

**National Education Policy-2020
(SINCE 2025-26)**

Common Minimum Syllabus for Uttarakhand State Universities and Colleges

Four Year Undergraduate Programme- FYUP/Honours Programme/master's in arts

PROPOSED STRUCTURE FOR FYUP/MASTER'S IN HOME SCIENCE SYLLABUS

DEPARTMENT OF HOME SCIENCE

(HSC 1,2 and 3rd year syllabus)

List of Experts in drafting NEP (2020) syllabus (Home Science)

S.no	Name and Designation of Expert	
1	Professor Lata Pande Convenor and Head, Department of Home Science D.S.B Campus, Kumaun University, Nainital, Uttarakhand	Convenor
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3	Dr Meena Batham Associate Professor Department of Fabric and Apparel Science, Institute of Home Economics, Delhi	Expert
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5	Professor Mukta Singh Head Department of Home Science, M.M.V. , B.H.U, Uttar Pradesh	Expert
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9	Professor Anju Bisht Head Department of Home Science, M.B.P.G College, Haldwani	Committee member
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11	Dr Prabha Bisht Associate Professor Department of Home Science, Govt PG Degree college Doiwala Dehradun	Committee member

List of Papers (DSC, DSE, GE) with Semester Wise Titles for ‘Home Science’

Year	Semester	Course	Paper Title	Theory/ Practical	Credits
FIRST YEAR	I	DSC	Fundamentals of Nutrition and Human Development	Theory	3+1
			Practical (a) Cooking Skills and Healthy Recipe Development	Practical	
		GE	Techniques of Food Preservation	Theory	4
		SEC	Basics of Food Science	Theory	2
	II	DSC	Introduction to Clothing, Fashion and Family Resource Management	Theory	3+1
			Practical (b) Clothing and Textile	Practical	
		GE	Entrepreneurship Management	Theory	4
		SEC	Fruits and Vegetables Preservation	Theory + Practical	1+1
		VAC	Basic Principles of Ayurvedic diets and Nutrition	Theory + Practical	1+1
Undergraduate Certificate (in the field of Multidisciplinary study)					
SECOND YEAR	III	DSC	Housing, Interior Decoration and Extension Education	Theory	3+1
			Practical (c) Interior Decoration and Development of Extension Teaching Aids	Practical	
		DSE	Family finance management	Theory	4
		GE	Entrepreneurship for Small Catering units	Theory	4
		SEC	NGO Management and Corporate Social Responsibility	Theory	2
	IV	DSC	Communication Process and Human Development II	Theory	3+1
			Practical (d) Practical based on communication process and Human Development	Practical	
		DSE	Food Processing and storage	Theory	4
		GE	Early Childhood Care and Education	Theory	4

		SEC	Food Safety, sanitation and hygiene	Theory	2
Undergraduate Diploma (in the field of Multidisciplinary study)					
THIRD YEAR	V	DSC	Surface Ornamentation of Fabrics	Theory	3
			Practical (e) Techniques of Surface Ornamentation of Fabrics	Practical	1 (Compulsory)
		DSE	Community Development and Programme Planning	Theory	4
		GE	Resource management for sustainable development	Theory	4
		Project	Project/Field survey	Theory/ Practical	4
	VI	DSC	Dietetics and Therapeutic Nutrition	Theory	3
			Practical (f) Therapeutic Diet Preparation and Nutrient Evaluation	Practical	1(Compulsory)
		DSE	Family Welfare and Community Education	Theory	4
		GE	Diet and Nutrition Counseling	Theory+ Practical	3+1
		Project	Project/Field survey	Theory/ Practical	4
Bachelors (in the field of Multidisciplinary study)					

Sem este r	Course code	Core (DSC)	Elective (DSE)	Generic Elective (GE)	Skill Enhancement Course (SEC)
I	HSC/DS C/UG 01 (4 credit)	Fundamentals of Nutrition and Human Development- (3TH) Cooking Skills and Healthy Recipe Development (1 Practical)		Techniques of Food Preservation (4) HSC/GE/UG 02	Basics of Food Science (2) HSC/SEC/UG 003
I I	HSC/ DSC/ UG 004 (4 credit)	Introduction to Clothing, fashion and Family Resource Management- (3 Th) Clothing and Textile- (1Practical)		Entrepreneurs hip Management (4) HSC/GE/UG 05	Fruits and Vegetables Preservation (1+1) HSC/SEC/UG 06
I I I	HSC/DS C/UG 007 (4 credit)	Housing, Interior Decoration and Extension Education-(3Th) Interior Decoration and Development of Extension Teaching Aids-(1Practical)	Family finance management HSC/DSE/UG 008 (4)	Entrepreneurs hip for Small Catering units (4) HSC/GE/U G 009	NGO Management and Corporate Social Responsibility (2) HSC/SEC/UG 010
I V	HSC/DS C/UG 011 (4 credit)	Communication Process and Human Development II (3Th) Practical (d) Practical based on communication process and Human Development (1Practical)	Food Processing and storage HSC/DSE/UG 012 (4)	Early Childhood care and Education (4) HSC/GE/UG 013	Food Safety sanitation and hygiene (2) HSC/SEC/UG 014
V	HSC/ DSC/ UG 015 (4 cred	Surface Ornamentation of Fabrics -(3 Th) Techniques of Surface Ornamentation of Fabrics- (1Practical)	Community Development and Programme Planning- (4) HSC/DSE/UG 016	Resource management for sustainable development (4) HSC/GE/UG 017	
V I	HSC/D SC/UG 018 (4 credit)	Dietetics and Therapeutic Nutrition-(4 Th) Therapeutic Diet Preparation and Nutrient Evaluation-(2 Practical)	Family Welfare and Community Education- (4) HSC/DSE/UG 019	Diet and Nutrition Counselling (4) HSC/GE/UG 020	

Programme Specific Outcomes (PSOs)

(Undergraduate Programme) After this programme, the learners will be able to:

PSO 1	Learn about the discipline of Home Science, promote all-round development of individuals and families, equip students with practical skills for managing homes and resources, and foster critical thinking and problem-solving abilities, ultimately aiming to improve quality of life and contribute to better society.
PSO 2	Students will be able to develop capabilities to start earning by enhancing their skills in the field of Food and Nutrition, Clothing and Textiles, Human development, Family Resource management and Extension education.
PSO 3	Equip learners with practical skills in meal-planning, preparation of recipes, apparel construction, home management, and child development
PSO 4	Understands the physical, emotional, and cognitive development of children.
PSO 5	Gain knowledge in fabric selection, garment construction, and maintenance.

Department of Home Science

Semester-I

BACHELOR OF HOME SCIENCE

DISCIPLINE SPECIFIC COURSE (DSC)- Fundamentals of Nutrition and Human Development			
HOME SCIENCE			
Programme: <i>CERTIFICATE</i>		Year: I	Semester: I Paper: DSC
Subject: HOME SCIENCE (credit 3+1)			
Course: HSC/DSC/UG 01		Course Title: Fundamentals of Nutrition and Human Development (Theory)	
Course Outcomes: The student at the completion of the course will be able to: • Students will get familiar with different methods of cooking • Acquaint students with practical knowledge of nutrient rich foods • Explain the need and importance of studying human growth and development across life span • Identify the biological and environmental factors affecting human development • Learn about the characteristics, needs and developmental tasks of infancy & early childhood years			
Credits:3+1		Core Compulsory/Elective	
Units	Topic		
Part A- Fundamentals of Nutrition			
I	Traditional Home Science and its relevance in current era. Contribution made by Indian Home Scientists i.e. Swaminathan, C.V. Gopalan, S.K. Dey, Rabindra Nath Tagore, Shanti Ghosh, etc.		
II	Food and Nutrition Food- meaning, Classification and function Basic food groups, Importance of basic food groups, balanced diet Nutrition-Concept of Nutrition, health Nutrients-Macro (Carbohydrates, Fat, Protein and Energy) Micro nutrients (Vitamins and Minerals), sources, functions, requirement and deficiency diseases		
III	Cooking Methods-Objectives, Preliminary preparations-advantages and disadvantages. Methods (Dry and Moist Heat methods), importance, Advantages and Disadvantages. Preservation of Nutrients while Cooking. Traditional methods of enhancing nutritional value of foods-germination, fermentation, etc. Microwave and Solar Cooking		
Human Development			

IV	Introduction to Human Development • Concept, Definition and need to study Human Development • Domains, Stages of development. Principles of Growth and Development. Determinants of Development heredity and environment
V	Prenatal Development and Birth Process: • Conception, Pregnancy and Childbirth, Problems of Pregnancy, Stages of prenatal development, Factors affecting pre-natal development • Physical appearance and capacities of the new-born Maternal and Infant mortality.
VI	Infancy: • Developmental task during Infancy and Preschool Stage • Physical and Motor Development • Social and emotional development • Cognitive and language development Common ailments of baby hood
	Suggested Reading • Dr. Brinda Singh, Manav Sharir evam Kriya Vigyan Panchchee IPrakashan, Jaipur, 2015, 15th Ed. • Chatterjee, C.C, “Human Physiology” Medical Allied Agency: Voll, II. • Textbook of Biology for 10+2 Students (NCERT) • Sumati R Mudambi, “Fundamentals of food Nutrition and Diet Therapy”, New Age International Pvt. Ltd, New Delhi, 6th Ed. (2018) • Punita Sethi and Poonam Lakda, “Aahar Vigyan, Suraksha evam Poshan”; Elite Publishing House, New Delhi; 2015 • Dr. Anita Singh, Aahar Evam Poshan Vigyan, star Publication, Agra • Dr. Devina Sahai, Aahar Vigyan, New Age International Publishers, New Delhi • Berk, L.E. Child Development New Delhi: Prentice Hall (2005) (5th ed.). • Berk L.E. Child Development Allyn and Bacon 1992 (6th) Edition
	This course can be opted as an elective by the students of the following subjects: Open for all The eligibility for this paper is 10+2 with any subject
	Suggested Continuous Evaluation Methods: • Seminar/Presentation on any topic of the above syllabus Test with multiple choice question/short and long answer questions Attendance Course prerequisites: The eligibility for this paper is 10+2 with any subject

Practical (a) Cooking skills and Healthy Recipe Development)

Programme/Class: Certificate		Year: I	Semester: I
Subject: Home Science			
Course Code: HSC/DSC/UG/01		Practical (a) Cooking skills and healthy recipe development	
Course Outcomes: - Students will get familiar with different methods of cooking - Acquaint students with practical knowledge of nutrient rich foods			
Credits:01		Core Compulsory/Elective	
Unit	Topic		
I	Basic Cooking skills Weighing of raw materials, Preparing of different food items		
II	Preparation of various dishes using different methods of cooking - Boiling/steaming - Roasting - Frying-Deep/shallow - Pressure cooking - Hot air cooking - Baking		
III	Different styles of cutting fruits and vegetables - Salad Decoration/Dressing - Table setting, Napkin Folding		
IV	Preparation of nutrient rich dishes - Protein rich dish - Carbohydrate rich dish - Fat rich dish - Vitamins rich dish - Minerals rich dish - Fiber rich dish		
	Suggested Readings: ❖ Dr.Brinda Singh, Manav Kriya Vigran Panchsheel Prakashan, Jaipur; 2015,15th Ed. ❖ Dr.Nitu Singh,Prayogik Grih Vigyan, Sahitya Prakashan, Agra ❖ Chatterjee,C.C, “Human Physiology” Medical Allied Agency; VolI,II. ❖ Text Book of Biology for 10+2 Students (NCERT) ❖ Sumati R Mudami, “Fundamentals of food Nutrition and Diet Therapy”, New Age International Pvt.Ltd, New Delhi, 6th Ed. (2018) - Punita Sethi and Poonam Lakda, “Aahar Vigyan, Suraksha evam Poshan”; Elite Publishing House, New Delhi; 2015		

This course can be opted as an elective by the students of the following subjects: Open for all

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Suggested Continuous Evaluation Methods:

- Test with multiple choice question/short and long answer questions
- Menu planning and calculation of nutrient requirement
- Nutritive value calculation of various nutrient rich dish

Course prerequisites: The eligibility for this paper is 10+2 with any subject.

Suggested equivalent online courses

I IGNOU and other centrally/state operated Universities/MOOC platforms such as “SWAYAM” in India and abroad.,

<http://heecontent.upsdc.gov.in/Home.aspx>

Further Suggestions:

Student may develop their cooking skills with new healthy recipe development after completion of this course and even start their own food service center.

Generic Elective
HSC/UG/GE 02- TECHNIQUES OF FOOD PRESERVATION

Programme/ Class: Certificate		Year: I	
Subject: Home Science			
Course Code: HSC/GE/UG 02		Course Title: TECHNIQUES OF FOOD PRESERVATION	
Credits: 4		Minor Elective	
Unit	Topic		
I	Food Microbiology Principles of Food Preservation, microorganisms associated with foods- bacteria, yeast and mold, Importance of bacteria, yeast and molds in foods. Classification of microorganisms based on temperature, pH, nutrient and oxygen requirements. Classification of food based on pH, Food infection, food intoxication, definition of shelf life, perishable foods, semi perishable foods, and shelf stable foods.		
II	Food Preservation by Low temperature Freezing and Refrigeration: Introduction to refrigeration, cold storage and freezing, definition, principle of freezing, changes occurring during freezing, types of freezing i.e., slow freezing, quick freezing, introduction to thawing, changes during thawing and its effect on food.		
III	Food Preservation by high temperature Sterilization, Pasteurization, and blanching. Food Preservation by Moisture control- Drying and Dehydration - Definition, drying as a means of preservation, differences between sun drying and dehydration (i.e. mechanical drying), heat and mass transfer, factors affecting rate of drying, types of driers used in the food industry.		
V	Food Preservation by Irradiation Introduction, units of radiation, kinds of ionizing radiations used in food irradiation, mechanism of action, uses of radiation processing in food industry.		
VI	Traditional Methods of Food Preservation a) Smoking b) Sun drying c) Pickling/ Salting d) Fermentation		
VII	Project – visit to food processing unit (such as fruit and vegetable Processing Unit, milk processing unit, cold storage plant etc.) observing various production processes and quality control and report writing)		
Suggested Readings: 1. B. Srilakshmi, Food science, New Age Publishers,2002 2. Meyer, Food Chemistry, New Age,2004 3. Bawa. A.S, O.P Chauhan et al. Food Science. New India Publishing agency, 2013 4. Frazier WC and Westhoff DC, Food Microbiology, TMH Publication, New Delhi, 2004			

Semester I
Skill Enhancement Courses (SEC)
Course HSC/SEC/UG 03:
Basics of Food Science

2(2-0-0)

Course code: HSC/SEC/UG 03

Course title & Code	Credits	Lecture	Tutorial	Practical\Practice	Eligibility criteria	Pre-requisite of the course (if any)
HSC\SEC\UGC\03-Basics of Food Science	2	2			Class XII	NIL

Learning objectives:

1. To impart knowledge on food groups and its nutritional composition
2. To relate the impact of cooking on the stability of nutrients.
3. To analyze the changes during processing and storage on the nutritional composition of foods.
4. To study the factors influencing the cooking quality of different foods.

By the end of the course students will:

- 1: Acquire knowledge on the food groups and factors influencing the changes in different cooking methods.
- 2: Gain knowledge on nutritive value of Cereals, Pulses, Nuts and Oil Seeds, Fats, Oils and changes affecting the nutritive value during cooking methods.
- 3: Gain information on the classification, composition of post-harvest changes of fruits and vegetables
- 4: Gain insight on composition, nutritive value and storage properties of meat, poultry, dairy and fish

Syllabus:

Unit I - Introduction of Food Groups and Cooking Methods.

Foods, Classification, Functions,
 Food groups, Balanced Food, Food pyramid, My plate
 Cooking- Objectives of Cooking,
 Preliminary preparation, cooking methods, Dry heat, Moist heat, Merits and Demerits.

Unit II - Cereals, Pulses, Nuts and Oil Seeds, Fats and Oils.

Structure, Composition and Nutritive Value, Changes in Nutritive Value during Cooking, Processing and storage, cooking quality
 Cereals- Cereal cookery concepts, fermented products, non-fermented products, breakfast cereals

Pulses- Factors affecting cooking quality of pulses, storage and infestation, toxic constituents, pulse cookery.

Nuts and oil seeds- Nuts and oil seeds cookery, toxins in nuts and oil seeds

Fats & Oils - Processing and refining of fats, Specific fats, Role of fats/oil in cookery, Emulsion, Smoking point, rancidity.

Unit III –

Vegetables and Fruits

Vegetables - Classification, Composition and Nutritive Value,
Selection, Vegetable cookery- pigments, Changes in Nutritive Value,

Fruits - Classification, Composition and Nutritive Value, post-harvest change, enzymatic and non-enzymatic, Storage of Fruits.

Unit IV- Meat, Poultry, Dairy and Fish.

Milk – Composition and Properties of milk, Nutritive Value, effect of heat, acid, enzymes, phenolic compounds and salts. Microorganisms, Processing, Milk Products, Milk Substitutes, Role of milk and milk products in cookery

Egg- Structure, Composition and Nutritive Value, Quality of eggs, Egg cookery, Buying and Handling, preservation, Role of eggs in cookery.

Fleshy Foods- Structure, Composition and Nutritive value of meat, Selection and Storage – Effect of cooking on colour, Texture and flavour. Ageing of meat, Curing of Meat, Tendering Meat, Cuts and grades of meat, Meat cookery.

Poultry - Classification, Processing, Composition and Nutritive value, Preservation and storage

Fish - Classification, Composition, Selection, Fish cookery, Spoilage, Preservation and storage.

Unit V – Sugars - Nutritive value, Properties, Stages of sugar cookery, Sugar Related Products, Sugar Cookery and Artificial Sweetener.

Suggested Readings:

1. Srilakshmi. B. Food Science, New Age International Pvt Ltd Publishers, 3rd Edition, 2005.
2. Shakuntala Manay, Shadaksharaswamy. M Foods, Facts and Principles, New Age International Pvt Ltd Publishers, Sixth Edition, 2015.
3. Usha Chandrasekhar, Food Science and Application in Indian Cookery, Phoenix Publishing House P. Ltd., New Delhi, 2002.
4. Food science, Chemistry and Experimental foods by M. Swaminathan.
5. Swaminathan, M. : Hand Book of Food Science and Experimental Food

(Home Science) Semester II

Introduction to Clothing, Fashion and Family Resource Management (Theory)

Programme/Class: Certificate		Year: I	Semester: II
Subject: Home Science			
Course Code: HSC/DSC/UG 04 Credit 3+1		Course Title: Introduction to Clothing, Fashion and Family Resource Management	
Course Outcomes: • Learn about scope of textile and clothing • Understanding why fabrics are different • Learn how fabrics can be manufactured • Understand basic concepts of clothing and fashion • Learn basic concepts of family resource management • Understand the decision making and use of resources throughout the lifecycle			
Credits:3+1		Core Compulsory	
Unit	Topic		
Part-A (Clothing and Fashion)			
I	Introduction a) Introduction to Clothing and Textile (b) Its importance in day-to-day life (c)Scope, (d)Classification of textile fiber on the basis of their source (e)General properties of fibers (f) Identification of fibers: visual test, microscopic test, chemical test and burning test		
II	Knowing Fibers- Manufacture, processing, properties and uses of (a) Cellulosic Fiber -cotton, Linen, Jute, hemp (b)Protein Fibers-Wool, Silk (c)Synthetic/Manmade Fibers-Nylon, Polyester, Acrylic, Rayon		
III	Clothing Construction (a) Tools for Clothing construction (b) Introduction to sewing machine, its parts and maintenance, (c)Importance of Drafting, Flat pattern techniques (d) Fabric preparatory steps for stitching a garment-preshrinking, straightening, layout, pinning, marking and cutting.		
IV	Introduction to Fashion and Fashion Illustration- Fashion terminologies; Theories of fashion adoption- trickle-down theory, trickle across theory, bottom-up theory; factors affecting fashion Fashion Illustration- importance and scope, tools for sketching, preparation of fashion figures; different poses and style, fashion sketching; shapes and silhouette		
	Part B (Family Resource Management)		
V	Introduction to Home Management: Basic Concepts, Purpose and Obstacles of Management. Process of Management–Planning, Organization, Controlling and Evaluation. Motivating Factors in Management –Values, Goals and Standards-Definition and Classification.		
VI	Resources-Meaning, Characteristics, Types and Factors affecting the use of Resources. Family lifecycle-Stages of family lifecycle.		
VII	Decision making –Concept and characteristics, definition, steps and role of decision making in management, types of decision, factors influencing decision process.		

Suggested Readings:

- ❖ Colbmen P Bernard: Textiles Fiber to Fabric
- ❖ Hollen & Saddler: Introduction to Textile
- ❖ Joseph M: Introduction to Textiles
- ❖ Trotman: Textile Fiber Science

Cutting Tailoring and Dress Making: National open School, B-31-BKailash Colony, New Delhi-96-3

- ❖ R Bhatia & C Arora (1999), Introduction to Clothing and Textile, Printed by Macho Printery, Raopura, Baroda.
- ❖ Complete Guide to Sewing by Reader's Digest: published by the Reader's Digest Association (Canada) Ltd. Montreal-Pleasantville, NY, 2002.
- ❖ Deacon R.E. and Firebaugh F.M. (1998) Family Resource Management-Principles and application. N. Delhi: Roy Houghton Mifflin Company.
- ❖ Faulkner, R.&Faulkner,S.(1961).ManagementforModernFamilies.N.Delhi: SterlingPublisherLtd.
- ❖ MoorthyG.(Ed.).(1985).HomeManagement.N.Delhi.:AryaPublishers,Mullick,P.Textbook of Home Science. Ludhiana. :Kalyani Publishers.
- ❖ Nickell,P.,andDorsey,J,M.(2002).ManagementinFamilyLiving.NewDelhi: CBS Publishers(ISBN13:9788123908519)
 - Patni Manju & Sharma Lalita,Grah Prabandh, Star Publication Agra
 - Varma, Pramila,Vastra Vigyan Avam Paridhan: Madhya Pradesh Hindi Granth Academy,Bhopal.
- ❖ Varghese, M.A, Ogale, N.Nand Srinivasan,K. (2001). Home Management. New Delhi, New Age International(P) Ltd.
- ❖ Varghese, M.A. House hold Equipment Manual, S.N.D.TWomen's University, Mumbai.
- ❖ Suggestive digital platform web links-Svayam Portal, <http://heecontent.upsdc>.

This course can be opted as an elective by the students of the following subjects: Open for all

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Suggested Continuous Evaluation Methods:

- Seminar on any topic of above syllabus.
- Test with multiple choice question/short and long answer questions
- Attendance

Course prerequisites: To study this course, a student must have had ALL in class12th.

Suggested equivalent online courses

IGNOU and other centrally/state operated Universities/MOOC platforms such as "SWAYAM" in India and abroad.

Practical (b) Clothing & Textiles

Programme/Class: Certificate		Year: I	Semester: II
Subject: Home Science			
Course Code: HSC/DSC/UG 04		Course Title: Practical (b) Clothing & Textiles	
Course Outcomes:			
• Ability to identify fibers and fabrics • Understanding why fabrics are different			
• Learn how garments are stitched			
Credits:1		Core Compulsory/Elective	
Total No. of lab. periods-30(60hours)			
Unit	Topic		
I	Identification of fiber sand fabrics (a) Fiber identification tests-Visual burning, solubility and microscopic test-natural and synthetic, pure and blended fibers. (b) Weaves identification and understanding their usage		
II	Learning to Stitch- (a) Knowing how to stitch-straight-line stitching, stitch in gat curves and corners (b)Basic Stitching-Temporary Stitching, Permanent and decorative stitching		
III	Basic Sewing -(a) Seams-Plain seams and its finishing, run and fell seam, French seam (b)Attaching different fasteners (c) Disposal of fullness-darts, gathers, tucks and pleats (d) Neckline Finishing- Facing & Binding		
Suggested Readings:			
❖ Cutting Tailoring and Dress Making: National open School, B-31-B Kailash Colony, New Delhi-1100048 ❖ RB hatia & C Arora (1999), Introduction to Clothing and Textile, Printed by Macho Printery, Raopura, Baroda. ❖ Complete Guide to Sewing by Reader's Digest: published by the Reader's Digest Association (Canada) Ltd. Montreal-Pleasantville, NY,2002. ❖ Helen J Armstrong, Pattern Making for Fashion Design, Prentice Hall. ❖ Gerry Cooklin, Introduction to Clothing Manufacture, Blackwell Science, UK,1991 ❖ Metric Pattern cutting & Grading by Winfred Aldrich. ❖ Suggestive digital platform web links- Svayam Portal,http://heecontent.upsdc.gov.in/Home.aspx			
Suggested Continuous Evaluation Methods:			
• Preparation of samples of various types on fabrics' • Evaluation of Prepared garment • Record file preparation and evaluation, Attendance			
Course prerequisites: Class12 th with any subject			
• learning basic sewing skills			

Entrepreneurship Management (Generic Elective)

Programme/ Class: Diploma		Year: II	
Subject: Home Science			
Course Code: HSC/GE/UG 05		Entrepreneurship Management	
Course Outcomes:		1: - Students will be able to explain the core concepts of entrepreneurship, including its role in economic development, the characteristics of entrepreneurs, and the challenges of entrepreneurial ventures. 2: - students will learn to assess and identify viable business opportunities by analysing market needs, customer preferences, and industry trends. 3: - Students will acquire the skills to create comprehensive business plans, including market analysis, financial planning, operational strategies, and risk management.	
Credits: 4		Minor Elective	
Unit	Topic		
Part- A (Theory)			
I	Entrepreneurship – Definition, need, scope and characteristics of entrepreneurship development and employment promotion Identification of Opportunities		
II	Entrepreneur and enterprise, entrepreneurial qualities, assessing entrepreneurial qualities, environment scanning and opportunity identification. Methods source and type of opportunity, assessment criteria and profiling opportunities.		
III	Infrastructure and support system, Industrial support agencies, Procedure and steps involved in setting up an enterprise, sources of information and industry organization.		
IV	Project planning and formulation of project, identification and product selection, generating project ideas, short listing, final selection market survey, market alternatives, an overview of the future, Product development, Product Selection, Preparation of project report		
V	Enterprise management, Basic management concepts, personnel management, product management, material management, financial management and accounting, market management, crisis management.		
VI	Interaction with entrepreneurs and report writing, visit to any entrepreneurial unit and report writing		
RECOMMENDED READINGS			
1. Ramachandran, Entrepreneurship Development, Mc Graw Hill			
2. Katz, Entrepreneurship Small Business, Mc Graw Hill			

3. Byrd Megginson, Small Business Management An Entrepreneur's Guidebook 7th ed, McGrawHill
4. Fayolle A (2007) Entrepreneurship and new value creation. Cambridge, Cambridge University Press
5. Hougaard S. (2005) The business idea. Berlin, Springer
6. Lowe R & S Mariott (2006) Enterprise: Entrepreneurship & Innovation. Burlington, Butterworth Heinemann

Semester II
Fruits and Vegetables preservation
Skill Enhancement course

Course title & code	Credits	Lecture	Tutorial	Practical\Practice	Eligibility criteria	Pre-requisite of course (if any)
HSC/SEC/UG 06 – Fruits and vegetables preservation	2	1		1		NIL

Subject: Home Science		
Course Code: HSC/SEC/UG 06		Course Title: Fruits and Vegetables Preservation
Learning Objectives: • To know about various types of fruits and vegetables and their nutritive value. • To understand the reasons for spoilage of fruits and vegetables. • To develop practical skills in preservation of fruits and vegetables. • Learn proper storage methods to maintain quality and taste.		
Learning Outcomes: On successful completion of this course the students will be able to 1. Identify various types of fruits and vegetables and explain their nutritive value. 2. Understand the fragile nature of fruits and vegetables and causes for their damage. 3. Explain various methods of preservation for fresh fruits and vegetables. 4. Get to know the value-added products made from fruits and vegetables.		
Credits: 2		Vocational Minor
Units	Topic	
Theory		
I	Introduction to fruits and vegetables 1. Fruits: Definition, elementary knowledge, types and classification of fruits (fleshy and dry) with local /common examples. 2. Vegetables: Definition, elementary knowledge, types and classification of vegetables (root, leafy, stem, flower and fruit) with local/ common examples. 3. Importance of fruits and vegetables in human nutrition.	

	4. Concept of perishable plant products – maturation and spoilage, shelf life; preservation – need for preservation of fruits and vegetables. Reasons for spoilage of fruits and vegetables.
II	1. Fruits – ripening and biological aging; storage and preservation concerns. 2. Fruit preservation at room temperature as juices and squashes 3. Preservation of fruits by application of heat; making of fruit products (jams, jellies). 4. Preservation by dehydration, -Drying of fruits and vegetables 5. Pickles and causes of spoilage of pickles.
III	1. Vegetables – losses after harvesting and causes; problems in handling and storage. 2. Modern methods of packaging and storage to reduce losses. 3. Preservation of sliced vegetables in factories by canning and bottling, General steps of canning of fruits and vegetables
Practical	
1. Assignments/Group discussion. 2. Invited lecture and demonstration by local expert. 3. Exhibition and report writing on various types of locally available fruits and vegetables. 4. Hands on training on making fruit juices, jams, jellies and pickles. 5. Preservation of vegetables by drying and dehydration. 6. Report making and presentation of various preserved fruit products available in local market. 7. Hands on training on making of potato, Colocasia, and banana chips.	
Suggested Reading 1. Giridharilal, G. S. Siddappa and G.L.Tandon (2007) Preservation of Fruits and Vegetables, Indian Council of Agri. Res., New Delhi. 2. Srivastava, R.P., and Sanjeev Kumar (2019) Fruit and Vegetable Preservation : Principles and Practices, CBS Publishers & Distributors Pvt., Ltd., New Delhi 3. Thompson, A.K. (1995) Post Harvest Technology of Fruits and Vegetables. Blackwell Sci., U.K. 4. Verma, L.R. and V.K. Joshi (2000) Post Harvest Technology of Fruits and Vegetables. Indus Publ., New Delhi 5. Website links- https://nchfp.uga.edu/	

VAC 1: Basic Principles of Ayurvedic diets and Nutrition

Credit distribution, Eligibility and Pre-requisites of the Course

Course Title & code	Credits	Credit distribution of the course			Eligibility criteria	Pre-requisite the course
		Lecture	Tutorial	Practical/ Practice		
Basic Principles of Ayurvedic diets and Nutrition	02	1	0	1		NIL

Learning Objectives

The Learning Objectives of the course are:

- To introduce students to Ayurvedic Nutrition
- To connect the Ayurvedic nutrition with contemporary dietary practices for health
- To introduce students to Ayurvedic Principles of food habits
- To understand of traditional diets of India
- To understand lifestyle management with application of Ayurvedic diets

Learning outcomes

The Learning outcomes of the Course are:

- Awareness regarding traditional food cultures of India and Ayurvedic Nutrition
- Awareness regarding changing food patterns and lifestyle over the years
- Understand Indian Knowledge Systems (IKS) and key Vedic principles with respect to Food and Nutrition
- Awareness regarding FSSAI regulations on Ayurvedic Aahar
- Apply basic principles of traditional diets for health and disease

SYLLABUS OF - Basic Principles of Ayurvedic diets and Nutrition

UNIT — I Introduction to Ayurvedic Nutrition

- Introduction to Ayurved
- Importance of Ahaar (Nutrition), Triupastambha in maintaining health
- Ayurveda and Indian food cultures
- Nutrition and lifestyle transition over the years
- Regional Food Traditions of India

UNIT — II Basic principles of Food and Nutrition and Ayurveda

- Understanding rich sources of nutrients
- Concept of Doshas & assessment
- Concept of Aam
- Ayurvedic Principles of food habits and factors determining quality of food (Ahara vidhi visheshaayatana)
- FSSAI regulations on Ayurvedic Aahar

UNIT — III Ayurvedic Diets

- Principles of Diet: Aharavidhi vidhan, Sattvic, Rajasi, Tamasic foods
- Incompatible food (Viruddha Ahara), Pathya; Apathya; Viprita Ahaar
- Lifestyle Management with Dinacharya and Ritucharya
- Application of Ayurvedic diets to stress linked food behaviour

Practical component (if any) —

- Visit your local market and classify the available food items according to Sattvic, Rajasi, Tamasic foods
- Conduct a survey of 10-15 households in your locality:
 - i. to study food behaviour and analyse them in light of Ayurvedic dietary principles of Sattvic, Rajasi, Tamasic
 - ii. to study the food consumption patterns and intake of incompatible food: Viruddha Ahara, Pathya; Apathya; Viprita Ahaar
 - iii. To know about their adopted lifestyle Dinacharya and Ritucharya
- The students may share their experiences in the form of audio-visual presentations of 15-30 minutes.
- Any other Practical/Practice as decided from time to time

Essential Readings

- Rastogi S (2014) Ayurvedic Science of Food and Nutrition. ASIN: BOOHWMV094, Springer: ISBN-13:978-1461496274
- Rastogi S (2010) Building bridges between Ayurveda and modern science. Int J Ayurveda Res. 1(1):41-46.
- FSSAI regulations on Ayurveda Aahar Regulations 2022. Gazette of India CG-DL-E-07052022-235642. New Delhi, Friday, May 6, 2022/ Vaisakha 16, 1944.
- Frawley D (2012) Ayurvedic healing: A comprehensive guide. Lotus Press, India.
- <https://iksindia.org/>: Indian Knowledge Systems

B.A. (Home Science) Semester III

Housing, Interior Decoration and Extension Education (Theory) (DSC)

Programme/Class: Diploma		Year: II	Semester: III
Subject: Home Science			
Course Code: HSC/DSC/UG 07		Course Title: Housing, Interior Decoration and Extension Education (Theory)	
Course outcomes: • Grasp knowledge of Housing, need & selection of site in real life situations. • Comprehending Housing plans for residential purpose. • Appreciate principles of design and the contributing factor store fine personal aesthetic senses. • Learn the widening concepts of Extension Education. • Develop understanding for Effective teaching and learning. • Gain skills to use technologically advanced Audio-visual aids.			
Credits:3+1		Core Compulsory/Elective	
Unit	Topic		
Part-A (Housing and Interior Decoration)			
I	Housing: Need and functions; Difference between House and Home, ways to acquire house (Own and rented). Factors influencing selection and purchase of house and site for house building.		
II	House Planning: Principles of house planning, Planning house for different income groups. Types of Kitchens		
III	Interior Designing: Introduction to Interior designing. Objective of interior decoration. Elements of Art- Line, Shape, Texture, Colour, Pattern, Light and Space, types of design. Colour: Importance in home decoration, meaning, functions, principles of colour, Prang’s colour system – hue, value and intensity, factors affecting selection of colour in home decoration, colour schemes. Principle of design-Proportion, Balance, Rhythm, Emphasis, Harmony. Elements of Design and types of design – naturalistic, stylized, geometric and abstract Structural and decorative design		
IV	Home Decors: Furniture: importance, selection of furniture, types of furniture Accessories – Importance, classification Flower Arrangement – Importance, styles, classification, care of cut flowers.		
PART B (Extension Education)			
V	Extension Education: Meaning, Concepts, Objective, Scope, Principles, objectives, need and importance. Scope of Extension Education, Early Extension Efforts in India, Formal and Non-Formal Education.		
VI	Extension Teaching & Learning Process: Role and qualities of an extension worker, Steps in Extension Teaching Process, Criteria for Effective Teaching and Learning.		

VII	Extension Teaching Methods- Classification, Factors guiding the selection and use of Extension teaching methods.
VIII	Audio- visual Aids: Definition, Importance, Classification, Selection, Preparation and effective use of Audio-visual aids

Suggested Readings:

- Khanuja. Reena(2018) Grah Vyavastha avam Grah Sajja .Agarwal Publications,AgraISBN:978-93-81124-96-3
- Patni Manju & Sharma Lalita, Grah Prabandh, Star publications Agra.
- Craig,H.T. and Rush,O.D.(1966).Homes with Character.Heath,1966.
- Faulkner, R., and Faulkner, S., (1961). Inside Todays Home. Rev. ed., New York: Holt, Rinehart & Winston, Inc.
- Goldstein. H& Goldstein.V.(1954) Artin Everyday Life Macmillan Publishers.
- Rutt,A. H. (1963)Home furnishing, John Wiley & Sons, Inc.;
- Supriya ,K.B.(2004).Landscape gardening and designing with plants. Pointer Publishers.
- Teresa ,P.Lanker.(1960).FlowerArranging:Step–by–stepInstructionsforEverydayDesigns Florist Review
- Aggarwal, R.(2008).”Communication-todayandtomorrow”,NewDelhi:SublimeCompany
- Dubey V.K., Srivastava Archana, Agrawal Garima, Grah Vigyan Prasara Samprashan, Star Publications Agra.
- Harpalini B .D.Patni.Manju,(PrasarShikshaAvamSanchar)StarPublications,Agra.ISBN978-93-81246
- Shaw Geeta Pushpa, Shaw Jois Sheela, Prasar Shiksha ,VinodPustakMandirAgra.ISBN81-7457-104-3
- Dhahama,O.P.,&Bhatnagar,O.P.(1988).“EducationandCommunicationforDevelopment”. New Delhi.- Oxford and IBH Publish in Co.Pvt. Ltd.
- Jaipal Singh.”Prasar Shiksha avam Gramin Vikas” SR Scientific publications, Agra
- Reddy A.(1987).”Extension Education”. Bapatha, Andhra Pradesh, India: Sreelakshmi Press.
- SupeA.N.(1983).An introduction to Extension Education, Delhi: Oxford IBH publishing

Suggestive digital platform websites Swayam Portal,

- <https://heecontent.upsdc.gov.in/Home.aspx>

This course can be opted as an elective by the students of following subjects: Open for all
Suggested Continuous Evaluation Methods • Seminar on any topic of the above syllabus • Test with multiple choice questions/short and long answer questions. • Preparation of Audio-visual aids. • Attendance
Course prerequisites: Class12 th with any subject
Suggested equivalent online courses: IGNOU&Othercentrally/stateoperatedUniversities/MOOCplatformssuchas “SWAYAM “in India and Abroad
Further Suggestions: It widens the scope for students to join Government and Non-Government organization, up skilling the people at different level sasper their socio-economic structure. Extension work will speed up the basic structures (Gram Panchayat, Village School and Cooperative Societies) etc.

Interior Decoration and Development of Extension Teaching Aids (Practical)

Programme/Class: Diploma		Year: II	Semester: III
Course Code: HSC/DSC/UG007		Course Title: Practical (c) Interior Decoration and Development of Extension Teaching Aids	
Course outcomes: • Developing skills for making time plan for effective balance of work & leisure. • Plan & prepare budget for the family. • In corporate appropriate work simplification in using house hold equipment's. • Develop understanding for house planning & decoration			
Credits:1		Core Compulsory	
Unit	Topic		
I	• Preparation of Color wheels and Color schemes. • Display of following colour schemes through a design Monochromatic, analogous, complementary, tri colour- colour schemes • Flower Arrangement and Floor Decoration (Rangoli)-Application of Design principles and Element of Art, Innovation of new styles.		
II	• Plans and elevation of different furniture pieces. Preparing drawings for furniture arrangements considering incomes, size and needs of family.		
III	Draw House Plans with Standard Specifications and Furniture Layout.		
IV	• Preparation of Projected (PowerPoint presentation, Slides) and • Preparation of non-projected communication aids (chart, poster, flashcard). Construction of message through mobile SMS, email, reels or short video on social and environmental issues		
	Suggested Readings: • Alexander.N.J.,(1972).DesigningInteriorEnvironment.NewYork:HarcourtBrace, • Bhargava,B.(2005). Family Resource Management and Interior Decoration, Jaipur: Apple Printer and V. R. Printers. • Faulkner,R.,andFaulkner,S.,(1975).InsideTodaysHome,NewYork:Rinehart • Gnndotra, V.andJaiswal,N.(2008).ManagementofWorkinHome,New Delhi:DominantpublishersandDistributors.(ISBNNo. 81-7888-526-3) • Harmon,S.and Kennon,K.(2018).The code cguide book for Interiors (5thEd.).New York: Wiley (ISBN:978-1-119-342319-6) • JohanovichInc. Ball,V.K.(1982).Art of Interior Design.New York: JohnWiley&Sons. • Leach, S. D. (1978). Techniques of Interior Design Rendering and Presentation (1stEd.).Architectural Record Books(ISBN-13:978-0070368057) • Mohanty,A.B.(1985).Guide to house buildings. New Delhi: Inter India Publications		

	- Patni Manju & Sharma Lalita, Grah Prabandh, Starpublications Agra. Suggestive digital platform websites - Bit.ly/3fJfghi https://bit.ly/39mTwGQ https://bit.ly/2JoXB2e https://bit.ly/3lkrWf Swayam Portal, https://heecontent.upsdc.gov.in/Home.aspx
	This course can be opted as an elective by the students of following subjects: Open for all
	Suggested Continuous Evaluation Methods - Assessment of Time-Energy, Budget & House Plans. - Assessment of Market Survey Records Assessment of Flower Arrangements and Rangoli.
	Attendance.
	Course prerequisites: To study this course, a student must have had the subject.....in class/12 th /certificate
	Suggested equivalent online courses: IGNOU & Other centrally/state operated Universities/MOOC platforms such as “SWAYAM” in India and Abroad
	Further Suggestions: Students may develop their managerial skills & Interior Designing skills after completion of this course with the capability to for a job or start their own ventures. The program giving an opportunity to advancement their knowledge by enrolling for advanced specialized program of their own areas & interest.

B.A. (Home Science) Semester III
HSC/DSE/UG 08 Family Financial Management (DSE)
Credit. Hrs. 4
Course code- HSC/DSE/UG 008

Course outcomes

After completing the course, students will be able to:

1. Acquire knowledge of income, saving and investment management in the changing socio-economic environment.
2. Develop an understanding about the issues related to consumer protection, legislative measures and redressal mechanisms.
3. Gain conceptual knowledge of critically evaluating and designing various consumer aids and about consumer education and protection.
4. Learn to undertake food adulteration tests through lab analysis.
5. Understand the schemes and services offered by banks and post office

HSC/DSE/UG 08 Family Financial Management (DSE)

Unit 1. Income- concepts, productive income, money income, hidden income, limits and factors affecting fluctuations in real income, depreciation in money value, inflation, deflation, consumer price index.

2. Money as a crucial resource in economic welfare

Unit 2 Saving

Saving, methods of saving, institutions for saving,

Investment: methods of investment- Mutual funds, shares, debentures, dividends

Unit 3 Budget

Budget: Definition, Types, Importance, Principles, Characteristics of good budget, steps in making budget and misconceptions, household budget, factor affecting budget

Unit 4 Financial management

Financial management, Financial Planning, Family Income, Financial Spending Plans, Methods of handling Money, Family life stages and use of Money, Record keeping, Account keeping

Unit 5 Taxation

Taxation, type of taxation and its effect, value added tax, Income Tax: Income tax slabs, Pan card, information regarding taxation, income tax section, tax rebate, tax evasion, advantages and disadvantages, principles of sound taxation system.

spending plan

Expert lectures to be arranged for students by experts from commerce/economics/financial back ground

Suggested Readings:

1:- Dr F C Sharma & C S Rachit Mittal, financial management, SBPD Publications. 2022

2:- Premavarthy Seetharaman, Preeti Mehra & Sonia Batra *Family Resource Management*, CBS Publisher and Distributors Pvt ltd, 2015

B.A. (Home Science) semester III

Course title-Entrepreneurship for Small catering units (GE)

HSC/GE/UG 09

Course Outcomes

Students will be able to:

1. Acquire fundamental knowledge of menu planning and resource management in a food service establishment.
2. Develop understanding of recipe standardization and quantity food production.
3. Develop understanding of making a business plan for a small food service unit.
4. Apply the knowledge gained for starting a successful food service unit.

Course Title - Entrepreneurship for Small catering units (GE)

Course code - HSC/GE/UG 09

Theory (Credit 4)

Unit I: Introduction to Food Service Management

Basics of management and food service for a small food establishment

- Principles of Management
- Functions of Management
- Types of food service systems

Unit II: Production Process in a Food Service Establishment

Components of food production cycle to run a small-scale food service unit.

- Menu Planning: Importance of menu, Factors affecting menu planning, Types of menu
- Food purchase and receiving
- Storage
- Quantity food production: Standardization of recipes, Recipe adjustment and portion control, Techniques of quantity food production
- Food service
- Food hygiene and sanitation, National food regulations

Unit III: Resource Management in a Food Service Unit

Understanding fundamentals of space, personnel and financial management

- Types of kitchen areas, Flow of work and work area relationship
- Equipment: Factors affecting selection of equipment, Equipment needs for different situations
- Personnel Management: Functions of a personnel manager, Factors to consider while planning the kind and number of personnel
- Financial Management: Importance of financial management, Budgets and budgeting process, Cost concepts

Unit IV: Planning a Food Service Unit

Developing business plan and strategies for establishing a small-scale food service unit

- Identifying resources, developing project plan, Determining investments
- Basics of marketing: 4P's
- Development of a business plan

Unit V: project -: Visit to a catering unit, studying its functioning and various operations and report writing

Suggested Readings

- 1:- Sanjeet sharma & Prerna, udhyamita awam laghu stariya vyawsay , VK Global Publication private Limited, 2023
- 2:- Lora Arduser and Douglas Robert Brown, The Professional Caterer's Handbook, Atlantic Publishing Company, 2006
- 3:-Dr Avinav Sharma, Udhyamita awam laghu vyawsav pravandhan, Educreation publishing, 2017

Semester III
Skill Enhancement Course

Course title and code	Credits	Lecture	Tutorial	Practical\ Practice	Eligibility criteria	Pre-requisite of the course (if any)
HSC/ SEC/UG 10- NGO Management and corporate social responsibility	2	1		1		NIL

Subject: Home Science	
Course Code: HSC/ SEC/UG 10	Course Title- NGO Management and corporate social responsibility
Learning Objectives: - To equip students with knowledge and skills to manage NGOs effectively. - To help students understand role, structure and function of NGO. - To help students understand CSR principles and contribute positively to social change.	
Course Outcomes: On completion of this course, - The student will be able to understand the concept of NGO. - Will gain ability to critically analyze challenges face by NGOs. - To develop knowledge and skill with regard to fund raise strategies.	
Credits: 2	Vocational Minor
	Total No. of Lectures-45
Units	Topic
Theory	
I	Concept of NGO - Meaning of NGO and GO - Difference between Government Organizations and NGO - Characteristics of good NGO - Structure of NGO - Functions of NGO - Historical Perspective of NGO - Advantages of NGO - Present status of NGO - Contribution of NGO in the Development Role of Development Communicator in developing NGO

II	Starting of NGO • Steps for starting NGO • Registration of NGO • Selection of Personnel • Training of Personnel • Proposal writing under NGO • Identifying Funding agencies • Resource Mobilization • Planning, Implementation and Evaluation strategy under NGO • Documentation • PR in NGO
III	NGO Management • Organizational types and structures • Managing people and teams in NGOs • NGO management competencies • Applying NGO principles and values • Accountability and impact assessment for NGOs
IV	Problems of NGO • Training • Recruitment • Funding • Resource Mobilization • Documentation
Learning Experiences:- 1. Visit of Local NGO 2. Studying the Annual report of NGOs 3. Studying the ongoing Activities 4. Studying the problems Suggested Readings • S. Chandra, Guidelines for NGO Management in India (2003), Published by Kanishka Distributors, New Delhi • D. Lewis, Management of Non Governmental Development Organization (2001), Second Edition, Published by Routledge, Newyork. • Abraham, Formation and Management of NGOs (2003), Third Edition, Published by Universal Law Publishing Co. Pvt Ltd., New Delhi. • Sundar, P. 2013, Business and Community: The Story of Corporate Social Responsibility in India , New Delhi, Sage Publication. • Aggarwal, S.2008, Corporate Social Responsibility in India, Sage Publication Pvt. Ltd.	

B.A. (Home Science) Semester IV

Communication Process and Human Development II (Theory) (DSC)

Programme/Class: Diploma		Year: II	Semester: IV
Subject: Home Science			
Course Code: HSC/DSC/UG 11		Course Title: Communication Process and Human Development II (Theory)	
Course Outcomes:			
The student at the completion of the course will be able to:			
Understand communication process			
Credits:3		Core Compulsory	
Unit	Topic		No. of lectures
Part A- (Communication Process)			
I	Communication- Meaning and definition, concept, functions, problems and barriers of communication, elements of communication, types of communication process, classification of communication methods		
II	ICT and New communication media, social networking sites, social awareness regarding cyber-crime and cyber security		
III	Models of Communication- Different models of communication, important characteristics of good communicators, communication barriers and strategies to overcome barriers		
IV	Innovation, Adoption and Diffusion: Innovation, adoption, diffusion of innovation, innovation decision process, factors affecting adoption process, role of extension agent in diffusion process		
Part B (Human Development II)			
V	Middle Childhood Years Development tasks and characteristics of middle childhood period - Physical and motor development - Social and emotional development. - Cognitive development - Language development		
VI	Puberty and Adolescence - Development tasks and characteristics - Significant physical physiological influencing and hormonal changes in puberty. Self and Identity, Factors influencing Identity & Personality development. - Family and peer relationship Problems- Drug and Alcohol abuse, STD, HIV/AIDS, Teenage Pregnancy.		

VII	Cognitive, Language and Moral Development during Adolescence: • Perspective on cognitive development, development of intelligence and Creativity • Adolescent language • Adolescent Morality
VIII	Introduction to Adulthood • Concept, transition from adolescence to adult hood • Development tasks of Adulthood • Physical and physiological changes from young adulthood to late adulthood Responsibilities and adjustment-educational, occupational, material and parenthood
	Suggested Readings: • Monaster G.J. 1 Adolescent Development Life Tasks. Mc.Graw Hill (1997) • Ambron S.R. Child Development Holt, Rinehart and Winston 1978 (II Edition) • Mussen P.H. Conger J.J. Kagan J and Huston A.C. 1990. Child development and Personality (VI Edition) Harper and Row Publishers New York. • Boeknek G. Human Development Book and Cole Publishing Company 1980. • Aadunik Vikasatmak Mano vigyan, Shri Vinod Pustak Mandir Agra Edition 3rd 2015. • Harpalani, Aahar vigyaan avam Upchar atmak Poshan, Star Publication, Agra • Suggestive digital platform web links-IGNOU & UPRTOU online study material Svayan Portal http://heecontent.upsdc.gov.in/Home.aspx

Suggested Continuous Evaluation Method:

- Seminar on any topic of the above syllabus.
- Test with multiple choice questions/short and long answer questions
- Attendance

Suggested equivalent online courses:

IGNOU & Other centrally/state operated Universities/MOOC platformssuchas “SWAYAM
“in India and Abroad

Further Suggestions:

Students can opt. dietitian; nutrition advisor/Nutritionist as a career in private and government sector as well as extend knowledge by joining advance course in same discipline.
It widens the scope for students to join Government and Non-Government organization upskilling the people at different levels as per their socio-economic structure.

Suggested Continuous Evaluation Method:

- Seminar on any topic of the above syllabus.
 - Test with multiple choice questions/short and long answer questions
- Attendance

Practical (d) Practical based on communication process and Human Development

Programme /Class: Diploma	Year: II
Course Code: HSC/DSC/UG 011	
Credits:1	
Unit	Topics
I	Preparation of speech on socially relevant topics, Planning and Conducting small group communication Preparation of folder, booklet
II	Preparation of radio talk Construction of social message through mobile – text and video
III	To study recent research articles on adolescents and write a report. To conduct a survey to assess peer pressure/ impact of media on adolescents.
IV	To write a narrative account on adolescent years to understand the development of self. To develop different activities to facilitate cognition and creativity in adolescents.
V	Interviews of adolescent girls and boys to understand their lifestyle, behavior and problems.
VI	Carry out case studies to know more about the different life stages, school going children, adolescents, young adults.
	Suggested Readings: • MonasterG.J.1 Adolescent Development Life Taska, Mc Graw Hill(1977) • Ambron S.R. Child Development Hoks, Renhart and Winston 1978 (IIndEdition). • Mussen P. H., Conger J.J .KaganJ. and Huston A.C. 1990.Child Development and Personality (VI Edition) Harper and Row Publishers New York. • BoeknekG. Human Development Brook and Cole Publishing Company 1980 • Aadhunik Vikasatmak Manovigyan, Shri Vinod Pustak Mandir Agra Edition3rd2015 Suggestive digital platfor ms web links- ePG- Pathshala infilibnet, IGNOU, & UPRTOU online study material. https://bit.ly/3922ZTH Swayam Portal,https://heecontent.upsdc.gov.in/Home.aspx

	Suggested Continuous Evaluation Methods • Assessment of observation report • Preparation of questionnaire • Visits records Attendance
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Food Processing and Storage (DSE)**Cr. Hrs. 4****Course Code- HSC/DSE/UG 12****Course Outcomes:**

Students after successful completion of the course will be able to:

- 1:- Understand the principles behind food preservation technologies such as freezing, drying, canning, and pasteurization.
- 2:- Learn about the factors affecting food spoilage and the methods to prevent it.

Theory Topics

Unit 1) Processing and storage of foods in the national perspective and their role in human nutrition. Processing of cereals, millets and legumes by traditional and unconventional methods. Changes in nutritional quality as affected by: pounding, milling. Puffing, flaking, cooking, parboiling. Fermentation, sprouting, malting Processing and packaging of milk products and their effect on nutritional quality

Unit 2) Common methods of preservation for fruits and vegetables and effects on nutritional quality characteristics

Unit 3) Processing of oilseeds for extraction of oils and use of oilseed cakes in human nutrition, limitations and possible improvements.

Unit 4) Different methods of cooking and preservation of meat, fish and poultry. effects on nutritional quality and merits and demerits of various methods

Unit 5) Traditional methods for storage of food grains viz, cereals, millets, legumes and oilseeds, limitations, losses in nutritional quality as influenced by insect and fungal infestation

Current strategies for storage of food grains at national and international level

Practical

Practical on Fermentation, sprouting, malting and puffing of cereals, millets and pulses
Practical based on different methods of domestic food preservation

Suggested Readings

- Frazier WC and Westhoff DC (2014). Food Microbiology, Fifth Edition. TMH Publication, New Delhi.
- Manay NS and Shadaksharaswamy M (2008). Food-Facts and Principles, Third Edition. New Age International (P) Ltd. Publishers, New Delhi.
- Mathur P. (2018). Food Safety and Quality Control. Orient BlackSwan Pvt. Ltd., Hyderabad.
- Potter NN and Hotchkiss H J (1996). Food Science, Fifth Edition. CBS Publication,

New Delhi.

- Suri, S. and Malhotra, A. (2014). Food Science Nutrition and Safety. Delhi: Pearson India Ltd.
- Mohini Sethi, Eram Rao (2011). Food science- Experiments and applications, Second Edition. CBS publishers & Distributors Pvt Ltd.

HSC /GE/UG 13 EARLY CHILDHOOD CARE AND EDUCATION CREDIT: 04

I. Course Outcomes:

Students after successful completion of the course will be able to:

1. Understand the meaning and importance of Pre-school/Early childhood education
2. Acquire a critical knowledge about various activities for pre-school children

Unit I early childhood years: developmental milestones, development during early childhood: physical, cognitive, social, emotional, moral and language development
factors influencing physical, cognitive, social, emotional, moral and language development

Unit II: Historical perspective

Concept of learning: definition, essential features, types and principles of learning
Learning environment: reinforcement, punishment, motivation and discipline

Unit III: Learning philosophies

Theories for classroom teaching and its applicability-

Jean Piaget, Erik Erikson, Maria Montessori, Lawrence Kohlberg

Indian: Rabindranath Tagore (1861–1941), Gijubhai Badeka, M.K Gandhi, Tarabai Modak

Unit IV Family: types of families and their effect on development of child
Types of parenting and their effect on children

Unit V: Principles of Early Childhood Education

Objectives; Need and significance; Basic Principles;

The Playway Method; Early Childhood education services in India- Government Sector– ICDS, NIPCCD, NCERT etc; Voluntary Sector–ICCW, Balwadi, MobileCreche’s, ECCE centers etc.; Private Sector (Nursery,Pre- Primaryetc)

Unit VI: Play

Concept of Play; Play and Learning; Role of play in development; Play as a means of understanding children’s development; Different types of play among preschool children (unoccupied behaviour, onlooker, solitary independent play, parallel activity, associative play, cooperative or organized, supplementary play)

Unit V :: Project - Visit a locality and other public spaces to note all the facilities available for children for play, learning and skill building and report writing
Preparation of education material for nursery school children

References:

1. NCERT (1991), A Guide for Nursery School Teachers, NCERT, New Delhi

2. Seth Kanta, Ahuja Kavita (1996), Minimum Specifications for Pre-Schools, NCERT, New Delhi
3. Kohn Ruth (2003), The Exploring Child– A Handbook for Pre-Primary Teachers, Orient Longman, Delhi
4. Chowdhury D Paul (1995), Child Welfare/Development, Atma Ram & Sons, Delhi
5. Certificate Course in Organizing Child Care Services, IGNOU, (Block 1 to 6)
6. Grewal JS (1998), Early Childhood Education– Foundations and Practice, Har Prasad Bhargava, Agra

FOOD SAFETY, SANITATION AND HYGIENE

(Skill Enhancement Course) (Elective)

HSC /SEC/UG 14

Course title & code	credits	lecture	Tutorial	Practical\ practice	Eligibility criteria	Pre-requisite of the course (if any)
HSC /SEC/UG 14- Food safety, sanitation and hygiene	2	1		1		NIL

Learning objectives

- To understand food safety principles and its importance in preventing the foodborne illnesses.
- To understand the importance of sanitation in food handling and preparation.
- Implementing personal hygiene standard.

Course Outcomes

After successful completion of the course, the students will be able to

1. Enumerate the various aspects of food safety and to identify the causes and prevention procedures for food borne illness, intoxication and infection
2. Understand the need for consumer education and discuss occupational safety and health administration requirements.
3. Analyze food handling procedure, describe food storage and refrigeration techniques.
4. Evaluate labelling methods by following the principles of food safety, sanitation and hygiene
5. To create awareness regarding sanitation of dishes, equipment and kitchen.

II. Theory Syllabus

Unit – I Food safety- Definition, Meaning - factors affecting food safety - importance of food safety - Risks and hazards - Food related hazards - microbial consideration in food safety- Food safety and standards bill 2005

Unit – II Basic principles of Food hygiene and Sanitation - Personal and environmental Hygiene – Hygiene aspects of Food handlers- Hygiene aspects in preparation and storage of food - dish washing and garbage disposal- Safety of leftover foods Methods of sanitation and hygiene

Unit – III Food Adulteration and Adulterants: Meaning, Methods to identify the presence of adulterants-Types of adulteration in various foods-Intentional, incidental and metallic contaminants - Consequences of adulteration

Unit – IV Safety in Food processing –Regulatory compliance requirement for establishment of food outlets - Frame work for enabling environment for serving safe and nutritious food at food establishment or outlets. Sterilization and disinfection using heat and chemicals – Solid and liquid waste management and disposal.

Unit- V Objectives of developing Food Safety and Standards- Enforcement of structure and procedure - Role of food analyst- good practices- statutory and regulatory requirements - Certification - HACCP, ISO-22000, FSSC-22000

References:

- 1:- Sunetra Roday, Food Safety and Sanitation, Tata McGraw-Hill Education, 2017
- 2:- Norman G. Marriott and Robert B. Gravani, Principles of Food Sanitation, Springer, 2018
- 3:- Dr. Anju Singh & Dr. Gouri Goyal, Bhojan posan awam swachhta, Sahitya Bhawan Publication, 2022
- 4:- krishna Sinha, Bhojan posan awam swachhta, Rakhi Prakashan, 2021

B.A. (Home Science) Semester V (DSC)

Surface Ornamentations of fabrics (Theory)

Programme/Class: Degree	Year: III
Course Code: HSC/DSC/UG 15	
Credits:3	
Course outcome: - 1:- Students will gain a comprehensive understanding of traditional and contemporary techniques for embellishing fabrics, including embroidery, printing, dyeing, and appliqué. 2:- To provide students with in-depth knowledge of mechanical finishing processes used in textiles and materials, including their purpose, applications, and impact on fabric properties. 3:- To provide students with a thorough knowledge of the history, cultural significance, and	

regional diversity of traditional embroidery techniques.	
Unit	Topics
I	Textile Finishes Definition, purpose, type, basic / routine /preparatory finishes, singeing, desiring, scouring, bleaching, stiffening, weighting, mercerization, carbonizing, sanforising
II	Mechanical Finishes Napping, Gidding, sue ding, glazing, raising, immersing, flocking, brushing, shearing, beating, tendering, calendaring, schreiner zing, moaring and embossing
III	Functional Finishes Waterproof and water repellency, shrinkage control, wrinkle resistance, durable press and flame retardant finish, mildew proof, soil resistance, anti-static, anti-piling, wash and wear, flame resistance, flame proof and anti-bacterial finish
IV	Dyeing (a) Classification of dyes- Natural v/s Synthetic, advantages and limitations(b)Theory of Dyeing(c)Properties and use of Dyes-Basic, Acidic, Direct, Azoic, Neutral, Sulphur, Vat, Disperse and Reactive dyes (d)Resist Dying Techniques-Tie-Die, Batik
V	Printing (a)Direct Printing- Block, Screen, Stencil, Roller (b)Transfer Printing (c) Discharge printing, Resist Printing (d)Polychromatic, Inkjet and Digital printing techniques(e)After treatment of dyed and printed goods
VI	Introduction to various components required for hand- embroidery Knowledge of basic hand embroidery, stitches- running, hemming (visible/invisible), back stitch, overcasting, catch stitch, button whole stitch, basting, slip stitch, satin, chain, herringbone, cross, French knot
VII	Traditional Embroideries: Meaning and status of traditional crafts of India, Knowing about the Traditional Embroideries of different states: Zardozi, Kashida of Kashmir, Phulkari of Punjab, Kantha of Bengal, Chikankari of UP, Kasuti of Karnataka, Sindh and Kutch work of Gujarat.
VII	Traditional Textiles: Knowing the Traditional textiles of different states of India(a) Woven fabrics- Baluchars, Brocades, Kashmir carpets, Patola, Ikat, Pochampalli, Chanderi (b) Printed, painted and dyed –Sanganeri, Bhagru, Kalamkari, Madhubani, Bandhani

Suggested Readings:

- Marsh JT: Textile Finishes
- Trotman Er: Dyeing and Chemical Technology of Fibers
- Joseph M: Introduction to Textiles
- Corbman P Bernard: Textiles- Fiber to Fabric
- Hollen & Saddler: Introduction to Textile
- J. Hall: The standard Handbook of Textiles, Wood Head Publication, 2004
- J.E. Smith: Textile Processing-Printing, Dyeing, Abhishek Publishing, 2003
- Kate Broughton: Textile Dyeing, Rockport Publishers, 1996
- W.S. Murphy: Textile Finishing, Abhishek Publication, 2000
- Naik.D.Shailaja, Traditional Embroideries of India, New Age International Publishers, 1996
- Naik.D.Shailaja, Jacquie.A. Willson: Surface Designing of Textile Fabrics, New Age International Publishers, 2006
- Bharga, Bela. Vastra Vigyaan, Univ. Book House Pvt. Avam Dhulai Kala, University Book House Pvt Ltd. Jaipur
- Patni, Majnu, Vastra Vigyaan Avam Paridhanka Parichay, Star Publications, Agra. Suggested digital platforms weblinks-

Swayam Portal, <https://heecontent.upsdc.gov.in/Home.aspx>

This course can be opted as an elective by the students of following subjects: Open for all

Suggested Continuous Evaluation Methods

- Seminar on any topic of the above syllabus
- Test with multiple choice questions/short and long answer questions.
- Subjective long questions
- Attendance

Course prerequisites: To study this course the student must have had the subject ALL in class/12th

Practical (e) Techniques of Surface Ornamentation of Fabrics

Programme/Class: Degree		Year: III	
Course Code: HSC/DSC/UG 15			
Credits:1			
Unit	Topic		
I	Demonstration of dry cleaning, visit to a commercial dry-cleaning unit/Textile mill.		
II	Identification of labels.		
III	Dying Techniques- Tie- Die, Batik		
IV	Printing Techniques- Block, Screen, Stencil, Roller, Spray		
V	Traditional Embroideries of different states: Zardozi, Kashida of Kashmir, Phulkari of Punjab, Kantha of Bengal, Chikankari of UP, Kasuti of Karnataka, Sindhi and Kutch work of Gujarat		
VI	Preparation of different weaves on Cardboard		

Community Development and Programme Planning (Theory)

Programme/Class: Degree	Year: III
Course Code: HSC/DSE/UG 016	
Course outcomes: • Understand the Community Development dynamics & organizing system for Development. • Create awareness about the various development programmes. • Identify the leadership pattern in the community. • Impart skills to implement, monitor & evaluate programmes	
Credits:4	
Unit	Topics
I	Community Development: Meaning, Definition, Functions, Objectives, Philosophy, Principles of Community Development Programmes in India.
II	Community Development Organization: Meaning, Types, Principles, Role & Administrative Structure at the National, State, District, Block & Village levels.
III	Home Science Extension Education in Community Development: Origin, Concept, Need, Importance and Contribution of Home Science Extension Education in National Development.
IV	Recent Development Programme for Women & Children: Support to training and Employment for women (STEP), Swarn Jayanti Gram Swarozgar Yojna (SGSY), Integrated Child development Services (ICDS) etc.
V	Support Service of Youth Development: NCC, NSS, Youth Camp, Youth Clubs etc.
VI	NGO & Other organizations: Contribution towards community services, Types & Role of NGO-WHO, CARE, UNICEF, UNESCO, UNDP/CRY, HELP-AGE INDIA.
VII	Leadership: Concept, Definitions, Types, Importance, Function and Role of Community leaders, Methods of Identifying and Training of Leaders
VIII	Programme Planning: Meaning and importance of programme planning in extension, Principles of programme planning, programme development cycle and its components, -Designing the project-Defining the objectives, Identifying resources, approach, feasibility and Work plan. Implementation, Monitoring and Evaluation

GENERIC ELECTIVE COURSE : RESOURCE MANAGEMENT FOR SUSTAINABLE DEVELOPMENT

Cr. Hrs. 4 (Theory)

Course Code- HSC/GE/UG 017

Learning Outcomes After completing the course, students will be able to:

- Build an understanding of environmental concerns, sustainable development and its challenges
- Understand the concept of resources and developmental issues with respect to sustainable development
- Develop skills in sustainable resource management

UNIT I: Introduction to Sustainable Development 10 hours

- Concept of sustainable development
- Need, objectives and principles of sustainable development
- National and international milestones, initiatives, summits and protocols
- Sustainable Development Goals (SDGs)

UNIT II: Resources and Developmental Issues

- Environmental concerns, population explosion, urbanization, globalization, economic development, ecological footprint, carbon footprint
- Perspectives in resource consumption
- Sustainable management of key resources: Land, green cover, water, air, waste
- Sustainable practices by industry, CSR initiatives
- Green buildings and green building rating systems

UNIT III: Sustainable Resource Management I

- Energy management – star labelling, energy auditing, renewable energy
- Water management – Rain water harvesting- Calculation of rainwater harvesting potential, water auditing, waste water recycling, water testing

UNIT IV: Sustainable Resource Management II

- Waste management – Waste to energy plants, waste to wealth • Air management – Air quality, AQI

UNIT V Measurement and Indicators of Sustainable Development

Measurement tools of Sustainable Development- Gross National Happiness; Human development Index (HDI); Ecological Footprint (EF),

Indicators of Sustainable Development: Indicators of health; Indicators for zero hunger; Indicators of gender equality

Essential Readings

1. Thakur, B., Thakur, R. R., Chattopadhyay, S., & Abhay, R. K. (Eds.). (2023). Resource Management, Sustainable Development and Governance: India and International Perspectives. Springer.

2. Prasad, R., Jhariya, M. K., & Banerjee, A. (2021). Advances in Sustainable Development and Management of Environmental and Natural Resources: Economic Outlook and Opinions. CRC Press, Taylor & Francis Group.
3. Goel, S. (Ed.). (2016). Management of Resources for Sustainable Development. New Delhi: Blackswan Publications.
4. Somayaji, G., & Somayaji, S. (2009). Environmental concerns and sustainable development: some perspectives from India. New Delhi: TERI Publication.
5. Sundar, I. (2006). Environment and Sustainable Development. New Delhi: APH Publishing Corporation

Semester V

Project/Field Survey

Course Title	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-requisites of the course (if any)
		Lecture	Tutorial	Practical/Practice		
Project/Field Survey	4	1	0	3		Nil

Subject : Home Science		
Course Code: HSC/P/S 01		Course Title : Project/Field Survey
Course Outcomes: - The students will learn about research proposal, hypothesis, questionnaire, report writing, citations, references and bibliography. - It will help the students in developing a research temperament and experiential learning.		
Credits : 4 Credits		Project
Unit	Topics	No. of Hours
I	Preparation of a Research Proposal. Framing of Objectives and Hypothesis. Review of Literature. Designing of a Questionnaire or selection of suitable methodology for laboratory work. Classification and tabulation of Data. Introduction to Descriptive and Inferential Statistical tools. Steps in Report Writing. Format of the research report. Rules for Citations & References. Bibliography writing - APA & MLA methods. Use of tables and graphs in report.	15
II	The students will be required to conduct a field study/or laboratory work on any topic under the area of Home Science under the supervision of the assigned teacher and will submit a report. The report should not be less than 30 pages in a standard format and submitted to the concerned teacher.	90

B.A. (Home Science) Semester VI

Dietetics and Therapeutic Nutrition (Theory) (DSC)

Programme/Class Degree	Year: III	Semester: VI
Subject: Home Science		
Course Code HSC/DSC/UG/18	Course Title: Dietetics and Therapeutic Nutrition (Theory)	
Course outcomes: • Knowledge of principles of diet therapy • Develop and understand modification of the normal diet for therapeutic purposes • Practical knowledge of dietary management in some common disorders.		
Credits:4		Core Compulsory
Unit	Topics	No. of Lectures
I	Introduction (a) Definition of Health Dietetics and Therapeutic Nutrition (b) Importance of Diet Therapy (c) Facts about fast foods/Junks foods (d) Objectives of therapeutic Diet (e) Principles of diet therapy	
II	Diet and feeding methods (a) Modification of normal diets for therapeutic purposes (b) (b)Methods of modifications • On the basis of nutrients • On basis of consistency (c) Different feeding methods • Oral feeding • Tube feeding	
III	Energy Metabolism (a) The calorific value of food (b) Measurement of energy exchange in the body (c) Factors influencing the Basal Metabolic Rate (d) Factors influencing total energy requirement of body	
IV	Diet during fevers and infections (a) Introduction to fever–Acute Fever, Chronic fever Important changes in nutrition during fever (c) Modification of the diet	
V	Diet during Digestive systems disorders (a)Peptic Ulcers-Causes, symptoms and diet modification (b) Diarrhea and Constipation-Causes, treatment and diet modification	
VI	Weight Management (a)Over weight and Obesity -Introduction to obesity	33

	-Causes of Obesity -Diet Modification (b) Underweight -Causes -Treatment -Diet Therapy	
VII	Therapeutic Diets in Cardiac Diseases (a) Atherosclerosis -Introduction -Dietary factors influencing lipid level in blood -Modification of diet and Meal Pattern (b) Hypertension -Causes and symptoms -Diet in Hypertension	

Suggested Readings:

- ❖ Sumati R Mudambi-“Fundamentals of food, Nutrition and Diet Therapy”, New Age International Pvt. Ltd, New Delhi, 6th Edition (2018).
- ❖ BSrilakshmi-“Dietetics”, New Age International Publishers, New Delhi 2017.
- ❖ Bamji MS, Krishna swamy K and Brahman GNV (Eds) (2009), Text book of Human Nutrition, Edition, Oxford & IBH Publishing Co. Pvt. Ltd New Delhi.
- ❖ Dr. Brinda Singh-Aahar Vigyan evam Poshan, Panchsheel Prakashan, Jaipur, 2015; 13th Ed.
- ❖ Dr. Devinasahani, Samanya Evam Upcharatmak Poshan, New Age International Publishers.
- ❖ Dr. Sheel Sharma, “Nutrition and Diet Therapy”, PEEPEE Publishers and Distributors (P) Ltd. Delhi, 2014, 1st Ed.
- ❖ Shubhangini A Joshi, -“Nutrition and Dietetics”, McGraw Hill Education Private Ltd., New Delhi, 2013.
- ❖ Kumud Khanna-“Textbook of Nutrition and Dietetics”, Elite Publishing House Pvt. Ltd, New Delhi, 7th Ed. 2013.
- ❖ MS Waminathan-Essentials of food nutrition, Vol III, Applied Aspects, The Bangalore Printing Publishing Co. Ltd, Bangalore, 2nd Edition 1985, Reprint 1997.

Suggested Continuous Evaluation Methods:

- Test with multiple choice questions/short and long answer questions
- Menu Planning and calculation of nutrient requirement
- Seminar on any above topics

Suggested equivalent online courses:

IGNOU and other centrally/state operated Universities/ MOOC platforms such as “SWAYAM” India and abroad.

<http://heecotent.upsdc.gov.in/Home.aspx>

Further Suggestions:

- Students can opt. dietitian, nutrition advisor/Nutritionist as a career in private and government sector as well as extend knowledge by joining advance course in same discipline.

Course Code: HSC/DSC/UG/018	
Credits:2 1	
Unit	Topic
I	Modification of normal diet for therapeutic purposes, preparation and presentation
II	Therapeutic Diet preparation and Nutrient Calculation of -Diet in fever -Diet in diarrhea -Diet in Constipation
III	Therapeutic Diet Preparation and Nutrient Calculation of some common Disorders -Diet in Diabetes Mellitus -Diet in Hypertension -Diet in Atherosclerosis
IV	Dietary Modification for weight management-Preparation and Nutrient Calculation of diet in- -Over weight & obesity -Underweight

Family Welfare and Community Education (Theory)

Programme/Class: Degree	Year: III	Semester: VI
Subject: Home Science		
Course Code: HSC/DSE/UG 019	Course Title: Family Welfare and Community Education (Theory)	
Credits:4	Core Compulsory	
Course outcomes • Understanding about Children’s rights and National Policy for Children • Learning about Family and child welfare services working at national and international level • Understanding family relationship and Child Parent relationships		
TotalNo.ofPeriods-60		
Unit	Topic	
I	Child and Family Welfare: Children’s rights and National Policy for Children. Demographic profile of child in India. Children with special needs. Deprived Children and abused children, juvenile Delinquency.	
II	Family and child welfare services working at national and international level; C.S.W.B., ICCW ICDS and others, W.H.O. UNICEF, CARE, and ILO. Rural extension services and community ICDS, DWCRA, IRDP and CHEB	
III	Family relationship, Child Parent relationship, responsibilities of parts relationship of home, school and community.	
IV	The role of teacher and other specialists in parents and community education programmes. Teacher as motivator, community work, guidance of child, youth ethical consideration in dealing with parents and community.	
Suggested Readings: 1. Gangrade,K.D.(1971) Community Organization in India. Popular Prakashan, New Delhi 2. Dahama, O.P. and Bhatnagar,O.P.(1980) Extension and Communication for Development, Oxford and IBH. 3. State of World Children, UNICEF Annual Publication. 4. HansNagpaul.(1980)Culture, Education and Social Welfare. Chand and Company, New Delhi. 5. Chaudhry,D.Paul,(1980).Child Welfare and Development. NIPCCD, NewDelhi.		
Suggested Continuous Evaluation Methods: • Test with multiple choice questions/short and long answer questions • Menu planning and calculation of nutrient requirement.		

36

Suggested equivalent online courses:

IGNOU and other central/state operated Universities/MOOC platforms such as “SWAYAM” in India and abroad Swayam Portal.

<http://heecontent.upsdc.gov.in/Home.aspx>

Diet and Nutrition Counselling

Generic Elective

HSC/GE/UG 20

I. Course outcomes

After successful completion of the course, the students will be able to

- Define Dietician and recall the qualities, role and responsibilities of a dietician
- Describes or explains the steps in diet and nutrition counseling
- Uses the skills in assessment of nutritional status of normal and diseased people
- Relate practical skills in dietary counseling of various health and disease conditions
- Develop teaching aids and uses computer applications and smart phones in diet counseling

II. Theory Syllabus

UNIT-1 Introduction to Dietitian and IDA

- Dietician – Definition and Educational qualification
- Types of Dietitians – Clinical, academic, research, specific, food service, public/Community, industrial, consultant, sports, business etc.
- Qualities, Role and responsibilities of Dietician
- IDA – Objectives, membership; Registered Dietician – eligibility for R.D. exam

UNIT-2 Diet Counselling/ Nutrition Care Process (NCP)

- Diet Counseling/ Nutrition Care Process (NCP) – Definition, importance, purposes and ethical principles
- Steps in Diet counseling Process; Documentation – SOAP
- Counseling Skills for a Dietitian; Tools of Dietitian; Guidelines for effective Counseling

UNIT-3 Counselling Approaches

- Counselling Approaches – Meaning, Developing a counselling approach
- Different Counselling Approaches – Psychoanalytical, behavioural, humanistic, Patient centered GALIDRAA approaches etc.

UNIT-4 Nutrition Education

- Nutrition Education – Meaning and importance,
- Teaching Methods and aids used for Nutrition Education in the Community
Teaching Methods – Lecture, Group discussion, Role Play, Storytelling, Demonstrations, Nutrition Exhibition, Marathon race etc.
- Teaching Aids – Posters, pictures, models, charts, flash cards etc.
- Teaching Materials for patients – Models, pamphlets, leaflets, book

UNIT-5 Use of Modern Technology in Diet Counselling

- Use of Computers in Diet Counselling and Nutrition Education
- Use of Computer Applications and Mobile Applications in Diet Counselling and Nutrition Education; Computer and mobile applications available for Diet Counselling
- Pre requisites for setting up a Diet Counseling Center

Project- Visit to a hospital and studying routine hospital diet and report writing

Preparation of teaching aids in the field of nutrition

Preparation of case history of a patient and feeding information and report writing

References

- Srilakshmi, B. "Dietetics", 8th edition, 2018, New Age International Publishes, New Delhi
- IDA, Clinical Dietetics Manual, 2018, 2nd edition Elite Publishing House New Delhi
- Corinne H. Robinson, Marilyn R. Lawler, "Normal & Therapeutic Nutrition" 17th edition 1986
- Shubangini A Joshi, "Nutrition & Dietetics" 5th edition, 2022, McGraw hill Education India Pvt. Ltd.
- Judy Gable "Counselling Skills for Dietitians" 2nd edition, 2007, Black Well Publishing Ltd, Oxford, UK.
- "Clinical and Therapeutic Nutrition M.Sc." published by directorate of Distance Education, Swami Vivekanand Subharti University, Meerut, U.P.
- Linda Snetselaar "Nutrition Counselling Skills for the Nutrition Care Process" 4th edition, 2021, Jane and Bartlett Publishers, London

Semester VI

Project/Field Survey

Course Title	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre-requisites of the course (if any)
		Lecture	Tutorial	Practical/Practice		
Project/Field Survey	4	1	0	3		Nil

Subject : Home Science		
Course Code: HSC/P/S 02	Course Title : Project/Field Survey	
Course Outcomes: • The students will learn about research proposal, hypothesis, questionnaire, report writing, citations, references and bibliography. • It will help the students in developing a research temperament and experiential learning.		
Credits : 4 Credits		Project
Unit	Topics	No. of Hours
I	Preparation of a Research Proposal. Framing of Objectives and Hypothesis. Review of Literature. Designing of a Questionnaire or selection of suitable methodology for laboratory work. Classification and tabulation of Data. Introduction to Descriptive and Inferential Statistical tools. Steps in Report Writing. Format of the research report. Rules for Citations & References. Bibliography writing - APA & MLA methods. Use of tables and graphs in report.	15
II	The students will be required to conduct a field study/or laboratory work on any topic under the area of Home Science under the supervision of the assigned teacher and will submit a report. The report should not be less than 30 pages in a standard format and submitted to the concerned teacher.	90

