 to 29 years, the thrust in this curriculum is on adolescent and adult education. It is understood that if adequate care and attention is given to adolescent needs, a healthier and empowering social environment can be created.

Home Science is an activity orientated subject; hence stress has been laid on the inclusion of a lot of activities and small projects drawn out of everyday life situations. The learners are expected to actively participate in the learning process. These activities have been designed to enable individuals to respond to situations in logical, sensitive and positive ways without harming either self or the society.

Objectives

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

- recognize their own strengths and weaknesses and work on them to achieve their maximum potential;
- put into practice decision making and problem solving skills to make informed choices;
- Learn the milestones of growth and development and develop sensitivity for each member of the family in different life stages;
- develop lifelong ability to absorb knowledge and apply it effectively to meet the challenges to ever changing life while focusing on adolescent issues;
- become aware of the national issues and challenges and identify one's own role in overcoming them.

Scope and job opportunity

Home Science 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 two categories of jobs i.e. wage employment and self employment. One can find jobs in export houses, bakery units; canteen, hotels, food preservation units, boutique, laundry service, dyeing and printing units, schools, shops etc. as well as learners can start their own enterprise like hobby classes, production unit etc from home or outside home depending upon the resources available.

Eligibility conditions

Age: 14 years

Qualification: Ability to read and write

Medium of instruction: Hindi, English, Urdu, Marathi, Telugu, Gujarati, Malayalam, Tamil and Odia medium

Duration of the course: 1 year

Weightage

Theory: 85 Marks

Practical: 15 Marks

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

Scheme of studies: 240 hours for theory and 60 hours for practical work, TMA (self paced)

Scheme of evaluation: Theory paper 85 marks; Practical work- 15 marks; TMA- 17 marks (20% of theory marks)

Pass criteria: 33% Marks

Course content

S. No.	Module/ Topics	Duration (in hours)	Module Approach/ Description	Description of practicals	Weightage (marks)
1.	Home Science in Everyday Life		The topics being covered in this module are related to the basics of Home Science in our everyday life. It is intended to be the foundation structure, the understanding of which will be reflected in the following module where the learners are expected to apply the knowledge of processes and procedures. The topics range from the basics of food and nutrition, housing, health concepts and diseases, knowledge of fibers and process of fabric construction, to human development; from infancy to adulthood.		41
2.	Unit 1: Home science and its importance	6	1 - What is Home Science Meaning and Importance of Home Science in personal life Facts about Home Science as a discipline and profession Scope of Home Science- Educational and Vocational		2
3.	Unit 2: Our Food	40	L2 Food and its nutrients Definition and Functions of food Nutrients - importance and sources Malnutrition - its effects and prevention L3 Food groups Classification of food and utility of classifying Food pyramid and balanced diet Factors affecting planning of balanced meals/diets Balanced meal for the family L4 Methods of Cooking	Practical 1: Observe and record the results of cooking any two cereals and two vegetables cooked by different methods. Practical 9: To observe the items eaten, from the given menu. To classify each item into an appropriate food group. To suggest, items to be included in the food group not covered in the meal. Practical 10: To adjust the given meal	15

			<p>Importance of cooking food</p> <p>Methods of cooking food- moist heat, dry heat, frying, solar and microwave cooking</p> <p>Effect of cooking on nutrients</p> <p>Evaluate procedures of cooking</p> <p>L5 Food Preservation</p> <p>Food storage and food spoilage</p> <p>Food preservation and its advantages</p> <p>Methods of preserving food at home</p> <p>Hygienic handling of food in a clean kitchen</p>	for a family keeping in mind the sex, age and activity of the family members	
4.	Unit 3: Our Health	35	<p>L6 Environment Pollution - sources, effects, prevention</p> <ul style="list-style-type: none"> • Waste disposal- waste water, garbage and animal waste • Eco-friendly practices <p>L7 Health</p> <ul style="list-style-type: none"> • Health : aspects and importance • Indices of good health • Immunity: importance in maintaining healthy life • Immunization <p>L8 Communicable and lifestyle diseases</p> <ul style="list-style-type: none"> • Communicable and lifestyle diseases: Causes and prevention, signs and symptoms • Healthy practices 		12

5.	Unit 4: Our Clothes	35	<p>L9 Care and maintenance of fabrics</p> <ul style="list-style-type: none"> • Meaning and importance of laundry • Stain removal - precautions and methods • General steps in laundering- sorting, mending, stain removal, soaking, washing, drying, finishing, storing • Laundering methods for specific fabrics • Storage of laundered clothes <p>L 10 Fiber to fabric</p> <ul style="list-style-type: none"> • Functions of clothing • Fibers- classification, properties and identification • Fabrics: characteristics, identification through visual and technical tests, uses • Yarn manufacture- simple, special and blends • Fabric construction- characteristics and end-use, basic weaves and knitting • Selection of fabric <p>L 11 Fabric finishes</p> <ul style="list-style-type: none"> • Meaning and importance of finishes • Classification of finishes: Basic and Functional 	<p>Practical 2: To identify fabrics through visual inspection</p> <p>Practical 11: To identify fibres using burning test.</p> <p>OR</p> <p>*To identify the given fabrics by touching and feeling the texture.</p> <p>Practical 12: To make graphic illustration or sample of plain weave by using strips of paper</p> <p>Practical 13: To remove the given stains from white cotton fabrics.</p> <p>OR</p> <p>*write the appropriate procedure in the column provided in the given table to remove the given stains.</p> <p>Practical 14:</p> <ol style="list-style-type: none"> To wash and finish a Cotton Dupatta /Saree/ Shirt, To wash and finish a woollen shawl/cardigan and To wash and finish a silk scarf/ 	12
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			finishes <ul style="list-style-type: none"> • Methods of dying and printing 	blouse/dupatta	
6.	Module II My family and I	This module deals with the process of human development from conception to adolescence. An attempt has been made to cater to the all round development of the young learners The units within the module have been written incorporating skills to empower learners to connect with self as well as others and develop healthy life style and positive behaviors. The topics also stress on equipping learners with competencies to manage challenging situations and optimize opportunities. Keeping in view the fact that learners are young, stress has been laid on enhancing coping skills as well as personal and social competencies to lead a more peaceful and conducive life.			44
7.	Unit 5: Our Home	20	L 12 Housing <ul style="list-style-type: none"> • Importance and functions of home • Evaluation of site for home • Cleaning of home and sanitation L 13 Safety in the home <ul style="list-style-type: none"> • Need for safety in home • Unsafe zones in home • Adoption of safety measures • First aid measures for specific accidents 	Practical 3: To prepare first-aid kit Practical 8: To survey home for safety hazards and suggest improvements regarding Practical 15: To clean the following surfaces OR *State appropriate cleansing agents and method of cleaning to clean the following surfaces.	8
8.	Unit 6: Our Resources	35	L14 Introduction to resources <ul style="list-style-type: none"> • Define and Identify: Goal, Resources and Management • Optimal use of resources and conservation of fuel, 	Practical 4: To record and study the weekly spending plan of your family. Practical 5: To record the steps in the process of management while	12

			<p>electricity and water in the house</p> <ul style="list-style-type: none"> • Process of management- planning, organizing, implementing and evaluating- its importance in home • Utilization of human resources in the family and shared resources <p>L15 Managing time and energy</p> <ul style="list-style-type: none"> • Meaning and importance of time and energy • Effective utilization of time plan • Need and procedure for making a time plan • Strategies for saving time and energy - discipline, dovetailing, etc. • Work simplification: Importance and Evaluation <p>L16 Managing income</p> <ul style="list-style-type: none"> • Define family income and identify its sources • Concepts of expenditure and saving • Managing family income • Importance of spending plan • Developing and evaluating family budget 	<p>arranging a family function</p> <p>Practical 6: To make a time plan for a homemaker with two school going kids, for a typical evening from 4 to 8 O'clock.</p>	
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9.	Unit 7: Growth And Development	48	<p>L17 Life begins</p> <ul style="list-style-type: none"> • Pregnancy • Prenatal and antenatal care • Family planning <p>L18 Concept of development</p> <ul style="list-style-type: none"> • Concepts, principles and types of development • Influence of heredity and environment on development: Individual differences • Age specific milestones • Activities to promote optimal development of children <p>L19 My family and I</p> <ul style="list-style-type: none"> • Family as a social unit: Functions and Need • Changing structure of the family: Reasons and Impact • Need for happy relationships within the family and role of all members in building healthy relationship especially when children are entering adolescence <p>L20 Adolescence: charms and challenges</p> <ul style="list-style-type: none"> • Managing various developmental changes during adolescence: Physical, Social, Emotional and Cognitive 	<p>Practical 16: To observe the communication skills of four children in given age groups</p> <p>Practical 17: To make low cost toy/game using household materials for children.</p>	16
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			<ul style="list-style-type: none"> • Influences from peers, adults, media and social norms • Adjustment and preparedness during adolescence • Readiness for adulthood and building positive relationships 		
10.	Unit 8: Our Values	12	L 21 Ethics in daily life <ul style="list-style-type: none"> • Values and Ethics • Caring and respecting elders • Dignity of labor • Tolerance, empathy and positive relationships • Developing a personal code of conduct 		4
11.	Unit 9: Our Rights And Responsibilities	12	L 22 Consumers! Beware, Be Aware <ul style="list-style-type: none"> • Importance and role of being an aware consumer • Problems faced by consumers • Consumer education • Consumer rights and responsibilities • Redressal Mechanisms 	Practical 7: To prepare a label for a product with given quality marks OR *Select a product amongst the following quality marks and give information on what should be included in the label.	4