

NATIONAL EDUCATION POLICY-2020

**Common Minimum Syllabus for all
Uttarakhand State Universities and Colleges for
First Three Years of Higher Education**

**PROPOSED STRUCTURE OF
UG - HOME SCIENCE
SYLLABUS**

2021

Curriculum Design Committee, Uttarakhand

Sr.No.	Name & Designation
1.	Prof. N.K. Joshi Vice-Chancellor , Kumaun University Nainital Chairman
2.	Prof. O.P.S. Negi Vice-Chancellor , Uttarakhand Open University Member
3.	Prof. P. P. Dhyani Vice-Chancellor , Sri Dev Suman Uttarakhand University Member
4.	Prof. N.S. Bhandari Vice-Chancellor, Soban Singh Jeena University Almora Member
5.	Prof. Surekha Dangwal Vice-Chancellor, Doon University, Dehradun Member
6.	Prof. M.S.M. Rawat Advisor, Rashtriya Uchchatar Shiksha Abhiyan, Uttarakhand Member
7.	Prof. K. D. Purohit Advisor, Rashtriya Uchchatar Shiksha Abhiyan, Uttarakhand Member

Syllabus Preparation & Expert Committee

S.No.	Name	Designation	Department	College/University
1	Prof. Lata Pande	Professor and Head	Home Science	D.S.B. Campus, Kumaun University, Nainital
2	Dr. Chhavi Arya	Assistant Professor	Home Science	D.S.B. Campus, Kumaun University, Nainital

Semester-wise Titles of the Papers in U.G. Programme (HOME-SCIENCE)

Year	Semester	Course Code	Paper Title	Theory/Practical	Credits
B.A-1	I	HSC/UG001 Core/Minor	Fundamentals of Nutrition and Human Development	THEORY	4
		HSC/UG002 Core/Minor	Cooking Skills and Healthy Recipe Development	PRACTICAL	2
		HSC/UGVM015 Vocational Minor	Fundamentals of Nutrition and Cooking Skills with Healthy Recipe Development	THEORY + PRACTICAL	
	II	HSC/UG003	Introduction to Clothing and Textile and Family Resource Management	THEORY	4
		HSC/UG004	Clothing and Textile	PRACTICAL	2
		HSC/UGVM016 Vocational Minor	Introduction to Clothing and Textile	THEORY + PRACTICAL	3
B.A-2	III	HSC/UG005 Core/Minor	Housing, Interior Decoration and Extension Education	THEORY	4
		HSC/UG006 Core/Minor	Interior Decoration and Development of Extension Teaching Aids	PRACTICAL	2
		HSC/UGVM017 Vocational Minor	Housing and Interior Decoration	THEORY + PRACTICAL	3
	IV	HSC/UG007	Nutrition Through Life Span and Human Development	THEORY	4
		HSC/UG008	Meal Planning and Human Development	PRACTICAL	2
		HSC/UGVM018 Vocational Minor	Nutrition Through Life Span and Meal Planning	THEORY + PRACTICAL	3
B.A-3	V	HSC/UG009	Surface Ornamentation of Fabrics	THEORY	4
	V	HSC/UG010	Community Development & Programme Planning	THEORY	4
	V	HSC/UG011	Techniques of Surface Ornamentation of Fabrics	PRACTICAL	2
	VI	HSC/UG012	Dietetics & Therapeutic Nutrition	THEORY	4
	VI	HSC/UG013	Family Welfare and Community	THEORY	4

			Education		
	VI	HSC/UG014	Therapeutic Diet Preparation & Nutrient Evaluation	PRACTICAL	2

Proposed Year wise Structure of UG Program in Home Science

Program Outcomes (POs)

- The program has been framed in such a manner that students receive real feel of quality education by touching all aspects of human lifecycle.
- Designed to enhance the capacity of students to understand universal and domain-specific values in Home Science.
- Develop the ability to address the complexities and interface among of self, social and national priorities.
- Inculcate both generic and subject-specific skills to succeed in the employment market and standards of life.
- Promote research and innovation and design (product) development favoring all the disciplines in Home Science.
- This programme develops scientific and practical approach among the students which helps in their day-to-day life.

B.A. First Year

Certificate in Fundamentals of Home Science

Program Specific Outcomes (PSOs)

At the end of the program following outcomes are expected from students:

Learn about the discipline of Home Science as a holistic field of study covering multiple facets and requirements of human beings in day living, for example, achievement of appropriate milestones in personal development: awareness, need and use of family resources: access to adequate nutrition for wholesome development; clothing fundamentals. May have capabilities to start earning by enhancing their skills in the field of Nutrition and Textiles.

B.A. Second Year

Diploma in Interior Decoration and Diet Planning

Programme Outcomes:

1. Grasp knowledge of Housing, need & selection of site in real life situations.
2. Comprehending Housing plans for residential purpose.
3. Appreciate principles of design and the contributing factors to refine personal aesthetic senses.

4. Learn the concepts of Extension Education, effective communication methods, using technologically advanced Audio- visual aids.
5. Create an awareness about importance of healthy meal at various stages of life cycle
6. Inculcate healthy eating practices among students
7. Develop skill of meal planning for different physiological groups
8. Physical & Physiological changes throughout life cycle.

B.A. Third Year
Bachelor in Home Science
Program Specific Outcomes (PSOs)

- Programme is framed to encourage a genre of responsible students with a person for lifelong learning and entrepreneurship, it also generates multi-skilled leaders with a holistic perspective that cuts across disciplines.
- Promote research, innovation and design (product) development favouring all the disciplines in Home Science.
- Enhance digital literacy and apply them to engage in real time problem solving and ideation related to all fields of Home Science.
- Appreciate and benefit from the symbiotic relationship among the five core disciplines of Home Science-Resource Management, Food Science and Nutrition, Textiles and Clothing, Human Development and Family Studies and Extension and Communication.
- After this degree programme students can be benefitted by getting jobs in various fields like government sector, working with NGOs, jobs as an extension worker, Education and establishing enterprises.

DETAILED SYLLABUS

B.A. I

B.A. I Semester I Home Science

Fundamentals of Nutrition and Human Development (Theory)

Programme/Class: Certificate	Year: 1	Semester: 1
Subject: Home Science		
Course Code: HSC/UG001	Course Title: Fundamentals of Nutrition and Human Development(Theory)	
Course Outcomes: The student at the completion of the course will be able to: <ul style="list-style-type: none"> • Prepare the students to understand physiologybased courses • 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:4	Core Compulsory / Elective	
Max. Marks: 25+75	Min. Passing Marks:	
Total No. of Lectures-60		
Units	Topic	No. of Lectures
I	Traditional Home Science and its Relevance in current era, Contribution made by Indian Home Scientists i.e., M Swaminathan, C.V. Gopalan, S.K. Dey, Rabindra Nath Tagore etc.	03
II	Cell and Digestive System; Respiratory and Cardiovascular system	10
III	Food and Nutrition Food-meaning, Classification and function Nutrition-Concept of Nutrition Nutrients-Macro and Micro, sources and deficiency diseases	09
IV	CookingMethods-Methods, Advantages and Disadvantages. Preservation of Nutrients while Cooking. Traditional methods of enhancing nutritional value of foods-germination, fermentation, food synergy etc.	08
Part B		
V	Introduction to Human Development • Concept, Definition and need to studyHuman	08

	<p>Development</p> <ul style="list-style-type: none"> • Domains, Stages and contexts of development. Principles of Growth and Development. Determinants of Development-heredity and environment 	
VI	<p>Prenatal Development and Birth Process:</p> <ul style="list-style-type: none"> • Conception, Pregnancy and Childbirth, Stages of birth • Types of delivery (Natural, C-section, breech, home vs. assisted delivery) • Physical appearance and capacities of the new-born • Factors affecting pre-natal development 	6
VII	<p>Infancy:</p> <ul style="list-style-type: none"> • Developmental task during Infancy and Preschool Stage • Physical and Motor Development • Social and emotional development • Cognitive and language development 	8
VIII	<p>Early Childhood (Pre School) years:</p> <ul style="list-style-type: none"> • Developmental Tasks during Early Childhood • Physical and Motor Development • Social and emotional development • Cognitive and language development 	8

Suggested Reading

- Dr. Brinda Singh, Manav SharirevamKriyaVigyanPanchcheelPrakashan, Jaipur, 2015, 15th Ed.
- Chatterjee, C.C, “Human Physiology” Medical Allied Agency: Vol I, 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, “AaharVigyan, SurakshaevamPoshan”; Elite Publishing House, New Delhi; 2015
- Dr. Anita Singh, AaharEvamPoshanVigyan, star Publication, Agra
- Dr. DevinaSahai, AaharVigyan, 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.
- Keenan, T., Evans, S., & Crowley, K. An introduction to child development, Sage (2016)
- Hurlock E. Child Development.
- AadhunikVikasatmakManovigyan, Shri Vinod Pustak Mandir Agra Edition 3rd 2015
 - Suggestive digital platforms web links-ePG-Pathshala, IGNOU & UPRTOU online study material
Svayam Portal
<http://heecontent.upsdc.gov.in/Home.aspx>

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

B.A. I Semester I Home Science

Cooking skills and Healthy Recipe Development (Practical)

Programme/Class: Certificate	Year: 1	Semester:1
Subject: Home Science		
Course Code: HSC/UG002	Course Title: Cooking skills and healthy recipe development(Practical)	
Course Outcomes:		
<ul style="list-style-type: none"> • Students will get familiar with different methods of cooking • Acquaint students with practical knowledge of nutrient rich foods 		
Credits:2	Core Compulsory / Elective	
Max. Marks: 25+75	Min. Passing Marks:	
Total No. of Lab Periods-30(60 hours)		
Unit	Topic	No. of Lectures
I	Basic Cooking skills - Weighing of raw materials - Preparing of different food items	06
II	Preparation of various dishes using different methods of cooking - Boiling / steaming - Roasting - Frying-Deep/shallow - Pressure cooking - Hot air cooking/Baking	08
III	Different styles of cutting fruits and vegetables - Salad Decoration/Dressing	06
IV	Preparation of nutrient rich dishes - Protein rich dish - Carbohydrate rich dish - Fat rich dish	10

	<ul style="list-style-type: none"> - Vitamins rich dish - Minerals rich dish - Fiberrich dish 	
<p>Suggested Readings:</p> <ul style="list-style-type: none"> ❖ Dr. Brinda Singh, Manav Sharirevam 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; Vol I, 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 		
<p>This course can be opted as an elective by the students of the following subjects: Open for all</p> <p>.....</p>		
<p>Suggested Continuous Evaluation Methods:</p> <ul style="list-style-type: none"> • 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 		
<p>Course prerequisites: The eligibility for this paper is 10+2 with any subject.</p>		
<p>Suggested equivalent online courses</p> <ul style="list-style-type: none"> ○ IGNOU and other centrally/state operated Universities/MOOC platforms such as "SWAYAM" in India and abroad, http://heecontent.upsdc.gov.in/Home.aspx 		
<p>Further Suggestions:</p> <p>Student may develop their cooking skills with new healthy recipe development after completion of this course and even start their own food service center</p>		

B.A. I Semester I Home Science

Fundamentals of Nutrition and Cooking Skills with Healthy Recipe Development

Programme/Class: Certificate	Year: 1	Semester: 1
Subject: Home Science		
Course Code: HSC/UGVM015	Course Title: Fundamentals of Nutrition and Cooking Skills with Healthy Recipe Development	
<p>Course Outcomes:</p> <p>The student at the completion of the course will be able to:</p> <ul style="list-style-type: none"> • Prepare the students to understand physiology based courses 		

<ul style="list-style-type: none"> • 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		Vocational/Skill Development Course
Max. Marks: 25+75		Min. Passing Marks:
Total No. of Lectures-60		
Units	Topic	No. of Lectures
I	Traditional Home Science and its Relevance in current era Contribution made by Indian Home Scientists i.e. M Swaminathan, C V Gopalan, S K Day, Rabindra Nath Tagore etc.	03
II	Cell and Digestive System Respiratory and Cardiovascular system	10
III	Food and Nutrition Food-meaning, Classification and function Nutrition-Concept of Nutrition Nutrients-Macro and Micro, sources and deficiency diseases	09
IV	Cooking Methods-Methods, Advantages and Disadvantages Preservation of Nutrients while Cooking. Traditional methods of enhancing nutritional value of foods-germination, fermentation, food synergy etc.	08
Part B (Practical)		
V	Basic Cooking skills Weighing of raw materials Preparing of different food items before cooking	8
VI	Preparation of various dishes using different methods of cooking - Boiling / steaming - Roasting - Frying-Deep/shallow - Pressure cooking - Hot air cooking/Baking	6
VII	Different styles of cutting fruits and vegetables Salad Decoration/Dressing	8
VIII	Preparation of nutrient rich dishes - Protein rich dish - Carbohydrate rich dish - Fat rich dish - Vitamins rich dish	8

	<ul style="list-style-type: none"> - Minerals - Fibers 	
<p>Suggested Reading</p> <ul style="list-style-type: none"> • 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, “AaharVigyan, SurakshaevamPoshan” ; Elite Publishing House, New Delhi; 2015 • Dr. Anita Singh, AaharEvamPoshanVigyan, star Publication, Agra • Dr. Brinda Singh, Manav SharirevamKriyaVigyanPanchcheelPrakashan, Jaipur, 2015, 15th Ed. • Chatterjee, C.C, “Human Physiology” Medical Allied Agency: Vol I,II. • Text Book of Biology for 10+2 Students (NCERT) • Dr. DevinaSahai, AaharVigyan, New Age International Publishers, New Delhi • AadhunikVikasatmakManovigyan, Shri Vinod Pustak Mandir Agra Edition 3rd 2015 <ul style="list-style-type: none"> • Suggestive digital platforms web links-ePG-Pathshala, IGNOU & UPRTOU online study material Svayam Portal http://heecontent.upsdc.gov.in/Home.aspx 		
<p>This course can be opted as an elective by the students of the following subjects: Open for all Admitted students</p>		
<p>Suggested Continuous Evaluation Methods:</p> <ul style="list-style-type: none"> • Seminar / Presentation on any topic of the above syllabus • Test with multiple choice question/ short and long answer questions <p>Attendance</p>		
<p>Further Suggestions</p> <p>It widens the scope for students to join Government and Non-Government organizations up skilling the people at different levels as per their socio-economic structure.</p> <p>At the End of the whole syllabus any remarks/suggestions:</p>		

B.A. I Semester 2 Home Science

Introduction to Clothing & Textiles & Family Resource Management (Theory)

Programme/Class: Certificate	Year: 1	Semester:2
Subject: Home Science		
Course Code: HSC/UG003	Course Title: Introduction to Clothing & Textiles & Family Resource Management (Theory)	
<p>Course Outcomes:</p> <ul style="list-style-type: none"> • Learn about scope of textile and clothing • Understanding why fabrics are different • Learn how fabrics can be manufactured 		

<ul style="list-style-type: none"> • Understand basic clothing concepts and garment making • Learn the family resource management as a whole • Understand the Decision making and use of resources throughout the Family life cycle. • Gain knowledge about Time, Money &Energy as a Resource. • Appreciate Household Equipments for work simplification 		
Credits:4		Core Compulsory
Max. Marks: 25+75		Min. Passing Marks:
Total No. of Lab Periods-60		
Unit	Topic	No. of Lectures
I	Introduction a) Introduction to Clothing and Textile (b) Its importance in day-to-day life (c) Scope (d) Classification of textile fibre on the basis of their source (e) General properties of fibers-primary and secondary	07
II	Knowing Fibers- Manufacture, processing, properties and uses of (a) Cellulosic Fiber-cotton, Linen (b) Protein fibers-Wool, Silk (c) Synthetic/Manmade fibers-Nylon, Polyester, Acrylic, Rayon	08
III	Yarn to fabrics (a) Definition of Yarn, Manufacture of Yarn and Yarn Properties (b) Different fabric construction techniques (Weaving, Knitting, Felting, Braiding, Non-woven) (c) Weaving of Cloth-Terminologies and Steps in Weaving (d) Types of weaves-Basic and Decorative	08
IV	Clothing Construction (a) Tools for Clothing construction (b) Introduction to sewing machine, its parts and maintenance, (c) Importance of Drafting, Flat pattern techniques-advantages & disadvantages (d) Fabric preparatory steps for stitching a garment-preshrinking, straightening, layout, pinning, marking and cutting.	07
Part B		
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.	08
VI	Resources, Decision making & Family life cycle: Meaning, Characteristics, Types and Factors affecting	08

	the use of Resources. Steps and Role of decision making in management. Stages of family life cycle.	
VII	<p>Time, Energy and Money Management: Time as a Resource, Steps in making Time Plan, Tools and Aids in Time Management.</p> <p>Energy as a Resource, Work Curve, Fatigue-Types, Causative Factors and alleviating techniques, Family income as a Resource, Source of Income and Expenditure and Saving. Preparation of family budget in view of family income</p>	07

Suggested Readings:

- ❖ Colbmen P Bernard: Textiles Fiberto 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-B Kailash 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). Management for Modern Families. N. Delhi: Sterling Publisher Ltd.
 - ❖ Moorthy G. (Ed.). (1985). Home Management. N. Delhi.: Arya Publishers, Mullick, P. Text book of Home Science. Ludhiana.: Kalyani Publishers.
 - ❖ Nickell, P., and Dorsey, J.M. (2002). *Management in Family Living*. New Delhi: CBS Publishers (ISBN 13: 9788123908519)
 - ❖ Patni Manju & Sharma Lalita, GrahPrabandh, Star Publication Agra
 - ❖ Varma, Pramila, VastraVigyanAvamParidhan: Madhya Pradesh Hindi Granth Academy, Bhopal.
 - ❖ Varghese, M.A, Ogale, N.N and Srinivasan, K. (2001). Home Mangement. New Delhi, New Age International (P) Ltd.
 - ❖ Varghese, M.A. Household Equipment Manual, S.N.D.T Women's University, Mumbai.
 - ❖ Suggestive digital platform weblinks- Swayam Portal, <http://heecontent.upsdc.gov.in/Home.aspx>

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

Suggested Continuous Evaluation Methods:

- Seminar on any topic of above syllabus.

<ul style="list-style-type: none"> • Test with multiple choice question/short and long answer questions • Attendance
Course prerequisites: To study this course, a student must have had ALL in class12 th .
Suggested equivalent online courses IGNOU and other centrally/state operated Universities/MOOC platforms such as “SWAYAM” in India and abroad.
Further Suggestions: Student may develop their managerial after completion of this course and may join any field. As management of Resources is applicable everywhere.
At the End of the whole syllabus any remarks/suggestions:

**B.A. I Semester 2 Home Science
Clothing & Textiles (Practical)**

Programme/Class: Certificate	Year: 1	Semester:2
Subject: Home Science		
Course Code: HSC/UG004	Course Title: Clothing & Textiles (Practical)	
Course Outcomes: <ul style="list-style-type: none"> • Ability to identify fibers and fabrics • Understanding why fabrics are different • Learning basic sewing skills • Learn how garments are stitched 		
Credits:2	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks:	
Total No. of lab. periods-30(60)		
Unit	Topic	No. of lab. periods

I	Identification offibers and fabrics (a) Fibre identification tests- Visual burning and microscopic test- natural and synthetic, pure and blended fibres.(b) Weaves identification and understanding their usage	07
II	Learning to Stitch- (a) Knowing how to stitch- straight-line stitching, stitching at curves and corners (b) Basic Stitching-Temporary Stitching, Permanent and decorative stitching	07
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	08
Suggested Readings:		
<ul style="list-style-type: none"> ❖ Cutting Tailoring and Dress Making: National open School, B-31-B Kailash Colony, New Delhi-1100048 ❖ 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. ❖ 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 weblinks- Svayam Portal, http://heecontent.upsdc.gov.in/Home.aspx 		
Suggested Continuous Evaluation Methods:		
<ul style="list-style-type: none"> • Preparation of samples of various types on fabrics' • Evaluation of Prepared garment • Record file preparation and evaluation, Attendance 		
Course prerequisites: Class 12 th with any subject		

**B.A. I Semester 2 Home Science
Introduction to Clothing & Textiles**

Programme/Class: Certificate	Year: 1	Semester:2
Subject: Home Science		
Course Code: HSC/UGVM016	Course Title: Introduction to Clothing & Textiles	
Course Outcomes:		
<ul style="list-style-type: none"> • Learn about scope of textile and clothing 		

<ul style="list-style-type: none"> • Understanding why fabrics are different • Learn how fabrics can be manufactured • Understand basic clothing concepts and garment making • Learn the family resource management as a whole • Understand the Decision making and use of resources throughout the Family life cycle. • Gain knowledge about Time, Money &Energy as a Resource. • Appreciate Household Equipments for work simplification 		
Credits:3		Vocational/Skill Development Course
Max. Marks: 25+75		Min. Passing Marks:
Total No. of Lab Periods-60		
Unit	Topic	No. of Lectures
I	Introduction a) Introduction to Clothing and Textile (b) Its importance in day-to-day life (c) Scope (d) Classification of textile fibre on the basis of their source (e) General properties of fibers-primary and secondary	07
II	Knowing Fibers- Manufacture, processing, properties and uses of (a) Cellulosic Fiber-cotton, Linen (b) Protein fibers-Wool, Silk (c) Synthetic/Manmade fibers-Nylon, Polyester, Acrylic, Rayon	08
III	Yarn to fabrics (a) Definition of Yarn, Manufacture of Yarn and Yarn Properties (b) Different fabric construction techniques (Weaving, Knitting, Felting, Braiding, Non-woven (c) Weaving of Cloth-Terminologies and Steps in Weaving (d) Types of weaves-Basic and Decorative	08
IV	Clothing Construction (a) Tools for Clothing construction (b) Introduction to sewing machine, its parts and maintenance, (c) Importance of Drafting, Flat pattern techniques-advantages & disadvantages (d) Fabric preparatory steps for stitching a garment-preshrinking, straightening, layout, pinning, marking and cutting.	07
Part B (Practical)		
V	Identify fibers and fabrics (a) Fibre identification tests- Visual burning and microscopic- natural and synthetic, pure and blended fibres. (b) Weaves identification and understanding their usage	08
VI	Learning to Stitch- (a) Knowing how to stitch-an idea of straight-line stitching, stitching at curves and corners	08

	(b) Basic Stitching-Temporary Stitching, Permanent and decorative stitching	
VII	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	07
<p>Suggested Readings:</p> <ul style="list-style-type: none"> ❖ Colbmen P Bernard: Textiles Fiber To Fabric ❖ Hollen & Saddler: Introduction to Textile ❖ Joseph M: Introduction to Textiles ❖ Trotman: Textile Fiber Science <p>Cutting Tailoring And Dress Making: National open School, B-31-B Kailash Colony, New Delhi-96-3</p> <ul style="list-style-type: none"> ❖ 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. ❖ Varma, Pramila, VastraVigyanAvamParidhan: Madhya Pradesh Hindi Granth Academy, Bhopal. ❖ Suggestive digital platform weblinks- Svayam Portal, http://heecontent.upsdc.gov.in/Home.aspx 		
<p>This course can be opted as an vocational/skill development course by the students of the following subjects: Open for all.</p> <p>.....</p>		
<p>Suggested Continuous Evaluation Methods:</p> <ul style="list-style-type: none"> • Seminar on any topic of above syllabus. • Test with multiple choice question/short and long answer questions • Attendance 		
<p>Suggested equivalent online courses</p> <p>IGNOU and other centrally/state operated Universities/MOOC platforms such as “SWAYAM” in India and abroad.</p>		
<p>Further Suggestions:</p> <p>Student may develop their managerial after completion of this course and may join any field.</p> <p>As management of Resources is applicable everywhere.</p>		
<p>At the End of the whole syllabus any remarks/suggestions:</p> <p>.....</p>		

B.A. II

B.A. 2 Semester 3 Home Science Housing, Interior Decoration and Extension Education (Theory)

Programme/ Class: Diploma	Year:2	Semester:3
Subject: Home Science		
Course Code: HSC/UG005	Course Title: Housing, Interior Decoration and Extension Education (Theory)	
Course outcomes: <ul style="list-style-type: none">• 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 factors to refine personal aesthetic senses.• Learn the widening concepts of Extension Education.• Develop understanding for Effective teaching and learning.• Comprehend the various effective communication methods.• Gain skills to use technologically advanced Audio- visual aids.		

Credits:4			Core Compulsory/ Elective		
Max. Marks: 25+75			Min. Passing Marks:		
Total No. of Lectures-60					
Unit	Topic				No. of Lectures
I	Housing: Needs of a House, Difference between House & Home, way to acquire house (Own & rented). Factors influencing selection and purchase of house and site for house building.				8
II	House Planning: Principles of house planning, Planning different residential spaces in a house, Planning house for different income groups.				7
III	Interior Designing: Introduction to Interior designing. Importance of good taste, Objective of interior decoration. Element of design- Line, Shape, Texture, Color, Pattern, Light & Space, Principle of design- Proportion, Balance, Rhythm, Emphasis, Harmony.				8
IV	Home Decors: Furniture, Furnishing (Curtains, Draperies, Floor Coverings, Wall ceiling, Lighting, Accessories (Wall painting, Mirrors, wall art, Sculpture, Antiques, Flower arrangements) etc.				7
PART B					
V	Extension Education: Meaning, Concepts, Objective, Scope, Principles, Philosophy of Extension Education, Early Extension Efforts in India, Formal and Non-Formal Education.				8
VI	Extension Teaching & Learning: Role and qualities of an extension worker, Steps in Extension Teaching Process, Criteria for Effective Teaching & Learning.				7
VII	Communication & Extension Teaching Methods: Definition, Importance, Characteristics, Elements, models & challenges in communications, Relationship between Communication, Extension & Development, Extension Teaching Methods- Classification, Factors guiding the selection & use of Extension teaching methods.				8
VIII	Audio-visual Aids: Definition, Importance, Classification, Selection, Preparation & effective use of Audio- visual aids				7
Suggested Readings:					
<ul style="list-style-type: none"> • Khanuja. Reena (2018) GrahVyavasthaavamGrahSajja. Agarwal Publications, Agra ISBN: 978-93-81124-96-3 • Patni Manju& Sharma Lalita, GrahPrabandh, Star publications Agra. • Cherunilam, F., &Hedggade, O. D. (1987). Housing in Bombay : Himalaya Publishing 					

House.

- Craig, H. T. and Rush, O. D. (1966). Homes with Character. Heath, 1966.
- Faulkner, R., and Faulkner, S., (1961). Inside Today's Home. Rev. ed., New York : Holt, Rinehart & Winston, Inc.
- Goldstein. H & Goldstein . V.(1954) Art in 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. Lancker. (1960). Flower Arranging: Step –by-step Instructions for Everyday Designs Florist Review
- Aggarwal, R. (2008).”Communication-today and tomorrow”, New Delhi: Sublime Company
Dubey V. K., Srivastava Archana, Agrawal Garima,
Grah Vigyan Prasaravam Sampreshan, Star Publications Agra.
Harpalini B. D. Patni. Manju, (Prasar Shiksha Avam Sanchar) Star Publications, Agra. ISBN 978-93-81246
Shaw Geeta Pushp, Shaw Jois Sheela, Prasar Shiksha, Vinod Pustak Mandir Agra. ISBN 81-7457-104-3
- Dhahama, O. P., & Bhatnagar, O. P. (1988). “Education and Communication for Development”. New Delhi.- Oxford and IBH Publishing 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.
- Supe A. 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: Class 12th with any subject

Suggested equivalent online courses:

IGNOU & Other centrally/ state operated Universities / MOOC platforms such as “SWAYAM” in India and Abroad

Further Suggestions:

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. Extension work will speed up the basic structures (Gram Panchayat, Village School and Cooperative Societies)etc.

**B.A. 2 Semester 3 Home Science
Interior Decoration and Development of Extension Teaching Aids (Practical)**

Programme/ Class: Diploma	Year:2	Semester:3
Subject:Home Science		
Course Code: HSC/UG006	Course Title: Interior Decoration and Development of Extension Teaching Aids (Practical)	
Course outcomes: <ul style="list-style-type: none"> • Developing skills for making time plan for effective balance of work & leisure. • Plan & prepare budget for the family. • Incorporate appropriate work simplification in using household equipments. • Develop understanding for house planning & decoration 		
Credits:2	Core Compulsory/ Elective	
Max. Marks: 25+75	Min. Passing Marks:	
Total No. of lab. Periods-30 (60 hours)		
Unit	Topic	No. of lab periods
I	<ul style="list-style-type: none"> • Preparation of time plans for self and family. • Drafting family budget for different income groups 	8
II	<ul style="list-style-type: none"> • Market Survey of Household Equipments- (Pressure cooker, Toaster, Gas Stove, Mixer & Grinder, Refrigerator, Washing Machine, Microwave, Solar cooker) 	8
III	<ul style="list-style-type: none"> • Draw House Plans with Standard Specifications & Furniture Layout. 	7
IV	<ul style="list-style-type: none"> • Preparation of Color wheels & Color schemes. • Flower Arrangement & Floor Decoration (Rangoli)- Application of Design principles and Element of Art, Innovation of new styles. 	7

Suggested Readings:

- Alexander. N. J., (1972). Designing Interior Environment. New York: Harcourt Brace,
- Bhargava, B. (2005). Family Resource Management and Interior Decoration, Jaipur: Apple Printer and V. R. Printers.
- Faulkner, R., and Faulkner, S., (1975). Inside Today's Home, New York : Rinehart
- Gnnodotra, V. and Jaiswal, N. (2008). Management of Work in Home, New Delhi: Dominant publishers and Distributors. (ISBN No. 81-7888-526-3)
- Harmon, S. and Kennon, K. (2018). The codec guidebook for Interiors (5th Ed.). New York: Wiley (ISBN: 978-1-119-342319-6)
- Johanovich Inc. Ball, V. K. (1982). Art of Interior Design. New York: John Wiley &

<p>Sons.</p> <ul style="list-style-type: none"> Leach, S. D. (1978). Techniques of Interior Design Rendering and Presentation (1st Ed.). Architectural Record Books (ISBN-13:978-0070368057) Mohanty, A. B. (1985). Guide to house buildings. New Delhi: Inter India Publications Patni Manju & Sharma Lalita, GrahPrabandh, Star publications Agra. <p>Suggestive digital platform websites</p> <ul style="list-style-type: none"> Bit.ly/3fJfghi https://bit.ly/39mTwGQ https://bit.ly/2JoXB2e https://bit.ly/3ljkWf <p>Swayam Portal,</p> <ul style="list-style-type: none"> https://heecontent.upsdc.gov.in/Home.aspx
<p>This course can be opted as an elective by the students of following subjects: Open for all</p>
<p>Suggested Continuous Evaluation Methods</p> <ul style="list-style-type: none"> Assessment of Time- Energy, Budget & House Plans. Assessment of Market Survey Records Assessment of Flower Arrangements and Rangoli. Attendance.
<p>Course prerequisites: To study this course, a student must have had the subject in class/12th/certificate</p>
<p>Suggested equivalent online courses: IGNOU & Other centrally/ state operated Universities / MOOC platforms such as “SWAYAM” in India and Abroad</p>
<p>Further Suggestions:</p> <ul style="list-style-type: none"> Students may develop their managerial skills & Interior Designing skills after completion 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. 2 Semester 3 Home Science Housing and Interior Decoration

Programme/ Class: Diploma	Year:2	Semester:4
Subject: Home Science		
Course Code: HSC/UGVM017	Course Title: Housing and Interior Decoration	
Course outcomes:		

<ul style="list-style-type: none"> • 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 factors to refine personal aesthetic senses. • Learn the widening concepts of Extension Education. • Develop understanding for Effective teaching and learning. • Comprehend the various effective communication methods. • Gain skills to use technologically advanced Audio- visual aids. 		
Credits:3		Vocational/Skill Development Course
Max. Marks: 25+75		Min. Passing Marks:
Total No. of Lectures-60		
Unit	Topic	No. of Lectures
I	Housing: Needs of a House, Difference between House & Home, way to acquire house (Own &retend). Factors influencing selection and purchase of house and site for house building.	8
II	House Planning: Principles of house planning, Planning different residential spaces in a house, Planning house for different income groups.	7
III	Interior Designing: Introduction to Interior designing. Importance of good taste, Objective of interior decoration. Element of design- Line, Shape, Texture, Color, Pattern, Light & Space, Principle of design- Proportion, Balance, Rhythm, Emphasis, Harmony.	8
IV	Home Decors: Furniture, Furnishing (Curtains, Draperies, Floor Coverings, Wall celing, Lighting, Accessories (Wall painting, Mirrors, wall art, Sculpture7Antiques, Flower arrangements) etc.	7
PART B (Practical)		
V	<ul style="list-style-type: none"> • Preparation of time plans for self and family. • Drafting family budget for different income groups 	8
VI	<ul style="list-style-type: none"> • Market Survey of Household Equipments-(Pressure cooker, Toaster, Gas Stove, Mixer & Grinder, Refrigerator, Washing Machine, Microwave, Solar cooker) 	7
VII	<ul style="list-style-type: none"> • Draw House Plans Standard Specifications &Furniture Layout. 	8
VIII	<ul style="list-style-type: none"> • Preparation of Color wheels & Color schemes. • Flower Arrangement & Floor Decoration (Rangoli)- Application of Design principles and Element of Art, Innovation of new styles. 	7
Suggested Readings:		

- Khanuja. Reena (2018) GrahVyavasthaavamGrahSajja. Agarwal Publications, Agra ISBN: 978-93-81124-96-3
- Patni Manju& Sharma Lalita, GrahPrabandh, Star publications Agra.
- Cherunilam, F., &Hedggade, O. D. (1987). Housing in Bombay : Himalaya Publishing House.
- Craig, H. T. and Rush, O. D. (1966). Homes with Character. Heath, 1966.
- Faulkner, R., and Faulkner, S., (1961). Inside Todays Home. Rev. ed., NewYork : Holt, Rinehart& Winston, Inc.
- Goldstein. H & Goldstein . V.(1954) Art in 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). Flower Arranging: Step –by-step Instructions for Everyday Designs Florist Review
- Aggarwal, R. (2008).”Communication-today and tomorrow”, New Delhi: Sublime Company
Dubey V. K., SrivastavaArchana, AgrawalGarima,
GrahVigyanPrasaravamSampreshan, Star Publications Agra.
Harpalini B. D. Patni. Manju, (PrasarShikshaAvamSanchar) Star Publications, Agra. ISBN978-93-81246
Shaw GeetaPushp, Shaw JoisSheela, PrasarShiksha, Vinod Pustak Mandir Agra. ISBN 81-7457-104-3
- Dhahama, O. P., & Bhatnagar, O. P. (1988). “Education and Communication for Development”. New Delhi.- Oxford and IBH Publishin Co. Pvt. Ltd.
- Jaipal Singh.” PrasarShikshaavamGramin Vikas” SR Scientific publications, Agra
- Reddy A. (1987).”Extension Education”. Bapatha, Andhra Pradesh, India: Sreelakshmi Press.
- Supe A. N. (1983). An introduction to Extension Education, Delhi: Oxford IBH publishing
- Suggestive digital platform websites
Swayam Portal,
- <https://heecontent.upsdc.gov.in/Homeaspx>

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

Suggested equivalent online courses:

IGNOU & Other centrally/ state operated Universities / MOOC platforms such as “SWAYAM” in India and Abroad
Further Suggestions: 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. Extension work will speed up the (1) Man Environment; (2) Basic structures (Gram Panchayat, Village School and Cooperative Societies))etc.
At the End of the whole syllabus any remarks/ suggestions:

B.A. II Semester IV Home Science
Nutrition Through Life Span and Human Development (Theory)

Programme/Class: Diploma	Year: 2	Semester:4
Subject: Home Science		
Course Code: HSC/UG007	Course Title: Nutrition Through Life Span and Human Development (Theory)	
Course Outcomes: The student at the completion of the course will be able to:		
<ul style="list-style-type: none"> • Create an awareness about importance of healthy meal at various stages of life cycle • Inculcate healthy eating practices among students • Develop skill of meal planning for different physiological groups • Explain the physical & Physiological changes during middle childhood, adolescent and adulthood stage • Identify the biological and environment factors affecting personality. • Learn about the characteristics, needs and developmental tasks of Middle childhood years, Adolescent & Adulthood stage 		
Credits:4	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks:	
Total No. Lectures-60		
Unit	Topic	No. of lectures
I	Meal planning- Definition, importance, factors affecting meal planning, Balanced Diet, RDA	07
II	Nutrition During Infancy and Childhood - Nutrition Requirement, RDA and Diet Plan	07
III	Nutrition during Adolescence, Adulthood and Old age Nutrition Requirement, RDA and Diet Plan	08
IV	Nutrition during special condition pregnancy and lactation-Nutrition Requirement, RDA and Diet Plan	08

Part B		
V	<p>Middle Childhood Years</p> <p>Development tasks and characteristics of middle childhood period</p> <ul style="list-style-type: none"> • Physical and motor development • Complete guide to sewing by • 	

	<ul style="list-style-type: none"> • Social and emotional development. • Cognitive development • Language development 	
VI	<p>Puberty and Adolescence</p> <ul style="list-style-type: none"> • 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 <p>Problems- Drug and Alcohol abuse, STD, HIV/AIDS, Teenage Pregnancy.</p>	8
VII	<p>Cognitive, Language and Moral Development during Adolescence:</p> <ul style="list-style-type: none"> • Perspective on cognitive development, development of intelligence and Creativity • Adolescent language • Adolescent Morality 	7
VIII	<p>Introduction to Adulthood</p> <ul style="list-style-type: none"> • Concept, transition from adolescence to adulthood • Development tasks of Adulthood • Physical and physiological changes from young adulthood to late adulthood <p>Responsibilities and adjustment-educational, occupational, material and parenthood</p>	7
<ul style="list-style-type: none"> • Suggested Readings: • Sheel Sharma, “Nutrition and Diet Therapy, Peepee Publishers, New Delhi; 2014 • Ankita Gupta, “Text book of Nutrition” Medico Refresher Publisher, Agra, 2018 • Subhangini A Joshi; Nutrition and dietetics, Mc Graw Hill Education, Private Ltd. • Kumud Khanna, “Text book of Nutrition and Dietetics”, Elite Publishing House Pvt. Ltd, New Delhi, 2013, 7th Ed. • Swaminathan M, “Essentials of food and Nutrition Vol I and II • 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.
- AadunikVikasatmakManovigyan, Shri Vinod Pustak Mandir Agra Edition 3rd 2015.
- Harpalani, AaharvigyaanavamUpcharatmakPoshan, 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 platforms such as “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.

B.A. 2 Semester IV Home Science

Meal Planning and Human Development (Practical)

Programme/ Class: Diploma	Year: 2	Semester: 4
Subject: Home Science		
Course Code: HSC/UG008	Course Title: Meal Planning and Human Development (Practical)	
Course Outcomes:		
<ul style="list-style-type: none"> • Learn to cope up with adolescent and adulthood problem • Understand and handle development related issues more efficiently. • Able to know human behaviour. • Understand individual differences. 		
Credits: 2	Core Compulsory/ Elective	
Max. Marks: 25+75	Min. Passing Marks:	
Total No. of lab. Period-30 (60 hours)		
Unit	Topics	No. of lab. periods
I	Planning and preparation of diets for different age groups.	6

II	Planning of Diet for Special Conditions (Pregnancy, Lactation)	4
III	Visit to Child Care Centres/anganwadi	1
IV	Study of physical, social, emotional, cognitive, language development Observations of child rearing practices in families from different social classes.	6
V	Interviews of adolescent girls and boys to understand their life style, behaviour and problems.	8
VI	Carry out case studies to know more about the different life stages e.g., school going children, adolescents, young adults.	5
<p>Suggested Readings:</p> <ul style="list-style-type: none"> • Monaster G. J. 1 Adolescent Development Life Taska, Mc Graw Hill (1977) • Ambron S. R. Child Development Hoky, Renhart and Winston 1978 (IIInd 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 Brook and Cole Publishing Company 1980 • AadhunikVikasatmakManovigyan, Shri Vinod Pustak Mandir Agra Edition 3rd 2015 <p>Suggestive digital platforms weblinks- ePG- Pathshalainfilibnet, IGNOU, & UPRTOU online study material. https://bit.ly/3922ZTH</p> <p>Swayam Portal, https://heecontent.upsdc.gov.in/Homeaspx</p>		
<p>Suggested Continuous Evaluation Methods</p> <ul style="list-style-type: none"> • Assessment of observation report • Preparation of questionnaire • Visits records • Attendance 		

**B.A. II Semester IV Home Science
Nutrition Through Life Span and Meal Planning**

Programme/Class: Diploma	Year: 2	Semester:3
Subject: Home Science		
Course Code: HSC/UGVM018	Course Title: Nutrition Through Life Span and Meal Planning	
<p>Course Outcomes:</p> <p>The student at the completion of the course will be able to:</p> <ul style="list-style-type: none"> • Create an awareness about importance of healthy meal at various stages of life cycle 		

<ul style="list-style-type: none"> • Inculcate healthy eating practices among students • Develop skill of meal planning for different physiological groups • Explain the physical & Physiological changes during middle childhood, adolescent and adulthood stage • Identify the biological and environment factors affecting personality. • Learn about the characteristics, needs and developmental tasks of Middle childhood years, Adolescent & Adulthood stage 		
Credits:3		Vocational/Skill Development Course
Max. Marks: 25+75		Min. Passing Marks:
Total No. Lectures-60		
Unit	Topic	No. of lectures
I	Meal planning- Definition, importance, factors affecting meal planning, Balanced Diet, RDA	07
II	Nutrition During Infancy and Childhood - Nutrition Requirement, RDA and Diet Plan	07
III	Nutrition during Adolescence, Adulthood and Old age Nutrition Requirement, RDA and Diet Plan	08
IV	Nutrition during special condition pregnancy and lactation-Nutrition Requirement, RDA and Diet Plan	08
Part B		
V	Planning and preparation of diets for different age groups.	6
VI	Planning of Diet for Special Conditions (Pregnancy, Lactation)	4
VII	Visit to Child Care Centres/anganwadi	1
VIII	Study of physical, social, emotional, cognitive, language development (any two) Observations of child rearing practices in families from different social classes.	6
	Interviews of adolescent girls and boys to understand their life style, behaviour and problems.	8
IX	Carry out case studies to know more about the different life stages e.g. school going children, adolescents, Young adults. (any two)	5

<ul style="list-style-type: none"> • Suggested Readings: • Sheel Sharma, “Nutrition and Diet Therapy, Peepee Publishers, New Delhi; 2014 • Ankita Gupta, “Text book of Nutrition” Medico Refresher Publisher, Agra, 2018 • Subhangini A Joshi; Nutrition and dietetics, Mc Graw Hill Education, Private Ltd. • Kumud Khanna, “Text book of Nutrition and Dietetics”, Elite Publishing House Pvt. Ltd, New Delhi, 2013, 7th Ed.

- Swaminathan M, “Essentials of food and Nutrition Vol I and II
- 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.
- AadunikVikasatmakManovigyan, Shri Vinod Pustak Mandir Agra Edition 3rd 2015.
- Harpalani, AaharvigyaanavamUpcharatmakPoshan, Star Publication, Agra
- Suggestive digital platform web links- IGNOU & UPRTOU online study material

Svayam 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

Course prerequisites: To study this course, a student must have had the subject in class/12th/certificate/diploma

Suggested equivalent online courses:

IGNOU & Other centrally/ state operated Universities / MOOC platforms such as “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.

At the End of the whole syllabus any remarks and suggestions:

B.A. III
B.A. 3 Semester 5 Home Science
Surface Ornamentations of fabrics (Theory)

Programme/ Class: Degree	Year: 3	Semester: 5
Subject: Home Science		
Course Code: HSC/UG009	Course Title: Surface Ornamentation of Fabrics (Theory)	
Course Outcomes:		
<ul style="list-style-type: none"> • Knowing why fabrics look differently • Identify the different techniques of fabric from surface • Learn about finishes done on fabric • Knowing about dyeing fabrics • Learn how printing on fabrics is carried • Knowing the traditional embroideries in India • Identifying traditional textiles of different states • Knowing the importance of appropriate laundry method 		
Credits: 4	Core Compulsory	

Max. Marks: 25+75		Min. Passing Marks:
Total No. of Lectures-60		
Unit	Topics	No. of Lecture
I	Techniques of Creating variety on fabrics (a) weaving (b) finishing of fabrics (c) dyeing of fabrics (d) printing fabrics (e) embroidery and other decoration methods	8
II	Finishes (a) Classification of fabric finishes (b) Study of purpose and process of finishes (i) General Purpose finishes- Bleaching, Mercerization, Calandring, Sanforization, Tentering, Singeing, Scouring (ii) Functional Finishes	8
III	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, Natural, Sulphur, Vat, Disperse and Reactive dyes (d) Resist Dying Techniques- Tie- Die, Batik	8
IV	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	8
V	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.	6
VI	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	7
VII	Water (a) Water and its uses in textile industry, properties (b) types of water used for processing (c) Hardness and removal of Hardness of water.	7
VIII	Laundry and dry cleaning of fabrics and garments (a) Methods of Laundry and Dry cleaning (b) Dry cleaning process (c) Reagents of Laundry- Blues, Bleaches, Optical Brighteners, Stiffening agents (d) Types of soaps and detergents (e) Cleaning action of soaps and detergents.	8
Suggested Readings:		
<ul style="list-style-type: none"> • Marsh JT: Textile Finishes • Trotman Er: Dyeing and Chemical Technology of Fibres • Joseph M: Introduction to Textiles • Corbman P Bernard: Textiles- Fibre to Fabric • Hollen & Saddler: Introduction to Textile • J. Hall: The standard Hand book 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. VastraVigyaan, Univ. Book House Pvt. AvamDhulai Kala, University Book House Pvt Ltd. Jaipur
- Patni, Majnu, VastraVigyaanAvamParidhankaParichay, Star Publications, Agra.
Suggestive 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

B.A. 3 Semester 5 Home Science

Community Development and Programme Planning (Theory)

Programme/ Class: Degree	Year: 3	Semester: 5
Subject: Home Science		
Course Code: HSC/UG010	Course Title: Community Development and Programme Planning (Theory)	
Course Outcomes:		
<ul style="list-style-type: none"> • 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	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks:	
Total No. of Lectures-60		
Unit	Topics	No. of Lecture
I	Community Development: Meaning, Definition, Functions, Objectives, Philosophy, Principles of Community Development Programmes in India.	8
II	Community Development Organization: Meaning, Types, Principles, Role & Administrative Structure at the National, State, District, Block & Village levels.	8
III	Home Science Extension Education in Community Development: Origin, Concept, Need, Importance and Contribution of Home Science Extension Education in National Development.	7
IV	Recent Development Programme for Women & Children: Support to training and Employment for women (STEP), SwarnJayanti Gram Swarozgar Yojna (SGSY), Integrated Child development Services (ICDS) etc.	7
V	Support Service of Youth Development: NCC, NSS, Youth Camp, Youth Clubs etc.	7
VI	NGO & Other organizations: Contribution towards community services, Types & Role of NGO-WHO, CARE, UNICEF, UNESCO, UNDP/CRY, HELP-AGE INDIA.	8
VII	Leadership: Concept, Definitions, Types, Importance, Function and Role of Community leaders, Methods of Identifying and Training of Leaders	7
VIII	Programme Planning: Programme planning component cycle and its components- Designing the project- Defining the objectives, Identifying resources, approach, feasibility and Work plan. Implementation, Monitoring and Evaluation	8
Suggested Readings:		
<ul style="list-style-type: none"> • Clark John. (1991). Voluntary Organizations: Their Contribution to Development, London: Earth Scan • Dahama, O. P. & Bhatnagar O. P. "Extension and Rural Welfare". New Delhi: 		

<p>Oxford and IBH Publishing Co. Pvt. Ltd.</p> <ul style="list-style-type: none"> • Ghosh Bhola Nath, (1996), “Rural Leadership and Development” Mohit Publications, New Delhi. • Julie Fisher. (2003). Governments, NGO’s and the Political Development of the Third World. Jaipur: Rawat Publications • Mohsionnadeem, (1985), “Rural Development through Government Program” Mittal Publications New Delhi. • MnjuPatni&Harpalini, (2018) PrasarShikshaAvamSancha,r Star Publications, Agra. • Reddy, A (1987).” Extension Education”. Bapatha, Andhra Pradesh, India: Sreelakshmi Press. • Ravi Shankar Kumar Singh. (2003)Role of NGO’s in Developing Countries (Potentials, Constraints and Policies). New Delhi: Deep & Deep Publications (P) Ltd <p>Suggestive digital platforms weblinks-</p> <ul style="list-style-type: none"> • https://bit.ly/313Ayaj • https://bit.ly/35RnyAi • https://ww.un.org/en/universla-dectlaratio-human-rights/ • https://ww.un.org/en/womenwatch/daw/cedaw/text/econvention.html • https://ww.ohchr.org/EN/Professional Interest/Pages/CRC.aspx • https://ww.undp.org/content/undp/en/home/sustainable-development-goals.html • https://bit.ly/39ROD8X • https://www.unicef.com • https://www.who.int/about • https://www.careindia.org
<p>Suggested Continuous Evaluation Methods</p> <ul style="list-style-type: none"> • Seminar on any topic of the above syllabus • Test with multiple choice questions/ short and long answer questions. • Attendance

B.A. 3 Semester 5 Home Science

Techniques of Surface Ornamentation of Fabrics (Practical)

Programme/Class: Degree	Year:3	Semester:5
Subject: Home Science		
Course Code: HSC/UG011	Course Title: Techniques of Surface Ornamentation of Fabrics (Practical)	
Course outcomes: 1- Performing printing on fabrics 2- Performing the traditional embroideries of India. 3- Identifying traditional textiles of different states. 4- Performing different appropriate laundry methods.		
Credits:2		Core Compulsory
Max Marks:25+75		Min. Passing Marks:
Total No. of lab. Periods-30		
Unit	Topic	No. of lab. periods
I	Stain removal & demonstration of dry cleaning,	04

	visit to a commercial dry-cleaning unit/Textile mill.	
II	Identification of labels.	01
III	Dyeing Techniques- Tie- Die, Batik	06
IV	Printing Techniques- Block, Screen, Stencil, Roller, Spray	06
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	07
VI	Preparation of different weaves on Cardboard	06
Suggested Readings:		
<ul style="list-style-type: none"> • Marsh JT: Textile Finishes • Trotman Er: Dyeing and Chemical Technology of Fibres • Joseph M: Introduction to Textiles • Corbman P Bernard: Textiles- Fibre to Fabric • Hollen & Saddler: Introduction to Textile • J. Hall: The standard Hand book of Textiles, Wood Head Publication, 2004 • J. E. Smith: Textile Processing- Printing, Dyeing, Abhishek Publishing, 2003 • Kate Broughton: Textile Dyeing, RockportPublishers,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. VastraVigyaan, Univ. Book House Pvt. AvamDhulai Kala, University Book House Pvt Ltd. Jaipur • Patni, Majnu, VastraVigyaanAvamParidhankaParichay, Star Publications, Agra. <p>Suggestive digital platforms weblinks- Swayam Portal, https://heecontent.upsdc.gov.in/Home.aspx</p>		
Suggested Continuous Evaluation Methods:		
<ul style="list-style-type: none"> • Test with multiple choice questions/ short and long answer questions • Menu planning and calculation of nutrient requirement. 		
Suggested equivalent online courses:		
<p>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</p>		

**B.A. 3 Semester 6 Home Science
Dietetics and Therapeutic Nutrition (Theory)**

Programme/Class Degree	Year: 3	Semester: 6
Subject: Home Science		
Centre Code HSC/UG012	Course Title: Dietetics and Therapeutic Nutrition (Theory)	
Course outcomes: 1- Knowledge of principles of diet therapy 2-Develop and understand modification of the normal diet for therapeutic purposes 3-Practical knowledge of dietary management in some common disorders.		
Credits:4	Core Compulsory	
Max. Marks: 25+75	Min. Passing Marks:	
Total Lectures- 60		
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	07
II	Diet and feeding methods (a) Modification of normal diets for therapeutic purposes (b)Methods of modifications <ul style="list-style-type: none"> • On the basis of nutrients • On basis of consistency (c) Different feeding methods <ul style="list-style-type: none"> • Oral feeding • Tube feeding 	07
III	Energy Metabolism (a) The calorific value of food (b) Measurement of energy exchange in the body <ul style="list-style-type: none"> • Direct calorimeter (c) Factors influencing the Basal Metabolic Rate (d) Factors influencing total energy requirement of body	08

IV	Diet during fevers and infections (a) Introduction to fever –Acute Fever, Chronic fever (b) Important changes in nutrition during fever (c)Modification of the diet	07
V	Diet during Digestive systems disorders (a)Peptic Ulcers-Causes, symptoms and diet modification	08

	(b)Diarrhea and Constipation-Causes, treatment and diet modification	
VI	Weight Management (a) Overweight and Obesity -Introduction to obesity -Causes of Obesity -Diet Modification (b) Underweight -Causes -Treatment -Diet Therapy	07
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	08
VIII	Endocrinal Disorders (a) Introduction to endocrinology (b) Various endocrine glands and their functions: Thyroid, Adrenal and Pancreas (c) Diabetes Mellitus-occurrence types, symptoms, metabolic changes, dietary modification and educating the patient	08
Suggested Readings:		
<ul style="list-style-type: none"> ❖ Sumati R Mudambi- “Fundamentals of food, Nutrition and Diet Therapy”, New Age International Pvt. Ltd, New Delhi, 6th Edition (2018). ❖ B Srilakshmi- “Dietetics”, New Age International Publishers, New Delhi 2017. ❖ Bamji MS, Krishnaswamy K and Brahman GNV (Eds) (2009), Text book of Human Nutrition, 3rd Edition, Oxford & IBH Publishing Co. Pvt. Ltd New Delhi. ❖ Dr. BrindaSingh-AaharVigyanevamPoshan, PanchsheelPrakashan, Jaipur, 2015; 13th Ed. ❖ Dr. Devinasahani, SamanyaEvamUpcharatmak Poshan, New Age International Publishers. ❖ Dr. Sheel Sharma, “Nutrition and Diet Therapy”, PEEPEE Publishers and Distributers (P) Ltd. Delhi, 2014, 1st Ed. ❖ Shubhangini A Joshi, - “Nutrition and Dietetics”, Mc Graw Hill Education Private Ltd., New Delhi, 2013. ❖ Kumud Khanna- “Text book of Nutrition and Dielectric”, Elite Publishing House Pvt. Ltd, New Delhi, 7th Ed. 2013. ❖ M Swaminathan-Essentials of food nutrition, Vol II, Applied Aspects, The Bangalore Printing and Publishing Co. Ltd, Bangalore, 2nd Edition 1985, Reprint 1997. 		
Suggested Continuous Evaluation Methods:		
<ul style="list-style-type: none"> • 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” in India and abroad.

[http://heecotent.upsdc.gov.in/ Home.aspx](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.

B.A. 3 Semester 6 Home Science**Family Welfare and Community Education (Theory)**

Programme/Class: Degree	Year:3	Semester:6
Subject: Home Science		
Course Code: HSC/UG013	Course Title: Family Welfare and Community Education (Theory)	
Course outcomes:		
Credits: 4		Core Compulsory
Max Marks:25+75		Min. Passing Marks:
Total No. of Periods-60		
Unit	Topic	No. of lab. periods
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.	15
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, ICCW and ILO. Rural extension services and community ICDS, DWCRA, IRDP and CHEB	15
III	Family relationship, Child Parent relationship, responsibilities of parts relationship of home, school and community.	10
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.	20
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. Hans Nagpaul. (1980) Culture, Education and Social Welfare. Chand and Company, New Delhi. 5. Chaudhry, D. Paul, (1980). Child Welfare and Development. NIPCCD, New Delhi.
Suggested Continuous Evaluation Methods: <ul style="list-style-type: none"> • Test with multiple choice questions/ short and long answer questions • Menu planning and calculation of nutrient requirement.
Suggested equivalent online courses: IGNOU and other central/state operated Universities/MOOC platforms such as “SWAYAM” in India and abroad Svayam Portal. http://heecontent.upsdc.gov.in/Home.aspx

**B.A. 3 Semester 6 Home Science
Therapeutic Diet Preparation and Nutrient Evaluation (Practical)**

Programme/Class: Degree	Year:3	Semester:6
Subject: Home Science		
Course Code: HSC/UG014	Course Title: Therapeutic Diet Preparation and Nutrient Evaluation (Practical)	
Course outcomes: 1-Gain Knowledge of principles of diet therapy 2-Develop and understand modification of the normal diet for therapeutic purposes 3-Practical knowledge of dietary management in some common disorders.		
Credits:2		Core Compulsory
Max Marks:25+75		Min. Passing Marks:
Total No. of lab. Periods-30		
Unit	Topic	No. of lab. periods
I	Modification of normal diet for therapeutic purposes, preparation and presentation	06
II	Therapeutic Diet preparation and Nutrient Calculation of -Diet in fever -Diet in diarrhea -Diet in Constipation	08
III	Therapeutic Diet Preparation and Nutrient Calculation of some common Disorders -Diet in Diabetes Mellitus -Diet in Hypertension -Diet in Atherosclerosis	08
IV	Dietary Modification for weight management- Preparation and Nutrient Calculation of diet in- -Overweight & obesity -Underweight	08
Suggested Readings:		

- ❖ Sumati R. Mudambi- “Fundamental of food, Nutrition and Diet Therapy”, New Age. International Pvt. Ltd, New Delhi, 6thEdition (2018).
- ❖ B. Srilaksmi, “Dietetics”, New Age International Publishers, New Delhi 2017
- ❖ Bamji MS, Krishnaswamy K and Brahmam GNV(Eds)(2009), Text book of Human Nutrition, 3rd edition, Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi.
- ❖ Dr. Sheel Sharma, “Nutrition and Diet Therapy” PEEPEE Publishers and Distributers (P) ltd. Delhi, 2014, 1stEd.

Suggested Continuous Evaluation Methods:

- Test with multiple choice questions/ short and long answer questions
- Menu planning and calculation of nutrient requirement.

Suggested equivalent online courses:

IGNOU and other central/state operated Universities/MOOC platforms such as “SWAYAM” in India and abroad Svayam Portal.
<http://heecontent.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.