DRAFT

National Education Policy-2020

Common Minimum Syllabus for Uttarakhand State Universities and Colleges

Four Year Undergraduate Programme Bachelor of Science (Home Science)/ Honours Programme/Master in Home Science (Foods and Nutrition)/ Textile and Apparel Designing

PROPOSEDSTRUCTURE FOR FYUP/MASTER'S HOME SCIENCE SYLLABUS

DEPARTMENT OF HOME SCIENCE

EXPERT COMMITTEE

S.NO.	NAME	DESIGNATION	DEPARTMENT	AFFILIATION
1.	PROF. LATA PANDEY	PROFESSOR	HOME SCIENCE	KUMAUN
				UNIVERSITY, NAINITAL
2.	DR. CHHAVI ARYA	ASSOCIATE	HOME SCIENCE	KUMAUN
		PROFESSOR		UNIVERSITY, NAINITAL
3.	DR. MEENA BATHAM	ASSOCIATE	HOME SCIENCE	DELHI UNIVERSITY
		PROFESSOR		
4.	DR. MUKTA SINGH	PROF. & HOD HOME	M.M.V.	B.H.U., UTTAR PRADESH
		SCIENCE		
	DR. MANISHA GHALOT	PROF. & HOD	APPAREL &	GBPUA&T, PANTNAGAR
5.			TEXTILE	
			SCIENCE	
6	DR. REKHA NAITHANI	PROFESSOR	HOME SCIENCE	BGR CAMPUS, PAURI,
				C.U.
				GARHWAL
	DR. SUNITA RANI	HOD HOME SCIENCE	HOME SCIENCE	KUMAUN UNIVERSITY,
7.				NAINITAL
8.	DR. HIMANI VERMA	ASSISTANT	HOME SCIENCE	KUMAUN
		PROFESSOR		UNIVERSITY, NAINITAL
9.	MR. SATISH KANDPAL	REGISTRAR	GYANARTHI	KUMAUN UNIVERSITY,
			COLLEGE	NAINITAL

SYLLABUS PREPARATION COMMITTEE

S. NO.	NAME	DESIGNATION	DEPARTMENT	AFFILIATION
1.	DR. SUNITA RANI	HOD & ASSISTANT PROFESSOR	HOME SCIENCE	KUMAUN UNIVERSITY, NAINITAL
2.	DR. JANKI JOSHI	ASSISTANT PROFESSOR	HOME SCIENCE	KUMAUN UNIVERSITY, NAINITAL
3.	DR. NEHA TIWARI	ASSISTANT PROFESSOR	HOME SCIENCE	KUMAUN UNIVERSITY, NAINITAL
4.	DR. HIMANI VERMA	ASSISTANT PROFESSOR	HOME SCIENCE	KUMAUN UNIVERSITY, NAINITAL
5.	DR. JYOTI PANT	ASSISTANT PROFESSOR	HOME SCIENCE	KUMAUN UNIVERSITY, NAINITAL
6.	MRS.ANKITA PUNETHA	TEACHING ASSISTANT	HOME SCIENCE	KUMAUN UNIVERSITY, NAINITAL
7.	DR. RUSHDA ANAM MALIK	ASSISTANT PROFESSOR	HOME SCIENCE	KUMAUN UNIVERSITY, NAINITAL

Contents

List of papers (DSC, DSE, GE,) with semester wise titles for 'Home Science' Programme specific outcomes (PSOs) (Undergraduate Programme) Programme specific outcomes (PSOs) (Honours Degree)

Semester-I

Course Title- Principles of Nutrition Course Title- Introduction to Clothing Construction Course Title- Practical based on DSC-2 Course Title- General English & Technical Writing

Semester- II

Course Title- Fundamental of Human Development Course Title- Household Dynamics and Management of Resources Course Title- Communication and Instructional Technology Course Title- Computer Application

Semester –III

Course Title- Food Processing and Storage Course Title- Indian Embroidery and Traditional Textile Course Title- Practical based on DSC-7 and DSC-8 Course Title- Ergonomic Design Course Title- Life Span Development

Semester -IV

Course Title- Introductory Textile Science Course Title- Fundamentals of Baking Course Title- Practical based on DSC-10 and DSC-11 Course Title- Community Nutrition Course Title- Family Financial Management & Consumer Economics

Semester V

Course Title- Therapeutic Nutrition and Diet Counseling Course Title- Fabric Formation and Finishes Course Title- Practical based on DSC-13 and DSC-14 Course Title- Entrepreneurship Development Course Title- Population and Family Life Education

Semester VI

Course Title- Food Science Course Title- Fundamentals of Housing and Interior Decoration Course Title- Practical on DSC-17 Course Title- Textile Designing & use of CAD Course Title- Programme Planning, Implementation and Evaluation

Semester VII

Course Title- Food Service Management Course Title- Research Methodology Course Title- Marriage and Family Dynamics Course Title- Early Childhood Education Course Title- Introduction to Extension Education Course Title- Principles of Food Preservation

Semester VIII

Course Title- Apparel Designing Course Title- Food Safety and Quality Control Course Title- Textile Industry and Trade Course Title- Retailing and Merchandizing in Textile and Apparel Course Title- Management of Childcare Centre and Nursery School Course Title- Household Equipment and Appropriate Technology

Master in Home Science (Food and Nutrition) Semester-IX

Course Title- Basics of Nutrition and Hygiene Course Title- Food Microbiology Course Title- Nutrition through life cycle Course Title- Dissertation/ Project/Internship/Training

Semester-X

Course Title- Clinical Nutrition and Dietetics Course Title- Food Quality Analysis Course Title- Food Product Development and Marketing Course Title- Dissertation/ Project/Internship/Training

Master in Home Science (Textile and Apparel Designing) Semester-IX

Course Title- Advanced Textile Designing and Woven Fabric Analysis Course Title- Eco Textile and Environment Course Title- Fashion Designing and Accessories Course Title- Dissertation/ Project/Internship/Training

Semester-X

Course Title- Historic Textiles and Costumes Course Title- Textile Quality Analysis Course Title- Garment Manufacturing -Draping Course Title- Dissertation/ Project/Internship/Training

L	Ast of I apers		'Home Science'		UI
Year	Semester	Course	Paper Title	Theory/ Practical	Credit
	١	Undergradu	ate Certificate in Home Science	1)	1
		DSC-1	Principles of Nutrition	Theory	4
		DSC-2	Introduction to Clothing Construction	Theory	4
		DSC-3	Practical on Introduction to Clothing Construction	Practical	4
		GE-1	General English & Technical Writing	Theory	4
FIRST YEAR		AEC-1	Indian language (as decided by university)	-	2
		SEC-1	Personality Development	Theory	2
		VAC-1	Value Addition of Apparels	Practical	2
-		DSC-4	Fundamental of Human Development	Theory	4
	II	DSC-5	Household Dynamics and Management of Resources	Theory + Practical	3+1
		DSC-6	Communication and Instructional Technology	Practical	4
		GE-2	Computer Application	Theory + Practical	2+2
		AEC-2	Indian language (as decided by university)	Theory	2
		SEC-2	Fashion Apparel Designing	Theory +Practical	1+1
		VAC-2	Value Added product from fruits and Vegetables	Practical	2
		Undergrad	luate Diploma In Home Science	1	
		DSC-7	Food Processing and Storage	Theory	4
		DSC-8	Indian embroidery and Traditional Textiles	Theory	4
	III	DSC-9	Practical based on DSC-7 and DSC-8	Practical	4
		DSE-1	Ergonomic design	Theory+	2+2
SECOND		or	or	Practical	or
YEAR		GE-3	Life Span Development	or Theory	4
ľ		AEC-3	Indian language (as decided by	-	2
			university)		
					1

		IAPC	Internship/Apprenticeshi	Practical	2
			p/ Project/ Community		
		Or or	Outreach		
		SEC-3	or	Theory	
			Guidance and Counseling		
		VAC-3	Ayurveda	Theory +	1+1
			and	Practical	
			Nutrition		
		DSC-10	Introductory Textile	Theory	4
			Science		
			Fundamentals of		
	IV	DSC-11	Baking	Theory	4
		DSC-12	Practical based on	Practical	4
			DSC-10 and DSC-11		
		DSE-2	Community Nutrition	Theory +	2+2
				Practical	or
		or	or	or	4
		GE-4	Family Financial		
			Management & Consumer	Theory	
			Economic		
		AEC	Indian language (as		2
			decided by university)		
		IAPC	Internship/Apprenticeship		
		Or	/ Project/Community		
			outreach Or		
		SEC-4	Public Speaking	Practical	2
		SEC 1	r uone speaking	Thettear	2
		VAC-4	Fashion Illustration	Practical	2
		Bachel	or in Home Science (Honours)		
		DSC-13	Therapeutic	Theory	4
			Nutrition and Diet		
			Counseling		
		DSC-14	Fabric Formation and	Theory	4
			Finishes		
	V	DSC-15	Practical based on DSC-13 and DSC 14	Practical	4
THIRD		DSE 2	Entreprepeurship	Theory Dreat	2 + 1
VEAD		DSE-3	Development	icol	3+1
ILAN		CE 5	Development Development	Theorem	Λ
		UE-J	Life Education	Theory	4
		IAPC	Internship/Apprenticeship/	Theory	2
			Project/Community		
		Or	outreach Or		
		SEC-5	Sustainable Development		
	VI	DSC-16	Food Science	Theory	4
		DSC-17	Fundamentals of	Theory	4
			Housing and Interior	i neor y	-
			Decoration		
	1	1		1	

		DSC-18	Practical on DSC-17	Practical	4	
		DSE-4	Textile Designing & Use of CAD	Theory+ Practical	2+2	
		GE-6	Programme Planning, Implementation and Evaluation	Theory	4	
		IAPC Or	Internship/Apprenticeship/ Project/Community outreach Or	Practical	2	
		SEC-6	Food Authenticity and Fraud Detection			
	Ē	Bachelor of Hor	ne Science (Honours with R	(esearch)		
		DSC-19	Food Service Management	Practical	4	
		DSE-5 DSE-6	Research Methodology Marriage and Family	Theory Theory	4 4	
		DSE-7	Introduction to Extension	Theory	4	
			Education			
		OR				
		DSE-5	Research Methodology	Theory	4	
	VII	DSE-6	Marriage and Family	Theory	4	
		GE-7	Early Childhood Education	Theory	4	
FOURTH		OR				
YEAR		DSE-5	Research Methodology	Theory	4	
		GE-7	Early Childhood Education	Theory	4	
		GE-8	Principles of food preservation	Theory+Practical	3+1	
		Dissertation	Dissertation on Major or Minor/Academic project/Entrepreneur ship		6	
		DSC-20	Apparel Designing	Practical	4	
		DSE-8	Food Safety and Quality control	Theory+ Practical	2+2	
		DSE-9 DSE-10	Textile Industry and Trade Management of Childcare Centre and Nursery School	Theory Theory+Pr actical	4 2+2	
	VIII					

		DSE-8	Food Safety and Quality control	Theory+ Practical	2+2
		DSE-9 GE-9	Textile Industry and Trade Retailing and Merchandizing in Textile and Apparel	Theory Theory	4 4
		DSE-8	Food Safety and Quality control	Theory+ Practical	2+2
		GE-9	Retailing and Merchandizing in Textile and Apparel	Theory	4
		GE-10	Household equipment and appropriate technology	Theory+Practical	3+1
		Dissertation	Dissertation on Major or Minor/Academic project/Entrepreneurship		6
ote: Stude inter	ents can op est from the	t courses of G courses pool of	E and DSE other than the a offered by universities/ colleg	above list, as per thes.	eir
		Master in Ho	me Science (Food and Nutr	ition)	
		DSC-21	Basics of nutrition and hygiene	Theory + Practical	2+2
	IX	DSE-11	Food Microbiology	Theory+ Practical	3+1
	IX	DSE-11 GE-11	Food Microbiology Nutrition through life cycle	Theory+ Practical Theory	3+1 4
	IX	DSE-11 GE-11 Dissertation	Food Microbiology Nutrition through life cycle Dissertation on Major or Minor/Academic project/Entrepreneurship	Theory+ Practical Theory Practical	3+1 4 10
	IX	DSE-11 GE-11 Dissertation DSC-22	Food Microbiology Nutrition through life cycle Dissertation on Major or Minor/Academic project/Entrepreneurship Clinical Nutrition and dietetics	Theory+ Practical Theory Practical Practical	3+1 4 10 4
FIFTH	IX	DSE-11 GE-11 Dissertation DSC-22 DSE-12	Food Microbiology Nutrition through life cycle Dissertation on Major or Minor/Academic project/Entrepreneurship Clinical Nutrition and dietetics Food Quality Analysis	Theory+ Practical Theory Practical Practical Theory+ Practical	3+1 4 10 4 2+2
FIFTH YEAR	IX	DSE-11 GE-11 Dissertation DSC-22 DSE-12 GE-12	Food Microbiology Nutrition through life cycle Dissertation on Major or Minor/Academic project/Entrepreneurship Clinical Nutrition and dietetics Food Quality Analysis Food product Development and Marketing	Theory+ Practical Theory Practical Practical Practical Theory+ Practical Theory+ Practical	3+1 4 10 4 2+2 2+2
FIFTH YEAR	X	DSE-11 GE-11 Dissertation DSC-22 DSE-12 GE-12 Dissertation	Food Microbiology Nutrition through life cycle Dissertation on Major or Minor/Academic project/Entrepreneurship Clinical Nutrition and dietetics Food Quality Analysis Food product Development and Marketing Dissertation on Major or Minor/Academic project/Entrepreneurship	Theory+ Practical Theory Practical Practical Theory+ Practical Theory+ Practical Practical	3+1 4 10 4 2+2 2+2 10
FIFTH YEAR	IX	DSE-11 GE-11 Dissertation DSC-22 DSE-12 GE-12 Dissertation	Food Microbiology Nutrition through life cycle Dissertation on Major or Minor/Academic project/Entrepreneurship Clinical Nutrition and dietetics Food Quality Analysis Food product Development and Marketing Dissertation on Major or Minor/Academic project/Entrepreneurship cience (Textile and Apparel	Theory+ Practical Theory Practical Practical Theory+ Practical Theory+ Practical Practical Practical Designing)	3+1 4 10 4 2+2 2+2 10
FIFTH YEAR	IX X Mas	DSE-11 GE-11 Dissertation DSC-22 DSE-12 GE-12 Dissertation ter in Home So	Food Microbiology Nutrition through life cycle Dissertation on Major or Minor/Academic project/Entrepreneurship Clinical Nutrition and dietetics Food Quality Analysis Food product Development and Marketing Dissertation on Major or Minor/Academic project/Entrepreneurship cience (Textile and Apparel Advanced Textile Designing and Woven	Theory+ Practical Theory Practical Practical Theory+ Practical Theory+ Practical Practical Practical Practical	3+1 4 10 4 2+2 2+2 10 4

	IX	GE-11	Fashion Designing and Accessories	Theory	4
		Dissertation	Dissertation on Major or Minor/Academic Project/ Internship/Training	Practical	10
FIFTH VEAD		DSC-22	Historic Textiles and Costumes	Theory	4
ILAN		DSE-12	Textile Quality Analysis	Theory	4
		GE-12	Garment Manufacturing- Draping	Theory+ Practical	2+2
	X	Dissertation	Dissertation on Major or Minor/Academic Project/ Internship/Training	Practical	10

ABILITY ENHANCEMENT COURSE (AEC) PREPARED FOR THE POOL OF COURSES

Course Code	Course Title	Theory /Practical	Credits
AEC-1	Indian Language (As decided by university)	Theory	2
AEC-2	Indian Language (As decided by university)	Theory	2
AEC-3	Indian Language (As decided by university)	Theory	2
AEC-4	Indian Language (As decided by university)	Theory	2

VALUE ADDITION COURSE (VAC) PREPARED FOR THE POOL OF COURSES

Course Code	Course Title	Theory /Practical	Credits
VAC-1	Value Addition of Apparels	Practical	2
VAC-2	Value Added Products from fruits & Vegetables	Practical	2
VAC-3	Ayurveda and Nutrition	Theory+ Practical	1+1
VAC-4	Fashion Illustration	Practical	2

SKILL ENHANCEMENT COURSE (SEC) PREPARED FOR THE POOL OF COURSES

Course Code	Course Title	Theory /Practical	Credits
SEC-1	Personality Development	Theory	2
SEC-2	Fashion Apparel Designing	Theory+ Practical	1+1
SEC-3	Guidance and Counseling	Theory	2
SEC-4	Public Speaking	Practical	2
SEC-5	Sustainable development	Theory	2
SEC-6	Food Authenticity and Fraud Detection	Practical	2

Abbreviations-

DSC-Discipline Specific Course; DSE-Discipline Specific Electives; GE-Generic Electives; AEC- Ability Enhancement Course; VAC-Value Addition Course

PSO 1	The courses are structured according to the industry-academia requirements and global world.
PSO 2	Courses offered by the college are absolutely in tune with its goals and objectives of generating employment, generating skills, entrepreneurship and sustainable development.
PSO 3	Home Science is a unique and follows interdisciplinary approach in synthesizing knowledge drawn from all fields of sciences, humanities and creative arts which has enriched its educational programs still including the Indian traditional in its curriculum.
PSO 4	It also caters to the present day needs of multidisciplinary education and provides solutions in societal and environmental contexts and demonstrates the knowledge and need for sustainable development.
PSO 5	To cater to the needs of Textiles and Apparel industry, the Clothing and Textiles department has focused course in Apparel and Textile Design.
PSO 6	It inculcates an awareness of current trends, new developments and technological changes in the field of fabric and apparel industry.
PSO 7	The curriculum equips the students with the knowledge and skills necessary for creative, managerial and technical careers as well as entrepreneurship in the field of Textiles and Apparel industry.
PSO 8	The curriculum of Nutrition has a strong practical base to keep pace with the dynamics and changing educational and professional needs in the field of nutrition and health care.
PSO 9	It trains the students as nutritionists and health experts to work in various health clubs, hospitals, schools, colleges, Non-Governmental Organizations.
PSO 10	The course of Human Development and Family Relations provides an in- depth knowledge and skill training to students.
PSO 11	Human Development and Family studies provides scope for the students to work with various agencies dealing with Child Welfare, Social Welfare, Education and Human Development. Students also get placements in various Non-Governmental Organizations, hospital setups, and institutes of higher education.
PSO 12	The course has scope for numerous job opportunities in private (corporate and commercial) and public sector related to Interior design area.
PSO 13	Students can work as freelancers and can also be co-workers with architects, interior decorators and real estate companies, teachers in schools, colleges and Polytechnic institutes.
PSO 14	The course makes students familiar with a wide array of subjects to equip them with challenging tasks in the modern day world. The course enables them to take up specializations in Honours degree or any of the two master programs offered by the institute.

Programme Specific Outcomes (PSOs) (Honours Degree) After this programme, the learners will be able to:

PSO 1	The aim of journal club is to stimulate continuing intellectual curiosity in students to discover new ideas so that they can re-look at old ideas and develop insightful connections among ideas.
PSO 2	Furthermore, it encourages them to exchange ideas focused on a source, thereby providing a unique and intellectual experience to the students.
PSO 3	Understand the role of food and nutrition for the welfare of the community Excel in the area of personal and public health nutrition and apply skill based knowledge in food industry.
PSO 4	To make them easy how to preserve the food and learn to understand about the jam, jelly and pickle processing methods. Acquire entrepreneurial skills in the field of food science and nutrition, Excel as academicians and research personnel,
PSO 5	The students are able to understand about the food service management and setup their own canteen after studying this. Develop comprehensive and analytical skills in food industries.
PSO 6	Enable them to understand the laws of food safety and detect the adulteration in foods. Take up professions in community upliftment programmes. Gain insight in public health nutrition for employment in State and Central government.
PSO 7	The aim is to orient students to the latest advances in the field of Clothing and Textiles and to provide a link between theory and applied initiatives in the field of Design, Research, Quality assurance and CAD.
PSO 8	To understand the merchandizing and retailing concept and work in export and import houses in textile industry.
PSO 9	The apparel designing course make perfect to construct designer dresses and give opportunities to open own boutique.
PSO 10	Explore the connection between family after marriage and to understand the gender and social justices in today's world context. The main purpose is to orient students to the latest advances in the field of Human Development with a focus on cultural perspectives and to provide a link between theory and applied initiatives.
PSO 11	Acquire in-depth knowledge of nursery school management and setup their own play school and nursery school for welfare of the society.
PSO 12	The purpose of teaching research methodology is to acquaint students with research and statistical methods and imparting knowledge of Computer applications for data analysis
PSO 13	The primary aim of the programme is to train the students in the method of scientific inquire and independent research. This is accomplished through advanced coursework and active participation with the faculty in their research programmes.

Department of Home Science Semester-I Undergraduate Certificate in Home Science DISCIPLINE SPECIFIC COURSE (DSC-1) - Principles of Nutrition

CREDITE	DISTRIBUT	FION, ELIO	GIBILITYA	ND PRE-REQ	No. of Ho UISITES OF THE C	ours-60 OURSE
Course Title	Credits	Credit distribution of the course		Eligibility Criteria	Pre- requisite of the	
		Lecture	Tutorial	Practical/ Practice		course (if any)
DSC-1 Principles of Nutrition	4	4	0	0	Passed class XII with Science, Arts and Commerce	Nil

	UNDERG	RADUATE CERTIFIC	ATE IN HOME SCIENC	Ε		
Programme/Class: Certificate in Home Science		Year: First		Semester: First Paper- DSC		
Subject : H	Iome science					
Cour	Course DSC Course Title: Principles of Nutrition					
Course ouTo underTo under	tcomes: After stuc rstand the principle erstand the role of e	lying this course, the stud es and basic knowledge at essential nutrients (macro	ents will be able to: bout nutrients. and micro) in human nutri	tion.		
	Credits	s: 4	Discipline Spec	ific Course		
Max. Marks: As per Univ. rulesMin. Passing Marks: As per Univ.				s per Univ. rules		
Unit		Topics	1	No. of Hours		
Unit I	 Food: Definition of tand mental. Food groups. food 	food, nutrition, functions of Meal planning, balanced of	of food – Physical, social diet, nutritional value of	10		
Unit II	Composition an Cereals and le fats and oilse Fruits and ve Milk and mil Eggs, meat, f Sugar.	nd importance of followi egumes eeds, egetables, k products, ïsh and poultry,	ng foods:	10		

	Macronutrients:	20
	Carbohydrates – Classification, sources, functions and	
Unit III	requirements	
	• Protein and amino acids – Classification, sources, functions and requirements, nitrogen balance, deficiency of protein.	
	• Fat and lipids- Classification, sources, functions and	
	requirements	
	Water and electrolytes:	10
Unit IV	Functions, requirements and sources	
	Water balance	
	Electrolytes:	
	• Sodium Chloride, Potassium – sources, RDA, functions	
Unit V	Energy:	10
	• Factor affecting energy requirements.	
	• BMR, DIT(diet induced thermogenesis)	

Recommended Readings

1. Bamji, M.S Rao, NP and Reddy, V. 1996. Text book of Human Nutrition.

2. B. Srilakshmi, Food science, New Age Publishers, 2002.

3. B. Srilakshmi, Nutrition Science, 8th Edition New Age Publishers, 2023

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literature- study-online.com, epg-pathshala, egyankosh.ac.in

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus \Box Test with multiple choice questions/ short and long answer questions \Box Attendance

Semester-I Undergraduate Certificate in Home Science

DISCIPLINE SPECIFIC COURSE (DSC-2)-Introduction to Clothing Construction

Programme/Class : Certificate in Home Science		Year: First	Semester: I	
Cou	rse Code:DSC-2	Course Title: Introduct	ion to Clothing Construction	n
Course out	comes:			
To devel	op knowledge about sev	wing machine, parts of sewing m	achine, analyze basic	
construc	tional processes.			
> To devel	op the skills in clothing	construction for children's garm	ients	
	Credits: 4	DISCIPLINE SI	PECIFIC COURSE	
Max. Marks: As per Univ. rules Min. Passing marks: As per Univ			ks: As per Univ. rules	
Unit		Topics	No. Lect	. of ures
Ι	Sewing machine and	its equipment/tools	9)
	• Sewing machine:	Parts of machine, their use and c	are	
	• Tools required: Me	easuring, drafting, cutting and st	itching;	
II	Clothing Construct	8	,	
III	Constructional processes:			5
	• Hand stitches,	-1		
	• seam and seam fin	isnes,		
	 Usposal of funites Plackets and edge 	s, finishing		
	Suitability for diffe	erent fabrics and clothing article	s	
IV	Preparation of fabri	c for layout and cutting; stay sti	tching 6	j
V	Unit construction n	nethod and fitting	6	;
VI	Importance and fur	ction of clothes	6	;
VII	Clothing requireme	nts of infants, toddler, pre-schoo	l and 8)
	elementary school	children		
VIII	Anthropometric me	asurements: Importance and tec	hniques 5	<u> </u>
Suggested I	10tal Doodings:		00)
1 Cars	on R 1969 How you l	ook dress 4 th Ed New vark Wo	ebster Division McGrw-Hil	1
book	company.			1
2. Doo	ngaji, S. and Deshpande	e, R. Basic process and clothing	construction. 2 nd Ed. New	
Delh	ni,New Raj book Depot			
3. Lew	is, V. S. Comparative C	lothing Construction Technique	s. Surjeet Publication, Delhi	
4. Man	sfield, E. A. and Lucas,	E.L. 1974. Clothing construction	n. 2 ^{ad} ed. London, Houghton	
Suggested 1	Digital Platform.			
http://ecours	esonline.iasri.res.in/cou	rse/index.php?categorvid=104		
		11 0 7		
Suggested (on any topic	Continuous Evaluation of the above syllabus	Methods: Seminar/ Presentati Test with multiple choice	on	

Semester-I **Undergraduate Certificate in Home Science**

DISCIPLINE SPECIFIC COURSE (DSC-3) - Practical on Introduction to Clothing Construction No. of Hours-120 CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE **Course Title** Credit distribution of the course Credits Eligibility Pre-Criteria **Requisite of** the course (if any) Lecture Tutorial Practical/ **Practice** DSC-3 0 4 0 Passed Nil 1 Practical on class XII Introduction with to Clothing science, Construction Arts and commerce **UNDERGRADUATE CERTIFICATE IN HOME SCIENCE Programme/Class: Certificate** Year: First Semester: First in Home Science Paper: DSC-3 Subject: Home Science Course: DSC-3 **Course Title: Introduction to Clothing Construction Course outcomes:** After studying this course, the students will be able to: • To develop knowledge about sewing machine, parts of sewing machine, analyze constructional processes. • Gain the practical knowledge for construction of children's garments. Credits: 4 **Discipline Specific Course** Max. Marks: As per Univ. rules Min. Passing Marks: As per Univ. rules No. of Hours Unit Topics Unit I Demonstration on: sewing equipment and tools, sewing 20 machine and its care Unit II Preparation of samples of basic hand stitches, machine 20 stitches, edge finishing, fullness, finishing of necklines, placket opening, fasteners, mending and patching Unit III Demonstration on the preparation and layout of the different 20 fabrics of plain, print, plaid, check and lines Unit IV Introduction to anthropometric measurement 20

Unit V	Drafting, cutting and stitching of different children's	20
	garments	
	• Bib,	
	• Panty,	
	• Bloomer,	
	• Jhabla,	
	• Frock	
Unit VI	Stitching of	20
	• Apron,	
	Hand bag or Laundry bag	
Suggested	Readings:	·
1. Carson, McGrw	B. 1969. How you look dress. 4 th Ed. New yark . Webster Divis -Hill book company.	ion.,
2. Doonga Delhi,N	ji, S. and Deshpande, R. Basic process and clothing construction few Raj book Depot.	on. 2 nd Ed. New
Suggest	ted Continuous Evaluation Methods: Seminar/ Presentation o	on any topic of the
above s	yllabus	swer questions \Box
Attenda	nce	-

Semester-I Undergraduate Certificate in Home Science GENERIC ELECTIVE (GE-1)- General English & Technical Writing

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the course Eligib Crite			Eligibility Criteria	Pre- requisite of the course (if any)
		Lecture	e Tutorial	Practical/ Practice		
GE-1 General English & Technical Writing	4	4	0	0	Passed class XII with Science, Arts and Commerce	Nil
	UNDEI	RGRADU	UATE CERT	TIFICATE IN	HOME SCIENC	E
Progra Certifi	Programme/Class:Year: FirstSemesterCertificate in HomePape			Semeste Pape	ster: First per: GE-1	
Subject: H	ome science	e				
Co	urse: GE-1		Course Ti	itle: General E	nglish & Techni	cal Writing
Course ou	tcomes: Af	ter studyi	ng this course	e, the students v	vill be able to:	
• To impr English.	ove ability i	n English	to form com	prehends writi	ng and speaking i	in modern
C	redits: 4			Gener	ric Elective	
Max. Mar	ks: As per Rules	Univ. N	Aini. Passing	Marks: As pe	r Univ. Rules	
Unit			Тор	pics		No. of Hours
Unit I	Word – Fo	ormation				5
Unit II	Preposition	n				5
Unit III	Idiomatic I	Expressio	ns			5
Unit IV	Conditiona	al Sentend	ces and Moda	l verbs		5
Unit V	Synthesis a	and Trans	tormation			5
Unit VI	Writing related concepts-writing process, aspects and basic principles of good writing					5
Unit VII	Communic function, f	cation thr ormulas c	ough writing	- reasons and a entence and part	needs, word agraph sense	10
<u> </u>				•		·
Unit VIII	Introduction writing,	on and im	portance of s	styles of writing	g-technical	10

Unit IX	Types of reports-recommendations, proposals, progress report,	10		
	oral reports, business letters and professional			
Recomme	nded Readings:			
• LN, W.	Standard. Living English structure, Orient Longmans, London.			
Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literature- study-online.com, epg-pathshala, egyankosh.ac.in				
Suggestee above syl	d Continuous Evaluation Methods: Seminar/ Presentation on a labus Test with multiple choice questions/ short and long answer or	ny topic of the questions□		

Semester-II Undergraduate Certificate in Home Science

DISCIPLINE SPECIFIC COURSE (DSC-4)- Fundamentals of Human Development

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course T	itle	Credits	Cred	it distributio	on of the	Eligibility	Pre-requisite
				course		Criteria	of the course
						(if any)	
			Lecture	Tutorial	Practical/		
					Practice		
DSC-4		4	4	0	0	Passed class	Nil
Fundamen	tals					XII with	
of Human				Science, Arts			
Developme	ent					and	
						Commerce	
	ι	J NDERG I	RADUAT	E CERTIFI	ICATE IN H	IOME SCIENCE	
Progr	amm	e/Class:		Year: Fii	rst	Semester:	Second
Certif	icatei	in Home				Paper:	DSC-4
	Scien	ce					
Subject: H	lome	Science					
Course : D	SC-4		C	ourse Title:	Fundamen	tals of Human De	velopment
Course ou	itcom	nes: After s	studying t	his course, th	e students w	vill be able to:	
• Define h	numar	n developn	nent and s	ummarize se	veral theorie	s of development.	
Apply de	evelo	pmental th	eories to j	personal deve	elopment.		
	Cre	dits: 4			Disciplin	e Specific Course	
Max. Mai	rks: A	As per Uni	v. rule	Min. Passir	ng Marks: A	s per Univ. rules	
Unit				Topic	s		No. of
				-			Hours
Unit I	Imp	portance of	human d	evelopment f	rom a life spa	an perspective,	10
	Issu	ues in hum	an develo	pment, stage	s of human	development.	
Unit II	a.	Methods of	of studyin	g human dev	elopment, st	teps of studying	10
		behaviour	scientific	cally			
	b. Non experimental and experimental studies, naturalistic						
		studies; c	clinical st	udies; cross	-sectional a	ind longitudinal	
	designs						
Unit III	Eth	ical consid	lerations i	n studying hu	iman develo	pment subjects	10
	I _						
Unit IV	The	e psycholo	gy of beh	aviours: Defi	nition of Psy	chology; meaning	15
	of	sensation;	percepti	on; concept	formation;	imagination and	
	creativity						

Unit VI	Major development theories:	15
	• Freud's theory	
	• Erikson's theory	
	• Piaget's theory	
	• Kohlberg's theory	
Recommen	nded Readings:	
• Laura, E	B.E. (2013). Exploring life span development. 3rded. McGraw Hill, Nev	v York.
Papalia,		
• D.E. and	l Olds, S. W. (2008). Human development. 11thed. McGraw Hill, New	v York.
Bronfen	brenner, V. (1979). The ecology of human development. Cambridge,	Harvard
Univ. P	ress.	
• Berk, L.	E. (2007). Development through the lifespan. Delhi: Pearson Education	on•
• Rice. F.	P. (1998). Human Development: A lifespan approach. New Jersey: H	Prentice
Hall.		
Santrock	x, J. W. (2007). A topical approach to life-span development. New Del	hi:
McGrav	v-Hill. • Singh, A. (Ed). 2015. Foundations of Human Development: A	life span
approac	h. New Delhi: Orient Black Swan.	
Suggested	equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in	, literature-
study-onli	ne.com, epg-pathshala, egyankosh.ac.in	

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus \Box Test with multiple choice questions/ short and long answer questions \Box Attendance

Semester-II Undergraduate Certificate in Home Science DISCIPLINE SPECIFIC COURSE (DSC-5)- Household Dynamics and Management of Resources

No. of Hours-45+30

CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit di	istribution	of the course	Eligibilit Criteria	y a	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/			
Dag F				Practice	D 11		X 701
DSC-5	4	3	0	1	Passed cla	ISS	Nil
Household					XII with		
Dynamics					Science,		
and					Arts and		
Management					Commerc	e	
of Resources							
	UNDER	GRADUAT	FE CERTII	FICATE IN H	OME SCIE	ENCI	E
Programme/C	lass:			Year: Firs	t Semester: Second		mester: Second
Certificate in l	Home Scie	nce			Paper: DSC-5		per: DSC-5
Subject: Hom	ne Science						
Course: DSC-5			Course Tit Managem	tle: Househo ent of Reso	old E urce	ynamics and s	
Course Outco	mes:						
After studying	this course	e, the stude	nts will be a	ble to:			
• To give ins problem sol	ight about ving.	managem	ent principle	e and ability to	o apply the	knov	wledge for

• To become good managers and understand the importance of managing resources to achieve goals.

	Credits:4	Discipline Specific Course		
Max. Marks: As per Univ. rule		Min. Passing Marks: As per Univ. rules		
Unit	Topics		No. of Hours	
Unit I	Family: Meaning, defin and family life cycle.	ition, classification, functions of family	5	
Unit II	Management concepts: home management, maj	Meaning of management, purpose of or home and family responsibilities.	10	
Unit III	Motivating factors for Standard, Decision making: Decis decision making, Clas resolving conflicts.	management: Values, Goals and ion making process, Role and scope of ssification of decision, methods of	10	
Unit IV	Management process: management process. Sy concepts applied to hous	Meaning, importance, and steps of ystem approach to management: System seholds.	5	

Unit V	Energy management: Fatigues, and its types, work simplification and its techniques, Mundel'classes of change, Inter linking time and energy resources.	10
Unit VI	Time management: Time demands in different stages family life cycle, Time Plan and Tools of Time management	5
	Practical	
Ι	Identification of individual and family values	5
П	Identification of immediate, short term and long term goals of individual and family, Standards for individual and family goals	5
Ш	Management of personal time record for daily, a week and semester. Presentation of personal time record.	10
IV	Application of management process to organize an event- planning, organization, evaluation	10

Recommended Readings:

- Mann, M.K. (2004). Home Management for Indian Families, Kalyani Publisher Ludhiana
- Nickell, P. and Dorsey, J.M. (1970). Management of Family Living. Wiley Eastern, New Delhi
- Vargeese, M.N. Ogale, N.N. and Srinivasan, K. (1992). Home Management, Wiley Eastern, New Delhi.
- Krishna Oberoi (2006). Resource Management for Better Homes. R.K. Offset, Delhi.
- Bhargava, Bela. (2005). Family Resource Management and Interior Decoration. Apple Printer and V. R. Printers, Jaipur.
- Steidle, Roze and Bratton. (1968). Work in the Home. John Wiley and Sons Inc. New York
- Gandotra, G., Oberoi, K. and Sharma, P. (2008). Appropriate technology for rural women.

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literature- study-online.com, epg-pathshala, egyankosh.ac.in

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus \square Test with multiple choice questions/ short and long answer questions \square Attendance

Semester-II Undergraduate Certificate in Home Science

DISCIPLINE SPECIFIC COURSE (DSC-6)- Communication and Instructional Technology

No. of Hours-120

CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Cour	se Title	Credits	Cree	lit distributio	n of	Eligibility	Pre-
				the cour	se	Criteria	requisiteof
							the course (if
				- 1			any)
			Lecture	e Tutorial	Practical	/	
					Practice	2	
DSC-6		4	0	0	4	Passed	Nil
Commu	inication					class XII	
and						with	
Instruct	tional					Science,	
1 ecnno	logy					Arts and	
	TINI		ПІАТЕ (TE IN HO	Commerce	
	UNI	DEKGKA	DUALE		I E IN HU.	VIE SCIENCE	1
Progra	mme/Class	s: Certifica	te in	Year: Fi	rst	Semester:	Second
8	Home S	cience				Paper: DS	SC-6
Subject	: Home Sci	ience				•	
	Course	· DSC-6		Course Titl	e. Commu	nication and Ir	structional
	Course				C. Commu Tec	hnology	isti uctionui
Course	outcomes:	The studer	nt at the co	mpletion of th	ne course w	vill be able to:	
• To de	velop unde	rstanding o	of commu	nication proce	ss.		
• To de	velop unde	rstanding a	bout diffe	erent types of a	audio visua	l aids.	
	Cred	lits: 4]	Discipline	Specific Cours	e
Max. N	Marks: As	per Univ.	rule N	lin. Passing N	Marks: As	per Univ. rules	8
Unit				Topics			No. of
				Draatiaal			Hours
I Init I	Communi	pation man	ning fund	tion and harmi	are Floma	ats of	40
Unit I	communic	vation proce	ning, tunc		ers. Elemen		40
	Audio-visi	ual aids -m	.ss. eaning cl	assification a	dvantages	and limitations	
	10010 1100	aar arab 111	cuiiii, ci	assincation, a	a runugos (and minutions	
	Preparatio	on and use of	of instruct	ional media:			
	• Charts	s, Posters, I	Flash card	s, Graphs, Mo	dels, leaflet	s and use of	
	Bullet	tin board		± '			
Unit II	Demonstra	ation as an i	instruction	nal technology	7		20
Unit III	Organizing	g and partic	cipating ir	various types	s of group d	iscussions	20
Unit IV	Preparatio	n of radio t	alk script	s on various to	opics		20

Unit V Visit to communication centre, Familiarization of radio, T.V and	20
video equipments and programme production.	
Recommended Readings:	
• Adivi Reddy.A, Extension Education, seventh edition, Sri lakshmi Press, Bapat	tla
• Agarwal J.C. 2007 Textbook on Essentials of Educational Technology Int Teaching –Learning, second edition, Vikas Publishing House Pvt Ltd.	novations in
• Sumita Roy, Tej Verma and Pushpa Gupta 2006 textbook on family approach i programme management, first edition, Indian council of agricultural research	in extension Newdelhi.
• Dahama O.P. and Bhatnagar O.P, Education and Communication Developme edition, oxford and IBH publishing pvt. Ltd,calcutta.	ent, second
• Ray GL (1996) Extension Communication and Management, Naya Prakash P Calcutta.	ublications,
Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in	, literature-
study-online.com, epg-pathshala, egyankosh.ac.in	
Suggested Continuous Evaluation Methods: Seminar/ Presentation on any top	pic of the
above syllabus Test with multiple choice questions/ short and long answer que	estions
Attendance	

Semester-II Undergraduate Certificate in Home Science GENERIC ELECTIVE (GE-2)- Computer Application

No. of Hours-30+60

CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course	Title	Credits	Credit d	istribution of the course			Eligibility Criteria	Pre- requisite
				I	1			of the
			Lecture	Tutorial	Pract Pract	ical/ tice		course (if any)
					TTac	ucc		(II any)
GE-2		4	2	0	2	2	Passed class	Nil
Computer							XII with	
Application	1						and	
							Commerce	
	U	NDERGR	ADUATE	CERTIFICA	TE IN I	HOM	E SCIENCE	
Progra	amme	/Class:		Year: First			Semester: Se	cond
Certifi	cate in	Home					Paper: C	E-2
Subject: H	lome s	e science						
Co	urse:	GE-2		Course T	itle: Co	mput	er Application	
Course ou	itcom	es:						
The Studen	it at th	e completio	on of the co	urse will be ab	ole to:			
 To know Students 	v abou	t the basic l	cnowledge	about the com	puter.	nd E-	mail	
• Students	Crea	lits: 4		bout the intern	Ger	neral]	Elective	
Max. Ma	rks: A	s per Univ	rule M	in. Passing M	arks: A	As per	Univ. rules	
Unit				Topics				No. of
TT 1 / T	D							Hours
Unit I	Bas	ics of Comj	puters: Def	inition of a Co	mputer,	Char	acteristics of	5
	Cor	nponents c	of a comp	uter system-	Block	diagra	ums, Central	
	Pro	cessing Un	its, Input/	Output Device	ces, Ke	yboar	d Shortcuts,	
	Cor	nputer Mer	Memory (primary, auxiliary and cache memory)					
	MS Pict	Windows -	- Desktop, Videos '	Recycle bin, N Fask Bar, Con	Iy Com trol Pan	puter,	Documents,	
Unit II	Ope	erating Con	puter using	g GUI Based C	peratin	g Syst	tem: What is	5
	an	Operating S	System, Th	e User Interfa	ace, Usi	ingM	louse, Using	
	righ	t Button of	the Mous	e and Moving	Icons of	on the	screen, Use	
		ving/ Find	ing locatic	ons of File at	ienu an id Fold	lers (Treating and	
	Ren	aming of t	files and f	olders,	10 1 010	, C	sound and	

S-Word: Features of MS-Word - MS-Word Window omponents- Creating, Editing, Formatting and Printing of ocuments, Headers and Footers, Insert/Draw Tables, Page orders d Shading, Inserting Symbols, Shapes, Word Art, Page umbers, Mail Merge. S-Excel: Overview of Excel features – Creating a new orksheet, Selecting cells, Entering and editing Text, Numbers, erting Rows/Columns, Changing column widths and row heights, rmulae, Referencing cells, Changing font sizes and colors, tertion of Charts, to fill, Sort. S-PowerPoint: Features of PowerPoint – Creating a esentation, Inserting and Deleting Slides in a Presentation, ding Clip Art/Pictures, Inserting Other Objects (Audio, Video), sizing and scaling of an Object, Slide Transition, Custom imation Practical eraction with personal computer components: Processor, otherboard, storage devices, multimedia components and <u>unners</u>	10 5 5 10
S-Excel: Overview of Excel features – Creating a new orksheet, Selecting cells, Entering and editing Text, Numbers, berting Rows/Columns, Changing column widths and row heights, rmulae, Referencing cells, Changing font sizes and colors, sertion of Charts, to fill, Sort. S-PowerPoint: Features of PowerPoint – Creating a esentation, Inserting and Deleting Slides in a Presentation, lding Clip Art/Pictures, Inserting Other Objects (Audio, Video), sizing and scaling of an Object, Slide Transition, Custom imation Practical eraction with personal computer components: Processor, otherboard, storage devices, multimedia components and anners ectronic documentation through MS word: Opening/creating	5 5 10
S-PowerPoint: Features of PowerPoint – Creating a esentation, Inserting and Deleting Slides in a Presentation, lding Clip Art/Pictures, Inserting Other Objects (Audio, Video), sizing and scaling of an Object, Slide Transition, Custom imation Practical eraction with personal computer components: Processor, otherboard, storage devices, multimedia components and unners ectronic documentation through MS word: Opening/creating	5
eraction with personal computer components: Processor, otherboard, storage devices, multimedia components and unners ectronic documentation through MS word: Opening/creating	10
ectronic documentation through MS word. Opening/creating	
e, saving file, document preparation, editing, formatting, page yout, spell and grammar check. Inserting: header/footer, table, at box, picture and object. Hyperlinking, Security: Password.	10
eating presentation through Power Point: slide layout, design, nplate and background. Inserting movies and sound. Inserting sture, Slide show: transition and animation	10
S Excel basics, work book and work sheet, cell formatting. Data try in work sheet. Chart wizard: title, axes, gridlines, legends, te label. Analyzing data: Correlation, Standard deviation, F-test, est. Improving data	10
ing Outlook Express for e-mail uses: mail message, import/export, send/receive, updating address ok. Setup e-mail accounts, setup multiple profiles	10
ernet basics. Configuring TCP/IIP. Web addresses (URLs), ng web browsers Netscape/Internet explorer for web surfing. ing search Engines for knowledge bases.	10
d Readings: ffice user's guide. to computer science. ITL Group, Pearson Edition.	
	 t box, picture and object. Hyperlinking. Security: Password. tating presentation through Power Point: slide layout, design, aplate and background. Inserting movies and sound. Inserting ture. Slide show: transition and animation. Excel basics, work book and work sheet, cell formatting. Data ry in work sheet. Chart wizard: title, axes, gridlines, legends, e label. Analyzing data: Correlation, Standard deviation, F-test, st. Improving data ng Outlook Express for e-mail uses: mail message, import/export, send/receive, updating address ok. Setup e-mail accounts, setup multiple profiles ernet basics. Configuring TCP/IIP. Web addresses (URLs), ng web browsers Netscape/Internet explorer for web surfing. ng search Engines for knowledge bases. Readings: fice user's guide. to computer science. ITL Group, Pearson Edition.

above syllabus• Test with multiple choice questions/ short and long answer questions• Attendance

Semester-III Undergraduate Diploma in Home Science DISCIPLINE SPECIFIC COURSE (DSC-7)- Food Processing and storage

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course 7	Fitle	Credits	Cred	Credit distribution of the course		Elig Cr	ibility iteria	Pre-ro of the (if	equisite course any)
			Lecture	Tutorial	Practical/ Practice				
DSC-7 Food Processing and storage	C-7 4 4 0 od ocessing 1 storage		0	Passed class XII with science, Arts and commerce			Nil		
Diplon	na in	Home Scien	nce	i ea	r: Second		Sem		mru
Course	e Cod	le: DSC-7		Course Tit	le: Food Pro	ocessin	g and Sto	rage (T	heory)
Course out The Studen ➤ Apply th ➤ Know th control	tcom nt at he pr he ba mea	the complet the complet inciples and sic knowled sures to ove	ion of the methods i lge about the rcome the	course will b nvolved in th he damage ca m.	e able to: e processing used by stora	of diffe	erent food dition and	s. I	
	Cr	edits: 4			Discipl	ine Spe	cific Cou	rse	
Max. Marks	: As	per Univ. ru	les	Ν	/Iin. Passing	g marks	s: As per U	Jniv. rule	es
Unit			l	Topics					No. of Lectures
I	Fo:	od Processi Introduction Role Importance Principles	ng : 1						10
 Principles Different processing methods of foods- Pounding, Milling, Puffing, II Cooking, Parboiling, Fermentation, Sprouting Malting. 								10	
III	Pro cha	ocessing of n aracteristics.	nilk produc	ets and their e	ffect on nutri	itional q	luality		5

IV	Processing of oilseeds for extraction of oils and use of oilseed	5
	cakes in human nutrition.	
V	Food Preservation-	10
	• Definition	
	Objectives	
	Principles of food preservation	
	Methods of food preservation	
	Storage of Foods	10
	Classification of food based on perishability	
	• Definition, importance and functions of food storage	
	Food losses and damages during storage- storage losses and	
VI	types of storage losses	
	• Types/ causes of damage	
	Control measures during storage of grain- Traditional	
	methods and Chemical methods	
VII	Visit to Food Processing Industry	10

1. Sivasankar, B. (2014). Food processing and preservation: Hall of India Pvt., New Delhi.

2. Fellows, P. J. (2009). Food processing Technology: Principles and Practice: Woodhead Publishing.

- 3. Brennan, J. G. (2006). Food Processing Handbook: Weinheim: Wiley-VCH.
- 4. Zeuthen, P. &Bogh- Sprensen, L. (2003). Food Preservation Techniques: CRC Press, Boca raton.
- 5. Vonloesecka, H. W. (1998). Drying and Dehydration of Foods: Allied, Bikaner.

6. B. Srilakshmi, Food science, New Age Publishers, 2002

7. Meyer, Food Chemistry, New Age,2004

Suggested Digital Platform:

https://onlinecourses.nptel.ac.in/noc22_ag03/preview

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus \Box Test with multiple choice questions/ short and long answer questions \Box Attendance

Semester-III Undergraduate Diploma in Home Science

DISCIPLINE SPECIFIC COURSE (DSC-8)- Indian Embroidery and Traditional Textile

No. of Hours-60 CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Cour Title	se	Credits	Credit di	stribution of th	ne course	Eligibility Criteria	Pre- requisite of the course (if any)	
			Lecture	Tutorial	Practical/ Practice			
DSC-8 Indian Embroi and Traditi Textiles	idery onal s	4	4	0	0	Passed class XII with Science, Arts and Commerce	Nil	
Programme/Class: Diploma in Home Science			Ye	ar: Second		Semester: Thi	rd	
Co	urse Code	: DSC-8	Course Tit	le: (Theory)				
Course The Stu ➤ Toin ➤ Toin	outcome ident at th npart know ntroduce st	s: te completion wledge about tudent with t	on of the cours t traditional we he creative art	Se will be able f oven textiles an of embroidery.	o: d embroidery c	of India.		
	Cred	its: 4		Di	scipline Specif	fic Course		
]	Max. Mar	ks: As per U	niv.	Min. Pa	ssing marks: A	As per Univ. rule	S	
Unit				Topics			No. of hours	
I	 Traditional woven textiles of India: Hand woven Sarees: Dacca muslin and Jamdani saree, Baluchar sarees, Pochampalli sarees, Patola and Ikat sarees, Kanchipuram sarees, Chanderi sarees, Maheswari sarees, Vichitrapuri sarees and Brocades, Hand woven 							
п	PrintedPrintedPrintedPaint	and Painte ed Textiles: ed Textiles:	ed textiles: Block printed t Kalamkari and	extiles, Tie and Madhubani	dyed textiles		10	
ш	Embroi Kash Chan Phull Embr Chik Kant	ideries of st ida of Kashi nba Rumal, kari and Bag roideries of 0 ankari and 2 has of Beng	ates of India: mir, th of Punjab, Gujarat, Zari work of Ut al,	tar Pradesh,			10	

	Manipuri Embroidery,	
	Kasuti of Karnataka,	
	Embroidery and Patchwork of Bihar	
IV	Traditional costumes of India:	10
	Kashmir, Punjab, Uttar Pradesh, West Bengal,	
	• NE states,	
	Rajasthan, Gujarat, Maharashtra,	
	South Indian states	
	Importance of traditional costumes and textiles and apparel industry, Impact of	5
V	adaptation of traditional motifs and designs for modern textiles	
VI	Factors affecting diversity of textiles and costumes of India: Geographical factors,	5
	socio-economic factors, customs and traditions and religious factors	
VII	Visit to Traditional Embroidery Unit	10
Sugg	gested Readings:	
1.	Crill, R. (1999). Indian Embroidery. London: Victoria and AlbertMuseum	

2. Chattopadhyay, K. 1985. The Glory of Indian Handicraft. New Delhi. Calrian book.

- 3. Flynnn, D. 1971. Costumes of India. New Delhi, Oxford and IBH Publishing Company.
- 4. Fabin, C. 1977. Indian Dress. New Delhi, Orient Longman L
- 5. Pandit, S.1976. Indian Embroidery: its variegated charms. Baroda.
- 6. Synge, L. (2005). Art of Embroidery: History of style and Technique. New York: ACC Art Book
- 7. Shailaja D. Naik. 1996. Traditional Embroideries of India. APH publishing.

Suggested Digital Platform:

https://textilevaluechain.in/in-depth-analysis/articles/traditional-textiles/traditional-indian-

embroidery/ https://www.slideshare.net/hemaupadhayay/traditional-embroideries-of-india-

76836145

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus

Test with multiple choice questions/ short and long answer questions

Attendance

Semester-III Undergraduate Diploma in Home Science

DISCIPLINE SPECIFIC COURSE (DSC-9)- Practical based on DSC-7	and DSC-8	
	No. of Hours-	120

Course T ⁴¹			dit diatmik	ution of	Flight 114-	D	councite of the -	
Course Inte		Cre	alt alstrib	ution of	Eligibility	Pre-re	Pre-requisite of the	
	ts		the	course	Criteria	cou	rse (II any)	
		Lecture	Tutorial	Practical/				
				Practice				
DSC-9 Practic	cal 4	0	0	4	Passed class		Nil	
based on DSC-					XII with			
and DSC-8				Science, Arts				
					and Commerce	æ		
	UN	DERGR	ADUATEI	DIPLOMA	INHOME SCI	ENCE		
Progra	mme/Class	s:	Y	ear: Secon	d Seme	ester: Third	1	
Diploma in	Home Sci	ence			Pape	r: DSC-9		
Subject: Hol	ne science		Course	Title: Dro	atical based on	DSC 7 on		
	Se: DSC-9		Course	e mie. Fra	cucal based on	DSC-7 and	1 DSC-0	
The Student	ones:	lation of	the course	will be able	to			
Apply the	at the comp	and meth	ade involve	will be able	tu.	rent foods		
 Appry the j Toimpartk 	principies a	houttradi	tionalwove	ntextilecand	lembroidervofIn	ient ioous.		
 To introdu 	ce student v	with the c	reative art	of embroid	rv	ula		
- 10 Introduc	redits:4			Di chiorola	scipline Specifi	ic Course		
Max. Marks	s: As per U	niv rule	Min. Pa	assing Mar	ks: As per Univ	rules		
Unit	or i is per e			Topics			No. of hours	
Unit I	Preparatio	on of pop	ped corn ar	nd sorghum.			12	
Unit II	Dehvdrati	on and di	rving of vegetables: green leafy vegetables.				8	
	tubers and	d others.	· · · · · · · · · · · · · · · · · · ·	5 6	,	,	-	
Unit III	Preparatio	on and bo	ttling of to	mato sauce.			8	
Unit IV	Preparatio	on and bo	ttling of fru	iit jam, squa	ash and jellies.		12	
Unit V	Preparatio	on of ferm	nented food	I-dhokla. id	li.		12	
Unit VI	Preparatio	on of whe	at malt.	· · · · · · · · · · · · · · · · · · ·			8	
Unit VII	Sample pr	eparation	of tradition	nal Indian er	nbroideries and		20	
	Machine	embroide	ries					
Unit VIII	Preparatio	on of two	articles usi	ng different	hand embroide	ries	20	
Unit IX	Documen	tation of	Indian texti	iles and cos	tumes		20	
Recommende	d Reading	s:						
• Desroiser l	N. W. & De	esroiser J.	N. 1977. T	The Technol	ogy of Food Pre	servation.	AVI	
Publication	l.	N T 1/		、 ·				
• Potty V. H.	and Mulk	y M. J. 19	193. Food F	rocessing.	Uxtord & IBH I	'ublishing l	House.	
• Sriiakshmi	(B.2001, F)	Embroi	lory Londa	Age Internat	IONAL.	oum		
• Unit, K.(1)	(2005) A #	of Embr	idery: LONGO	ory of style	and Technique	Julli New Vork	$\cdot \land CC \land rt$	
Sungo I (/		JUCIV. EUSI	TH V DESEVICE	and reconnine	INCW IOFK	. AUL AIL	
• Synge, L. (2003). Art	OI LINUIC	, , , , , , , , , , , , , , , , , , ,	lory of style	and reeninque.	1.0.00		
 Synge, L. (Book ShailaiaD 	2005). An	APH pul	blishing Ti	raditional E	mbroideries of I	ndia		

Suggested equivalentonline courses: On Swayam, Vidyamitra.inflibnet.ac.in, literature- study-online.com, epg-pathshala, egyankosh.ac.in

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus \square Test with multiple choice questions/ short and long answer questions \square Attendance

Semester-III Undergraduate Diploma in Home Science DISCIPLINESPECIFICELECTIVE (DSE-1)-Ergonomic Design No. of Hours-30+60

CREDIT DIS	STRIBUT	ION, ELIG	IBILITYAN	D PRE-REQU	ISITES OF T	HE COURSE
Course	Credits	Pre-requisite of				
Title					Criteria	the course (if any)
						-
		Lecture	Tutorial	Practical/		
		Lecture	1 utor fur	Practice		
DSE-1	4	2	0	2	Passed class	Nil
Ergonomic	•	-	Ū	-	XII with	1 144
Design					Science.	
Design					Arts and	
	UN	DERGRAI	UATEDIPI	LOMAINHON	IE SCIENCE	
Programme/C	lass: Diplo	ma in Hom	e Year	: Second	Semest	er: Third
8	Science				Pape	r: DSE-1
Subject: Home	e Science					
Course: DSE-	-1		Course T	itle: Ergonom	ic Design	
					8	
Course outco	mes: The S	Student at th	e completion	of the course w	vill be able to:	
• To sensitize	e students t	o the import	ance of ergor	nomics in desig	n.	
• To develop	aptitude in	identifving	the product/	space design pr	oblems at plac	e of work.
• To understa	ind interfac	ce of human	element and	the user's persp	ective in the ev	volution of
product / sp	ace design	1.				
• To develop	skill in des	signing spec	ific work-cer	ntres and produ	cts.	
Credits:4		0 0 1	Disciplin	e Specific Elect	tive	
Max. Marks	: As per U	niv. Rule	Min. Passi	ng Marks: As	per Univ. rules	5
Unit	1		То	pics	1	No. of
			-	I		Hours
Unit I	Ergonomi	cs – concep	t, significanc	e, history and g	growth	10
	Application	ns of Ergon	omics in desi	gn and work ef	ficiency	
	Anthropom	netric Measu	rements -His	story and its app	olication in inte	rior
	designing f	for different	work areas a	and workers.		
,	The bio- m	echanisms o	of work as rela	ated to the user,	the work and t	he
	environme	nt				
Unit II	The User:	Component	s of worker in	nput – affective	, cognitive,	10
1	temporal a	nd physical	(physical, ph	ysiological, ps	ycho-	
	Physiologi	cal aspects of	of work.			
Unit III	Work Env	vironment				10
	Functional	design and	arrangement	of work places.		
	Indices of i	ndoor comfo	ort: ventilatio	n, lighting, tem	perature, noise	Work
	study					
,	Time and r	notion study	Energy Stuc	lies		
				Practical		
Unit I	Basic anth	ropometry-	space norms/	/ standards		20
Unit II	Time and r	notion study	•			20
Unit III	Designing	products-fu	rniture (mult	ipurpose and m	odular, etc.).S	pace 20
	design-pre	paring floor	and elevation	on plans- Kitche	en, Workstatio	n

Recommended Readings:

- Bridger. R.S., "Introduction to Ergonomics." Mc. Graw HallInc, New York, 1995.
- Chiara J.D., Panero. J., Zelnik M., "Time Saver standards for Interior Design and Space Planning", McGraw Hill, Neuferts Architect's Data, 1992.
- Lakhwinder Pal Singh, "Work Study and Ergonomics." Cambridge University Press, Noida, 2016.
- Mark.S.SandersandErnest.J.Mc.Cormick, "HumanFactorsinEngineeringand Design." Mc. GrawHallInc, New York, 1992.
- PheasantS, "Anthropometry, ergonomics and Design of work", Taylor and Francis, London, 2003. Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literature-study-online.com, epg-pathshala, egyankosh.ac.in

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus
Test with multiple choice questions/ short and long answer questions Attendance

Semester-III Undergraduate Diploma in Home Science DISCIPLINE SPECIFIC COURSE (GE-3)- Life Span Development

No. of Hours-60

Course '	Course Title Credits		Credit	t distributio course	on of the	Eligibility Criteria	Pre- requisite o the course any)	of (if		
			Lecture	Tutorial	Practical/ Practice					
GE-3 Life Span 4 Development		4 4 0 0		Passed class XII with science, Arts and commerce	Nil					
Prog	ramme/	Class:	KADUAI	Vear: Seco	iA IN HOW	Semester: Third	h			
Diploma	in Hom	e Science		I cal . Dect	/114	Paper: GE-3	u			
Subject: H	lome Sci	ience				F				
C	ourse: G	E-3		Cou	rse Title: Lif	e Span Develop	ment			
Course ou • Learn a	itcomes: bout diff	The Stude	ent at the co es of humar	ompletion of developme	f the course went through li	vill be able to: fe.				
• Learn a	bout fac	tors that aff	ect differe	nt developr	nental stages					
<u> </u>	Credit	<u>s: 4</u>	1	D ' 1	General I					
Max. Mai	r ks: As <u>p</u>	per Univ. R	ule Min	h. Passing N	larks: As pe	r Univ. rules	NT	•		
Unit				Торіс	S		No. 0 Hour)f rs		
Unit I	Prenat Geneti	tal develop	ment stage onmental in	es: nfluences or	n prenatal dev	velopment	5			
Unit II	Neona develog Infanc emotio	te (neonate pment. y (Four we onal. cognit	e up to 4 we beeks up to 2 ive and lan	eeks): physi 2 years): ph guage deve	cal, sensory, ysical and m lopment	cognitive and solution social and	ocial 10)		
Unit III	Early cogniti	childhood give and lang	years(2-6 y guage deve	ears): physelopment.	ical and moto	or, social, emotio	nal, 5			
Unit IV	Middl • Phy	e childhoo vsical and	d: motor dev	velopment			10)		
	LanEmailSoc	guage and otional dev ial and mor	intellectua elopment; ral develop	l developme ment	nt					
Unit V	Adoles • Cha • Phy • Issu	scence: aracteristics vsical, socia ues in adole	s of adolesc l, cognitive scence, ide	ence e and emotio ntity crisis	onal developr	nent	10)		
Unit VI	Adulth • Cha	nood: aracteristics	of adultho	od			10)		

	Old age:	10
	Characteristics of old age	
Unit VII	• Biological, physical and social changes in old age	
	• Attitudes towards life and death among the elderly. Special needs of	
	elderly, status of aged in India	
Recommen	ided Readings:	
• Hurloc	KE.B. (1980), Developmental Psychology, A Life span Approach, 5 th edition	on,
New D	elhi: Tata Mc. Graw Hill Publishing company Ltd.	
• Rice. F	P. (1998). Human Development: A lifespan approach. New Jersey: Prentice	e Hall.
• Rutter,	M. and Rutter, M. (1992) Developing Minds. Challenge and continuity acros	ss the
life spa	n. London: Penguin.	
• Santroo	k, J. W. (2007). A topical approach to life-span development. New Delhi	:
Tata M	cGraw- Hill.	
• Singh,	A. (Ed). 2015. Foundations of Human Development: A life span approach. N	ew
Delhi:	Orient BlackSwan.	
• Tennar	t, M. and Pogson, P. (1995) Learing and Change in the Adult Year, San	
Francis	co: Jossey-Bass	
Suggested study- onl	equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, lite ine.com, epg-pathshala, egyankosh.ac.in	rature-
Semester-IV Undergraduate Diploma in Home Science DISCIPLINE SPECIFIC COURSE (DSC-10)- Introductory Textile Science No. of Hours-60

Course Title	Credits	Credit	t distributio	n of the	Elig	ibility	Pre-
			course		Cri	teria	requisite
							of the
							course (if
			1				any)
		Lecture	Tutorial	Practical/			
D G G 40				Practice	_		.
DSC-10	4	4	0	0	Passe	d class	Nil
Introductory						vith	
Textile					science	e,	
Science					Arts	and	
					comn	ierce	
	UNDERGE	KADUATE	DIPLOMA	A IN HOME	SCIE	NCE	
Programme/C	lass:		Year: Seco	nd		Semest	er: Fourth
Diploma in H	ome					Paper:	DSC-10
Science							
Subject: Home	Science						
Course: DSC-	10		Course Titl	e: Introduct	tory Te	xtile Sci	ence
Course outcon	nes: The Stude	ent at the co	mpletion of	the course w	vill be a	ble to:	
• To understan	nd basic knowl	edge about	the textiles	fibers, yarns	and fat	oric.	
• To educate s	students about	the use of la	undering pr	ocess and its	equipm	ent as wo	ell as
the cleansin	g agents.						
Credits: 4]	DISCIPLIN	E SPEC	CIFIC C	OURSE
Max. Marks	: As per Univ	. Rule N	/Iin. Passing	g Marks: As	per Ur	iv. rules	1
Unit			Topic	5			No. of
							Hours
Unit I	Introducti fibers	ion, termino	ology and cla	assification o	of textile	;	5
Unit II	Natural f wool. sp	ibers: Cotto ecialty hair	on, flax, jute fibers and a	e, hemp, ram	ie, silk,		5
Unit III	Manmad acrylic. 9	e fibers: Ra glass fibers	iyon, acetate	e, nylon, poly	yester,		8
Unit IV	Yarn clas	ssification;	characteristi	cs and their u	ise		8
L	1						

Unit VII	Labels and tags used in textiles and consumer education	8
Unit VIII	Laundry equipment; their use and care, principles and methods of washing and finishing	6
Unit IX	Cleansing agents: water, detergents, soaps and other laundry reagents- acidic, alkaline reagents and bleaching agents	5
Unit X	Additives used in laundry: stiffening and blueing agents	5
Unit XI	Visit to Textile Industry	10

Recommended Readings:

- Vastala. R (2003), Text book of Textiles & Clothing, ICAR, New Delhi
- Andrea Wynne 1997. Textiles. Macmillian.
- Hollen N & Saddler (1993) Textiles, New York, John Wiley.
- Bernard P Corbman 1983. Textiles Fiber to Fabric. McGraw-Hill.
- Marjory L. Joseph 1966. Introductory Textile Science. Rinehart & Winston.

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literature- study-online.com, epg-pathshala, egyankosh.ac.in

Semester-IV Undergraduate Diploma in Home Science DICIPLINE SPECIFIC COURSE (DSC-11)- Fundamentals of Baking

No. of Hours-60

Course Title	Credits	Credit distribution of the course		Eligibility Criteria	Pre-requisite of the course (if any)	
		Lecture	Tutoria	l Practical/		
		Lecture	1 010110	Practice		
DSC-11	4	4	0	0	Passed	Nil
Fundamentals					class XII	
of Baking					with	
					science,	
					Arts and	
			TE DIDI (COMMERCE	
	UNDEI	GKADUA	IE DIPL		E SCIENCE	
Programme/	Class:	Year: S	econd	Semester: Fou	rth	
Diploma in H	Iome			Paper: DSC- 1	11	
Science						
Subject: Home	Science			1		
Course: DSC-11 Course Title: Fundamentals				s of Baking		
Course Outcon	nes: At th	e end of the	term / cour	se the Students	will be able to:	
• Explain the c	lifferent in	gredients us	sed in bake	ry		
• Explain the c	lifferent w	orking temp	peratures fo	or bakery produc	ets	
• Define the bi	read faults	and remedi	es of baker	y products		
 Draw and ex Write reciped 	piani the i	ayoul of a d nt broads in	akery	antoniv		
• white recipes	odite A	in breaus, p	asules allu	CENERA	IFIFCTIVE	
Max Marks	As per Un	iv Rule	Min Pass	ing Marks · As	per Univ rules	
		IV. Kule	141111. 1 455	ing widt N5. 745	per entv. rules	
Units			То	pic		No. of Hours
Units I	Introduc	ction				10
	Scope of	Bakery, Ba	kery terms,	Organization c	hart of Bakery	
Units II	Wheat a	nd Flour				10
	Different	types of flo	urs availab	le, Constituents	of flours, pH	
	Value of flour, Water absorption power of flour,					
T T •/ TTT	Gluten, Gluten	irade of flo	ur.			
Units III	Kaw ma	terial requi	red for br	ead making	d foto	10
	Charact	our, water,	yeast, salt	- Sugar, mik an	iu rais	
	External	characteris	tics-Volum	e symmetry of	shape: Internal	
	character	istics - colo	or, texture.	aroma, clarity a	and elasticity	

Units IV	Bakery Products	10
	Production of cakes and cookies/biscuits. Types of biscuit dough's	
	-Developed dough, short dough's and batters. Cake making:	
	Ingredients and their function Structure builders. Shortening and	
	leavening agents, Tenderizers, moisteners and flavor enhancers.	
	Problems of baking.	
Units V	Yeast	5
	An elementary knowledge of Baker's yeast, fermentation of	
	dough and conditions influencing it's working.	
Units VI	Oven & Baking	5
	Knowledge and working of various types of oven. Baking	
	temperatures for bread, confectionery goods.	
Unit VII	Visit to Baking Food Industry	10

Recommended Readings:

- Neelam Khetarpaul, Bakery Science and Cereal Technology.
- N. Shakuntala Manay, Food Facts and Principles.

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literature-study-online.com, epg-pathshala, egyankosh.ac.in

Semester-IV Undergraduate Diploma in Home Science DISCIPLINE SPECIFIC COURSE (DSC-12)- Introductory Textile Science and Fundamental of Baking

No. of Hours-120

Course Title	Credits	Credit distribution of the			Elig	ibility	Pre-
			course		Cri	iteria	requisite
							of the
							course (if
							any)
		Lecture	Tutorial	Practical/			
				Practice			
DSC-12	4	0	0	4	Passe	d class	Nil
Introductory					XII w	vith	
Textile					scienc	ce,	
Science and					Arts	and	
Fundamental					comn	ierce	
of Baking							
	UNDER	GRADUAT	TE DIPLON	AA IN HOM	E SCI	ENCE	
Programme/C	Class: Diploma	in	Year: Seco	nd		Semest	er: Fourth
Home Science Pap				Paper:	er: DSC-12		
Subject: Home	Science	·					
Course: DSC-	12		Course Titl	e: Introduct	ory Tex	tile Scie	nce and
				Fundame	ental of	Baking	
Course outcon	mes: The Stude	ent at the co	mpletion of	the course w	vill be a	ble to:	
• To understa	nd basic knowl	edge about	the textiles	fibers, yarns	and fab	oric.	
• To educate s	students about	the use of la	undering pr	ocess and its	equipm	ents as w	vell as the
cleansing ag	gents.						
• Draw and ex	xplain the layo	ut of a bake	ry				
• Explain the	different work	ing tempera	tures for ba	kery products	S		
Credits: 4]	DISCIPLIN	E SPEC	CIFIC C	OURSE
Max. Marks	s: As per Univ	. Rule N	/Iin. Passing	g Marks: As	per Ur	niv. rules	5
Unit			Practic	al			No. of
							Hours
Unit I	Identific	ation of fibe	ers: visual in	nspection, bu	ırning,		10
	microsco	pic and solu	bility tests		_		
Unit II	Study and identification of common fabrics available in				e in	10	
	the mark	et and threa	ad count				
Unit III	Removal	l of common	n stains from	n fabrics			12
L							

Unit IV	Demonstration of laundry equipment	10
Unit V	Washing, ironing and finishing of textile articles: cotton, silk, wool, synthetic/blend, zari embroidery and lace articles	16
Unit VI	Visit to Processing unit/ Textile mill	8
Unit VII	Introduction to ingredients / Equipment used in Bakery: Identification and uses of equipment – large, small and other utilities. Ingredients – Types of flour, Sugar, Nuts and Dry fruits, Shortenings, Leavening	10
Unit VIII	Quality Checking & Basic Mixing Methods Flour: W.A.P Test, Gluten Content Yeast : Flying fermentation	10
Unit IX	Mixing Methods Basic steps involved in mixing ingredients –Kneading, stirring, whipping, creaming.	10
Unit X	Flavored Breads and Biscuits Flavored Breads, Cakes, Muffins, Biscuits, Basic Buns, Fruit Buns	14
Unit XI	Visit to a Baking Unit	10

Recommended Readings:

- Vastala. R (2003), Text book of Textiles & Clothing, ICAR, New Delhi
- Andrea Wynne 1997. Textiles. Macmillian.
- Hollen N & Saddler (1993) Textiles, New York, John Wiley.
- Bernard P Corbman 1983. Textiles Fiber to Fabric. McGraw-Hill.
- Marjory L. Joseph 1966. Introductory Textile Science. Rinehart & Winston.
- Neelam Khetarpaul, Bakery Science and Cereal Technology.
- N. Shakuntala Manay, Food Facts and Principles.

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literaturestudy-online.com, epg-pathshala, egyankosh.ac.in

Semester-IV Undergraduate Diploma in Home Science DISCIPLINE SPECIFIC COURSE (DSE-2)- Community Nutrition

No. of Hours-30+60

Course Title	Credits	Credit distribution of the course		Eligibility Criteria	Pre-requisite of the course (if any)	
		Lecture	Tutorial	Practical/ Practice		
DSE-2 Communit Nutrition	y 4	2	0	2	Passed class XII with science, Arts and commerce	Nil
Prog	UNDEF	KGRADU	ATE DIPLO Vear: Se	OMA IN HOM	E SCIENCE Semester	Fourth
Diploma	in Home Science		I car . De	conu	Paper:	DSE-2
Subject: H	ome science					
Co	ourse: DSE-2		Cour	se Title: Comm	nunity Nutritio	n
Course ou	tcomes: The Stu	dent at the	e completion	of the course wi	ll be able to:	
• To prov	vide information r	regarding	nutritional as	sessment.		
• To enab	ble students to imp	part nutrit	tion education	n among rural an	id needy people	
• To acqu	aint them knowle	edge regar	ding food sec	curity and govern	nment and inter	national
progran	n running in the l	field of co	mmunity nut	rition.		710
May Ma	realts: 4	u Min	DISC.	PLINE SPECI	FIC ELECTIV	E
IVIAX. IVIA	Rule	v. 1viii	1. I assing wi	arks. As per or	IIV. TUIES	
Unit			Topi	ics		No. of Hours
Unit I	Role of nutrition improving amore income and its in consumption to environmental l	n educatio unt and va influence meet ind nygiene.	n programme ariety of food on nutritiona ividual needs	in eradication of supplies, improvi l status, improvi in the family, in	f malnutrition: oving family ing food mproving	3
Unit II	Planning, imple programme.	mentation	and evaluation	on of a nutrition	education	2
Unit III	Assessment of r simple question	nutritional maire and	knowledge b rapid rural a	y informal discu ppraisal.	ssion and by	3
Unit IV	Introduction to national nutrition programmes and policies programmes for improving nutritional status at national level, ICDS, NRDP, NREP, miscellaneous monofocal programmes.					es 2 P, 2
Unit V	Role of internati FAO, WHO, U	Role of international agencies and programmes in community nutrition, FAO, WHO, UNICEF; other voluntary and government agencies.				
Unit VI	Food production foods and their	n systems statewise	in India; Thei production ii	r influence on fo 1 India.	ood supply; majo	or 5
Unit VII	Food distributio of India, intra he	n system: ousehold o	Public Distril distribution a	bution System, F nd per capita av	Food Corporatio ailability of foo	n 5 d.

Unit VIII	Magnitude of nutrition problem in India: PEM, vitamin A deficiency,	5
	endemic goiter, flourosis and lathyrism, strategies for control of	
	malnutrition	
	PRACTICALS	
Unit I	Identifying nutritional problems in a community.	10
Unit II	Formulation of nutrition and health related messages for presentation to	20
	the community through radio script, popular article, charts/posters;	
	leaflets, games.	
Unit III	Organization of a campaign in the community through prepared nutrition	10
	education media.	
Unit IV	Evaluation of the programme in the community.	10
Unit V	Visit to an ICDS block/ongoing project site where nutrition education is	10
	a part of programme.	
Recommen	nded Readings:	•

- Bamji, M.S Rao, NP and ReddyV. 1996. Text book of Human Nutrition
- Bagchi,K. 1990. Guidelines for the management of nutrition programmes- a manual for nutrition officers.WHO EMRO Technical Publication no. 15, WHO,Geneva
- Bendich, A and Deckelbaum, RJ, 1997. Preventive Nutrition. The Comprehensive guide for health professional.

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literaturestudy-online.com, epg-pathshala, egyankosh.ac.in

Semester-IV Undergraduate Diploma in Home Science

GENERAL ELECTIVE (GE-4)- Family Financial Management and Consumer Economics

No. of Hours-60

Course Title	Credits	Cred	it distribut course	ion of the e	Eligibility Criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		(
GE-4 Family Financial Managemen t and Consumer Economics	4	4	0	0	Passed class XII with science, Arts and commerce	Nil
	UNDER	GRADUA	TE DIPL	OMA IN HC	ME SCIENCE	
Program Diploma in 1	nme/Class: Home Scienc	ce	Year:	Second	Seme Pa	ster: Fourth per: GE-4
Subject: Hon	ne science					
Cour	se: GE-4		Course T	itle: Family I Consum	Financial Mana ner Economics	gement and
Course outco The Student at • To lea consur • To edu	omes: t the completer trn the basic mption patter to the stud	tion of the of financ rns? lents to bea	course will ial manage	be able to: ement which consumers.	have an impac	et on family
C	redits: 4		DI	SCIPLINE S	SPECIFIC ELE	CTIVE
Max. Marks:	As per Univ	v. Rule I	Min. Passir	ng Marks: A	s per Univ. rules	
Unit 7	Fopics	·				No. of Hours
Unit I	Family Finance: Meaning, Definition and importance of family finance, guidelinesUnit Ifor family financial management. Family income: Income concepts: productive income hidden income money					es 10
	income, real profile, meth	income, particular income, parti	sychic incom ndling incom	me, Analyzin me, account	g income: incom keeping	e

		0
Unit II	Steps of budget making, factors influence on budget making, advantages of budget making, and Engel's law of consumption,	8
	controlling and evaluation of budget. Savings and Investment- types of savings / investment, saving institution and its importance.	
Unit III	Credit- Meaning, Definition, Needs, Types, use and source of credit Taxation- objectives, characteristics and classification.	8
	• Meaning of consumer, Basic concepts of consumer economics:	8
Unit IV	and price. Consumer problems	
Unit I v	 Consumer education: Meaning Definition Objectives and need of 	
	in India.	
	• Consumer rights and responsibilities in today's world.	
	Consumer decision making	8
Unit V	Determinants of consumer choices	
	• Market and merchandising – types of market, definition and	
	Structure and functioning of consumer retail markets	
	Pricing process	0
	a) History of consumer movement in the developed and developing	8
Unit VI	countries	
	b) Consumer protection and Govt. legislation-Act and orders	
	c) Govt. and NGO for consumer protection and welfare	
Unit-VII	Visit to financial Institutions and Consumer Organizations	10
Recommen	nded Readings:	
• Manees	sha Shukul and VeenaGandotra. (2006). Home Management and Family Fina	ince.
Domina	ant Publishers and Distributors, New Delhi.	
• Mann, I Delhi.	M.K. (2004) Home Management for Indian Families. Kalyani Publishers,	New
• Rice, N New Y	ickel and Tucker. (1976). Management in Family Finance. John Wiley and S ork	ons.,
• Seethar and Dis	aman P. Sethi M. (2002). Consumerism Strategies and Tactics. CBS Publish stributors. New Delhi.	ners
Suggested	equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, liter	rature-
study-onli	ne.com, epg-pathshala, egyankosh.ac.in	_
Suggested	Continuous Evaluation Methods: Seminar/ Presentation on any topic of the set of the se	the
above sylla	$\log \alpha$ lest with multiple choice questions/ short and long answer questions	
Attondonco		

Semester-V Bachelor in Home Science (Honours)

DSC-13 Therapeutic Nutrition and Diet Counseling

No. of Hours-60

Course Tit	le Credits	Credit distribution of the course			Eligibility Criteria	Pre- requisiteof the course	
							(if any)
		Lecture	e Tutorial	Practica	al/		
				Practio	ce		
DSC-13	4	4	0	0		Passed	Nil
Therapeutio	2					class XII	
Nutrition						with	
and Diet						science,	
Counseining	3					Al 15 allu	
		Bachelo	or in Home So	 rience (Hoi	1011rs	s)	
Pro	gramme/Class	S:	Year: T	Third	Sem	ester: Fifth	
Bachel	or in Home Sci	ence		Paper: DSC- 13		er: DSC- 13	
	(Honours)				-		
Subject: H	ome Science						
C	Course- DSC-1	3	Course	Title: The	rapeu	itic Nutrition a	and Diet
	~			(Couns	selling	
	Credits: 4			SCIPLINE	<u>SPE</u>	CIFIC COUP	RSE
Max. Mar	ks: As per Uni	v. Rule	Min. Passing	g Marks: A	As per	r Univ. rules	
Unit			Topics	5			No. of
	Introduction						10
	Nutrition	and imm	mity				10
Unit I	Cataboli	c effects o	of infections				
	Effect of	illness on	food acceptan	ice and utili	zatio	n	
	 Types of 	feeding.	lood deeeptuin		Zuilo		
	• Use of for	od exchan	ge list in diet	planning.			
	Fever:		0				10
	Metabolio	c alteration	n				-
Unit II	• Types of	fever					
	Dietary m	nanagemer	nt of short (typ	hoid) and le	ong d	uration	
	fever (tub	perculosis)		-		

	Principles of dietetic management of disorders of the	10
	gastrointestinal tract –	
T T •4 TTT	• Gastritis	
Unit III	• Peptic ulcer	
	• Diarrhea	
	• Constipation.	
	• Ulcerative colitis	
	Regional enteritis	
	Etiology, symptoms, metabolic alterations and nutritional	5
Unit IV	management of liver disease-	
	• Hepatitis	
	• Cirrhosis	
	Diabetes mellitus:	5
	Clinical characteristics,	
Unit V	• risk factors,	
	dietary management	
	Complications	
	Risk factors, metabolic anomalies and principles of nutritional	8
	management in-	
Unit VI	• Hypertension	
	• hyperlipidemias,	
	• atherosclerosis	
	Nutritional considerations in weight management-	8
	1) Obesity:	
	• Etiology	
	Energy balance	
Unit V	Metabolic changes	
	Dietary management	
	2) Underweight	
	• Etiology	
	Metabolic changes	
	Dietary management	
	Principles of nutritional therapy in diseases of the kidney-	2
Unit VI	• Glomerulonephritis,	
	Renal failure	
	Renal calculi.	
nit VII	Visit to Hospital	2
Recommen	ded Readings	I
• Antia F.F	P. (1989). Clinical Dietetics and Nutrition. Third Edition. (pp-226-239), Bombay,
Oxford U	Jniversity Press.	
Bamji . S	.M., Rao, P.N., and Reddy, V. Textbook of Human Nutrition. Pp-360-6	67.
Ovford a	nd IBH nublishing Co Put I td	

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literature-study- online.com, epg-pathshala, egyankosh.ac.in Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the

Semester-V Bachelor in Home Science (Honours) DSC-14 Fabric Formation and Finishes

No. of Hours-60

Course	Credits	Credit di	stribution	of the course	Elig	ibility	Pre-requisite of	
Title						iteria	the course (if	
							any)	
		_						
		Lecture	Tutoria	Practical/				
DEC 11			•	Practice			N 741	
DSC-14	4	4	0	0	Passe	d class	Nil	
Fabric						vith		
Formation					scienc	e, Arts		
and Eiseicher					and			
Finisnes		Deale			comn	ierce		
		Bache	elor in Hol	ne Science (Hol	nours)			
Programme/(lass: Bach	elor	Yea	r: Third		Semeste	er: Fifth	
in Home Scie	nce		- ••			Paper:	DSC-14	
							22021	
Course Cod	le: DSC-14	ļ	Cou	rse Title: Fabri	c Form	ation and		
			Fin	Finishes				
Course outcon	nes:		1					
The Student at t	the comple	tion of the c	ourse will	be able to:				
• To study th	ne chemica	als used in	textile pro	cessing from s	izing to	finishin	g, along with the	
essential p	roperties (of raw ma	terials us	ed in their ma	anufactu	ire and	study the recent	
developmen	nts in vario	us finishing	g processes	•				
Credits: 4			DI	DISCIPLINE SPECIFIC COURSE				
Max. Marl	ks: As per	Univ. Rule	Min	Passing Marks	s: As pe	r Univ. rı	ıles	
Unit				Topics	No. of			
							Hours	
Unit I	Met	hod of fabr	ic formati	o n:			15	
	• W	• Weaving						
	Knitting							
	• N	• Non-woven						
Unit II	Loo	Looms: Shuttle looms, shuttle less looms, gripper					15	
	loon	n, rapier loo	m, water j	et and air jet loo	m			
Unit III	Intro	oduction to	fabric fin	ishes			15	
	a) Pr	ocesses of r	emoving ir	npurities from fa	brics:			
	S	scouring, degumming, carbonizing						

	 b) Basic finishes that alter hand or texture; felting, singeing, stiffening, decatazing c) Surface finishes: Bleaching, delustering, calendaring, beetling, napping, flocking, burnt out design, plisse design, acid design, tenetring, shearing and brushing d) Functional finishes: water proof and water repellent finish, soil repellent finish, shrinkage control, wrinkle resistance, durable press finish, flame retardant finish, mildew proof, rot proof, moth proof finishes, antistatic and antibacterial finishes 	
Unit IV	 Adding colour to textiles Natural dyes Synthetic dyes 	15
Recommended	Readings:	

 Banerjee, P.K. Principles of Fabric Formation 2014.1st Edition19 December 2014. ISBN-13: 978-1466554443 ISBN-10: 1466554444.

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literature-study-online.com, epg-pathshala, egyankosh.ac.in

Semester- V Bachelor in Home Science (Honours) DISCIPLINE SPECIFIC COURSE (DSC-15)- Practical based on DSC-13 and DSC-14

No. of Hours- 120

Course 7	ſitle	Credits	Credit	distribution	of the	Eligib	Eligibility Pre-	
				course	Crite	ria	Requisite	
								of the
								course
								(if any)
-			Lecture	Tutorial	Practica	վ/		
					Practic	xe		
DSC-15		4	0	0	4	Passed of	lass	Nil
Practical ba	ised					XII with	1	
on DSC-13	and					Science,	Arts	
DSC-14						and		
						Comme		
						r ce		
	<u> </u>	J NDERGR	ADUATE	DIPLOMA	IN HOMI	E SCIENCE		
Pr	ogramn	ne/Class:	Y	Year: Third		Semes	ster:	
Bachelo	r in Hon	ne Science				Fift	h Pape	r:
	(Honou	rs)				DSC	C- 15	
Subject: Ho	ome scie	ence	0 5	() D ()			10.14	
Cor	urse : D	SC-15	Course Ti	tle: Practica	I based D	SC-13 and DS	5C-14	
Course out	tcomes:							
The Student	t at the c	ompletion o	of the course	will be able	to:			
• Understa	nd the ba	asics of nori	mal diet, the	rapeutic diet	related w	ith specific dis	ease co	ondition.
• Students	will be a	able to know	v different fe	eeding metho	ds used in	hospitals.		
• To study	the chen	nicals used	in textile pro	ocessing from	n sizing to	finishing, alo	ng with	ı
the esser	ntial pro	perties of r	aw materia	ls used in th	eir manu	facture and st	udy the	e
recent de	velopme	ents in vario	ous finishing	g processes.			2	
	Credits	: 4		Dis	scipline S	pecific Course)	
Max. Mar	ks: As p	er Univ. rul	e Min. P	assing Mark	s: As per	Univ. rules		
Unit				Topics			No.	of Hours
Unit I	Planni	ng normal d	iet for patier	nts who do no	t			12
	require	e special die	ets: adults, c	hildren				
Unit II	Planni	ng soft diet	and liquid d	iets.				12
Unit III	Unit III Planning diet in fevers						12	
Unit IV	IV Diet for underweight children						12	
Unit V	Diet for obese						12	
Unit VI	Identification of common textile fibers, yarns and fabrics						20	
Unit VII	Prepar	ation of bas	ic weaves o	n cardboard				15
Unit VIII	Prepar	ation of sam	ples: Screen	n printing, Bl	ock printi	ng, stencil		15
	printin	g, tie and d	ye and batik	with differe	nt dyes			
Unit IX	Visit to	o Dyeing &	Printing					10

Recommended Readings:

- Antia F.P. (1989). Clinical Dietetics and Nutrition. Third Edition. (pp- 226-239), Bombay, Oxford University Press.
- Bamji . S.M., Rao, P.N., and Reddy, V. Textbook of Human Nutrition. Pp-360-67. Oxford and IBH publishing Co Pvt Ltd.
- Banerjee, P.K. Principles of Fabric Formation 2014.1st Edition19 December 2014. ISBN-13: 978-1466554443 ISBN-10: 1466554444.

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literature- study- online.com, epg-pathshala, egyankosh.ac.in

Semester-V Bachelor in Home Science (Honours)

DSE-Entrepreneurship Development

No. of Hours-45+30

Course Title	Credits	Credit d	istribution o	of the course	Eligibility Criteria	Pre- requisite of the course (if any)	
		Lecture	i utoriur	Practice			
DSE-3 Entrepreneur ship Development	4	3	0	1	Passed class XII with science, Arts and commerce	Nil	
		Bachelo	r in Home S	cience (Hono	urs)		
Programme/(Bachelor in H	Class: Iome Scienc	e Y	ear: Third		Semester: Paper: DS	ter: Fifth • DSE-3	
Subject: Hom	_						
Course: DSE-	-3	C	ourse Title:	Entrepreneu	rship Develop	ment	
Course outco The student at t • To lear Manag • Creatir • Opport legal a	mes: the completion mabout the gement in the ng awareness cunity idention nd manageri	on of the co importance e developm s regarding fication, pr al aspects.	ourse will be of entrepren ent of Indian entrepreneu roject report	able to: eurship Devel economy rial traits, entr preparation a	opment and Bu repreneurial sup and understand	port system, ing of	
Cr	redits: 4		DIS	CIPLINE SPI	ECIFIC ELEC	CTIVE	
Max. Marks:	As per Univ	V. Rule N	lin. Passing	Marks: As pe	r Univ. rules		
Unit	Unit Topics					No. of Hours	
Unit IEntrepreneurship: concepts, definition, need and significance of entrepreneurship development in India, Entrepreneur-their characteristics, types, Challenges faced by women entrepreneurs.					and ndia, es faced	5	

Unit II	Business organizations: Meaning and definitions, types of business	10
	organizations and their characteristics.	
	Business opportunities: Meaning and definition, characteristics of	
	business opportunities, sources of business opportunities, types of	
	business opportunities and analysis of business opportunities.	
	Business environment: Meaning and definition of business	
	environment, factors affecting business environment, importance of	
	business environment analysis.	
	Steps involved in functioning of an enterprise: Selection of the	10
Unit III	product / services, selection of form of ownership: registration.	
0	selection of s i t e . capital sources, legal requirement for starting	
	an enterprise.	
Unit IV	EDP: Entrepreneurship development program, types of EDPs, role	10
0	of financial institutions, and other Agencies in entrepreneurship	
	development	
Unit V	Enterprise management Basic management concepts personnel	10
Unit v	management product management material management	10
	financial management market management and crises	
	management	
	natural etc	
	natural etc.	
	Practical	
T	Assessment of entrepreneurial traits	5
1	Thematic Appreciation Test (TAT): Who am I?	5
	Paired comparison Test (PCT)	
	Sentence Completion Test (SCT)	
	Rick Taking Behavior (Ring Toss)	
Π	Interaction with successful antropropours	10
ш	interaction with successful entrepreneurs	10
III	Visit to financial institutions and support agencies	5
IV	Preparation of project proposal for funding by different agencies	10
Docommo	adad Daadings	
Dhowal	C D 2005 Entropropourship and Entropropourial Davidoproset New I	Doval
• Bnawal	, C. F. 2003. Entrepreneursnip and Entrepreneurial Development. New F	coyai
Compar		
• . Vasant	Desai. (2011). Entrepreneurial Development Potential beyond Boundar	nes;
TT' '		

- Gundry Lisa K. &Kickul Jill R.,2007, Entrepreneurship Strategy: Changing Patterns in New Venture Creation, Growth, and Reinvention, SAGE Publications, Inc.
- Taneja& Gupta, 2001, Entrepreneur Development- New Venture Creation, Galgotia Publishing Company.

Suggested Continuous Evaluation Methods: Since the class is conceived as learner-centric and built around tasks that require learners to actively use various language skills, formative Assessment can and should be used extensively. Oral presentations, peer interviews, and group tasks can be used for this purpose. The end-semester written examination will test all the areas targeted in the course.

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literaturestudy-online.com, epg-pathshala, egyankosh.ac.in

Semester-V Bachelor in Home Science (Honours)

GENERAL ELECTIVE GE-5- Population and Family Life Education

No. of Hours-60

Course Title	Credits	Credit dis	tribution of	f the course	Eligib Crite	ility eria	Pre- requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice			(ii any)
GE-5	4	4	0	0	Passee	1	Nil
Population					class X	KII	
and Family					with		
Life					scienc	e,	
Education					Arts a	nd	
		D. 1.1	II. C.		comm	erce	
		Bachelor 1	n Home Sci	ence (Honou)	rs)		
Programme/Cla	ss: Bachelor	•	Year: Th	ird	Se	mester:	Fifth
in Home Science	e				Pa	per: G	E-5
Subject: Home Se	cience						
Course: GE-5			Course 7	itle: Populati	ion and	Family	Life Education
Course outcome	s:						
The Student at th	e completio	n of the cour	se will be ab	ole to:			
• To understand	the perspec	tive of popul	ation and its	measures, gro	owth and	d develo	pment.
• To provide kn	owledge abo	out the family	y life educat	ion in students	5.		
Credits: 4			DISCIPI	LINE SPECI	FIC CO	URSE	
Max. Marks:	As per Uni	v. Rule	Min. Pass	ing Marks: A	s per U	niv. rul	es
Unit			Topi	CS			No. of
							Hours
Unit I	Population	in perspecti	ive, theories	of population	n educat	ion,	15
	Growth of	world popu	ilation, pop	ulation of Ind	ia, Indi	a´s C	
	population	problem in j	perspective,	socio-cultural	aspects	IO	
	population	growth in In	idia. Popula	tion policy in	India	of	10
Unit II	t II Measures of population composition and growth of						
	a) Measure	res of mortali	ity and life t	able			
	b) Measur	res of fertility	and reprodu	lotion			
Init IV	Population	$\frac{0.000}{\text{education }}$	leaning of p	pulation educ	ation		10
	need and in	nportance of	nonulation	education	unon,		10

Unit V	 Family life education a) Conception, pregnancy and pre-natal development process of conception, determination of sex techniques, fertilization techniques: amniocentesis, sonography, gift, I.V.F. and A.I., pregnancy and its management. b) Planning family: family planning and contraceptive technology, planned parenthood- spacing between children, size of family. 	15
Unit VI	Visit to a hospital	10

Recommended Readings:

- Nye.F.I., & Berardo. F.M. (1973). The family its structure and Interaction. New York: Mac. Millan Company
- Arcus, M.E., Schvaneveldt, J.D. & Moss, J.J. (1993). *Handbook of Family Life Education: Foundations of Family Life Education*. USA : Sage Publications, Inc.
- WHO, USAID and Johns Hopkins Bloomberg School of Public Health. (2007). *Family Planning: A Global Handbook for Providers*.

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literaturestudy-online.com, epg-pathshala, egyankosh.ac.in

Semester-VI Bachelor in Home Science (Honours) DICIPLINE SPECIFIC COURSE (DSC-16)- Food Science

No. of Hours-60

Course Tit	tle Credits	Credit Lecture 4	distribution the cour Tutorial 0	n of se Practical/ Practice 0	Eligibility Criteria Passed class XII with Science,	Pre-requisite of the course (if any) Nil		
Science					Commerce			
		Bachel	or in Home	Science (H	onours)			
Pro Bachel	ogramme/Cla lor in Home So	ss: cience	Yea	r: Third	Semeste Paper	er: sixth r: DSC- 16		
Subject:	Home Science	•			·			
	Course- DSC	-16		Course	e Title: Food Scien	ence		
 To provi Familia process 	 To provide an understanding of composition of various foodstuffs Familiarize students with changes occurring in various food stuffs as a resu processing and cooking. 							
	Credits: 4		L	DISCIPLIN	E SPECIFIC COU	JRSE		
Max. Ma	rks: As per U	niv. Rule	Min. Pas	sing Marks	s: As per Univ. rul	es		
Unit	Topics					No. of Hours		
Ι	 Introduction to Food Science Properties of foods Functions of foods Factors affecting appearance, taste, texture, flavor, color. 							
 II Changes during food processing and storage in – Fruits and vegetables; milk and milk products; meat and poultry; fish, eggs, cereals and legumes; nuts; oilseeds and spices. 						5		

III	Carbohydrates-	5
	• Functional role of sugars in foods- sweetness, texture, preservation, preservation, fermentation, appearance, maillard reaction, caramelization, freezing point, antioxidant activity, miscellaneous activity; sweetness; invert sugar.	
IV	 Proteins- Functional properties of protein- hydration properties, precipitation, viscosity, gelation, texturization, dough formation, surface properties. 	6
V	 Lipids- Functional properties of lipids- deep fat frying, deteriorative changes in fats/ oils, antioxidants 	6
VI	 Food polysaccharides- Functional properties of starch; hydrocolloids, on-starch polysaccharides, gums. 	4
VII	 Role of water in foods- Free water and bound water Functional properties Water activity Intermediate moisture foods. 	6
VIII	Sols, gel, emulsion; colloids, colloidal system, properties of solutions, foams.	4
IX	Enzymes and pigments: Biotechnological applications of enzymes; Natural pigments- sources and uses.	4
X	 Sensory evaluation- Importance Sensory panel Sample preparation Hedonic scale 	6
XI	Visit to Milk processing unit	10

Recommended Readings:

- Desroiser N. W. & Desroiser J. N. 1977. The Technology of Food Preservation. AVI Publication.
- > Potty V. H. and Mulky M. J. 1993. Food Processing. Oxford & IBH Publishing House.
- > Srilakshmi B. 2001. Food Science. New Age International.
- M. Shadakhsharaswamy and N. Shakuntala Manay. Food Facts and Principles, Mohindra Singh Sejwal for Wiley Eastern Limited, Ansari Road Daryaganj, New Delhi.
- > Mudambi, S. 1997. Food Science. New Age International (P) Limited Pub.

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literaturestudy-online.com, epg-pathshala, egyankosh.ac.in

Semester-VI Bachelor in Home Science (Honours) DSC-17 Fundamentals of Housing and Interior Decoration

CR	EDIT DI	STRIBUTI	ON. ELIG	BILITYAN	D PRE-F	REOU	NO. OF	Hours-60 IE COURSE
Cours	e Title	Credits	Credit distribution of the course		Eligibility Criteria	Pre- requisite of the course (if any)		
			Lecture	1 utoriai	Practic			
DSC Fundan of Housi Inter	C-17 nentals ng and rior	4	4	0	0		Passed class XII with science, Arts and	Nil
Decora	ation						commerce	
		~	Bachelor i	in Home Scie	ence (Hon	ours)		
Programme/Class: Bachelor in Home Science (Honours)				Year: Third			Semester: S DSC-17	ixth Paper:
Subject:	Home So	cience						
Co	ourse- DS	SC-17	Co	ourse Title: F	undamen De	itals of coration	f Housing and I on	nterior
Course of The Stud 1. 7 2. 7	outcome: lent at th Γο learn a Γο gain be	e completio bout elemen etter understa	n of the co ts and prine anding of in	ourse will be ciples of art a nterior enrich	able to: nd their aj ment.	pplicat	tion in interior c	lesigning.
	Credits:	4	U	DISCII	PLINE SF	PECIF	TIC COURSE	
Max. M	larks: As Rule	per Univ.	Min. Pas	ssing Marks:	As per U	niv. r	ules	
Unit	Topics							No. of Hours
Unit I	Unit IIntroduction to interior planning and decoration• Importance of interior planning and decoration• Current trends in interior decoration						5	
 Unit II Elements of design: Line, Form, Texture, Colour, Pattern, Light, Space Objectives of interior decoration Principles of designs: Proportion, Balance, Emphasis, Harmony, Rhythm 					5			
Unit III	Colour: • Char • Qual	acteristics of ities of colou	f colour 1r					5

r		
	 Properties of colour Emotional effect of colour 	
	 Colour wheel 	
	Colour schemes	
	• Use of colour in interior decoration	
	Planning of colour schemes of different areas in the house	
Unit IV	 Planning for various background areas of the house and their treatment Floor: Types of floor covering, care and maintenance and Selection of floor covering Walls: Types of building walls, Types of wall treatments Windows: Types of window treatment 	5
Unit V	 Functional and decorative accessories for interiors, Lighting: Importance, Types of lighting, Flower arrangement: Materials used, principles involved and Types of flower arrangements. 	10
	Home	10
	• Functions of home	
Unit VI	Renting verses owning house	
	• Advantages and disadvantages of renting and owning a house	
	• Factors to be considered in selection of family housing, selection of site, soil locality, orientation and sanitation of a house, principles of	
	planning a house, housing needs at different stages of family life	
	cycle.	
	Types of house planning	10
	• Floor plan,	
	• Site plan,	
Unit VII	Cross sectional plan,	
	Perspective plan, Elevation plan	
	 Elevation plan Landscape plan 	
Unit VIII	Housing finance	5
	 Government and non- government finance institutes. 	5
	Housing schemes	
	Technology in housing	5
Unit IX	Advance technology in housing construction	
	Low cost building technology	
	• Low cost building materials.	
Recommen	nded Readings	
Bhargay	va, B. 2001. Family Resource Management and Interior Decoration. Univer	sity Book
House I	Lu. Jaipur.	Inimur
 Dilarga Seethar 	va, D.2001 . HOUSING and Space Management, University BOOK HOUSE Ltd. aman P and Sethi M (2002) Interior Design and Decoration CRS Published	Jaipur. ers and
Distribu	itors. New Delhi.	1.5 uilu
• Gewthe	r, M. (1970).The Home, its Furnishings and Equipment U.S.A. Mc. GrawH	Hill.
• Gupta, 6	G. Garg, N. and Aggarwal, N (2007). Text Book of Family Resource Manag	gement
Hygien	e and Physiology. Kalyani Publishers.	
Suggester	d equivalent online courses: On Swayam, Vidyamitra.inflibne	t.ac.in,
Suggester	d Continuous Evaluation Methods: Seminar/ Presentation on any topic of	of the
above syl	labus \square Test with multiple choice questions/ short and long answer question	ns
Attendanc		

Semester-VI Bachelor in Home Science (Honours) DSC-18 Practical on DSC-17

CREDIT DI	STRIBUTION	FLIGIRI	LITVAND	PRE-REOUI	NO. 0 SITES OF THE	t Hours-120 COURSE	
Course Tit	le Credits	Credit d	Credit distribution of the course		Eligibility Criteria	Pre- requisite of the course (if any)	
		Lecture	Tutorial	Practical/ Practice		(in unif)	
DSC-18 Practical on DSC-17	4	0	0	4	Passed class XII with Science, Arts and Commerce	Nil	
		Bachelor	· in Home So	cience (Honou	irs)		
Progra Bachelor i (H	mme/Class: n Home Science onours)	2	Year: Thi	rd	Semester Paper: L	Semester: Sixth Paper: DSC-18	
Subject: Ho	me Science						
Cours	se- DSC-18		Co	urse Title: Pi	actical on DSC-1	7	
Course outc The Student 1. To le	ome: t at the complet earn about elem	ion of the c ents and pri	course will h nciples of ar	be able to: t and their app	lication in interior	designing.	
2. To g	ain better under	standing of	interior enri	chment.		P	
Ul Max Marl	eans: 4 ks• As ner Univ	Min P	DID Passing Mar	LIPLINE SPI ks: As ner Ur	iv rules	Ľ	
1 114A. 11 141 1	Rules	• • • • • • • • • • • • • • • • • • • •	ussing man	K5. 115 pci 01	inv. ruies		
Unit			Торіс	S		No. of Hours	
Unit I	Development	of motif for	primary, sec	condary and te	rtiary colours	10	
Unit II	Drawing color	ir wheel, co	lour scheme	s, values and i	ntensity scale	10	
Unit III	Drawing for an Kitchen, Draw	rangement ving Room a	of furniture i and Study R	n different roc oom	oms, Bed Room,	10	
Unit IV	Drawings for different surface arrangements of interiors 2 a) Arrangement of walls 2 b) Arrangement of floors 2 c) Ceiling arrangements 2						
Unit V	Market survey	- different	types of wal	l and floor cov	verings.	20	
Unit VI	Learning archi blue prints, de	tectural syr	nbols, plann of master pla	ing, preparing an	g and reading of	20	

Unit VII	Drawing of house plans for different income levels.	10
Unit VIII	Learning of drawing, isometric projections of house plan	10
Unit IX	Market survey to study the available building materials in the local market	10

Recommended Readings

- Bhargava, B. 2001. Family Resource Management and Interior Decoration. University Book House Ltd. Jaipur.
- Bhargava, B.2001 .Housing and Space Management, University Book House Ltd. Jaipur.
- Seetharaman P. and Sethi M. (2002). Interior Design and Decoration. CBS Publishers and Distributors. New Delhi.
- Gewther, M. (1970). The Home, its Furnishings and Equipment U.S.A. Mc. GrawHill.
- Gupta, G. Garg, N. and Aggarwal, N (2007). Text Book of Family Resource Management Hygiene and Physiology. Kalyani Publishers.

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literaturestudy-online.com, epg-pathshala, egyankosh.ac.in

Semester-VI Bachelor in Home Science (Honours) DSE-4 Textile Designing and Use of CAD

No. of Hours-30+60

Course 7	ſitle	Credits	Credit distribution of the course			se Eligibility Criteria	Pre-		
				1	· · · · · · · · · · · · · · · · · · ·		the course		
			Lecture	Tutorial	Practica Practic	al/ ce	(if any)		
DSE-4		4	2	0	2	Passed	Nil		
Textile						class XII			
Designing	g f					with			
CAD	1					Arts and			
						commerce			
			Bachelor	of Home Scie	nce (Hon	ours)			
Prog	rammo	e/Class:		Year: Third		Semester:	Sixth		
Bachelor	of Ho	me Science	2			Paper:	DSE-		
			Su	biect: Home	science				
C	ourse-I	DSE-4	(Course Title:	Textile D	esigning and Use of	of CAD		
Course of	utcome	es: The Stu	dent at the	completion of	the cours	e will be able to:			
• To intr	oduce	them about	various adv	vanced Textile	e and Appa	arel Designing softv	vare		
packag	ges and	develop th	ne creativity	y of the studer	nts in use	of CAD software.			
Mox M	Cr orke:	eaits: 4		Min	Disciplin Possing n	e Specific Elective	Dules		
	ai ks. 1	As per Unit	v. Kules		i assing n	lai ks. As per Univ.	No of		
Cint		Hours							
	Intr	oduction to	o textile de	signs.			6		
Unit I	• W	oven desig	n: simple a	nd compound	structures	s of the fabric			
	• Decorative designs: Ethnic designs, historic designs,								
	contemporary designs, abstract designs, stylized designs,								
Unit II	geometric designs, naturalistic designs, Kealistic designs Application of various design elements and principles in toxtile								
	designing design elements and principles in textile 6								
Unit III	Fancy and ornamental weaves: Pile weave, leno weave, tapestry								
	weave, dobby, jacquard weave and extra yarn								
	figur	ing							
Unit IV	Auto	matic Prin	ting technic	ques: Roller, s	screen, he	at transfer	4		
	printing, flock printing, resist printing.								

		1
Unit V	Basics of Design and Repeat software: Types of design repeats,	4
	Tools for designing, Drawing and Editing different menus	
Unit VI	Creating and editing motifs, Adaptation of basic motif for design	4
	organization, use of computer colour palette for colouring the	
	designs	
	Practical	•
Unit I	Demonstration of Basic of design and repeat software CAD	5
Unit II	Demonstration of Coral Draw Window	5
Unit III	Creation of textile design in Coral Draw	10
Unit IV	The Harmony of Colour Form	5
	Colour Wheel and Colour Scheme	
	Harmony according to colour wheel	
Unit V	Design development: All over design, Border design, Spot design	5
	and Pallav design	
Unit VI	Design Development from Basic Motifs	5
Unit VII	Weaving: Graphical representation of straight draft plan, lift plan	5
	and tie-up of plain weave and its variations	
Unit	Creating library for various designs (Ethnic designs, historic	5
VIII	designs, contemporary designs, Abstract designs, Stylized designs,	
	Geometric designs, Naturalistic designs, Realistic designs)	
Unit IX	Preparing two dress material/household articles using CAD	5
	software.	
Unit X	Visit to Fashion Institute	10

Suggested Readings:

- CAD design software manuals
- Davis L Msrisn. 1980. Visual Design in Dress. PrenticeHall.
- Rene Weiss Chase 1997. CAD for Fashion Design. PrenticeHall.
- Winfred Aldrich 1992. CAD in Clothing & Textiles. BSP ProfessionalBooks.
- Yates MP. 1996. *Textiles A Handbook for Designers*. W.W.Norton.

Suggested Digital Platform:

http://ecoursesonline.iasri.res.in/course/view.php?id=196

Semester-VI Bachelor in Home Science (Honours) GE6- Programme Planning, Implementation and Evaluation

No. of Hours-60

Course Ti	itle (Credits	Credit distribution of the course			Eligib Crito	ility eria	Pre- requisit e of the course(i f any)
			Lecture	Tutorial	Practical/ Practice			
GE-6		4	4	0	0	Passed	class	Nil
Programme						XII	with	
Planning,						science	,	
Implementa	tion					Arts	and	
and Evaluat	tion					comme	erce	
		Ba	achelor in H	lome Scien	ce (Honours)			
Programm	ne/Class:		Y	ear: Third			Semest	er: Fifth
Bachelor in	n Home						Pape	er: GE-6
Scien	ice							
Subject: He	ome scien	ice						
Course:	GE-6		Course Ti	tle: Progran ar	nme Planning Id Evaluation	g, Impleı n	mentat	ion
Course out	tcomes:							
The Student	t at the co	mpletion	n of the cour	se will be a	ble to:			
• To under	stand abou	ut impor	tance, objec	tives and pr	inciples of ext	ension p	rogram	me
planning.	•							
• To learn a	about exec	cution, 1	nonitoring and evaluation of extension progra				mme p	lanning.
	Credits:	4			GENERIC	ELECT	IVE	
Max. Mar	:ks: As pe	er Univ.	Rule N	Ain. Passing	g Marks: As	per Univ	rules.	
Unit				Topics			No	of Hours
Unit I	Extens	ension Programme: meaning and definition, need						10
	and Ch	aracteri	stic.		~ .			10
Unit II	Extensi	sion Programme Planning: meaning and definition,						10
	1mporta	ance, ob						
TI24 TTT	plannin	ıg.	1 1 0		(f. 1 1			10
Unit III	Leader	: meani	ng and defin	nition, quali	ties of a leade	er,		10
	Kole of a leader, types of leaders.							

		20							
	Execution of programme: steps/ procedures in programme	20							
Unit IV	execution, Role of leaders, local bodies, organisations and								
	extension agencies in programme execution, constraints in								
	programme implementation at grass root level								
Unit V	Monitoring and evaluation: definition, importance.	10							
	types principles	-							
Recommen	ded Readings:								
Dohomo	\mathbf{OP} and Bhatnagar \mathbf{OP} (1087) Education and Co	mmunication for							
• Danama	nont Oxford and IDH Dublishing Co. Now Dolhi	minumeation for							
Developi	There, Oxford and ID11 Fuorishing Co., New Denn.	1							
• Leagans	, J.P. (1961). Programme Planning to Meet People's Nee	ds. In: Extension							
Education	n in Community Development, Directorate of Extension, Mir	nistry of Food and							
Agricultu	rre, Govt. of India. New Delhi.								
• Ray, G.I	. (2001). Extension Communication and Management. Nava	Prakash, Calcutta,							
4th editio	n.	, , ,							
 Sandhu 	A S (1994) Extension Programme Planning Oxford and IB	H Publishing Co							
• Sanunu, New Del	hi	III I ublishing Co.,							
Sume S V (III. (1092) An Introduction to Extension Education Oxford and IDI	I Co. Now Dolhi							
Supe, 5. v. (1965). An introduction to Extension Education, Oxford and IBI	A Co., New Defm.							
• Swanson	, Burton, E. Ed. (1984). Agricultural Extension. A Reference	e Manual, Rome,							
Food and	Agricultural Organization (FAO), of the United Nations, 2nd	Edition.							
Suggested	equivalent online courses: On Swayam, Vidyamit	ra.inflibnet.ac.in,							
literature-s	tudy-online.com, epg-pathshala, egyankosh.ac.in	,							
	nteruture study ommeteom, epg putushala, egyankoshlaem								
Suggested (Continuous Evaluation Methods: Seminar/ Presentation on	any topic of the							

above syllabus \square Test with multiple choice questions/ short and long answer questions \square Attendance

Semester-VII

Bachelor of Home Science (Honours with Research/Academic projects/ Entrepreneurship)

DSC-19 Food Service Management

No. of Hours-120

Course Title	e Credits	Credits Credit distribution of the course				Pre-requisite of the course (if ony)		
		Lecture	Tutorial	Practical/ Practice		(II any)		
DSC-19 Food Service Managemen	1 4 t	0	0	4	Passed class XII with science, Arts and commerce	Nil		
Bac	chelor of Hor	ne Science	(Honours w Entreprene	ith Research/A urship)	Academic proje	ects/		
Programme: Science (Hon Research/Aca Entrepreneu	Programme: Bachelor of Home Science (Honours with Research/Academic projects/Year: FourthSemester: Seventh Paper: DSC-19							
Subject-Ho	me Science							
Course- DSC	-19	(Course Title	: Food Service	Management	(Practical)		
Course Outcon • To learn ab • To enhance	mes: The stud out the conce the students	dents at the ept of training about diffe	completion ng rent training	of the course w methods and t	ill be able to: heir use			
Credits: 4 Max. Marks	s: As per Uni	v. rules	Discipline S Min. Passin	pecific Course g Marks: As p	e er Univ. rules			
Unit			Торі	CS		No. of Hours		
Unit I	Standardiza cost.	tion of recip	pes of snacks	and meals for	portion and	20		
Unit II	Running a c	canteen for	fifty persons	•		40		
Unit III	Planning, p	reparation a	and service for	or special occas	ions.	40		
Unit IV	Visit to nea	rby food se	rvice institut	ions.		20		
 Suggested R Food Serv Someone Restaurant Basics Ser 	eadings: . ice Managem Who Did. By t Marketing fe ies, publishe	nent: How to Bill Wentz or Owners a r.	o Succeed in z. Atlantic P and Manager	the High-risk F ublishing Grou s. By Patti J. Sł	Restaurant Busin p. hock. Wiley Res	ness by taurant		
• The Non-C	Commercial H	Food Servic	e Manager's	Handbook: A	Complete Guid	e for		

Hospitals, Nursing Homes, Military, Prisons, Schools and Churches. By Douglas R. Brown and Shri Henkel. Atlantic Publishing Group Inc.

- Managing Food and Nutrition Services for Culinary, Hospitality, and Nutrition Professions. By Sari Edelstein, editor. Jones and Bartlett Learning, publisher.
- Catering Management.Mohini Sethi and Surjeet Malhan. Revised second edition.New Age international Limited Publishers.

Semester-VII

Bachelor of Home Science (Honours with Research/Academic projects/ Entrepreneurship)

DSE-5 Research Methodology

No. of Hours-60

Credits	Credit di	stribution o	of the course	Eligibility	Pre-requisite of	
				Criteria	the course (if	
	Lecture	Tutorial	Practical/ Practice		any)	
4	4	0	0	Passed	Nil	
				class XII		
				with		
				science,		
				Arts and		
	~ . ~			commerce		
or of Hom	e Science (F	Honours wit	th Research/A	cademic projec	ts/	
chelor of	<u>г</u> Уея	r: Fourth	n smb)	Semester: Sex	zenth	
lonours wi	th	ii • I oui ui		Paper: DSE-	5	
nic projec	ts/				-	
ip)						
Science						
	Cou	ırse Title: R	Research Meth	odology		
: The stude	ents at the c	ompletion o	of the course wi	ill be able to:		
t the conce	ept of trainin	ng				
e students	about diffe	rent training	methods and t	their use		
	Di	scipline Spe	ecific Elective			
s per Univ.	rules M	in. Passing	Marks: As per	Univ. rules		
		Тор	pics		No. of	
					hours	
Research	Methodo	ology: An	Introduction	, Meaning c	f 12	
Research	, Objectiv	res of Res	search, Types	s of Research	l,	
Research Approaches, Significance of Research, Research						
Process.	Dagion	anning and	definition of a	maling Store	n 10	
Sampling	, Design: III	ritoria of Se	allocting a Sam	unpung, Steps 1		
Character	ristics of a	Good Sam	nle Design D	ifferent Types of	, f	
Sample	Designs n	robability s	ampling and	non- probabilit	VI V	
sampling	Hypothes	es types of	hypothesis va	riables and type	y S	
of variab	les.	co, cypes of		ind type		
	Credits Credits 4 A or of Home chelor of lonours wi nic projec p) Science science e students s per Univ. Research	Credits Credit dial Image: Credit dial Image: Credit dial Image: Credit dial Image: Credit dial 4 4 4 4 Image: Credit dial Image: Credit dial or of Home Science Image: Credit dial Chelor of Home Sciences Yea Image: Credit dial Yea	CreditsCredit distribution of I lectureTutorial440440a 4 4 a 4 4 a 4 4 b <td>Credit distribution of the course Lecture Tutorial Practical/ Practice 4 4 0 0 4 4 0 0 or of Home Science (Honours with Research/A Entrepreneurship) chelor of Ionours with nic projects/ p) Science Course Title: Research Meth s: The students at the completion of the course wit t the concept of training e students about different training methods and the course wit t the concept of training Discipline Specific Elective s per Univ. rules Min. Passing Marks: As per Topics Research Methodology: An Introduction Research, Objectives of Research, Types Research Approaches, Significance of Research Process. Sampling Design: meaning and definition of sa Sampling Design, Criteria of Selecting a Sam Characteristics of a Good Sample Design, D Sample Designs, probability sampling and sampling. Hypotheses, types of hypothesis, va of variables.</br></td> <td>Credits Credit distribution of the course Eligibility Criteria Lecture Tutorial Practical/ Practice Criteria 4 4 0 0 Passed class XII with science, Arts and commerce or of Home Science (Honours with Research/Academic project Entrepreneurship) Semester: Sev Paper: DSE- nic projects/ p) Semester: Sev Paper: DSE- science Science Year: Fourth Semester: Sev Paper: DSE- science Science Semester: Sev Paper: DSE- science Discipline Specific Elective s per Univ. rules Min. Passing Marks: As per Univ. rules Discipline Specific Elective s per Univ. rules Min. Passing Marks: As per Univ. rules Research Methodology: An Introduction, Meaning of Research, Objectives of Research, Types of Research Process. Sampling Design: meaning and definition of sampling, Steps i Sampling Design, Criteria of Selecting a Sampling Procedure Characteristics of a Good Sample Design, Different Types of Sample Designs, probability sampling and non- probabiliti sampling. Hypotheses, types of hypothesis, variables and type of variables.</td>	Credit distribution of the course Lecture Tutorial Practical/ Practice 4 4 0 0 4 4 0 0 or of Home Science (Honours with Research/A Entrepreneurship) chelor of 	Credits Credit distribution of the course Eligibility Criteria Lecture Tutorial Practical/ Practice Criteria 4 4 0 0 Passed class XII with science, Arts and commerce or of Home Science (Honours with Research/Academic project Entrepreneurship) Semester: Sev Paper: DSE- nic projects/ p) Semester: Sev Paper: DSE- science Science Year: Fourth Semester: Sev Paper: DSE- science Science Semester: Sev Paper: DSE- science Discipline Specific Elective s per Univ. rules Min. Passing Marks: As per Univ. rules Discipline Specific Elective s per Univ. rules Min. Passing Marks: As per Univ. rules Research Methodology: An Introduction, Meaning of Research, Objectives of Research, Types of Research Process. Sampling Design: meaning and definition of sampling, Steps i Sampling Design, Criteria of Selecting a Sampling Procedure Characteristics of a Good Sample Design, Different Types of Sample Designs, probability sampling and non- probabiliti sampling. Hypotheses, types of hypothesis, variables and type of variables.	

	Methods and tools of data collection: Collection of Primary	12
Unit III	Data, Observation Method, Interview Method, Collection of	
	Data through Questionnaires, Collection of Data through	
	Schedules, Difference between Questionnaires and Schedules,	
	Collection of Secondary Data,	
	.Data processing methods, Graphical Representation of data,	12
Unit IV	General guidelines for presenting data, tables, graphs and	
	illustrations, Interpretation and generalization and analysis of	
	data.	
Unit V	Scientific reporting, points to be considered in report writing,	12
	Footnotes, Bibliographic citation, Citation style, Preparation of	
	an abstract	

Suggested Readings:

- C. R. Kothari, GauravGarg, 2014 Research Methodology Method and Techniques, (IIIrdedition), New age International Publishers.
- C R. kothari research methodology methods and techniques Wiley eastern.limited
- Bandarker, P.L. and Wilknson T.S. 2000, Methodology and Techniques of Social Research, Himalaya Publishing House, Mumbai.
- Bhatnagar, GL. 1990: Research Methods and Measurements in Academy, New Delhi.
- Dooly, D, 1995, Strageies for interpreting Qualitative data: sage Publication California

Suggesteddigital platform

- **Chrome**extension://efaidnbmnnnibpcajpcglclefindmkaj/https://southcampus.uok.edu.in /files/link/
- downloadlink/rm%20u1%20p1.pdf
- chromeextension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.uou.ac.in/sites/defa ult/files/
- slm/BHM-503T.pdf
- chromeextension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.uou.ac.in/sites/defa ult/files/
- slm/BHM-503T.pdf

Semester-VII

Bachelor of Home Science (Honours with Research/Academic projects/ Entrepreneurship)

DSE-6 Marriage and family dynamics

No. of Hours-60

Course Ti	tle	Credits C		t distributio course	on of the	Eligibility Criteria	Pre- requisiteof	
			Lecture	Tutorial	Practical/ Practice		(if any)	
DSE-6		4	4	0	0	Passed class	Nil	
Marriagear	nd					XII with		
family						science, Arts		
dynamics						and		
B	achel	or of Hom	e Science (1	Honours wi	th Research/4	commerce	rts/	
	action		E Belence (I	Intreprenet	irship)	seaucine projec	. (.5)	
Programme	: Bacl	helor of	Year	r: Fourth	······································	Semester: Se	eventh	
Home Scien	ce (H	lonours				Paper: DSE	2-6	
with Researc	ch/Ac	ademic						
projects/		、 、						
Entrepreneu	irship	<u>))</u>						
Subject-He	ome S	Science				a •1 1 •		
Course- DSE-6 Course Title: Marriage and family dynamics							S	
Course outco	omes:	The Stude	ent at the co	mpletion of	the course wi	Il be able:		
• To provi	ide sti	idents with	an overvie	w of change	lng families ir	changing times		
• To help	Stude	ins examin	e uie issues		iose interperse			
Credits: 4			Dis	cipline Spe	cific Elective			
Max. Mark	s: As	per Univ.	rules Mi	n. Passing N	Marks: As per	r Univ. rules		
Unit		1		Topi	ics		No. of	
	Ma	arriage co	ncept and	meaning:			10	
Readiness of marriage-physiological, social, psychological and								
Unit I	Unit I others							
	 premarital guidance and counseling 							
Unit II Family:								
	•	Definition	, function,	composition	and type			
	•	Family life	e cycles					
	Break up of family:	15						
---------	--	----						
	• Divorce							
	Separation							
	• single parenthood							
Unit IV	• death of a partner,							
	Crisis in family life:							
	• prolonged illness							
	• death							
	• suicide							
	• mental illness							
	• unemployment							
	Family planning motivation and responsibility-	15						
Unit V	Planning parenthood-spacing between children							
	• Size of the family							
Unit VI	Legal aspects: :	1(
	• laws regarding marriage							

- 1. Introduction to family life education. Dr. Subhakanta Mahapatra. SOITS, IGNOU.
- 2. Lemme, B. (2006) Patterns of changes in family relationship. Pregnancy and infant in the family. Families with pre-school and school age child and adolescent. Development in adulthood (4th ed.). New York, NY: Pearson.
- 3. Gottman, J., & Silver, N. (2015). The seven principles for making marriage work. New York, NY: Harmony.
- 4. Lamanna, M. A., Riedmann, A., & Stewart, S. (2015). Marriages, families, and relationships: Making choices in a diverse society (12th ed.). Belmont, CA: Wadsworth , Cengage Learning.
- 5. Olson, D. H., DeFrain, J. & Skogrand, L. (2013). Marriage and families: Intimacy, diversity, and strengths (8th ed.). New York, NY: McGraw-Hill Education.

Suggested Digital Platform:

• <u>https://onlinecourses.nptel.ac.in/noc22_ag03/preview</u>

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus Test with multiple choice questions/ short and long answer questions Attendance

Semester-VII

Bachelor of Home Science (Honours with Research/Academic projects/ Entrepreneurship) GE- 7 Early Childhood Education (Theory)

No. of Hours-60

Course Title	e Credits	Credit distribution of the course		Eligibility Criteria	Pre-requisite of the course (if		
		Lecture	Tutorial	Practical/ Practice		any)	
GE-7 Early Childhood Education	4	4	0	0	Passed class XII with science, Arts and commerce	Nil	
Bac	cts/						
Programme: Bachelor of Home Science (Honours with Research/Academic projects/ Entrepreneurship) Year: Fourth Semester: Seven Paper: GE-7						enth	
Subject-Ho	me Science	G					
 Todevelo To equip Credits: 4 	on, Programme						
Unit	As per Univ.	rules IVI	m. Passing Topie	marks: As p cs	er Univ. rules	No. of hours	
I	Early Childhood Period and education: • Characteristics of early childhood period • Significance of early childhood period • Early Childhood Education: Meaning, Concept and significance						
п	Need for ECE Origin of early childhood education in India and abroad: Status of ECE - Pre independence period Status of ECE during Dest independence Desied						
III Different types of Pre School programmes: • Montessori, • Kindergarten,						5	
	Nursery,Pre-Basic,Balwadi						
IV	 Early Childhood Education Center: Need for ECE centers Objectives of Early Childhood Education center ECE center Basic requirements 						

	Western philosophers and their contributions for ECCE:	8
	Contributions of John Amos Commonius	
\mathbf{V}	Contributions of Jean Jacques Rousseau	
	Contributions of Henry Pestalozzi	
	Contributions of Maria Montessori	
	Contributions of Indian Philosophers to Early Childhood	8
VI	Education:	
	Contributions of Mahatma Gandhi	
	Contributions of Rabindranath Tagore	
	Contributions of Tarabai Modak	
	Curriculum planning in ECE Programme:	8
	Types of planning	
VII	Steps in Curriculum Planning	
	Characteristics of curriculum planning	
	• Factors influencing Curriculum Planning in ECE: Child related,	
	Parent related, Center/ School related	
	The play-way method for ECE:	8
	Origin of the Term Play-Way	
	Selection of Play-Way Activities	
VIII	 Various types of Play-Way Activities 	
	Principles of Play-Way	
	Advantages of Play-Way	
	Application of Play-Way Attitudes in progressive methods of	
	teaching	
	Play Activities in the ECE center:	5
IX	• Nature of Play,	
	Purpose and functions of play	
	• Types and purpose of different play activities	
	The Qualities of an ECE Teacher:	3
Χ	• Important characteristics of an early childhood teacher	
	Teachers' role in promoting learning	
XI	Records and Reports maintained in ECE center	2

• Bhatia&Bhatia(1995).TheoryandprinciplesofEducation,DoabaHouse,Delhi.

• Brewe, J.A. 1998 Introduction to early childhood Education 3rd Ed. Boton: Ahyn & Bacaon.

• Murlidharan,R.[1996].Guide to nursery school teacher .New Delhi NCERT.

• Pankajam,G.[1994]Preschool Education .Ambala: India Pub.

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus Test with multiple choice questions/ short and long answer questions Attendance

Semester-VII

Bachelor in Home Science (Honours with Research) DISCIPLINE SPECIFIC ELECTIVE (DSE-7)- Introduction to Extension Education

No. of Hours-60

Course Title DSE-7 Introduction to Extension Education	e Credits n on 4	Cred Lecture 4	it distribut Tutorial 0	ion of the co Practical/I 0	urse Practice	Eligibility Criteria Passed class XII with	Pre- requisite of the course (if any) Nil		
						science, Arts and commerce			
	Ba	chelor in H	lome Scienc	e (Honours v	with Resea	arch)			
Programme/ Bachelor in H (Honours wi	Programme/Class: Bachelor in Home Science (Honours with Research)			Year: Fourth Seme Pa			ster: Seventh aper: DSE-7		
Subject: Ho	ome Science								
Cour	rse : DSE-7		Course titl	le: Introduct	ion to Ex	tension Educa	ation		
 Course Out After studyin To unders its contribution 	ng this course, stand the conce pution.	the student pt, philosop	ts will be ab	le to: les and object	ives of ext	tension educat	ion and		
• To learn a	and understand	about the c	lifferent dev	elopment pro	ogrammes	acific Course			
Max. Mar	ks: As per Un	iv. Rules	Mini. Pa	ssing Marls:	As per U	niv. Rules			
Unit	Unit Topics					No. of Hours			
Unit I	Origin and co extension edu	ncept of ex cation, Pri	tension educ nciples of e	cation, objecti xtension educ	ves, funct	ions of	10		
Unit II Pre-Independence Extension and Rural Development Programmes: Gurgaon project, Sri Niketan Experiment, Marthandam Project, Sarvoday Programme.						10			

Unit III	Post-Independence Extension and Rural Development Programmes:Itawa Pilot Project (1948), Nilokheri Experiment, CommunitiyDevelopment Project, National Extension Service, Training and VisitSystem, Integrated Rural Development Programme.	10
Unit IV	First-line extension system of ICAR; National demonstration (ND), Operational Research Project (ORP), Krishi Vigyan Kendra (KVK), Lab to Land Project (LLP).	10
Unit V	Extension teaching methods: individual, group and mass contact methods, Factors influencing in selection of extension teaching methods	10
Unit VI	Visit to nearby KVK	10

Recommended Readings:

- Adivi Reddy.A, Extension Education, seventh edition, Sri lakshmi Press, Bapatla
- Agarwal J.C. 2007 Textbook on Essentials of Educational Technology Innovations in Teaching –Learning, second edition, Vikas Publishing House Pvt Ltd.
- Sumita Roy, Tej Verma and Pushpa Gupta 2006 textbook on family approach in extension programme management, first edition, Indian Council of Agricultural Research, New Delhi.
- Dahama O.P. and Bhatnagar O.P, Education and Communication Development, second edition, oxford and IBH publishing pvt. Ltd,calcutta.
- Ray GL (1996) Extension Communication and Management, Naya Prakash Publications, Calcutta.

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literature-study-online.com, epg-pathshala, egyankosh.ac.in

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus Test with multiple choice questions/ short and long answer questions Attendance

Semester-VII

Bachelor of Home Science (Honours with Research/Academic projects/ Entrepreneurship)

GE-8 Principles of Food Preservation

No. of Hours-45+30

Course 7	ſitle	Credits	Credi	t distributio	on of the	Eligibility	Pre-requisite
			course			Criteria	of the course
			Lecture	Tutorial	Practical/ Practice		(II ally)
GE-8		4	3	0	1	Passed class	Nil
Principles	s of					XII with	
Food	•					science, Arts	
Preservat	ion					and commerce	
Bachelor	of Ho	ne Science	e (Honours	with Resea	rch/Academi	c projects/ Entr	epreneurship)
			`			1 9	
Programm	ne: Bao	chelor of H	ome	Year: H	ourth	Semester: Seve	nth
Science (H	lonour	s with	4-2			Paper: GE-8	
Kesearch/	Acade	mic projec	:ts/				
Entrepren	cui sin	(h)					
Subject-1	Home	Science					
Course- G	E-8		Cours	e Title: Pri	nciples of Foo	od Preservation	
Course or	utcom	es: The Stu	udent at th	e completio	on of the cour	se will be able to):
• Descri	be diff	erent proce	essing and f	ood preserv	ation techniqu	es based on diffe	rent food
materi	als lik	e low temp	erature pro	cessing, hig	temperature	processing, irra	diation,
preser	vation	by chemic	als and high	n concentra	tion.	ad to procomia fo	ada and
List di factors	influe	noing the	shelf-life of	f the food p	us methous us	ed to preserve to	ous and
Identif	s minu fv diffe	rent nacka	oing technic	wes used fo	r food nackagi	ing and also effect	ts of different
proces	ssing te	chniques c	on palatabil	itv and nutr	itive value of	food.	
• Write	down t	he basic pr	inciples of	different pro	eservation met	thods.	
Credits: 4			Gene	ric Elective	<u> </u>		
Max. Mar	•ks: As	s per Univ.	rules Min.	Passing M	arks: As per U	Jniv. rules	
Unit				Topics			No. of hours
Unit I	Food	processing	g and prese	rvation prir	ciples, metho	d of preservation	n: 10
	paste	urization	(definition	n, time-te	mperature c	ombination ar	d
	equip	ment) ster	ilization (d	lefinition, t	ime-temperatu	re combination	
	and	equipme	nt), blar	nching (d	letinition,	time-temperature	
	comb (defin	nition man	u equipme	ni, adequac	y in dianchin	g), canning	
	(ueill	muon, man	uracturning	process, del	icuts of calls)		

Unit II	Freezing and Refrigeration: Introduction to refrigeration, cool storage;	15
	Freezing: introduction, principle of freezing, freezing methods- air	
	freezing, plate freezing, liquid immersion freezing and cryogenic	
	freezing, changes during freezing, advantages and disadvantages of	
	freezing and changes in food during freezing storage; introduction to	
	thawing, changes during thawing and its effect on food.	
		10
Unit III	Food drying/ dehydration: definition, free and bound moisture,	10
	concept of water activity, factors affecting drying, moisture content	
	(wet basis and dry basis), drying methods and equipment: sun/solar	
	drying, cabinet dryer, tunnel dryer, spray dryer, freeze dryer, fluidized	
	bed dryer; changes in food during drying	10
Unit IV	Food irradiation- definition, units of radiation, mechanism of actions,	10
	uses of radiation processing in food industry, kinds of ionizing radiation	
	used in food irradiation; food fermentation.	
	Practical	
Unit-1	Preparation and pasteurization of fruit juice	10
Unit-1I	Dehydration and drying of fruits and vegetables, Preservation by	10
	freezing and refrigeration	
Unit -III	Visit to Food Processing Industry	10
Reference	es	
• Fellow	vs, P. Food Processing Technology Principles and Practices. CRC Press, Bo	oca Raton
Bostor	n New York Washington, DC.	
• Jonger	n, W. M. F. 2002. Fruit and Vegetable Processing: Improving quality, Woo	odhead
Publis	hing Ltd, England	
• Somos	gavi, L. P., Ramaswamy, H. S. and Hui, Y. H. 1996. Processing Fruits: Scie	ence and
Techn	ology, Vol 1. Biology, Principles and Applications. CRC Press, Florida	
• Smith	D. S., Cash, J. N., Nip, Y. K. and Hui, Y. H. 1997. Processing vegetables:	Science
and Te	echnology. Technomic Publishing Company Inc, USA.	
• Dauth	v. M. E. 1995. Fruit and Vegetable Processing. Food and Agriculture Organ	nization
of the	United Nations, Rome.	
Suggested	Continuous Evaluation Methods: Seminar/ Presentation on any topic of	f the
above sylla	bus Test with multiple choice questions/ short and long answer question	ns
Attendance		

Semester-VIII

Bachelor of Home Science (Honours with Research/Academic projects/ Entrepreneurship)

DSC-20 Apparel Designing

No. of Hours-120

Course	Credits	Credit distribution of the course			Eligibility	Pre-requisite of	
Title					Criteria	the course (if	
		Lecture	Tutorial	Practical/		any)	
		Lecture	i utoriai	Practice			
DSC-20	4	0	0	4	Passed class	Nil	
Apparel		-	_		XII with		
Designing					science, Arts		
					and		
					commerce		
Bach	elor of Ho	me Scieno	ce (Honours	with Research	/Academic project	s/	
			Entreprer	neurship)	I		
Programme: B	achelor of	i j	ear: Fourth	l	Semester:		
Home Science (Honours	with			Eighth Paper:		
Kesearch/Acad	emic proj	ects/			DSC-20		
Entrepreneurst	<u>up)</u>						
Subject-Home	e Science				•		
Course-DSC-2		(Course Title:	Apparel Desi	gning		
Course outcome	es: The Stu	dent at th	e completion	of the course v	vill be able to:		
• To enable s	tudent to n	nake patte	rn from sket	ch/photograph	C 1 · · · 1 · ·	6.1	
• To enable th	nem to obta	ain perfect	t fit and harm	ony between th	e fabric and design	of the	
Gradita: 4			Dissipl	ino Snaoifia Ca			
May Market A	s per Univ	miles	Min D	ne Specific Co assing Marks:	As per Univervles		
Unit		. Tules	141111. 1	assing wiarks. Fonics	As per Univ. Tules	No of hours	
Omt	Practica	1		ropies			
Unit I	Fashion	u illustratio	ns: Figure dra	wing with diffe	prent poses and style	s 40	
Cint I	Designin	ng of vari	ous colors v	okes sleeves a	nd accessories	з, то	
	Designir	ig and stv	ling with the	application of n	rinciples of pattern	20	
	making	rules		-rpireation of p	Pres of puttorn	20	
Unit II	a) Movi	ng, dividi	ng and combi	ining darts: Piv	ot and slash		
	metho	od	C	C I			
	b) Converting dart into seam lines Adding fullness in blouse by						
	gathe						
Unit III	Construe	15					
Unit IV	Skirts: si	ix gored s	kirt, circular	skirt and skirt o	on bias	15	
Unit V	Construc	ction of 3	formal dresse	s for different a	ige group using	20	
	different	construct	tion and deco	orative features			
Unit VI	Visit to 0	Visit to Garment Manufacturing Unit					

- Connie Amaden-Crawford. 1989. The Art of Fashion Draping. Fair ChildPubl.
- Janine Mee & Michal Purdy. 1987. *Modelling on the Dress Stand*. BSP Professional Books.
- Natalie Bray. 1994. Dress Fitting. Blackwell.
- **Suggested Digital Platform:**
 - http://ecoursesonline.iasri.res.in/course/view.php?id=196

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus Test with multiple choice questions/ short and long answer questions Attendance

Semester-VIII

Bachelor of Home Science (Honours with Research/Academic projects/ Entrepreneurship) DSE-8 Food Safety and Quality Control

No. of Hours-30+60

Course Title	Credits	Credit	distributio	on of the	Eligibility Criteria	Pre-request	uisite of the e (if any)
		Lecture	Tutorial	Practical/	-		
				Practice			
DSE-8	4	2	0	2	Passed class		Nil
Food					XII with		
Safety and					science, Arts		
Quality					and		
Control					commerce		
Ba	chelor of H	ome Scienc	e (Honour) Entrepro	s with Resea eneurship)	rch/Academic pr	ojects/	
Programme	Bachelor o	f Home	Year: F	ourth		Semeste	er:
Science (Hor	nours with					Eighth	
Research/Ac	ademic pro	ojects/				Paper:	
Entrepreneu	rship)	•				DSE-8	
Subject-Ho	ome Science	e e e e e e e e e e e e e e e e e e e					
Course- DSE	-8		Course	Title: Food	Safety and Quali	ity Contro	ol
Course outc	omes: The	Student at	the comple	tion of the c	ourse will be able	e to:	
• To famili	arize studen	ts to apply p	protocol for	safe food har	ndling techniques,	water and	
waste ma	nagement	11 7 1					
• To unders	stand the rol	e of food pa	ckaging an	d the import	ance of Nutrition l	abeling.	
• To analys	e conseque	nces of food	l poisoning	and infection	n on the health of i	individuals	5
To Under	stand the ba	sic principl	es food pres	servation me	thods		-
Credits: 4		<u> </u>	<u> </u>	I	Discipline Specific	c Elective	
Max. Marks	: As per Uni	iv. rules		I	Min. Passing Mar	ks: As per	Univ. rules
Unit				Topics			No. of
							Lectures
Unit I	Quality sta	ndards, assu	arance and f	factors affect	ing quality.		5
	Methods an	nd techniqu	es for asses	sment of foo	d quality.		5
	1. Objecti	ve evaluatio	on: Physica	l parameters	and their testing.		
Unit II	2. Sensor	y evaluatio	n: Sensory	characterist	tics of foods, con	nducting	
	sensory	, tests, sele	ection of t	aste panel,	type of tests- di	fference,	
	ranking	g, sensitivity	y and descri	ptive tests.			
	3. Nutritional evaluation: Proximate composition, iron, calcium.						
	phosph	orus, vitam	in C.				
Unit III	Food safety: Microbiological evaluation of raw material/products,						5
	microbiolo	gical limits	s, colony c	ount, colifor	rm streptococci a	nd their	
	indicators.						
Unit IV	Food adult	eration: con	nmon adult	erants and the	eir ill effects.		5
Unit V	Food stand	lards, food	laws and re	gulations: P	FA, Essential Cor	nmodity	5
	Act, FPO,	MPO, MM	IPO, Misbr	anding, BIS	, Agmark, Export	Quality	
	Control an	d Inspection	n Act.				

Unit VI	Food safety, safety hazards and risks, HACCP as a method to prevent	5
	food bore illness, ISO.	
	PRACTICALS	
Unit I	Estimation of proximate principles (moisture, crude fiber, total ash,	10
	crude protein and fat).	
Unit II	Estimation of iron and calcium.	10
Unit III	Estimation of vitamin C.	4
Unit IV	Physical testing of grains.	2
Unit V	Estimation of gluten in wheat.	10
Unit VI	Detection of adulterant in milk: Water and starch.	4
Unit VII	Detection of mineral oil and argemone oil in edible oils.	6
Unit VIII	Detection of adulterant in spices and condiments.	6
Unit IX	Sensory evaluation of foods using sensory score card and hedonic scale.	8
Suggested]	Readings:	

- Mahindra N. S, 2008, Food Additives, Characteristics, Detection and Estimation, APH Publishing Corporation, New Delhi
- Ward law G.M, Hamp J S, 2007, Perspectives in Nutrition, 7th edition, Mc Graw Hill
- The Food Safety and Standards Act along with Rules and Regulations, 2011, Delhi, Commercial Law Publishers (India) Pvt Ltd.
- Khanna K et al, 2013, Text Book of Nutrition and Dietetics, Phoenix publications
- Sethi P and Lakra P, Aahaarvigyaan, Poshanevam suraksha, 2015, Elite Publishing House. 6. Sharma S, Wadhwa A, 2003, Nutrition in the Community- a text book, Elite publishing house.

Suggested Digital Platform: http://ecoursesonline.iasri.res.in/course/view.php?id=196

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus Test with multiple choice questions/ short and long answer questions \Box Attendance

Semester-VIII Bachelor in Home Science (Honours) DSE-9 Textile Industry and Trade

No. of Hours-60

Course Title	Credits	dits Credit distribution of the			Eligibility	Pre-requisite of
			course		Criteria	the course (if
		Locturo	Tutorial	Practical /		any)
		Lecture	1 0101101	Practice		
DSE-9	4	4	0		Passed class	Nil
Textile	-	-	U	v	XII with	1 111
Industry and					Science, Arts	
Trade					and	
					Commerce	
		Bachel	or in Home	Science (Ho	onours)	
Progr	amme:		Year: For	urth	Semester: Eighth	
Bachelor of H	Home Science	e			Paper: DSE-9	
(Hor	nours)				-	
			Home	science		
Cour	se: DSE-9		Cours	e Title: Texti	le Industry and	
				Trade		
Course outco	omes:					
The Student	at the comp	letion of th	e course w	ill be able to		
Students w	fill be able to	understand	about the te	extile related	trades and recent	practices.
	Credits: 4	• 1		<u> </u>	eneric Elective	1
Max. Mark	s: As per Un	iv. rules		in. Passing n	harks: As per Uni	v. rules
Unit			Тор	DICS		No. of hours
Unit I	Textiles Ir	dustries of	India inclu	iding cottage	industries of	5
	handloom,	hosiery an	d sericultur	re		
Unit II	Importance	e of entrepro	eneurs and t	extile industr	ies in the Indian	5
	Economy					
Unit III	Five year p	plans and To	extile indus	tries		5
Unit IV	Marketing	concept				5
Unit V	Co-ordinat	tion of prod	uction with	consumer pr	reference for vario	ous 5
	textiles pro	oducts		-		
Unit VI	Factors inf	luencing th	e productio	n and consun	nption of textiles	5
Unit VII	Factors aff	ecting the c	cost of textil	e and pricing	policies	5
	Causes for	price fluctu	ations			5
Unit IX	Sales prom	notion techr	iques			5
Unit X	Import and	l export trai	isaction			5
Unit XI	Quality con	ntrol institu	tions and qu	uality regulati	ion in India	5
Unit XII	Different t	extile mills	, khadi and	village indus	stry commission,	5
	weaving	service co	enters, hai	ndloom sec	tor, co-operative	
	societies, r					

- Cooklin, G., *Introduction to Clothing Manufacture*. Blackwell Scientific Publications.
- Karpan., Change in Trends in Apparel Industry. Abhiskeh Publcation.
- Kathryn Moore Greenwood. Fashion Innovation & Marketing. MacmillanCo.
- Kitty Dickerson. Textiles & Apparels in Global Economy. Merrill PrenticeHall.

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus
above Test with multiple choice questions/ short and long answer questions
box Attendance

Semester-VIII

Bachelor of Home Science (Honours with Research/Academic projects/ Entrepreneurship) GE-9 Retailing and Merchandizing in Textile and Apparel

No. of Hours-60

Course Title	Credits	Credit distribution of the		Eligibility	Pre-requisite of	
		course		Criteria	the course (if	
		Lecture	Tutorial	Practical/	-	any)
		Leeture	1 avoi 141	Practice		
GE-9	4	4	0	0	Passed class	Nil
Retailing and					XII with	
Merchandizi					science, Arts	
ng-Textile					and	
and Apparel					commerce	
Bac	helor of Home	e Science (I	Honours wi	th Research/	Academic proje	cts/
		E	Intrepreneu	urship)		
Programme:	Bachelor of	Year: F	ourth		Semester: Eight	h
Home Science	e (Honours				Paper: GE-9	
with Research	1/Academic					
Subjects/ Entr	epreneursmp) no Scienco					
Subject- Hol	ne Science	C	T'41 D 4	· · · · · · · · · · · · · · · · · · ·		1. (•1.
Course- GE-9		Course	Title: Keta	lling and Me	rchandizing in 1	extile
Course outer	mos. Tho Stu	and Ap	parei complotio	n of the cour	so will be able to	•
• To dev	elon in denth k	nowledge	about Mercl	handizing	ise will be able u	J •
To dev	n about sales n	romotion to	acout Mere	nd export im	nort procedures	
Credits: 4	n about sales p		Conoric Flo		port procedures	
Max Marke	s• As per Univ	rules	Min Passir	o Marks• Δ	s per Univ rules	
Unit		. 10105	To	nics	s per entre rules	No. of hours
Unit I	Merchandizi	na termina	logy conce	ont and princip	nles	3
	Wierchandizh	ing. termine	nogy, conce		pies.	5
Unit II	Factors affect	ting Merch	andizing			3
Unit III	Role and resp	ponsibilitie	s of a merch	andiser		3
Unit IV	Merchandizi	ng for buyi	ng houses, d	lepartmental	stores and export	3
	houses.					
Unit V	Retailing- ter	minology a	and concept			5
Unit VI	Evolution of	retail and r	etail format	s		5
Unit VII	Sale promotio	on and pror	notion mix:	Advertising,	Sale promotion	10
	techniques, p	ersonal sel	ling, and pu	ıblicity.		
Unit VIII	Pricing meth	ods and pri	cing of text	iles		6
Unit IX	Marketing re-	search: mea	aning, scope	e and classific	cation. Steps in	8
Unit X	Fashion analy	vsis, foreca	sting and si	gnificance in	product planning	. 7
	a aomon anai	, 515, 101 00 a	sting und SI	5 mileunee m	Product plaining	
Unit XI	Export and In	mport: Cha	nnels of dis	stribution, sta	arting of export a	nd 7
	import busin	ess and its	procedure, o	organizations	s involved in exp	ort
	promotion in	India.				

- Mike Easey (1995) Fashion Marketing Blackwell science Lts, USA
- Pamela Stecker (1996) Fashion Design Manual Macmillan Education Australia Pvt, Ltd, South Yarra.
- Elaine Stone and jean A. Samples (1985) Fashion Merchandising –An Introduction Mc Graw-Hill Book Co, New York USA
- Jeanette Jarnow and Kitty Dickerson (1997) Inside the Fashion Business Merill Prntice Hall New Jersey
- Nancy .J. Rabolt & Judy .K.Miler (1997) Concepts and Cases IN Retail Management Fair Child Publications ,New York rd
- Pradhan, S. 2009. Retailing Mangement, edn. New Delhi, Tata McGraw-Hill Publishing Company Limit. 613p

Suggested Digital Platform:

- https://egyankosh.ac.in/bitstream/123456789/15023/1/Unit-1.pdf
- http://ecoursesonline.iasri.res.in/mod/page/view.php?id=30821

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus \Box Test with multiple choice questions/ short and long answer questions \Box Attendance

Semester-VIII

Bachelor of Home Science (Honours with Research/Academic projects/ Entrepreneurship) DSE- 10 Management of Child Care Center and Nursery School

No. of Hours-30+60

Course Title	e Credits	Credit	t distributio	on of the	Eligibility	Pre- requisite
			course		Criteria	of the course
		Lecture	Tutorial	Practical/ Practice		(if any)
DSE-10	4	2	0	2	Passed class	Nil
Management	t				XII with	
of Child Care	e				science, Arts	
Center and					and	
Nursery					commerce	
School		G . • (T)	•4		1	
Вас	chelor of Home	Science (H Ei	lonours wit ntrepreneu	n Kesearcn/A rship)	Academic project	ts/
Programme:	Bachelor of	Year	: Fourth	1	Semester: Eig	ghth
Home Science	e (Honours with	n 🛛			Paper: DSE	-10
Research/Aca	demic projects	/			-	
Entrepreneur	rship)					
Subject- Hom	e Science					
Course- DSE-	10	Cour	rse Title: M	anagement o	of Child Care Ce	nter and
Commo outoo	The Card	Nurs	ery School	f the course or		
Course outco	mes: The Stude	m about ab	ind come com	tore ond its m	ana accompany	
• Student wi	he student should	n adout ch	nd care cen	ing authors in	anagement.	
• To aware u	ne student abou		rinling Sno	nig synabus		
Max Marks	· As per Univ r		Min Passi	ng Marke: As	per Univ rules	
		uies	wiiii. 1 assii	lig Marks. As	per Oniv. Tutes	
Unit			Тор	bics		No. of hours
	Introduction					5
Ι	Child Care	Centers and	d Nursury S	chool		
	• Survey on c	community	needs with	regard to day	care centre/child	
	care centre.					
II	Management	of the cent	tre			5
	• Management	nt committe	ee for admir	histrative task	,	
	• layout plan	ning of day	care centre	/child care ce	entre,	
	Planning po	olicies of th	e centers,			
	• Procedures	and rules,				
	• Budgeting,					
	• Building,					
	• Equipment	s and close	d room plan	ning.		

	Utilization of resources:	2
	Hiring staff	2
ш	 analification and salary 	
	 qualification and salary, producing toys 	
	 procuring toys, equipments and furniture 	
	 Equipments and furniture, Maintaining records and registers 	
	Waintaining records and registers. Training in service stoff:	3
	• Mothods of communicating with children	5
IV	 Methods of communicating with clindren, Learning methods of handling shildren 	
1.4	Leanning methods of handning children, Setting class room limits	
	 Setting class foom limits, Observing and testing children 	
	• Observing and testing children.	2
V	Involving parents:	2
v	Building rapport with children,	
	• Arranging parent teacher conferences.	2
	Curriculum planning for young children:	3
X/I	Planning syllabus-	
VI	• Annual,	
	• Monthly,	
	• weekly and daily planning of activities.	~
	Planning play environment:	5
	Preparation and putting up play room for teaching young children,	
VII	a) Discussed in a methods	
VII	a). Play way teaching methods.	
	c) Planning music dramatization and story session	
	d) Putting up display of play equipment in classroom and	
	teaching methods	
	e). Preparation and submission of project report.	
	Observation of teaching in Nursery School and Building	5
	rapport with the children.	-
VIII	• Organizing and participating in the pre-school activities in:	
	1. Laboratory Nursery School.	
	2. Community Balwadi.	
	Practical	
Unit	Topics	No. of hours
Unit I	Plan out different activities and preparation of teaching aid and play	20
	materials for nursery school children	
Unit II	Visit to Day Care Centre and Participating in different activities	40
	conducting in a nursery school with children and report writing	
Suggested Re	adings:	
Contractor	r,M., 1984, Creative drama and puppetry in education, National book true	st of India,
Delhi		
Devadas P	P. Rajammal and N. Jaya (1996), "A Textbook on child development", N	IacMillan
India Ltd.	New Delhi.	1.5.1
Nasim Sid	diqi, Suman Bhatia and Suptika Biswas (2007) Early Childhood Care an	d Education –
Book IV,	DUABA HUUSE, New Delhi.	
• Sen Gupta	n, M. (2009). Early Childhood Care and Education. New Delhi: PHI Lear	ning Pvt. Ltd.
• Soni,R., 2	015, Theme based early childhood care and education programme- A Res	ource Book,
NCERT.	Continue Fueles that Matheda Continue (Description)	1
Suggested	Continuous Evaluation Methods: Seminar/ Presentation on any topic of the a	dove syllabus●
1 est with h	numple choice questions/ short and long answer questions• Attendance	

Semester-VII Bachelor of Home Science (Honours with Research) GENERAL ELECTIVE (GE-10) Household Equipment and Appropriate Technology

C	REDIT DIS	TRIBUTI	ON, ELIGII	BILITYAND	PRE	-REQU	No. of I ISITES OF TH	Hours- <mark>45+30</mark> E COURSE
Coι	ırse Title	Credits	Credit di	Pre-requisite of the course(if any)				
			Lecture	Tutorial	Pra Pra	ctical/ actice		
GE- 1 House Equij Appr Techi	l0 ehold pment and opriate nology	4	3	0		1	Passed class XII with science, Arts and commerce	Nil
		Bach	elor of Hon	ne Science (H	lonou	rs with I	Kesearch)	
P Bach (Hor	rogramme/ elor of Hom nours with H	Class: ne Science Research)	Yes	ar: Fourth			Semester: S Paper: Gl	eventh E-10
Subje	ect: Home S	cience	()			-		
a	Course- GI	£-10	Course T	itle: Househ	old Ec	luipmen	it and Appropri	ate Technology
The s	se outcome: tudent at th	e completi	ion of the co	urse will be a vative technol	able to ogy in): househ	old equipment.	
2. T	o understand	d the stude	nts about ma	rket of the ho	usehol	ld equipi	nent.	
3. T	o enable the	students a	bout conserv	ation of time	and er	nergy sav	ving.	1
4. I	o study abol	ut the drudg dite. A	gery reductio	n of nome ma	aker th	rougn a	ppropriate techno	Diogies.
Ma	x Marks A	uns. 4 As ner Liniv	v Rule - N	D. Jin Passing	Mark	s. As ne	r Univ-rules	KSL
Unit	Topics							No. of Hours
Unit I	 Work-w Work si Mundel Factors 	orker and mplification 's classes of affecting w	workplace re on techniques of change ork capacity	lationship				10
Unit II	 Energy cost work : meaning, methods of to calculate energy cost of work Technology used for calculating Energy cost work Fatigues, types of fatigues, methods of relieving from fatigues. Measurement of the physiological cost of work 							10
Unit III	• Househ reductio	old drudge on technolo	ry- definition gies used in I	n, drudgery p household	rone a	reas in l	nome, drudgery	10
Unit IV	• Househ material	old equipn ls used in c	nent- introdu	action, defini selection, use	tion, , care	classific and main	ation and base	15
]	Practical				
Ι	• Market	survey for	household ar	pliances				10
Π	• Use of c	lifferent kit	tchen appliar	ces (available	e in la	boratory).	10
Ш	• Identifie	cation of di	fferent finish	es.				5
IV	• Scrapbo	ook (collect	ion of differe	ent) innovativ	e equi	pments.		5

Recommended Readings

- Grandjean, E. (1981). Ergonomics of the Home Taylor and Francis Ltd. New York.
- Grandjean, E. and Kroemer, K.H.E. (1999). Fitting the Task to the Human a Text Book of Occupational Ergonomics. Taylor and Francis, New York.
- Peet, I.J and Arnold, M.G. (1993). Household Equipment. John Wiley, New York.
- Science and Technology for Women. (1993). Complied by Center of Science for Village. Waradha. Department of Science and Technology, New Delhi.
- Singh, S. (2007). Ergonomics Integration for Health and Productivity. Himanshu Publication, Udaipur, New Delhi.
- Gandotra, G., Oberoi, K. and Sharma, P. (2008). Appropriate technology for rural women.

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literature-study-online.com, epg-pathshala, egyankosh.ac.in

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus Test with multiple choice questions/ short and long answer questions Attendance

Semester-IX Master in Home Science (Food and Nutrition) Discipline Specific Course (DSC-21)- Basics of Nutrition and Hygiene

No. of Hours-30+60

(CREDIT	DISTRIBU	JTION, EL	IGIBILITY	AND PRE-	REQUISITES OF T	HE COURSE
Course	e Title	Credits	Credit o	listribution	of the cours	se Eligibility Criteria	Pre-requisite of the course(if any
			Lecture	Tutorial	Practical / Practice		
Discipline Specific Co (DSC-21)- Basics of Nutrition a Hygiene	ipline4202Passed B.Sc.ific CourseScience orC-21)Science orScience orcs ofScience orition andene					Nil	
Master in	Home Sci	ence (Food	l and Nutri	tion)			
Programn Master in I and Nutrit	ne/Class: Home Scie tion)	ence (Food	Year:	Fifth		Semester: Ninth Paper: DSC-21	
Subject: H Course- D	ubject: Home Science Course- DSC- 21 Discipline Specific Course (DSC-21)- Basics of Nutrand Hygiene						rition
The studen Stude Acqua Credits: 4 Max. Mar	t at the cor nts will get aint studen ks: As per	npletion of t familiar w ts with prace : Univ. Ru l	the course vith different ctical knowl DIS	will be able t t methods of edge of nutri SCIPLINE S n. Passing N	o: cooking. ent-rich foo SPECIFIC farks: As p	ds. COURSE er Univ. rules	
Unit				Topics			No. of Hours
Unit I	Introduct concept	tion to food of health.	ning of nutrition,	5			
Unit II	Composition, classification, functions, sources, digestion, absorption and utilization of macronutrients (Carbohydrates, Fat, Protein) and Energy.						5
Unit III	Composi micronut deficienc	Composition, functions, sources, digestion, absorption and utilization of micronutrients (Vitamins and Minerals), sources, functions, requirement and deficiency diseases.5					
Unit IV	Food Spe evaluatin hygiene o sanitation	oilage, fact ng food for during cool n. Food sar	ors contribu freshness, e king and ser hitation at he	iting to food valuating car ving, public ousehold lev	spoilage, pe nned food fo health depar el.	ersonal hygiene, or spoilage, food rtment and food	5
Unit V	Agents o transmiss control o	of contamin sion of infe of infection	ation, sourc ction, mode and disease	es and reserved of entry into	voirs of infe a susceptibl	ction, modes of e host, prevention and	10
				PRACTICA			
Ι	Basic Co -Weighir	oking skills ng of raw m	s aterials				10

II	Preparation of various dishes using different methods of cooking	15
	- Steaming	
	- Roasting	
	- Baking	
III	Different styles of cutting fruits and vegetables	15
	- Salad Decoration/Dressing	
	- Table setting, Napkin Folding	
IV	Preparation of nutrient rich dishes	20
	- Protein rich dish	
	- Carbohydrate rich dish	
	- Fat rich dish	
	- Vitamins rich dish	
	- Minerals rich dish	
	- Fiber rich dish	

- - Dr. Brinda Singh, Manav Sharirevam Kriya Vigyan Panchcheel Prakashan, Jaipur, 2015, 15th Ed.
 - Chatterjee, C.C, "Human Physiology" Medical Allied Agency: Vol I, II.
 - 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 evamPoshan"; 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 •

Suggestive digital platforms web links-ePG-Pathshala, IGNOU & UPRTOU online study material Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literature-study- online.com, epg-pathshala, egyankosh.ac.in

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus \Box Test with multiple choice questions/ short and long answer questions \Box Attendance

Semester-IX Master in Home Science (Food and Nutrition) Discipline Specific Elective (DSE-11)- Food Microbiology

No. of Hours-45+30

Cou	ırse Title	Credits	Crec	lit distribu	ition of the c	ourse	Eligibility Criteria	Pre- requisite of the course (if any)
			Lecture	Tutorial	Practical/P	ractice		
Discipli	ne	4	3	0	1		Passed	Nil
Specific	Course						B.Sc. with	
(DSE-11	l)- Food						Home	
Microbi	ology						Science or	
							Science	
Master	in Home Sc	ience (Foo	d and Nut	rition)				
Program	nme/Class: N	Master	Year: F	ifth		Semest	er: Ninth	
in Hom	e Science					Paper:	DSE-11	
(Food a	nd Nutrition	n)						
Subject	: Home Scie	nce						
Course-	DSE -11		Course ' Food M	Title: Disci icrobiolog	ipline Specifi v	ic Electiv	ve (DSE-11)-	
Course	outcome:			0	<i>.</i>			
The Stuc	lent at the co	ompletion o	f the cours	e will be at	ole to:			
≻ To	know about	different n	nicroorgan	ism occurri	ing in food.			
> To	be able to k	now food s	poilage an	d factors re	sponsible for	r food sp	oilage.	
Credits:	: 4			DISCI	PLINE SPE	CIFIC E	ELECTIVE	
Max. M	arks: As pe	r Univ. Ru	le	Min. P	assing Mark	ks: As pe	er Univ. rules	
Unit				Topics				No. of Hours
Ι	Microbiolo	ogy of foods	S-					5
	Basic c	concepts						
	• Role of	f micro-org	anisms in t	fermented t	foods.			
II	Micro-orga	anisms in fo	oods:					10
	Bacteri	ia,						
	 Fungi, 							
	Yeasts	,						
	Mould	s,						
	• Viruse	s,						
	• Parasit	es.						
m	Occurrence	e and growt	h of micro	-organisms	in food:			5
	• Microt	510logy of a	ur, water a	nd soil,				
TX 7	• Source	es of 1000 C		on,	•			
11	Factors affe	ecting the g	growth of n	ncro-organ	iisms-		II licht	5
	• Nutriti	on, oxygen	, temperati	ire, moistur	e, osmotic pr	essure, p	n, light,	
	contro	i and destru	iction of m	nero-organ	151115.			

V	Food spoilage-	10
	Factors responsible for food spoilage	
	Chemical changes due to spoilage	
	• Spoilage of meat, poultry and fish; fruits and vegetables; cereals and	
	• cereal products; milk and milk products; soft drinks; fruit juices, fruit	
	preserves.	
VI	Food hazards of microbial origin:	10
	• Food borne diseases;	
	• Food borne intoxications- staphylococcal poisoning, bacillus cereus	
	poisoning, botulism;	
	 Food borne infections- Salmonellosis, Shigellosis, Vibrio 	
	Parahaemolyticus gastroenteritis, E. coli Diarrhoea, Hepatitis A,	
	Shellfish poisoning;	
	• Food borne toxic infections- clostridium perfringens gastroenteritis,	
	E.coli gastroenteritis, cholera, listeriosis, Yersinia Enterocolitica	
	gastroenteritis, Campylobacter Jejuni Diarrhoea; mycotoxins	
	Practical	
Ι	Familarization with instruments used in microbiological lab, their principles	5
	and working: Microscope, Autoclave, Laminar Flow Bench, Hot air oven,	
	Incubator, Centrifuge, pH meter, spectrophotometer etc.	
II	Glass ware washing and sterilization for microbiological work	5
III	Microbial staining techniques	10
	a. Simple direct staining	
	b. Gram staining techniques	
IV	Preparation of culture media	5
V	Isolation of bacteria from food sample	5
	d Dee din age	

• Frazier, W.C. 1988. Food Microbiology. Tata McGraw Hill Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literature-study-

online.com, epg-pathshala, egyankosh.ac.in

Semester-IX Master in Home Science (Food and Nutrition) General Elective (GE-11)- Nutrition Through Life Cycle

No. of Hours-60

Cours	se Title	Credits	its Credit distribution of the course		Eligibility Criteria	Pre- requisit the cou (if an	te of Irse V)		
			Lecture	Tutorial	Practical	/Practice			•
Discipline		4	4	0)	Passed	Nil	l
General E	lective						B.Sc. with		
(GE-11)-							Home		
Nutrition							Science or		
Through I	Life						Science		
Cycle									
Master in	Home Sc	ience (Fo	od and Nut	rition)					
Programm	ne/Class:		Year: l	Fifth		Semester	r: Ninth		
Master in	Master in Home Science (Food		d			Paper: (JE-11		
and Nutrition)									
Subject: F	Iome Scie	nce	~						
Course- G	E-11		Course Life Cy	e Title: Ger ycle	ieral Electi	ive (GE-1)	1)- Nutrition 'I	hrough	
Course ou	tcome:			, 					
The Stude	nt at the co	ompletion	of the cours	e will be ab	ole to:				
> Kno	w the role	of diet in p	preventing the	he degenera	ative diseas	ses			
> Kno	w major m	ilestones i	n different	age groups.					
Credits: 4			GENER	RAL ELEC	TIVE				
Max. Mar	ks: As per	Univ.	Min. P	assing Ma	rks: As pe	r Univ. ru	les		
Rule									
Unit				Тор	ics			No Ho	o. of ours
Unit I	Nutrition with mal malnutrit	al status: r nutrition, tion, recon	nalnutrition morbidity, a nmended di	, under nutr and mortali etary intake	ition, over ty. Global e.	nutrition, t and natior	factors associat al data on	ed	10
Unit II	Nutrition gain, con the impo nutrition Nutrition action, t nutrition special for	nal in Preg nplications rtance of 1 al problem 1 in Lacta he efficie al compos pods durin	nancy and I s of pregnan nutrition dur ns, and dieta tion: Physic ency of mil ition of brea g lactation,	Lactation: S cy, nutritio ring and be rry manage ology of lac k producti ast milk, n dietary mo	Stages of ge nal probler fore pregna ment. ctation, hor ion, proble utritional c odification.	estation, m ns and die ancy, teen rmonal con ems of br concerns d	naternal weight tary manageme age pregnancy ntrol, and refle reastfeeding, t luring lactation	ent, - ex he n,	15

	Nutrition in Infancy, Pre-School and School Children Infant feeding: nutritional needs, premature infant and their feeding, weaning foods. Feeding problems,	15
Unit III	infant formulae lactose intolerance.	
	Nutrition in Pre-school - Physiological development related to nutrition, feeding	
	problems, benavioral characteristics, nutritional requirement.	
	Nutrition in school children - feeding school children and factors to be	
	considered. Nutritional requirements, feeding problems.	
Unit IV	Nutrition in Adolescents and Adults – Physical changes, Nutritional requirements dietary practices, Nutritional problems.	10
Unit V	Geriatric Nutrition- Nutritional requirements of the elderly & dietary management to meet nutritional needs.	10

- Srilakshmi B, Dietetics, sixth edition, New age Publishing Press, New Delhi, 2011 2.
- Gopalan C., Ramanathan, P.V. Balasubramanian, S.C., Nutritive value of Indian foods, NIN, Hyderabad, 2001.

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literature-study-online.com, epg-pathshala, egyankosh.ac.in

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus □ Test with multiple choice questions/ short and long answer questions □ Attendance

Semester-X Master in Home Science (Food and Nutrition) Discipline Specific Course (DSC-22)- Clinical Nutrition and Dietetics

No. of Hours-120 CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course Title Credit distribution of the course Credits Eligibility **Pre-requisite** of the course Criteria (if any) Lecture Tutorial **Practical/Practice** Nil Discipline 4 Passed B.Sc. 0 0 **Specific Elective** with Home (DSE- 22)-Science or **Clinical Nutrition** Science and Dietetics Master in Home Science (Food and Nutrition) **Programme/Class:** Year: Fifth Semester: Tenth Master in Home Science (Food and Paper- DSC-22 Nutrition) Course : DSC-22 Course Title: Discipline Specific Course (DSC-22)-**Clinical Nutrition and Dietetics Course outcomes:** The student at the completion of the course will be able to: Understand the basics of normal diet, therapeutic diet related with specific disease condition Students will be able to know different feeding methods used in hospitals. Credits: 4 DISCIPLINE SPECIFIC COURSE Max. Marks: As per Univ. rules Min. Passing marks: As per Univ. rules **Practical** Topics No. of Lectures I Planning and preparation of Normal diet for children. 10 Planning and preparation of diet for a high BP patient. 10 Π Ш Planning and preparation of diet for a heart disease patient. 10 IV Planning and preparation of diet for a patient suffering from peptic ulcer. 10 V Planning and preparation of diet for a patient suffering from liver disease. 10 Planning and preparation of diet for a patient suffering from gastro VI 10 intestinal diseases. VII Planning and preparation of diet for a patient suffering from coronary 20 heart diseases. Planning and preparation of diet for a patient suffering from – VIII 20 • Stress Trauma • Surgery • Burns IX Planning and preparation of diet for an eating disorder 20 • Anorexia nervosa, Bulimia nervosa, **Binge** eating

• Anderson L., Dibble M.V., Turkki P.R., Mitchel H.S. & Rynbergen H.1982. Nutrition in Health and Disease. JB Lippincott Co2

•RDA, 2020.Recommended Dietary Allowance for Indians.ICMR.

•Khanna K., Gupta S., Seth R.& Puri S.1997. TextBook of Nutrition and Dietetics. Phoenix Publ.

• Srilakshmi B.2002. Nutrition Science. New Age International.

•Swaminathan, M.1988. Principles of Nutrition and Dietetics.BAPPCO.

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus \Box Test with multiple choice questions/ short and long answer questions \Box Attendance

Semester-X Master in Home Science (Food and Nutrition) Discipline Specific Elective (DSE-12)- Food Quality Analysis

No. of Hours-30+60 CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Discipline Elective (D Food Qual Analysis Master in I Programm Master in I Nutrition) Course- DS Course out The Studen > To ur > To ge > To ge Credits: 4 Max. Marl Unit I Unit I Unit I Unit II Unit II Unit II Unit V Unit V Unit V I Senso test o II Adult a.	e Specific	Credits	Cred	it distribut	bution of the course Eligibility Criteria		Credit distribution of the courseEligibilityProvideCriteriaof			Pre-requisite of the course (if any)
Discipline Elective (D Food Qual Analysis Master in I Programm Master in I Nutrition) Course- DS Course- DS Course- DS Course out The Studen > To ge Credits: 4 Max. Marl Unit I Unit I Unit I Unit I Unit II Unit II Unit II Unit IV Unit V Unit V Unit V I I Nutrition	e Specific		Lecture	Tutorial	Practical/P	ractice				
Master in IProgrammMaster in INutrition)Course outTo geTo geTo geCredits: 4Max. MariUnitUnit IIUnit IIUnit IIUnit IIUnit III Unit IVUnit VI PhysiIPhysiIISensotest oIIIAdulta.	DSE-12)- ality	4	2	0	2		Passed B.Sc. with Home Science or	Nil		
ProgrammMaster in INutrition)Course outThe StudenTo urTo geTo geCredits: 4Max. MariUnit IUnit IIUnit IIUnit IIUnit IIUnit IIInterventionI PhysicII PhysicII Sensotest oIII Adulta.	1 Home Sc	ience (Fo	od and Nut	rition)			Science			
Notice of the second s	me/Class:			Year: Fiftl	n	Semest	er: Tenth			
Course outCourse outTo geTo geTo geCredits: 4Max. MariUnitUnit IIUnit IIUnit IIUnit IIUnit IIUnit IIIntervention of the second	Home Sci	ence (Foo	d and			Paper:	DSE-12			
Course outCourse outTo ge \succ To ge \succ To ge \sim To geCredits: 4Max. MariUnitUnit IIUnit IIUnit IIIUnit IIIUnit IVUnit VIIPhysiIISensotest oIIIAdulta.	DOE 10		Si	ubject: Ho	me Science		(DEE 10)			
Course out The Studen \succ To ur \succ To ge \succ To geCredits: 4Max. MarlUnitUnit IUnit IIUnit IIIUnit IIIUnit VIInit VIIPhysiIISensotest oIIIAdulta.	DSE-12		Quality	Analysis	pline Specifie	c Electiv	/e (DSE-12)-	Food		
Unit Unit I Unit II Unit III Unit IV Unit V Unit VI I Physi II Sensor test o III Adult a.	ent at the co understand get acquain get knowled 4	ompletion physical, i ited with s dge about	of the cours rheological ensory analy food intoxic DISCI	e will be ab properties of ysis of food cants. PLINE SP	ole to: of foods ECIFIC ELI		E			
Unit I Unit II Unit III Unit III Unit IV Unit V Unit VI I Physic II Sensor III Adult a.	rks: As pe	r Univ. K	ule Iviin. P		rks: As per u	Univ. ru	les	N. ett.		
Unit II Unit III Unit IV Unit V Unit VI I Physi II Sensor test o III Adult a.	Chamical	changes i	n foods duri	1 opics	na			No. of Hours		
Unit III Unit IV Unit V Unit V Unit VI I I I Sensc test o III Adult a. b	Physical a	and rheolo	gical proper	ties of food	ing. Is			5		
Unit IV Unit V Unit VI I Physi II Senso test o III Adult a.	Changes i and storage	in flavor co	omponents a	ind natural f	food pigments	s during	processing	5		
Unit V Unit VI I Physi I Senso test o III Adult a.	Bioavaila	bility of m	icronutrient	s: vitamins	and minerals.	•		5		
Unit VI I Physi II Senso test o III Adult a.	Sensorye	valuation	methods for	foods.				5		
I Physi II Senso test o III Adult a.	Food into glycoside aromatic	xicants: E s; phenolic hydrocarb	nzyme inhil cs; oxalates; ons; allerge	bitors; lathy phytates; al ns.	rogens; goitr kaloids; carci	ogens; c nogens;	yanogenic polycyclic	5		
I Physi II Senso test o III Adult a.				Pract	ical					
II Sense test of III Adult a.		f grain qua	lity					15		
III Adult a.	sical tests of	tion of foo evaluation	ds: Selection n and consu	of panel, tr mer accept	aining of pane ability	el membe	ers, objective	20		
b. c. d. e.	sical tests of sory evaluat of sensory	sts:						20		
IV Visit	sical tests of sory evaluat of sensory literation tes a. Milk b. Spices c. Oil d. Tea leav e. Honev	ves								

- 1. AOAC. 1975. Official Methods of Analysis of the Association of Official Analytical Chemists. 12th edition, Washington. D. C.
- 2. Raghuramulu, N.; Nair, K.M. and Kalyanasundaram, S. 2003. A Manual of Laboratroy Techniques. National Institute of Nutrition. ICMR. Hyderabad.
- 3. Ranganna, S. 1986. Handbook of Analysis and Quality Control for Fruit and Vegetable Product. Tata McGraw Hill Pub. Co. Ltd., New Delhi

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literature-study-online.com, epg-pathshala, egyankosh.ac.in

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus \Box Test with multiple choice questions/ short and long answer questions \Box Attendance

Semester-X Master in Home Science (Food and Nutrition) General Elective (GE-12)- Food Product Development and Marketing

No. of Hours-30+60

Course	urse Title Credits Cre			edit di	stribution o	of the course	Eligibility Criteria	Pre- requisite of the course (if any)
			Leo	cture	Tutorial	Practical/ Practice		
General Elective (GE- 12)- Food Pro Developn and Mark	duct nent seting	4		2 0 2		Passed B.Sc. with Home Science or Science	Nil	
Master in Program	1 Home S ne/Class·	Master	od ai	1d Nu Vear	trition) • Fifth		Semester	
in Home (Food an	Science d Nutriti	on)		I cui			Tenth Paper: GE- 12	
Subject:	Home Sc	ience		C			$(CE 12) E_{-} dI$	
Course-	JE-12			Cour Deve	se Thie: Ge lopment ar	nd Marketing	(GE-12)- F000 F	roduci
Course of The stude • To und	utcome: nt at the c derstand v	completion various asp	of the bects o	e cours of the d	e will be ab	le to: t of a food prod	uct.	
• Standa	ardize and	l generate	the pro	ocess f	low chart f	or a new food p	roduct	
Credits: 4 Max Mai	t rks· As n	er Univ R	ule	GEN Min	EKAL ELI	LUIIVE arks: As ner II	niv rules	
Unit			uic	171111.	Topics	arks. As per o	mv. ruics	No. of Hours
I	Product • Nee • facto • Sens • Trer • Food • Adv	developm d for produ ors influen soryevalua nds in Soci d product o vantages of	ent – uct dev cing p tion d al Cha levelo new f	velopn roduct uring j inge as pment ood pr	nent t developme product life s a Base for t in India, roduct devel	ent, cycle. New Product I lopment and its	Development. new trends.	10
III	Food fo • Obje • Prin • Tecl	ortification- ectives ciples hnologies.	-					5
IV	Food pa • Prin • Pacl	ackaging ciples in th kaging mat	ne deve terials	elopm (meta	ent of safe a ls, glass, pa	and protecting p per and plastics	packing)	5
V	SweeterNatuArtiCon	ning agents ural sweete ficial swee nposition a	s- eners teners and use	e of sw	veeteners			5

VI	Food additives-	5
	• Functions	
	• Uses	
	Chemical, technological and toxicological aspects of food additives	
	PRACTICAL	
Ι	A. Product Development and Standardization	30
	Cereal and Pulse Based Foods	
	• Fruit Juices, Squash and Jams	
	Pickles, Ketchup, Sauce	
	Weaning Foods	
	 Convenience foods, RTS, and RTE foods 	
	Healthy Bakery foods	
II	Marketing of a Food Product	30
	• Selection of a Product, Preparation, Standardization, and Cooking	
	• Selection of Packaging Material, Labeling, Cost Calculation, and	
	Marketing	
	Presentation of Report	
uggest	ed Readings:	
• Pom	heranz, Yeshajahu, ed. Food analysis: theory and practice. Springer Science	e & Busines
Med	lia,2013.	
Noll	et, Leo ML, and Fidel Toldrá, eds. Food analysis by HPLC. CRC press, 2012	
Hart	, Frank L., and Harry J. Fisher. Modern food analysis. Springer Science & Bu	isiness Media
2012		
Full	er, Gordon W. New food product development: from concept to marketplace	. CRC Press,
2010		1
Smi	th, Jim, and Edward Charter, eds. Functional food product development. 201	1.
uggest	ed Continuous Evaluation Methods: Seminar/ Presentation on any topic of	the above
vilabus	\square lest with multiple choice questions/ short and long answer questions \square At	tendance

Semester-IX Master in Home Science (Textile and Apparel Designing) Discipline Specific Course (DSC-21)- Advanced Textile Designing and Woven Fabric Analysis

No. of Hours-120

Course '	Course Title Credit s			edit distribut course	tion of the	Eligibility Criteria	Pre- requisite of the course(if any)	
			Lecture	Tutorial	Practical/ Practice			
Discipline Specific Course (DSC)- Advanced Textile Designing and Woven Fabric Analysis		4	0	0	4	Passed graduation withscience, Arts and commerce	Nil	
		Master in	n Home Sci	ence (Textile	and Appar	el Designing)		
Programm Master in H Apparel De	e/Class: Iome Sc esigning	: cience (Te g)	extile and	Cear: Fifth		Semester: Ninth Paper: DSC-21		
Subject: Ho	ome Scie	ence						
Course- DS	SC-21		Course ' Textile l	Title: Discip Designing an	line Specific d Woven F	Course (DSC-22 abric Analysis	1) Advanced	
Course out The Student ➤ To deve ➤ To learn process.	come: at the c lop in d about th	ompletior epth knov ne comple	n of the cou vledge abou x weaves an	rse will be ab at use of cad ad dobby, jacc	le to: in textiles. Juard mechar	nism and carpet ma	aking	
Credits: 4			I	DISCIPLINE	SPECIFIC	COURSE		
Max. Mark	s: As pe	er Univ. F	Rule I	Ain. Passing	Marks: As j	per Univ. rules		
Unit	Topics						No. of Hours	
Unit I	History yarns, o	History and development of spinning, weaving and handlooms. Spinning of yarns, classification of woven fabrics. Operation in woven cloth production10						
Unit III	Study o calcula Constru Colour	Study of design, draft and peg plan for different weaves; weave10calculations; advantages and disadvantages.10Construction of elementary weaves: plain, twill, satin and sateen weaves.10Colour and weave effects.10						
Unit IV	Complex and fancy structures- leno, crepe, double and back cloth, honey comb, mock leno, diaper, diamond, warp and weft figuring, and pile weave							
Unit IV	CAD c	ommands	; creating	stripes and cl	hecks using	various command	ls. 10	
Unit V	Developing motifs by scanning and drawing using the CAD commands 10						ds 10	

Unit VI	Simulation and graph/ point paper; Developing a computer aided portfolio of different motifs, Creation of special effects layers and layer softings	10
	layer settings	
Unit IV	Creation of grid and editing the object.	20
Unit IV	Development of woven samples using basic and other fancy weaves.	20
Unit IV	Product development (apparel and household articles) by using CAD	20
	software.	

- 1. Grosicik. Z. J. Watson's Textile Design & Colour. Butterworths.
- 2. Grosick Z. J. Watson's Advanced Textile Design. Universal Publication.
- 3. Grosick Z. J. Watson's Advanced Textile Design Compound Woven Structures.
- 4. Marjory Joseph. Illustrated Guide for Textiles. Rine Hort & Winsoten, New York.
- 5. Radha Krema. Manual of Non Wovens. Textile Trade Press.
- 6. Sen Gupta. Weaving Calculations. DB Taraporawala Sons.
- 7. Talukdar M. K. Weaving Machines, Mechanism and Management.
- 8. Davis L. Marisn. *Visual Design in Dress*. Prentice Hall.end-semester written examination will test all the areas targeted in the course.

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literaturestudy- online.com, epg-pathshala, egyankosh.ac.in

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus \square Test with multiple choice questions/ short and long answer questions \square Attendance

Semester-IX Master in Home Science (Textile and Apparel Designing) Discipline Specific Elective (DSE-11)- Eco textile and Environment

No. of Hours-60

Course	rse Title Credits Credit distribution of the course			Eligibility	Pre- requisite					
					Criteria	of the				
							course (if any)			
			Lecture	Tutor	rial	Practical/				
						Practice				
Discipline	•	4	4	0		0	Passed	Nil		
Specific C	ourse	-	-	Ū		Ŭ	graduation with			
(DSE)- Ec	:0						Science, Arts			
textile and							and			
Environm	ent						Commerce			
Master in	Home	Science (Te	extile and A	Appare	el De	esigning)				
Program	ne/Clas	SS:			Ye	ar: Fifth	Semester:			
Master in	Home	Science (Te	extile and		Ninth Pa			er:		
Apparel I	Designi	ng)					DSE-11			
			Su	bject:]	Hon	ne Science				
Course- D	SE-11				Co D	ourse Title: D SE- 11)- Eco	iscipline Specific Fextile and Envi	: Elective ronment		
Course ou	tcome:				(
The Studen	nt at the	completion	n of the cou	ırse wil	l be	able to:				
To imp	part in c	depth know	ledge of di	ifferent	ban	ned and eco-	friendly dyes.			
• To imp	• To impart knowledge about health hazards due to textile industries									
Credits: 4 DISCIPLINE SPECIFIC ELECTIV							TIVE			
Max. Marks: As per Univ. Rule Min. Passing Marks: As per Univ. r							v. rules			
Unit	Unit									
	Topics							Hours		
Unit I	✓ Industrialization, eco-balance and textile ecology.							15		
	🗸 Ai	r, noise and	water pollu	tion by	mec	chanical and				
	che	emical textil	le processii	ng and t	heir	effect.				
	✓ Ge	rman Ban						10		
Unit II	✓ Indian Ban,									
	✓ Banned dyes									
	✓ Eco-parameters									
	✓ Eco-friendly Textiles									
Unit III	Oeko- Tex Standard 100.							10		
Unit IV	Red listed chemicals as per Eco- specification, Testing of textiles and									
	auxiliaries, effluents discharge.									
Unit V	it V Health hazards of textile workers working in various textile units and						15			
	their re	medial mea	sures.							
	Total						60			
L	ι							1		

- 1. Banerjee, S. 1995. Principle and Practices of management. New Delhi and Oxford, IBH publishing co. Pvt. Ltd
- 2. .Davis L. Marisn. *Visual Design in Dress*. Prentice Hall.end-semester written examination will test all the areas targeted in the course.

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literaturestudy- online.com, epg-pathshala, egyankosh.ac.in

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus
above Test with multiple choice questions/ short and long answer questions
box Attendance

Semester-IX Master in Home Science (Textile and Apparel Designing) General Elective (GE-11)- Fashion Designing and Accessories

No. of Hours-60

Course Ti	tle C	e Credits Credit distribution of the course				urse	Eligibil Crite	lity ria	Pre- requisite of the course if any)	
			Lecture	Tutorial	Practi	cal/				
GENERAL Elective (GE- 11)- Fashion Designing and		4	4	0	0		Passed graduation with Science, Arts and		Nil	
Accessories							Comm	erce		
Master in H	ome Sci	ence (Te	xtile and A	pparel Desi	gning)					
Programme Master in H Designing) Subject: Ho	Programme/Class:Year: FifthSerMaster in Home Science (Textile and ApparelPapDesigning)Pap							Sen Pap	nester: Ninth per: GE-11	
Course- GE	-11			Course Tit	le: Fasl	nion l	Designir	ng an	d Accessories	
							8	8		
 > To understand about the fashion terminologies, evolution, psychology, fashion forecasting, fashion cycle and factors affecting fashion. > This course also helps to give the knowledge about the national and international > fashion designs, fashion careers and opportunities of jobs in this area. It is also provides the knowledge about the fashion accessories. Credits: 4 GENERAL ELECTIVE Max Marks: As per Univ. Rule 								ion national so ules		
Unit				Topics					No. of Hours	
Unit I	Fashior	n termino	ology						2	
Unit II	Evolution of fashion and fashion theories							8		
Unit III	Current fashion trends, Factor determining fashion trends 6								6	
Unit IV	Fashion forecasting and creation, factors affecting fashion8forecasting8									
Unit V	Fashion life cycle: trickle up, trickle down and trickle across 4 theory 4								4	
Unit VII	Techniques and tools used for fashion sketching								4	
Unit VII	National and international fashion designers								7	
	Fashion careers and job opportunities							6		
Unit IX	Fashion Accessories: Introduction to Fashion accessories, itstypes and use							5		
Unit X	Visit to Fashion Designing Industry							10		
	Total								60	
Suggested Readings:

- > Brockman, H.L., The Theory of Fashion Design. Sydney, Johan, Wiley and Sons.
- > Ireland, P. J., Fashion Design Drawing. London. B.T. batsford Ltd.
- > Ireland, P. J. Basic Fashion Design. London. B.T. batsford Ltd.
- > Ireland, P. J., Fashion Drawing for Advertising. London, B. T. batsford Ltd.
- > Jabenis, E., The Fashion Director. Sydney, Johan, Wiley and Sons.

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus Test with multiple choice questions/ short and long answer questions Attendance

Semester-X Master in Home Science (Textile and Apparel Designing)

Discipline Specific Course (DSC-22)- Historic Textiles and Costumes

No. of Hours-60 CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course Ti	tle	Credits	Credit	distribution	se Eligibility Criteria	 Pre- requisite of the course (if any) 	
			Lecture	Tutorial	Practical Practice	/	
Discipline		4	4	0	0	Passed	Nil
Specific Cou	urse					graduation	L
(DSC)- Hist	oric					with Science	e,
Textiles and	1					Arts and	
Costumes						Commerce	
		Master in	Home Scier	nce (Textile a	nd Apparel	Designing)	
Programme	e/Clas	SS:		Year: Fifth		Semester: Ten	th Paper:
Master in H	lome	Science (T	extile and			DSC-22	
Apparel De	signi	ng)					
Subject: Ho	me S	cience				~ ~ ~ ~	(T , C , C)
Course- DS	C-22			Course Titl	le: Discipli	ie Specific Cou	irse (DSC-
				22)- Histor	ic Textiles	and Costumes	5
Course outco	ome:	1	6.4				
The Student	at the	e completion	n of the cour	se will be able	e to:		
Credita: 4	and a	bout mistori	c costume a	Discipling	various cour		
Max. Marks	: As	ner Univ. I	Rule	Min. Passin	g Marks: A	urse As ner Univ. ru	iles
Unit	• 115			Topics	5 1/101 1150 1		No. of Hours
Unit I	Intr	aduction H	istoric backa	round and det	ailed study	of ancient	10
Unit I	and	medieval II	ndian costum	iound and det	aneu study	of ancient	10
	Stu	dv of tradit	ional dyed	nrinted emb	roidered ar	nd non-	10
	wox	ven textiles	of ·	princu, cino	l oluci cu ai	iu non-	10
	•	America	01.				
Unit II	•	China					
	•	Egypt					
	•	France.					
	•	Greece.					
	•	Japan and					
	•	Rome.					
	Hist	tory and ev	olution of t	raditional cos	tumes of		10
	•	America,					
	•	China,					
Unit III	•]	Egypt					
		 Г					
	•	France,					
	•	France, Greece,					
	•	France, Greece, Japan and					

	Fiber content, fabrics, motifs, colours and designs used in:	10
	• America,	
	• China,	
Unit IV	• Egypt	
	• France,	
	• Greece,	
	Japan and	
	• Rome.	
Unit V	Historical development of tradition textiles from different state of	5
	India	
Unit VII	Introduction: Historic background and detailed study of ancient	5
	and medieval Indian costumes	
Unit VII	Study of traditional dyed, printed, embroidered and non-woven	10
	textiles of :	
	• America,	
	• China,	
	• Egypt	
	• France,	
	• Greece,	
	Japan and	
	• Rome.	

Suggested Readings:

- Blanche Payne., *History of Costumes from the Ancient Egyptian to the TwentiethCentury.* Harper & Row.
- Jack Cassin Scott., The Illustrated Encyclopedia of Costume and Fashion. StudioVista
- Pandit, S., Indian Embroidery It's variegated charms. Latest edition. Vinu BaiPatel, Baroda.
- Dhamija, J.S., Handicrafts of India. National book trust, India.
- Dhaniya, J and Jain, J., Handwoven Fabrics of India. Mapin publishing Ltd., Ahmedabad.

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus• Test with multiple choice questions/ short and long answer questions• Attendance

Semester-X Master in Home Science (Textile and Apparel Designing) Discipline Specific Elective (DSE-12)- Textile Quality Analysis

CR	EDIT DIS	TRIBUTIO	ON ELIG	IRILITVAN	JD PRE-REO	No. DUISITES OF T	of Hours-60
Course	e Title	Credits	Credit distribution of the course			Eligibility Criteria	Pre- requisite of the course(if any)
			Lecture	Tutorial	Practical/ Practice		
Discipline Elective (I Textile Q Analysis	Discipline Specific 4 Clective (DSE-12)- Cextile Quality Analysis		4 0		0	Passed Graduation with Science, Arts and Commerce	Nil
Master in	Home Sc	cience (Text	tile and Ap	oparel Desig	ning)		
Program Master in Apparel 1	ne/Class: Home Sc Designing	cience (Text g)	tile and	Year: F	ifth	Semester: Tent DSE-12	h Paper:
Subject: I	10me Scie	ence		Course	Titles Digein	ino Snooifio Elos	tive (DSE
Course- I	5E-12			12)- Te	xtile Ouality	Analysis	cuve (DSE-
The Stude: To dev Credits: 4 Max. Mar	ttcome: nt at the c velop kno ks: As pe	ompletion o wledge abo er Univ. Ru	of the cours ut testing 1 le	e will be abl nethods of DISCIE Min. Pa	e to: different fiber PLINE SPEC ssing Marks	rs, yarns and fab IFIC ELECTIV : As per Univ. ru	orics E ules
Unit				Topics			No. of Hours
Unit I	Importan functions	nce of textile s of BIS and	e testing, st other stand	andardizatio dards.	n and quality	control,	10
Unit II	Fiber len diameter	gth, finenes , air permea	s, evenness bility	, fiber streng	th, elongation,		10
Unit III	Yarn stre curve, el	ength, elong astic recove	ation, cour ry	nt, denier, cri	mp, twist, stre	ess-strain	10
Unit IV	Fabric st conducti pilling, a or crocki	rength, brea vity, air per brasion resi ng and Pers	king, burst meability, v stance,colo piration	ing, tear and water repelle our fastness t	ballistic stren ncy, thickness o washing, lig	gth, thermal , shrinkage, ght, rubbing	10
Unit V	Apparel	Testing- sea	am strengtl	n, button and	d print etc.		5
Unit VI	National organiza	and Internat	tional organ	nization and ottesting	objectives of v	arious	5
Unit VII	Visit to 7	Fextile Indus	stry				10
	Total						60

Suggested Readings:

- 1. Kotler, P., Marketing Management. McGraw Publishing.
- 2. Wells Burnette Morianty. Advertising- Principles and Practices. Prentice Hall.
- 3. Frings, Fashion from Concept to Consumer. Prentice Hall.
- 4. Sen Gupta. Brand Positioning. Tata McGraw Hill Publishing.

Suggested equivalent online courses: On Swayam, Vidyamitra.inflibnet.ac.in, literaturestudy- online.com, epg-pathshala, egyankosh.ac.in

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus \Box Test with multiple choice questions/ short and long answer questions \Box Attendance

Semester-X Master in Home Science (Textile and Apparel Designing) General Elective (GE-12)- Garment Manufacturing- Draping

No. of Hours-120

CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course Tit	le Credits	Credit dist	tribution	ı of	the course	Eligibility Criteria	Pre- requisite of the course(if
		Lecture	Tutori	al	Practical/ Practice		any)
General	4	0	0 4		Passed	Nil	
Elective						Graduation	
(GE-12)-						with	
Garment						Science,	
Manufactur	•					Arts and	
ing-						Commerce	
Draping							
Master in H	lome Science (T	extile and A	pparel I)esi	gning)	Γ	
Programme	e/Class:			Y	ear: Fifth	Semester: Ter	nth
Master in H	lome Science (T	extile and A	pparel			Paper: GE-12	2
Designing)	~ •						
Subject: Ho	me Science						
Course- GE	2-12			Co G	ourse Title: (arment Mar	General Electiv Iufacturing- D	e (GE-12)- raping
Course outc	ome:						
The Student	at the completio	on of the cour	se will b	e al	ole to:		
To impar	rt technical know	wledge and sl	cills in g	arm	ent designing	g and manufactu	uring by draping
Credits: 4		-		G	ENERAL E	LECTIVE	
Max. Marks	s: As per Univ.	Rule		Μ	in. Passing N	Aarks: As per	Univ. rules
Unit			To	pic	8		No. of Hours
Unit I	Garment design	ning through	draping:	de	finition and r	elated terminol	ogy 20
Unit II	Tools and supp	lies for drapi	ng				20
Unit III	Draping princip	ples and tech	niques				20
Unit III	Designing and o	construction of	of followi	ng g	garments usin	g	20
	different constr	uction feature	es:				
	a) Children g	arment					
	b) Male garm	ent					
	c) Female gar	rment					
Unit IV	Pattern develop	oment					20
Unit V	Visit to fashior	institute; pro	oject pre	para	ation and rep	ort writing	20
Suggested RBane, A.	eadings: 1972. Flat Patte	ern Design. N	lew York	c. N	AcGraw Hill	Book	

• Waren, G.S. 1969. Principles for creative clothing.

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus \square Test with multiple choice questions/ short and long answer questions \square Attendance

VALUE ADDITION COURSE (VAC) PREPARED FOR THE POOL OF COURSES

Ι	Value Addition of Apparels	Practical	2
II	Value Added Products from fruits & Vegetables	Practical	2
III	Ayurveda and Nutrition	Theory+ Practical	1+1
IV	Fashion Illustration	Practical	2

Undergraduate Certificate in Home Science VALUE ADDITION COURSE (VAC-1) Value Addition of Apparels

No. of Hours-60 CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course	ſitle	Credits	Credit distribution of the Eligibility course Criteria				Pre- requisite of the course (if any)		
			Lec	ture	Tutorial	Practica Practic	al/ ce		
VAC -	1	2	0)	0	2		Passed class XII	[Nil
Value	e							with Science,	
Additi	01 OI ماد							Arts and Commerce	
Арраг	C15	UN	DERG	GRAI	DUATE CEF	RTIFICA	ГЕ	I HOME SCIEN	ICE
Program	nme/ C	lass:			Year: Fir	st		Semester	: First
Certifica	ate in H	lome Scien	ce						
Subject :	Home	science			~				
Course C	ode: V	AC-1			Course Ti	tle: Value	e Ao	ddition of Appar	rels
The Stud • To in • To en Credits: 2	ent at t troduce able stu 2	the completer and train subtraction of the completer and train subtraction of the completer and train subtraction of the completer and train subtractions and train subtractions and train subtractions are subtractions and train subtractions are	tion o tudent arn me	f the s on thod Valu	course will b value addition s of value add e Addition C	e able to: n aspects. lition throu Course	ıgh	various techniqu	es.
Max. Ma	rks: As	s per Univ.	rules	Min.	Passing man	rks: As pe	r U	niv. rules	
Total No.	of lect	ures-Tuto	rials-P	racti	ical (in hours	s per week	:) : I	L-T-P: 0-0-2	
Unit					Topics				No. of Hours
Unit I	Value of Va	addition: I lue Additio	ntrodu n	ction	, Techniques	of value ac	ddit	ion, Importance	6
Unit IIPreparation of samples using different techniques20a. Screen printing, b. Block printing, c. Stencil printing, d. Spray printing e Batik20									
Unit III	Prepa	ration of sa	mples	using	g different tie	-dye techi	niqu	ues	10
Unit IV	Prepa	ration of sa	mples	using	g patch work				4
Unit V	Prepa additi	ration of on on techniqu	e hous	sehol	d and one app	arel article	es b	y using value	20
Reference	es:	. ~.		(D				~	

• V. A. Sehnai, Chemistry of Dyes and principle of Dyeing. Sevak Prakasahan, Mumbai

• Hall AJ. 1955. *Handbook of Textile Dyeing & Printing*. The National Trade Press.

• Shenai VA. 1994. *Technology of Dyeing*. SevakPubl.

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus• Test with multiple choice questions/ short and long answer questions• Attendance

Undergraduate Certificate in Home Science

No. of Hours - 60

VALUE ADDITION COURSE (VAC-2) - Value added products from fruits and vegetables

CREDIT D	ISTRIBUTI	ON ELIGI	BILITY AN	ND PRE REQU	UISIT	ES OF TH	E COURSE
Course Title	e Credits	Credit	distribution course	n of the	E (ligibility Criteria	Pre- requisite of the course
		Lecture	Tutorial	Practical/ Practice			(if any)
VAC-2 Value added products from fruits and	2	0	0	2	Passed class X with Science, Arts and Commerce		Nil
vegetables							
	UNDR	GRADUA	TE CERTI	FICATE IN H	OME	SCIENCE	
Programme from fruits	/Class: Valu and Vegetab	ie added les	product	S Year: F	irst	Semester: Paper- V	Second AC-2
Subject : H	ome Science					0.04	
Cours	se VAC-2	Course	itle: Value	added produc	ts fron	n fruits and	d vegetables
• Explain v	arious metho	r studying th ods of preser	nis course, the vation for fi	resh fruits and v	be abl vegetab	e to: les.	
• Get to ki	Ow the value- Credi	$\frac{1}{100}$			e A ddi	tion Cours	Σ ρ
Max. Mark	s: As per Un	iv. rules		Min. Passing	Mark	s: As per U	niv. rules
Unit			Topics				No. of Hours
Unit I	Processing	and preserva	tion by appl	ication of heat(Blancl	ning	10
	pasteurizatio	n and steril	ization)			ining,	10
Unit II	Chemical pro and freezing	eservatives,	drying, addi	tion of sugar, R	lefriger	ation	10
Unit III	Fruit juices: opackaging.	extraction, o	clarification,	preservation ar	nd		10
Unit IV	Preparation of squashes. cri	of fruit juice Jshes, cordi	and beverages als. syrups.	ges <i>viz</i> . Juices, r	nectars	,	10
Unit V	Methods of p	preparation,	flow charts,	packaging, stor	rage an	ld Ig	10
Unit VI	Visit to Food	l Processing	g Unit	sponage and p	aonagn	-8	10
 Recomment Giridha Indian (Srivasta and Procession 	nded Readin rilal, G. S. Si Council of Ag va, R.P., and	igs: ddappa and gri. Res., Ne Sanjeev Ku ublishers P	G.L.Tandor ew Delhi. mar (2019)	n (2007) Prese Fruit and Veg	ervation getable	n of Fruits Preservatio	and Vegetables, on : Principles
 Thomps Sci.,U.K Verma, 	on, A.K. (19 L.R. and V.	95) Post Ha K. Joshi (20	1000) Post H	arvest Technol	and V	egetables. Fruits and	Blackwell Vegetables.
Indus Pu Suggested C syllabus □ Te	ibl., New Del ontinuous Ev st with multi	lhi valuation N ple choice c	lethods: Se uestions/ sh	minar/ Presenta ort and long an	ation or swer q	n any topic uestions□	of the above Attendance

Undergraduate Diploma in Home Science VALUE ADDITION COURSE (VAC-3) - Ayurveda and Nutrition

COURSE

No. of Hours - 15+30 CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE

Course Titl	e Credits	CreditsCredit distribution of the courseEligibilityCriteria			Pre- requisite of the course		
		Lecture	Tutorial	Practical/ Practice	-	(if any)	
VAC-3 Ayurveda an Nutrition	VAC-3 2 Ayurveda and Nutrition		0	1	Passed class XII with Science, Arts and	Nil	
		FRCRAT	IIATE DI	PI OMA IN I	Commerce		
Programme/	Class: Diplo	ma in	Year: Se	econd	Semester: Third		
Home Scien	ce ce				Course: VAC-3		
Subject: Hor	ne science		L				
Course: VA	C-3		Course	Fitle: Ayurve	eda and Nutrition		
Course outco	omes: After	studying th	is course, th	ne students wi	Il be able to:		
• To Under	stand Indian	Knowledge	e Systems (1	IKS) and key	Vedic principles wit	h respect to Food	
and Nutri	tion						
Credits: 2			VALUE	ADDITION	COURSE		
Max. Marks	: As per Uni	v. Rules	Mini. Pa	ssing Marks	: As per Univ. Rule	S	
Unit			Торі	ics		No. of Hours	
Unit I I	ntroductior	n to Ayurv	edic Nutrit	ion			
	• Ayurved	a and India	n food cultu	ıres		5	
	• Nutrition	and lifesty	le transitio	n over the yea	urs		
	Regional	Food Trad	itions of Inc	lia			
Unit II	Basic princi	ples of Foo	d and Nut	rition and Ay	vurveda		
	• Understa	nding rich	sources of 1	nutrients		5	
	• Concept	of Doshas	& assessme	ent			
	• Ayurved	ic Principle	s of food ha	abits and facto	ors		
	determin	ing quality	of food (A	hara vidhi			
	• ESSALro	<i>ayatana)</i>	n Ayuryadi	a Ashar			
Unit III		guiations o	li Ayui veui	c Aallal		5	
	• Principle	s of Diet	Aharavid	hi vidhan	Sattvic Rajasi	5	
	Tamasic	foods	1110101010	ni vianan,	Sativić, Rajaši,		
	• Incompat	tible food	(Virudd)	ha Ahara).	Pathva: Apathva:		
	Viprita A	haar		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	······································		
	• Lifestyle	Managem	ent with Di	<i>ncharya</i> and <i>H</i>	Ritucharya		
	• Applicati	ion of Ayur	vedic diets	to stress linke	d food behaviour		
			Pı	ractical			
Unit I	/isit your loc	al market a	nd classify	the available	food items	10	
2 2	ccording to	Sattvic. Ra	iasi. Tamas	sic foods			
Unit II	To study the f	food consu	nption patt	erns and intak	e of incompatible	10	
f	ood: Virudd	ha Ahara, I	Pathya; Ap	athya; Viprita	a Ahaar		
Unit III	The students	may share t	heir experie	ences in the fo	orm of audio-visual	5	
Ĩ	presentations	of 15-30 r	ninutes.				
Unit IV	/isit to Ayur	veda Hospi	tals			5	

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.
- <u>https://iksindia.org</u>/: Indian Knowledge Systems Suggested Readings
- Charaka Samhita, Charaka (1998) In: Tripathi BN (ed) Sutra Stahan Maharashitiya Adhyay. Chaukhamba Orientelia, Varanasi.

Kapoor Kapil & Singh AK Indian Knowledge Systems Volume – 1. Indian Institute of Advanced Study Shimla. Published by DK Printworld (P) Ltd, N.Delhi. https://www.lkouniv.ac.in

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus \Box Test with multiple choice questions/ short and long answer questions \Box Attendance

Undergraduate Diploma in Home Science VALUE ADDITION COURSE (VAC-4) -Fashion Illustration

No. of Hours - 60 CREDIT DISTRIBUTION ELIGIBILITY AND PRE REQUISITES OF THE COURSE

Course Title	Credits	Credi	t distributi	on of t	he	Eligibility	Pre- requisite
			course			Criteria	of the course
		Lecture	Tutorial	Pra	rtical/		(if any)
		Lecture	I utoriur	Pra	ictice		
VAC-4	2	0	0		2	Passed class XII	Nil
Fashion						with Science,	
Illustration						Arts and	
						Commerce	
Program	ne/Class:	Year: Se	cond		Semes	ter: Fourth Paper-	VAC-4
Diploma	in Home						
Scie	nce						
Subject : Ho	ome science						
Course	e VAC-4		Co	urse T	itle: Fa	shion Illustration	
Course outo	comes: Afte	r studying	this course,	the st	udents v	will be able to:	
• To develo	p knowledg	ge and skill	about basi	c figu	e drawi	ng and illustration o	f human
features.							
• To enable \tilde{a}	students to	sketch the	ir imaginati	ion int	o reality	y by using stylish fig	ure and fashion
figures.		a of torrar	للمحمد أحمدهم		a tha fia		
• To apply	Various type	es of textur	es and med	lums 1	$\frac{1}{1}$	gures.	100
May Marks				N	n Daga	ing Montras Agener	Se Iniv. miles
Max. Marks	: As per Un	IIV. Tules			II. r ass	ing warks. As per o	
Unit			То	opics			No. of Hours
Unit I	Fashion Illu	stration: In	troduction,	Tools	for Ske	tching and	10
	<u>Illustration.</u>						10
Unit II	Designing o design, Prin	of Clothing aciple of De	: Design, Cl esign.	assific	cation of	f Design, Element of	10
Unit III	Create and p	practice the	type of line	es and	apply di	ifferent lines in	10
	dress design	ning.					
Unit IV	Create and a	apply the co	olors Schem	nes in l	Dress Do	esigning by	10
	using Acryl	ic or Wate	r colors.				
Unit V	Create and a	apply the ef	fect of line/	variet	y of line	s in Dress	10
	Designing t	by using pe	ncii and bri	usnes.			
Unit VI	Draw the di	fferent Ske	tch of fashi	on det	ail by us	sing pencil and	10
	brushes-				-		
	• Differe	nt types of	necklines				
	• Differe	nt types of	sleeves				
	• Differe	nt types of	collars				
	• Different types of skirts						

Recommended Readings:

- Figure Drawing for Fashion, Isao Yajima, Graphic-Sha; First Edition (1987)
- Fashion Art for the Fashion Industry, Rita Gersten, Fair child Books(1989).
- Fashion Drawing–The Basic Principles, Anne Allen and Julian Seaman, Anova Books.
- Fashion illustration and Presentation, Manmeet Sodhia, Kalyani Publishers.
- Fashion Source Book, Kathryn Mckelvey, Blackwell Science
- Encyclopedia of fashion details, Patrick John Ireland, Batsford.
- Fashion Illustration, Colin Barnes, Little Brown and Co.(UK)(April1995).
- Snap Fashion Sketch Book, Bill Glazer, Prentice Hall;2 edition(2007).

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus \square Test with multiple choice questions/ short and long answer questions \square Attendance

SKILL ENHANCEMENT COURSE (SEC) PREPARED FOR THE POOL OF COURSES

Course Code	Course Title	Theory /Practical	Credits
SEC-1	Personality Development	Theory	2
SEC-2	Fashion Apparel Designing	Theory + Practical	1+1
SEC-3	Guidance and Counseling	Theory	2
SEC-4	Public Speaking	Theory+ Practical	1+1
SEC-5	Sustainable Development	Theory	2
SEC-6	Food Authenticity and Fraud	Theory+ Practical	1+1
	Detection		

Semester-I Undergraduate certificate in Home Science SKILL ENHANCEMENT COURSE (SEC-1) -- Personality Development

No. of Hours: 30

DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course Tit	le Credits	Credi	t distributio course	on of the	Eligibility Criteria	Pre- requisite of the course	
		Lecture	Tutorial	Practical/ Practice	-	(if any)	
SEC-1	2	2	0	0	Passed class	Nil	
Personalit	y nt				XII with Science Arts		
Developme	111				and Commerce		
	UND	ERGRAD	UATE DIF	PLOMA IN H	IOME SCIENCE		
Program	me/Class:	Year: Fi	rst	Semes	ter: First		
Certificat	e in Home			Paper	- SEC		
Subject : H	ence Iome science						
	ome serence						
Cours	se: SEC-1		Cou	irse Title: Pe	ersonality Developm	nent	
Course out	comes:	lation of t		ill ha ahla tar			
 Develop 	understandin	σ of the co	ne course w	ill be able to:	asic psychological s	kills	
 Apply te 	chniques and	methods to) enhance pi	oductivity an	d time management	KIII5	
• Develop	critical think	ing skill and	d organize h	uman resource	es with improved lea	dership qualities	
	<u> </u>	4					
Max Mark	Creal	iv rules		V Min Pass	ing Marks: As per I	rse	
Credits: 2		IV. Tules			ENHANCEMENT		
Unit				onics		No. of Hours	
Cint			•	opies			
Unit I	Interperson	nal Skills:				5	
	a) Commun	a) Communication-Concept and characteristics					
	b) Effective communication						
1	b) Effective	communic	ation				
	b) Effectivec) Skills ford) Leadersh	communic successful ip	ation interview				
	b) Effectivec) Skills ford) Leadersh	communic successful ip	interview				
Unit II	 b) Effective c) Skills for d) Leadersh Self-develop a) Introduce 	communic successful ip pment skil	interview			5	
Unit II	 b) Effective c) Skills for d) Leadersh Self-develop a) Introduct b) Types opening 	communic successful ip pment skil ction to personalit	interview Is: sonality			5	
Unit II	 b) Effective c) Skills for d) Leadersh Self-develog a) Introduct b) Types o c) Trace of 	communic successful ip pment skil ction to personalit personalit	interview Is: sonality y			5	
Unit II	 b) Effective c) Skills for d) Leadersh Self-develop a) Introduct b) Types o c) Trace of d) Self-con 	communic successful ip pment skil tion to personalit personalit fidence	interview isterview Is: sonality y			5	
Unit II Unit III	 b) Effective c) Skills for d) Leadersh Self-develop a) Introduct b) Types o c) Trace of d) Self-com Critical The	communic successful ip pment skil tion to personalit personalit fidence inking and	interview isterview Is: sonality y I Human re	esources:		5	
Unit II Unit III	 b) Effective c) Skills for d) Leadersh Self-develog a) Introduct b) Types o c) Trace of d) Self-con Critical Th a) Logical 	communic successful ip pment skil tion to personalit f personalit fidence inking and fallacies	interview is: sonality y I Human re	esources:		5	
Unit II Unit III	 b) Effective c) Skills for d) Leadersh Self-develop a) Introduct b) Types o c) Trace of d) Self-com Critical Th a) Logical b) Cognitive c) Marcing 	communic successful ip pment skil tion to personalit fidence inking and fallacies ve biases	interview is: sonality y I Human re	esources:		5	
Unit II Unit III	 b) Effective c) Skills for d) Leadersh Self-develop a) Introduct b) Types o c) Trace of d) Self-con Critical Th a) Logical b) Cognitive c) Mental I d) Critical 	communic successful ip pment skil tion to personalit f personalit fidence inking and fallacies ve biases Model	interview Is: sonality y I Human re	esources:		5	
Unit II Unit III	 b) Effective c) Skills for d) Leadersh Self-develog a) Introduct b) Types o c) Trace of d) Self-con Critical Th a) Logical b) Cognitive c) Mental I d) Critical e) Evaluati 	communic successful ip pment skil tion to personalit fidence inking and fallacies ve biases Model Thinking on and im	interview interview Is: sonality y I Human re	esources:		5	

Unit IV	Dealing Negativity:	5				
	a) Work-life balance					
	b) Stress management					
	c) Coping with failures and depression.					
Unit V	Goal-setting	7				
	a) Concept of goal-setting					
	b) Importance of goal-setting					
	c) Types of goal					
	d) Time-management					
Recommen	nded Readings:					
1. Bast,F.(2016). Crux of time management for students. Available at	:				
https://v	vww.ias.ac.in/article/fulltext/reso/021/01/0071-0088					
2. Cialdini Collius.	, R.B. (2001). Influence: The Psychology of Persuasion, Revised Edition	n. Harper				

- 3. Green, C.J. (2015). Leadership and soft skills for students: Empowered to succeed in High School, College and beyond. Dog Ear Publishing.
- 4. Velayudhan, A. and Amudha devi, N. V. (2012). Personality Development for College Students. LAP Lambert Academic Publishing.

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus \Box Test with multiple choice questions/ short and long answer questions \Box Attendance

Semester- II Undergraduate Certificate in Home Science Skill Enhancement Course (SEC-2)- Fashion Apparel designing

No. of Hours-45

CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course Ti	tle Credits	Credit d	Credit distribution of the course		Eligibility Crite	ria Pre-				
					-	the course				
		Lecture	Tutorial	Practical/ Practico		(if any)				
SEC-2	2	1	0	1	Passed class XII	Nil				
Fashion	_	_	Ŭ	-	with Science,					
Apparel					Arts and Comm	erce				
Designing										
UNDERGRADUATE CERTIFICATE IN HOME SCIENCE										
Programme	/Class: Certif	icate in Hom	e Science Ye	ear: First	Semester: Se	cond				
Subject : Ho	ome science				·					
Course SEC	2-2		Co	ourse Title: Fa	shion Apparel de	signing				
Course out	comes: After s	studying this	course, the st	udents will be	able to:					
\succ Gain the	practical know	ledge for con	nstruction of	children's garn	nents.					
Create sk	illed candidate	e who could y	work from ho	ome too or they	can establish their	own boutique.				
► Many sta	ndard compar	nes provides	lots of oppoi	Disconding S	rea.					
Creans: 2				Discipline 5	pecific Course					
Max. Marks	s: 100			Min. Passin	g Marks: As per U	Jniv. rules				
Total No. of	Lectures-Tu	torials-Pract	ical (in hou	rs per week): (3					
Unit			No. of Lectures/ Theory							
Unit I	Introduction elements of apparels.	ess of designing, ess of designing	5							
Unit II	Fabric type preshrinking handling dif	5								
Unit III	Fundamenta components different fa pleats, neck	5								
Unit I	Introduction t types of fabric	ion of different	10							
Unit II	Preparation of finishing, full mending and	10								
Unit II	Preparation	10								

Suggested Readings:

- Carson, B. 1969. How you look dress. 4th Ed. New yark . Webster Division., McGrw-Hill book company.
- 2. Doongaji, S. and Deshpande, R. Basic process and clothing construction. 2nd Ed. New Delhi,New Raj book Depot.

Suggested Digital Platform: https://onlinecourses.nptel.ac.in/noc22_ag03/preview

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus Test with multiple choice questions/ short and long answer questions Attendance

Semester-III Undergraduate Diploma in Home Science SKILL ENHANCEMENT COURSE (SEC-3) - Guidance and Counselling

No. of Hours - 30 CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course Ti	tle Credits	Credit distribution of the			Eligibility	Pre- requisite		
		course		Criteria	of the course			
		Lecture	Tutorial	Practical/		(if any)		
		Lecture	1 utor lai	Practice				
SEC-3	2	2	0	0	Passed class XII	Nil		
Guidance a	nd		-		with Science,			
Counselling	g				Arts and			
	_				Commerce			
	UNE	DERGRAD	UATE DI	PLOMA IN H	IOME SCIENCE			
Program	mme/Class:		Year	: Second	Semester	: III		
Diplomain	Home Science				Paper- S	EC		
Subject :]	Home science							
Cou	rse SEC-3	Course T	itle: Guida	ince and Cou	nseling			
Course or	utcomes: Afte	r studying	this course,	the students v	will be able to:			
• The stu	dents will bec	ome a perfe	ect counselo	or.				
• The stu	dents will be a	ble to solv	e day to day	y problems of	the clients.			
• The students will become able to solve social problems.								
Credits: 2 Skill Enhancement Course								
Max. Marks: As per Univ. rulesMin. Passing Marks: As per Univ. rules								
Unit	No. of							
		Hours						
	Introduction to Guidance and Counselling: Nature, Principle, Goal and							
Unit I	Adjustment Problem							
	Approaches to	Guidance	and Counse	lling I: Person	al Centered approac	n. 8		
Unit II	Psychodynam	ic approach	n, Behaviou	ral approach	and Cognitive	-, -, -, -, -, -, -, -, -, -, -, -, -, -		
	behavioural approach							
	Approaches to	Guidance	and Course	lling II: Norro	tive therapy Solution	on 6		
Unit III	focused thera	v Music f	herany and	Yoga and me	ditation			
	rocused merapy, wusie merapy and roga and meditation							
	Applications: Child Counselling, Family Counselling, Career Counselling, 10							
Unit IV	IV Crisis intervention: suicide, grief and sexual abuse							

Recommended Readings:

- 1. Aguilera, D. C. (1998). Crisis intervention: Theory and methodology (8th Ed.) Philadelphia: Mosby.
- 2. Belkin, G. S. (1998). Introduction to Counselling (3rd Ed.) Iowa: W. C. Brown.
- 3. Capuzzi, D. & Gross, D. R. (2007). Counselling and Psychotherapy: Theories and interventions (4th Ed). New Delhi. Pearson.
- 4. Corey, G. (2009) Counselling and Psychotherapy: Theory and practise. (7th Ed.) New Delhi: Cengage Learning.
- 5. Friedlander, M. L. and Diamond, G. M. (2012). Couple and Family Therapy. In E.M. Altmaier and J. C.
- Gibson, R. L., & Mitchell, M. H. (2009). Introduction to Counselling and Guidance (7th Ed) New Delhi: PHI Learning Pvt. Ltd.
- 7. Hansen (Eds.) The Oxford Handbook of Counselling Psychology. New York: Oxford University Press
- 8. Kapur, M. (2011). Counselling Children with Psychological Problems. New Delhi, Pearson.
- 9. Parti, V. R. (2008). Counselling Psychology. New Delhi: Authors Press.
- 10. Rao, S. N. Sahajpal, P. (2013). Counselling and Guidance, New Delhi: Tata Mc Graw-Hill.
- 11. Rao, S. N. (2004). Guidance and Counselling. New Delhi: Discovery Publishing House.
- 12. Sharf, R. S. (2012). Theories of Psychotherapy and Counselling: Concepts and Cases. 5th Edition. Belmont: Brooks/Cole (Cengage Learning).
- S. Brown & R. Lent (Eds.). Handbook of Counselling Psychology (4th Ed) (pp. 267-283). NY: Wiley.
- 14. Sharma, R.A. (2014). Fundamentals of Guidance and Counselling, Meerut: R. Lall Book Depot.

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus \Box Test with multiple choice questions/ short and long answer questions \Box Attendance

Semester-IV Undergraduate Diploma in Home Science SKILL ENHANCEMENT COURSE (SEC-4) - Public Speaking

No. of Hours – 15+30

CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course T	itle Credits	Credit distribution of the			Eligibility	Pre-		
		course			Criteria	requisite of		
		Lectur	tur Tutorial Practical/		-	the course		
			1 0101 141	Practice		(if any)		
SEC-4	2	L 1	0	1	Passed class XII	Nil		
Public	-	-	Ū	•	with Science.			
Speaking					Arts and			
1 0					Commerce			
Progra	mme/Class:		Year:	Second	Semester: Four	th		
Diplon	na of Home				Paper- SEC-4			
S	cience							
Subject:	Home science							
Cou	rse SEC-4	Course T	Title: Publi	c Speaking				
Course o	utcomes: After	studying	this course,	the students v	will be able to:			
• Overco	ome the fear of	public sp	eaking and	l enhance the	ir confidence to gai	n practical		
experie	ence in effective	e public sp	beaking.					
Credits: 2 Skill Enhancement Co						ourse		
Max. Ma	rks: As per Uni	v. rules		Min. Pass	ing Marks: As per U	Jniv. rules		
Unit		No. of Hours						
Ι	Public Speaking	7						
	Speaking: Media, Corporate and Political.							
Π	Art of Public Speaking: Language, Etiquettes and Communication 8							
	Skills. Techniques of Public Speaking: Audience Applause							
	Technique, Practice with a mini-audience, Practice in front of							
	camera, Soft Sale Storytelling Strategy.							
	Practical							
1	Art of Public S	nd Communication	15					
	Skills. Techni	idience Applause						
	Technique, Pra	actice wi	th a mini-	audience, Pra	actice in front of			
	camera, Soft Sa	ale Storyte	elling Strate	gy				
III	Tools for Public	Cools for Public Speaking: Vocal delivery, Body language, Audio						
	Visual aids. Effective Speaking: Presentation							

Recommended Readings:

- Davidson, Jeff, The Complete Guide to Public Speaking, Breathing Space Institute, 2003
- DiSanza, J. R., &Legge, N. J, Business and professional communication: Plans, processes, and performance (3rd ed.). Needham Heights, MA: Allyn & Bacon, 2005.
- Goleman, Daniel, Working with Emotional Intelligence, London: Banton Books, 1998
- Hall, Calvin S, et.al., Theories of Personality, New Delhi: Wiley, rpt.2011 Hamilton, C, Essentials of public speaking (5th ed.). Belmont, CA: Wadsworth Cengage Learning, 2012
- Holtz, Shel, Corporate Conversations, New Delhi: PHI.2007
- King, Dale, Effective Communication Skills: The Nine-Keys Guidebook for Developing the Art of Persuasion through Public Speaking, Social Intelligence, Verbal Dexterity, Charisma and Eloquence, Hamatea Publishing Studio, 2020
- Kumar, Sanjay and Pushp Lata, Communication Skills, New Delhi: OUP, 2011

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus \Box Test with multiple choice questions/ short and long answer questions \Box Attendance

Semester-V Bachelor in Home Science (Honours) SKILL ENHANCEMENT COURSE (SEC-5) – Sustainable Development

No. of Hours- 30

CREDIT COURSE	DISTRIBU	TION, E	ELIGIBILI	ITYAND P	RE-REQUISITES	OF THE			
Course Ti	tle Credits	Credit distribution of the course			Eligibility Criteria	Pre- requisite of the course			
		Lecture	Tutorial	Practical/ Practice		(if any)			
SEC-5	2	2	0	0	Passed class XII	Nil			
Sustainable	e				with Science,				
Developme	nt				Arts and				
	B	ACHELO							
	Programme	/Class:		Year: Th	nird Semester	: V			
Bachel	or in Home Sci	ence (Hone	ours)		Paper- SE	C-5			
Subject : 1	Home science								
Cou	rse SEC-5	Course T	itle: – Sus	tainable Deve	elopment				
Course ou	itcomes: After	studying t	his course,	the students v	vill get to know abou	t the importance			
and need of	of Sustainable	approache	s in today'	s consumerist	era. They will also	know about the			
efforts atte	empted on inter	rnational as	s well as on	national level	l for optimum utiliza	tion of resources			
through vi	able technique	te• ?		SI	zill Enhancement C	ourse			
Max Mar	Iniv rules								
Unit	No. of Hours								
	Sustainable D	Developmen	nt: Meanin	g, Concept, I	Definition, History,				
Unit I	Components and Scope; Ecology and Environmental conservation, 10								
	Biodiversity loss and ecological imbalance; Sustainable								
	Development Goals. UNFCCC, COP, IPCC.								
Unit II	Challenges to Sustainable Development; Sustainable Agriculture and								
	forest. Huma	annable res	nment. Th	zation: water	to health and	10			
	education: Poverty and disease								
	In alwaiters D			o.a. II141-					
	Carrying Ca	evelopment	: Educatio	on, Health; Developme	climate Change:				
Unit III	Programmes:	Summits	related	to environ	ment: Stockholm	10			
	conference, 1	Montreal	Protocol, 1	Brundtland C	Commission, Earth				
	Summit, Paris	s Agreeme	nt (COP 2	1); NITI Aay	og and Sustainable				
Development; National Environmental Policy.									
Suggested Readings:									
1. G. Arjun, Sarkar A. & others (2019): Environmental Issues & Sustainable Development, Notion India Press, Chennai									
2. Ahlawat, A. (2019): Sustainable development Goals. Notion India Press. Chennai									
2. r_{MHawat} , r_{M} (2012). Sustainable development Obals, Notion india i ress, Chennal									

- 3. Ossewarde, M.J. (2018): Introduction to Sustainable Development, Sage Publication, New Delhi
- 4. Mishra, J. (2018): Growth with Sustainability, Notion India Press
- 5. Sedana, N. & Indapurkar, K.: Susainable Development Goals, Bloomsberry Publication House, London

Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus Test with multiple choice questions/ short and long answer questions Attendance

Semester-VI Bachelor in Home Science (Honours) SKILL ENHANCEMENT COURSE (SEC-6) - Food Authenticity and Fraud Detection No. of Hours – 15+30

DISTRIBUTION ELIGIBILITY AND PRE- REQUISITES OF THE COURSE

Course Title Credits		Credit distribution of the course			Eligibility Criteria	Pre- requisite of			
			Lecture	Tutorial	Practical/ Practice	_	(if any)		
SEC-6		2	1	0	1	Passed class X	II Nil		
Food Authent	icity					with Science,			
and Fraud						Arts and			
Detection				X 7 (D) •		Commerce			
Programme/Cl Home Science	Programme/Class: Bachelor in Home Science (Honours)Year: ThirdSemester: Sixth Paper-SEC-6								
Subject: Hom	e scien	ice	1						
Course S	SEC-6		Cou	rse Title: F	ood Authen	ticity and Fraud	Detection		
Course outcom	es: Th	e student a	t the comp	letion of the	e course will	be able to:			
1. Understand	the cor	ncepts of fo	ood authen	ticity and fr	aud.				
2. Identify the	types c	of food frau	id and thei	r impact on	the food ind	ustry.			
3. Analyze the	metho	ds and tech	nniques use	ed to detect	food adulter	ation.			
4. Evaluate the	e role of	f food auth	enticity an	d fraud det	ection in ens	uring food safety	and quality.		
	Credits: Value Addition								
Max. Marks:	100				Min. Pas	sing Marks: As p	ber Univ. rules		
Unit	Topics						No. of Hours		
Unit I	Defin	5							
	food	ssurance, and							
	regulatory compliance								
Unit II	Comr substi	slabeling,	5						
Unit III	Supp	5							
	quality assurance, Regulatory frameworks and enforcement								
	Practical								
Unit I	Identification of common types of food fraud: Adulteration,10mislabeling, substitution, counterfeiting, and dilution								
Unit II	I Sensory evaluation and organoleptic testing for Food Authentication: Visual, taste, and smell analysis in detecting fraudulent products								
Recommend	ed Res	adings.							
1. Food Auth	enticity	and Trace	eability – N	1. Lees					
2. Food Fraud Prevention – John Spink									
3. Chemical Analysis of Food: Techniques and Applications – Yolanda Picó									
Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above									
syllabus Test with multiple choice questions/ short and long answer questions Attendance									