National Education Policy-2020

Common Minimum Syllabus for Uttarakhand State Universities and Colleges

Master in Home Science (Foods and Nutrition)

DEPARTMENT OF HOME SCIENCE
SURAJMAL AGARWAL PRIVATE KANYA MAHAVIDYALAYA

Kichha, Udham Singh Nagar Uttarakhand
(Affiliated to Kamaun University, Nainital, Uttarakhand)

EXPERT COMMITTEE

S.NO.	NAME	DESIGNATION	DEPARTMENT	AFFILIATION
1.	Prof. Lata Pandey	Convenor and Head	Department of Home Science D.S.B Campus	Kumaun University, Nainital
2.	Dr. Chhavi Arya	Expert, Associate Professor	Department of Home Science, D.S.B Campus	Kumaun University, Nainital
3.	Dr. Meena Batham	Expert, Associate Professor	Department of Fabric and Apparel Science, Institute of Home Economics, Delh	Delhi University
4.	Dr. Mukta Singh	Expert, Head	Department of Home Science, M.M.V.	B.H.U., Uttar Pradesh
5.	Dr. Manisha Ghalot	Expert, Head	Deptt. of Apparel & Textile Science	GBPUA&T, Pantnagar
6..	Dr. Rekha Naithani	Expert, Head	Department of Home Science	BGR Campus, Pauri, C.U. Garhwal
7.	Dr. Sunita Rani	Expert, Head	Department of Home Science	Kumaun University, Nainital
8.	Mr. Satish Kandpal	Registrar	Gyanarthi College, Kashipur	Kumaun University, Nainital

SYLLABUS PREPARATION COMMITTEE

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2.	Dr. Janki Joshi	Assistant Professor	Department of Home Science, SAPKM, Kichha	Kumaun University, Nainital
3.	Dr. Neha Tiwari	Assistant Professor	Department of Home Science, SAPKM, Kichha	Kumaun University, Nainital
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5.	Dr. Jyoti Pant	Assistant Professor	Department of Home Science, SAPKM, Kichha	Kumaun University, Nainital
6.	Mrs.Ankita Punetha	Teaching Assistant	Department of Home Science, SAPKM, Kichha	Kumaun University, Nainital
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List of Papers (DSC, DSE, GE, VAC, SEC) with Semester Wise Titles for 'Home Science'					
Year	**Semester**	**Course**	**Paper Title**	**Theory/ Practical**	**Credits**
Master in Home Science (Food and Nutrition)					
FIFTH YEAR	**IX**	DSC-21	Basics of nutrition and hygiene	Theory + Practical	2+2
		DSE-11	Food Microbiology	Theory+ Practical	3+1
		GE-11	Nutrition through life cycle	Theory	4
		Dissertation	Dissertation on Major or Minor/Academic project/Entrepreneurship	Practical	10
	X	DSC-22	Clinical Nutrition and dietetics	Practical	4
		DSE-12	Food Quality Analysis	Theory+ Practical	2+2
		GE-12	Food product Development and Marketing	Theory+ Practical	2+2
		Dissertation	Dissertation on Major or Minor/Academic project/Entrepreneurship	Practical	10
Master in Home Science (Textile and Apparel Designing)					
		DSC-21	Advanced Textile Designing and Woven Fabric Analysis	Practical	4
		DSE-11	Eco textile and Environment	Theory	4
	IX	GE-11	Fashion Designing and Accessories	Theory	4
		Dissertation	Dissertation on Major or Minor/Academic Project/ Internship/Training	Practical	10
FIFTH YEAR	**X**	DSC-22	Historic Textiles and Costumes	Theory	4
		DSE-12	Textile Quality Analysis	Theory	4
		GE-12	Garment Manufacturing-Draping	Theory+ Practical	2+2
		Dissertation	Dissertation on Major or Minor/Academic Project/ Internship/Training	Practical	10

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 DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the course			Eligibility Criteria	Pre-requisite of the course(if any)
		Lecture	Tutorial	Practical / Practice		
Discipline Specific Course (DSC-21)- Basics of Nutrition and Hygiene	4	2	0	2	Passed B.Sc. with Home Science or Science	Nil

Master in Home Science (Food and Nutrition)		
Programme/Class: Master in Home Science (Food and Nutrition)	**Year: Fifth**	**Semester: Ninth Paper: DSC-21**
Subject: Home Science		
Course- DSC- 21	**Course Title: - Basics of Nutrition and Hygiene**	

Course outcome:
The student at the completion of the course will be able to:
- Students will get familiar with different methods of cooking.
- Acquaint students with practical knowledge of nutrient-rich foods.

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	Introduction to food and its functions, food groups, meaning of nutrition, concept of health.	5
Unit II	Composition, classification, functions, sources, digestion, absorption and utilization of macronutrients (Carbohydrates, Fat, Protein) and Energy.	5
Unit III	Composition, functions, sources, digestion, absorption and utilization of micronutrients (Vitamins and Minerals), sources, functions, requirement and deficiency diseases.	5
Unit IV	Food Spoilage, factors contributing to food spoilage, personal hygiene, evaluating food for freshness, evaluating canned food for spoilage, food hygiene during cooking and serving, public health department and food sanitation. Food sanitation at household level.	5
Unit V	Agents of contamination, sources and reservoirs of infection, modes of transmission of infection, mode of entry into a susceptible host, prevention and control of infection and disease.	10
PRACTICAL		
I	Basic Cooking skills -Weighing of raw materials	10

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

Suggested Reading:

- 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 Test with multiple choice questions/ short and long answer questions Attendance

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

No. of Hours-45+30

CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the course			Eligibility Criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
Discipline Specific Course (DSE-11)- Food Microbiology	4	3	0	1	Passed B.Sc. with Home Science or Science	Nil

Master in Home Science (Food and Nutrition)		
Programme/Class: Master in Home Science (Food and Nutrition)	**Year: Fifth**	**Semester: Ninth** **Paper: DSE-11**
Subject: Home Science		
Course- DSE -11	**Course Title: Food Microbiology**	

Course outcome:
The Student at the completion of the course will be able to:
- To know about different microorganism occurring in food.
- To be able to know food spoilage and factors responsible for food spoilage.

Credits: 4	**Discipline Specific Elective**
Max. Marks: As per Univ. Rule	**Min. Passing Marks: As per Univ. rules**

Unit	Topics	No. of Hours
I	Microbiology of foods- • Basic concepts • Role of micro-organisms in fermented foods.	5
II	Micro-organisms in foods: • Bacteria, • Fungi, • Yeasts, • Moulds, • Viruses, • Parasites.	10
III	Occurrence and growth of micro-organisms in food: • Microbiology of air, water and soil, • Sources of food contamination,	5
IV	Factors affecting the growth of micro-organisms- • Nutrition, oxygen, temperature, moisture, osmotic pressure, pH, light, control and destruction of micro-organisms.	5

V	Food spoilage- • 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.	10
VI	Food hazards of microbial origin: • 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	10
	Practical	
I	Familarization with instruments used in microbiological lab, their principles and working: Microscope, Autoclave, Laminar Flow Bench, Hot air oven, Incubator, Centrifuge, pH meter, spectrophotometer etc.	5
II	Glass ware washing and sterilization for microbiological work	5
III	Microbial staining techniques a. Simple direct staining b. Gram staining techniques	10
IV	Preparation of culture media	5
V	Isolation of bacteria from food sample	5

Suggested Readings:

- 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)
GENERIC ELECTIVE (GE-11)- Nutrition Through Life Cycle

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the course			Eligibility Criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
Discipline General Elective (GE-11)- Nutrition Through Life Cycle	4	4	0	0	Passed B.Sc. with Home Science or Science	Nil

Master in Home Science (Food and Nutrition)		
Programme/Class: Master in Home Science (Food and Nutrition)	**Year: Fifth**	**Semester: Ninth** **Paper: GE-11**
Subject: Home Science		
Course- GE-11	**Course Title: Nutrition Through Life Cycle**	

Course outcome:
The Student at the completion of the course will be able to:
- Know the role of diet in preventing the degenerative diseases
- Know major milestones in different age groups.

Credits: 4	**Generic Elective**
Max. Marks: As per Univ. Rule	**Min. Passing Marks: As per Univ. rules**

Unit	Topics	No. of Hours
Unit I	Nutritional status: malnutrition, under nutrition, over nutrition, factors associated with malnutrition, morbidity, and mortality. Global and national data on malnutrition, recommended dietary intake.	10
Unit II	Nutritional in Pregnancy and Lactation: Stages of gestation, maternal weight gain, complications of pregnancy, nutritional problems and dietary management, the importance of nutrition during and before pregnancy, teenage pregnancy - nutritional problems, and dietary management. Nutrition in Lactation: Physiology of lactation, hormonal control, and reflex action, the efficiency of milk production, problems of breastfeeding, the nutritional composition of breast milk, nutritional concerns during lactation, special foods during lactation, dietary modification.	15

Unit III	Nutrition in Infancy, Pre-School and School Children Infant feeding: nutritional needs, premature infant and their feeding, weaning foods. Feeding problems, infant formulae lactose intolerance. Nutrition in Pre-school - Physiological development related to nutrition, feeding problems, behavioral characteristics, nutritional requirement. Nutrition in school children - feeding school children and factors to be considered. Nutritional requirements, feeding problems.	15
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

Suggested Reading

- 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

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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	Credits	Credit distribution of the course			Eligibility Criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
Discipline Specific Elective (DSE- 22)- Clinical Nutrition and Dietetics	4	0	0	4	Passed B.Sc. with Home Science or Science	Nil

Master in Home Science (Food and Nutrition)		
Programme/Class: Master in Home Science (Food and Nutrition)	**Year: Fifth**	**Semester: Tenth Paper- DSC-22**
Course : DSC-22	**Course Title: 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
II	Planning and preparation of diet for a high BP patient.	10
III	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
VI	Planning and preparation of diet for a patient suffering from gastro intestinal diseases.	10
VII	Planning and preparation of diet for a patient suffering from coronary heart diseases.	20
VIII	Planning and preparation of diet for a patient suffering from – • Stress • Trauma • Surgery • Burns	20
IX	Planning and preparation of diet for an eating disorder • Anorexia nervosa, • Bulimia nervosa, • Binge eating	20

Suggested Readings:

- 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.PhoenixPubl.
- 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 Test with multiple choice questions/ short and long answer questions 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

Course Title	Credits	Credit distribution of the course			Eligibility Criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/Practice		
Discipline Specific Elective (DSE-12)- Food Quality Analysis	4	2	0	2	Passed B.Sc. with Home Science or Science	Nil

Master in Home Science (Food and Nutrition)		
Programme/Class: Master in Home Science (Food and Nutrition)	**Year: Fifth**	**Semester: Tenth** **Paper: DSE-12**
Subject: Home Science		
Course- DSE-12	**Course Title: Food Quality Analysis**	

Course outcome:

The Student at the completion of the course will be able to:

- To understand physical, rheological properties of foods
- To get acquainted with sensory analysis of food.
- To get knowledge about food intoxicants.

Credits: 4	**Discipline Specific Elective**
Max. Marks: As per Univ. Rule	**Min. Passing Marks: As per Univ. rules**

Unit	Topics	No. of Hours
Unit I	Chemical changes in foods during processing.	5
Unit II	Physical and rheological properties of foods.	5
Unit III	Changes in flavor components and natural food pigments during processing and storage.	5
Unit IV	Bioavailability of micronutrients: vitamins and minerals.	5
Unit V	Sensoryevaluation methods for foods.	5
Unit VI	Food intoxicants: Enzyme inhibitors; lathyrogens; goitrogens; cyanogenic glycosides; phenolics; oxalates; phytates; alkaloids; carcinogens; polycyclic aromatic hydrocarbons; allergens.	5

Practical

I	Physical tests of grain quality	15
II	Sensory evaluation of foods: Selection of panel, training of panel members, objective test of sensory evaluation and consumer acceptability	20
III	Adulteration tests: a. Milk b. Spices c. Oil d. Tea leaves **e.** Honey	20
IV	Visit to a quality analysis unit of food processing industry	5

Suggested Readings:

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

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Semester-X
Master in Home Science (Food and Nutrition)
GENERIC ELECTIVE (GE-12)- Food Product Development and Marketing
No. of Hours-30+60

CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the course			Eligibility Criteria	Pre- requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
General Elective (GE-12)- Food Product Development and Marketing	4	2	0	2	Passed B.Sc. with Home Scienceor Science	Nil

Master in Home Science (Food and Nutrition)		
Programme/Class: Master in Home Science (Food and Nutrition)	**Year: Fifth**	**Semester: Tenth Paper: GE-12**
Subject: Home Science		
Course- GE-12	**Course Title: Food Product Development and Marketing**	

Course outcome:
The student at the completion of the course will be able to:
- To understand various aspects of the development of a food product.
- Standardize and generate the process flow chart for a new food product

sCredits: 4	**Generic Elective**
Max. Marks: As per Univ. Rule	**Min. Passing Marks: As per Univ. rules**

Unit	Topics	No. of Hours
I	Product development – • Need for product development • factors influencing product development, • Sensoryevaluation during product life cycle. • Trends in Social Change as a Base for New Product Development. • Food product development in India, • Advantages of new food product development and its new trends.	10
III	Food fortification- • Objectives • Principles • Technologies.	5
IV	Food packaging • Principles in the development of safe and protecting packing • Packaging materials (metals, glass, paper and plastics)	5
V	Sweetening agents- • Natural sweeteners • Artificial sweeteners • Composition and use of sweeteners	5

VI	Food additives- • Functions • Uses • Chemical, technological and toxicological aspects of food additives	5
	PRACTICAL	
I	A. Product Development and Standardization • Cereal and Pulse Based Foods • Fruit Juices, Squash and Jams • Pickles, Ketchup, Sauce • Weaning Foods • Convenience foods, RTS, and RTE foods • Healthy Bakery foods	30
II	Marketing of a Food Product • Selection of a Product, Preparation, Standardization, and Cooking • Selection of Packaging Material, Labeling, Cost Calculation, and Marketing • Presentation of Report	30

Suggested Readings:

- Pomeranz, Yeshajahu, ed. Food analysis: theory and practice. Springer Science & Business Media,2013.
- Nollet, 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 & Business Media, 2012.
- Fuller, Gordon W. New food product development: from concept to marketplace. CRC Press, 2016.
- Smith, Jim, and Edward Charter, eds. "Functional food product development."2011.

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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

CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the course			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 Home Science (Textile and Apparel Designing)		
Programme/Class: Master in Home Science (Textile and Apparel Designing)	**Year: Fifth**	**Semester:Ninth Paper: DSC-21**
Subject: Home Science		
Course- DSC-21	**Course Title: Advanced Textile Designing and Woven Fabric Analysis**	

Course outcome:

The Student at the completion of the course will be able to:

- To develop in depth knowledge about use of cad in textiles.
- To learn about the complex weaves and dobby, jacquard mechanism and carpet making process.

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	History and development of spinning, weaving and handlooms. Spinning of yarns, classification of woven fabrics. Operation in woven cloth production	10
Unit III	Study of design, draft and peg plan for different weaves; weave calculations; advantages and disadvantages. Construction of elementary weaves: plain, twill,satin and sateen weaves. Colour 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	10
Unit IV	CAD commands; creating stripes and checks using various commands.	10
Unit V	Developing motifs by scanning and drawing using the CAD commands	10

Unit VI	Simulation and graph/ point paper; Developing a computer aided portfolio of different motifs, Creation of special effects layers and layer settings	10
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 software.	20

Suggested Readings:

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, 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 (Textile and Apparel Designing)

DISCIPLINE SPECIFIC ELECTIVE (DSE-11)- ECO TEXTILE AND ENVIRONMENT

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the course			Eligibility Criteria	Pre- requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Discipline Specific Course (DSE)- Eco textile and Environment	4	4	0	0	Passed graduation with Science, Arts and Commerce	Nil
Master in Home Science (Textile and Apparel Designing)						
Programme/Class: Master in Home Science (Textile and Apparel Designing)		Year: Fifth			Semester:Ninth Paper: DSE-11	
Subject: Home Science						
Course- DSE-11		Course Title: EcoTextile and Environment				

Course outcome:

The Student at the completion of the course will be able to:

- To impart in depth knowledge of different banned and eco-friendly dyes.
- To impart knowledge about health hazards due to textile industries

Credits: 4	**Discipline Specific Elective**
Max. Marks: As per Univ. Rule	**Min. Passing Marks: As per Univ. rules**

Unit	Topics	No. of Hours
Unit I	✓ Industrialization, eco-balance and textile ecology. ✓ Air, noise and water pollution by mechanical and chemical textile processing and their effect.	15
Unit II	✓ German Ban ✓ Indian Ban, ✓ Banned dyes ✓ Eco-parameters ✓ Eco-friendly Textiles	10
Unit III	Oeko- Tex Standard 100.	10
Unit IV	Red listed chemicals as per Eco- specification, Testing of textiles and auxiliaries, effluents discharge.	10
Unit V	Health hazards of textile workers working in various textile units and their remedial measures.	15
	Total	**60**

Suggested Readings:

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

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

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the course			Eligibility Criteria	Pre- requisite of the course if any)
		Lecture	Tutorial	Practical/ Practice		
GENERAL Elective (GE-11)- Fashion Designing and Accessories	4	4	0	0	Passed graduation with Science, Arts and Commerce	Nil

Master in Home Science (Textile and Apparel Designing)		
Programme/Class: Master in Home Science (Textile and Apparel Designing)	**Year: Fifth**	**Semester: Ninth Paper: GE-11**
Subject: Home Science		
Course- GE-11	**Course Title: Fashion Designing and Accessories**	

Course outcome:
The Student at the completion of the course will be able to:

- 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	**Generic Elective**
Max. Marks: As per Univ. Rule	**Min. Passing Marks: As per Univ. rules**

Unit	Topics	No. of Hours
Unit I	Fashion terminology	2
Unit II	Evolution of fashion and fashion theories	8
Unit III	Current fashion trends, Factor determining fashion trends	6
Unit IV	Fashion forecasting and creation, factors affecting fashion forecasting	8
Unit V	Fashion life cycle: trickle up, trickle down and trickle across theory	4
Unit VII	Techniques and tools used for fashion sketching	4
Unit VII	National and international fashion designers	7
Unit VIII	Fashion careers and job opportunities	6
Unit IX	Fashion Accessories: Introduction to Fashion accessories, its types 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 Title	Credits	Credit distribution of the course			Eligibility Criteria	Pre-requisite of the course (if any)
		Lecture	Tutorial	Practical/ Practice		
Discipline Specific Course (DSC)- Historic Textiles and Costumes	4	4	0	0	Passed graduation with Science, Arts and Commerce	Nil

Master in Home Science (Textile and Apparel Designing)		
Programme/Class: Master in Home Science (Textile and Apparel Designing)	**Year: Fifth**	**Semester: Tenth Paper: DSC-22**
Subject: Home Science		
Course- DSC-22	**Course Title: Historic Textiles and Costumes**	

Course outcome:
The Student at the completion of the course will be able to:
- Understand about historic costume and textiles of various countries

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	Introduction: Historic background and detailed study of ancient and medieval Indian costumes	10
Unit II	**Study of traditional dyed, printed, embroidered and non-woven textiles of :** • America, • China, • Egypt • France, • Greece, • Japan and • Rome.	10
Unit III	**History and evolution of traditional costumes of** • America, • China, • Egypt • France, • Greece, • Japan and • Rome.	10

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

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

No. of Hours-60

CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the course			Eligibility Criteria	Pre-requisite of the course(if any)
		Lecture	Tutorial	Practical/ Practice		
Discipline Specific Elective(DSE-12)-Textile Quality Analysis	4	4	0	0	Passed Graduation with Science, Arts and Commerce	Nil

Master in Home Science (Textile and Apparel Designing)		
Programme/Class: Master in Home Science (Textile and Apparel Designing)	**Year: Fifth**	**Semester: Tenth Paper: DSE-12**
Subject: Home Science		
Course- DSE-12	**Course Title: Textile Quality Analysis**	

Course outcome:

The Student at the completion of the course will be able to:

- To develop knowledge about testing methods of different fibers, yarns and fabrics

Credits: 4	**Discipline Specific Elective**
Max. Marks: As per Univ. Rule	**Min. Passing Marks: As per Univ. rules**

Unit	Topics	No. of Hours
Unit I	Importance of textile testing, standardization and quality control, functions of BIS and other standards.	10
Unit II	Fiber length, fineness, evenness, fiber strength, elongation, diameter, air permeability	10
Unit III	Yarn strength, elongation, count, denier, crimp, twist, stress-strain curve, elastic recovery	10
Unit IV	Fabric strength, breaking, bursting, tear and ballistic strength, thermal conductivity, air permeability, water repellency, thickness, shrinkage, pilling, abrasion resistance,colour fastness to washing, light, rubbing or crocking and Perspiration	10
Unit V	Apparel Testing- seam strength, button and print etc.	5
Unit VI	National and International organization and objectives of various organizations related to textile testing	5
Unit VII	Visit to Textile Industry	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, 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 (Textile and Apparel Designing)

GENERIC ELECTIVE (GE-12)- Garment Manufacturing- Draping

No. of Hours-120

CREDIT DISTRIBUTION, ELIGIBILITYAND PRE-REQUISITES OF THE COURSE

Course Title	Credits	Credit distribution of the course			Eligibility Criteria	Pre- requisite of the course(if any)
		Lecture	Tutorial	Practical/ Practice		
General Elective (GE-12)- Garment Manufacturing- Draping	4	0	0	4	Passed Graduation with Science, Arts and Commerce	Nil

Master in Home Science (Textile and Apparel Designing)		
Programme/Class: Master in Home Science (Textile and Apparel Designing)	**Year: Fifth**	**Semester: Tenth Paper: GE-12**
Subject: Home Science		
Course- GE-12	**Course Title: Garment Manufacturing- Draping**	

Course outcome:

The Student at the completion of the course will be able to:

- To impart technical knowledge and skills in garment designing and manufacturing by draping

Credits: 4	**Generic Elective**
Max. Marks: As per Univ. Rule	**Min. Passing Marks: As per Univ. rules**

Unit	Topics	No. of Hours
Unit I	Garment designing through draping: definition and related terminology	20
Unit II	Tools and supplies for draping	20
Unit III	Draping principles and techniques	20
Unit III	Designing and construction of following garments using different construction features: a) Children garment b) Male garment c) Female garment	20
Unit IV	Pattern development	20
Unit V	Visit to fashion institute; project preparation and report writing	20

Suggested Readings:

- Bane, A. 1972. Flat Pattern Design. New York. McGraw Hill Book
- Waren, G.S. 1969.Principles for creative clothing.

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