

THE GANDHIGRAM RURAL INSTITUTE - DEEMED TO BE UNIVERSITY
GANDHIGRAM - 624302, DINDIGUL DISTRICT, TAMIL NADU
(MINISTRY OF EDUCATION, GOVERNMENT OF INDIA)

DEPARTMENT OF HOME SCIENCE



B.Sc. / B.Sc (Hons) in HOME SCIENCE
SYLLABUS

(With effect from July 2024)

Programme Educational Objectives (PEO)

- PEO 1** Creating knowledgeable, skillful and competent workforce to manage available resources at family/community to establish holistic society.
- PEO 2** Equip the learners with scientific knowledge and skills in food handling, processing, quality control and assurance.
- PEO 3** Acquire the skills required for menu planning, preparation of diets for normal, diseased persons at the family, institution and hospital levels.
- PEO 4** Identify the physical, cognitive, emotional and social needs at different stages of life span and address to improve the personal efficiency.
- PEO 5** Ability to plan and manage houses by applying decision making and work simplification techniques and acquire knowledge in consumer behaviour.
- PEO 6** Acquire the skills in garment selection, maintenance, designing and construction.
- PEO 7** Developing competency among the learners in acquiring skills in handling audio visual aids and selection of appropriate aids for outreach activities.

Program Outcome (PO)

- PO 1** Become knowledgeable in the field of Home Science and apply the principles of the same to cater the needs of the Employer / Institution / Society.
- PO 2** Gain Analytical skills in the field/area of Home Science.
- PO 3** Understand and appreciate professional ethics, community living and Nation Building initiatives.
- PO 4** Execute professional ethics, attitude and values to be an effective food scientist, dietitian, counselors, managers at garment units, family care institutions, entrepreneurs and extension workers.
- PO 5** Manage human and non-human resources at home/community and establish a sustainable community.
- PO 6** Demonstrate and counsel various types of diet plan to a family/ diseased/ person with disability.
- PO 7** Equip with skills related to apparel designing, food preservation, catering, bakery, diet planning and programme planning.
- PO 8** Create individuals with social and cultural sensitivity and to address the everyday challenges positively.
- PO 9** Equip them to pursue advanced studies in various fields of Home Science.

Programme Specific Outcome (PSO)

PSOs are statements that describe what the Home Science graduates are expected to do.

- PSO 1** Demonstrate skills/talents and proficiency in specialized areas of study such as Food Science & Nutrition, Textiles and Clothing, Human Development, Family Resource Management and Home Science Extension.
- PSO 2** Apply the knowledge of Home Science in the domain of Teaching, Learning, Research and Extension.
- PSO 3** Address concern for the community (urban, rural and tribal) with genuine sensitivity and dedicate transferable knowledge and research findings for the benefit of the community.
- PSO 4** Solve the complex problems in the field of Home Science with an understanding of the societal, legal and cultural impacts of the solution.
- PSO 5** Demonstrate interest in engaging in active need based, innovative and community-oriented research using appropriate methods, collect and process data and present evidence-based solutions and defend arguments related to the field of research in Home Science.
- PSO 6** Emerge as Diet Counsellors, Managers at Food Industries/ Family Care Institutions, Garment units, Play schools, Extension Worker.
- PSO 7** Equip the learners to pursue higher education in specific branches of Home Science.
- PSO 8** Demonstrate inclination toward acquiring knowledge and doing in-depth studies on allied subjects of Home Science.
- PSO 9** Explore and decide upon viable avenues of self-employment and entrepreneurship plus career options in different facets of Home Science disciplines.

Credit requirements for B.Sc / B.Sc (Hons) in Home Science

S. No.	Broad Category of Course	3-year UG	4-Year UG
1	Major (Core)	60	80
2	Minor Stream	24	32
3	Multidisciplinary	09	09
4	Ability Enhancement Courses (AEC)	12	12
5	Skill Enhancement Courses (SEC)	09	09
6	Functional Tamil/Malayalam/Hindi	02	02
7	Value Added Courses common for all UG	08	08
8	Internship (During V Semester)	02	02
9	Field study/VPP/Community Engagement	06	06
10	Research Project / Dissertation/Core Course	-	12
11	Internship* (at the end of the IV Year)	-	02
	Total	132	174

* Internship during summer vacation of Fourth Year.

Note: Honours students' not undertaking research **will do 3 courses for 12 credits** in lieu of a Research project / Dissertation

Semester wise distribution of Credit Requirements for B.Sc/B.Sc Hons in Home Science

S. No.	Broad Category of Course	Semester								Total
		I	II	III	IV	V	VI	VII	VIII	
1	Major (Core) (15X4) = 60	4	4	8	12	12	16	12	8	76
2	Minor Stream	4	4	4	4	4	4	8	-	32
3	Multidisciplinary	3	3	3	-	-	-	-	-	9
4	Ability Enhancement Courses (AEC)	3	3	3	3	-	-	-	-	12
5	Skill Enhancement Courses (SEC)	3	3	3	-	-	-	-	-	9
6	Functional Tamil/ Malayalam/Hindi	-	2	-	-	-	-	-	-	2
7	Value Added Courses common for all UG	4	4	-	-	-	-	-	-	8
8	Internship	-	-	-	-	2	-	-	2	4
9	Field study/VPP/Community Engagement	-	-	VPP-2	CC-2	FS/CC - 2	-	-	-	6
10	Research Project / Dissertation/ Core course	-	-	-	-	-	4*	-	12	16
	Total	21	23	23	21	20	24	20	22	174

* Project or Major for 4 credits

B.Sc/B.Sc (HONS) HOME SCIENCE
SEMESTER-WISE CREDIT DISTRIBUTION ALONG WITH SCHEME
OF INSTRUCTION AND EVALUATION
2024-2025 Onwards

Category	Course Code	Course Tile	No. of Credits	Lecture Hours Per Week	Exam Duration (Hrs.)	Max marks		
						CFA	ESE	Total
I Semester								
Core	Major-I 24HSUC1101	Introduction to Home Science	3	3	3	40	60	100
	24HSUC1102	Introduction to Home Science Practical	1	2	2	60	40	100
	Minor-I 24HSUB1101	Family Dynamics	4	4	3	40	60	100
Multi Disciplinary		Multi Disciplinary-I	3	3	3	40	60	100
Ability Enhancement Course (AEC)	24ENUA1101	Essential English: Basic	3	3	3	40	60	100
Skill Enhancement Course	24TAUS1101/ 24MLUS1101/ 24HIUS1101	Indian Language (Tamil / Malayalam / Hindi) -I	3	3	3	40	60	100
Value Added Course	24FSUV1001	VAC - 1 Environmental Science	2	2	2	50	-	50
Value Added Course	24FAUV1001 (Or) 24GTUV1002	VAC – 2 Heritage and cultural history of India(or)Shanthi Sena	2	2	2	50	-	50
		Total	21	20				
II Semester								
Core	Major-2 24HSUC1203	Fundamentals of Human Development	3	3	3	40	60	100
	24HSUC1204	Fundamentals of Human Development -Practical	1	2	3	60	40	100
	Minor-2 24HSUB1202	Food Microbiology	4	4	3	40	60	100
Multi Disciplinary	24CSUI10XX	Multi Disciplinary II Computational Skills	3	3	3	40	60	100
Ability Enhancement Course (AEC)	24ENUA1202	Essential English: Intermediate	3	3	3	40	60	100
Skill Enhancement Course	24TAUS120/ 24MLUS120/ 24HIUS1202	Indian Language – II (Tamil / Malayalam / Hindi)	3	3	3	40	60	100
Value Added Course	24PEUV1001	VAC – III Yoga and Fitness	2	2	2	50	-	50
Value Added Course	24GTUV1001	VAC – IV Let Us Know Gandhi	2	2	2	50	-	50
Skill Enhancement Course	24TAUF000/ 24MLUF0004 / 24HIUF0004/	Functional Tamil/Malayalam/Hindi	2	2	2	50	-	50
		Total	23	22				
Exit option: UG Certificate in Home Science (provided a student earns 4 credits in skill based vocational course /summer term or internship for 8 weeks during summer vacation of the First Year)								

Category	Course Code	Course Tile	No.of Credits	Lecture Hours Per Week	Exam Duration (Hrs.)	Max marks		
						CFA	ESE	Total
III Semester								
Core	Major-3 24HSUC2105	Resource Management and Interior Design	3	3	3	40	60	100
	24HSUC2106	Resource Management and Interior Design -Practical	1	2	3	60	40	100
	Major-4 24HSUC2107	Fundamental of Textiles	3	3	3	40	60	100
	24HSUC2108	Fundamental of Textiles Practical	1	2	3	60	40	100
	Minor-3 24HSUB2103	Food Chemistry	3	3	3	40	60	100
	24HSUB2104	Food Chemistry practical	1	2	3	60	40	100
Multi Disciplinary		Multi Disciplinary -III (Online course)	3	3	3	40	60	100
Ability Enhancement Course (AEC)	24ENUA2103	Essential English – Advanced	3	3	3	40	60	100
Skill Enhancement Course	24TAUS2103/ 24MLUS2103 / 24HIUS2103	Indian Language – III (Tamil / Malayalam / Hindi)	3	3	3	40	60	100
Extension	24EXUE2101	Village Placement Programme -VPP	2	-	-	50	-	50
		Total	23	18				
IV Semester								
Core	Major-5 24HSUC2209	Basics of Apparel Designing	3	3	3	40	60	100
	24HSUC2210	Basics of Apparel Designing Practical	1	2	3	60	40	100
	Major-6 24HSUC2211	Fundamentals of Food and Nutrition	3	3	3	40	60	100
	24HSUC2212	Fundamentals of Food and Nutrition -Practical	1	2	3	60	40	100
	Major-7 24HSUC2213	Home Science Extension and Communication	3	3	3	40	60	100
	24HSUC2214	Home Science Extension and Communication Practical	1	2	3	60	40	100
	Minor-4 24HSUB2205	Traditional Textiles of India	4	4	3	40	60	100
Ability Enhancement Course (AEC)	24HSUA2001	AEC: Core Elective	3	3	0	40	60	100
Extension	24EXUE2202	Community Engagement	2	-	-	50	-	50
		Total	21	22				
Exit option: UG Diploma in Home Science ((provided a student earns 4 credits in skill based vocational course /summer term or internship for 8 weeks during summer vacation of the Second year)								

Category	Course Code	Course Tile	No.of. Credits	Lecture Hours Per Week	Exam Duration (Hrs.)	Max marks		
						CFA	ESE	Total
V Semester								
Core	Major-8 24HSUC3115	Normal and Therapeutic Nutrition	3	3	3	40	60	100
	24HSUC3116	Normal and Therapeutic Nutrition Practical	1	2	3	60	40	100
	Major-9 24HSUC3117	Family Clothing	3	3	3	40	60	100
	24HSUC3118	Basics of Fashion Illustration- Practical	1	2	3	60	40	100
	Major-10 24HSUC3119	Early Childhood Care and Education	3	3	3	40	60	100
	24HSUC3120	Early Childhood Care and Education practical	1	2	3	60	40	100
	Minor-5 24HSUB3106	Programmes for Rural Families	2	2	3	40	60	100
	24HSUB3107	Programmes for Rural Families Practical	2	2	3	60	40	100
	24HSUC3121	Internship	2	-	-	50	-	50
	24HSUE3101	Field Study/ Field Visit	2	4	4	50	-	50
		Total	20	23				
VI Semester								
Core	Major -11 24HSUC3222	Developmental Challenges and Children with Disabilities	3	3	3	40	60	100
	24HSUC3223	Developmental Challenges and Children with Disabilities- Practical	1	2	3	60	40	100
	Major -12 24HSUC3224	Family Finance and Consumer Behaviour	3	3	3	40	60	100
	24HSUC3225	Family Finance and Consumer Behaviour -Practical	1	2	3	60	40	100
	Major -13 24HSUC3226	Gender Sensitization for Empowerment	3	3	3	40	60	100
	24HSUC3227	Gender Sensitization for Empowerment -Practical	1	2	3	60	40	100
	Major -14 24HSUC3228	Food Service Management	3	3	3	40	60	100
	24HSUC3229	Food Service Management - Practical	1	2	3	60	40	100
	Minor-6 24HSUB3208	Community Health and Nutrition	3	3	3	40	60	100
	24HSUB3209	Community Health and Nutrition Practical	1	2	3	60	40	100
	Major - 15 24HSUC3230	Introduction to Ergonomics (OR) Project	4	4	0	40	60	100
				0	0	40	40 + 20	100
		Total	24					
	Exit option: Bachelor Degree in Home Science with 132 credits							

Category	Course Code	Course Tile	No.of. Credits	Lecture Hours Per Week	Exam Duration (Hrs.)	Max marks		
						CFA	ESE	Total
VII Semester								
Core	Major - 16 24HSUC4131	Extension Education System	4	4	3	40	60	100
	Major - 17 24HSUC4132	Advanced Food Science and Nutrition	3	3	3	40	60	100
	24HSUC4133	Advanced Food Science and Nutrition- Practical	1	2	3	40	60	100
	Major - 18 24HSUC4134	Enterprise Development	4	4	3	40	60	100
	Minor-7 24HSUB4110	Nutritional Biochemistry	3	3	3	40	60	100
	24HSUB4111	Nutritional Biochemistry-Practical	1	2	3	60	40	100
	Minor-8	Research Methods and Statistics	4	4	3	40	60	100
		Total	20	18	4			
VIII Semester								
Core	Major - 19 24HSUC4235 24HSUC4236	Behaviour Change Communication (or) Boutique planning	4	4	3	40	60	100
	Major - 20 24HSUC4237 24HSUC4238	Food Processing Technology	3	3	3	40	60	100
		Food Processing Technology-Practical	1	2	3	60	40	100
		(or)	3	3	3	40	60	100
	24HSUC4239 24HSUC4240	Advanced Dietetics	1	2	3	60	40	100
	Advanced Dietetics- Practical	1	2	3	60	40	100	
	Major - 21 24HSUC4241	Project	12	12	3	100	100+ 100	300
		Total	20	22				

Note: Honours Students not undertaking research will do 3 courses for 12 credits in lieu of a research project / Dissertation.

**** Internship during Summer Vacation.**

A) Major Core Papers (from Each Discipline of Home Science) (Up to 6th Semester)

Sl.No	Branches of Home Science	Nomenclature	Credit	
			Theory	Practical
1.	Food Science and Nutrition; Food Service Management	Fundamentals of Food Science and Nutrition	3	0
		Fundamentals of Food Science and Nutrition Practical	0	1
		Normal and Therapeutic Nutrition	3	0
		Normal and Therapeutic Nutrition-practical	0	1
		Food Service Management	3	0
		Food Service Management Practical	0	1
Total			9	3
2.	Human Development and Family Studies	Fundamentals of Human Development	3	0
		Fundamentals of Human Development - Practical	0	1
		Developmental Challenges and Children with disabilities	3	0
		Developmental Challenges and Children with disabilities- Practical	0	1
		Early childhood care and Education	3	0
		Early childhood care and Education-Practical	0	1
Total			9	3
3.	Resource Management	Resource Management and Interior Design	3	0
		Resource Management and Interior Design- Practical	0	1
		Family Finance and Consumer Behaviour	3	0
		Family Finance and Consumer Behaviour -Practical	0	1
		Introduction to Ergonomics	4	0
Total			10	2
4.	Textiles and Clothing	Fundamental of Textiles	3	0
		Fundamental of Textiles- Practical	0	1
		Basics of Apparel Designing	3	0
		Basics of Apparel Designing- Practical	0	1
		Family clothing	3	0
		Basics of Fashion Illustration	0	1
Total			9	3
5.	Home Science Extension and Communication	Introduction to Home Science	3	0
		Introduction to Home Science Practical	0	1
		Home Science Extension and Communication	3	0
		Home Science Extension and Communication - Practical	0	1
		Gender Sensitization for Empowerment	3	0
		Gender Sensitization for Empowerment practical	0	1
Total			9	3
Grand Total			46	14

B) Minor Stream

Sl.No	Branches of Home Science	Nomenclature	Credit	
			Theory	Practical
1.	Food Science and Nutrition;	Food Microbiology	4	0
		Food Chemistry	3	1
2.	Food Service Management	Nutritional Bio-chemistry	3	1
3.	Human Development and Family Studies	Family Dynamics	4	0
4.	Resource Management	Community Health and Nutrition	3	1
5.	Textiles and Clothing	Traditional Textiles of India	4	0
6.	Extension and Communication	Programmes for Rural families	2	2
7.	-	Research Methods and Statistics*	4	0
Total			27	5

*Offered by Department of Applied Research

C) Multi-Disciplinary (Inter Departmental Electives)

Sl.No	Course Code	Nomenclature	Credit
			Theory
1.	24HSUI1101	Basics of Food and Nutrition	3
2.	24HSUI1102	Nutrition Through Life Cycle	3
3.	24HSUI1103	Food Hygiene and Sanitation	3
4.	24HSUI1104	Bakery and Confectionary	3
5.	24HSUI1105	Adolescence and Life skill Education	3
6.	24HSUI1106	Management of Pre-School and Day Care Centres	3
7.	24HSUI1107	Arts and Crafts of India	3
8.	24HSUI1108	Traditional Embroidery of India	3
9.	24HSUI1109	Communication for Development	3
10.	24HSUI1110	Participatory Learning and Action	3
11.	24HSUI1111	Basics of Art and Design	3
12.	24HSUI1112	Event Management	3

D) Ability Enhancement Courses (Discipline Centric Electives)

Sl.No	Branches of Home Science	Course Code	Nomenclature	Credit
				Theory
1.	Food Science and Nutrition	24HSUA2201	Food Safety and Quality Control	3
		24HSUA2202	Human Physiology	3
		24HSUA2203	Technology of Food Preservation	3
2.	Food Service Management	24HSUA2204	Food Hygiene and Sanitation	3
		24HSUA2205	House Keeping	3
3.	Human Development and Family Studies	24HSUA2206	Theories of Child Development	3
		24HSUA2207	Gerontology	3
4.	Resource Management	24HSUA2208	Designing and Furnishing Life-space	3
		24HSUA2209	Hospitality Management	3
5.	Textiles and Clothing	24HSUA2210	Soft Toy Making	3
		24HSUA2211	Fashion Grooming	3
6.	Home Science Extension and Communication	24HSUA2212	Entrepreneurship Development	3
		24HSUA2213	NGO Management	3

SEMESTER-I

INTRODUCTION TO HOME SCIENCE

Code: 24HSUC1101

Credits: 3

Pd/Wk:3

Marks: 100

Learning Objectives:

Enable the students to

- Understand the concept, scope and philosophy of Home Science.
- Appreciate the role of home science in nation building.
- Desirable attitude towards integrated rural and urban development
- Cultivate human values through learning home science

Course Outcomes:

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

- Identify good design
- List personal goals and values, set living standards
- Plan a Balanced diet, enlist the principles of diet therapy and functioning of food service institutions
- Comprehend the key aspects of human growth and development and realize the importance of mastering developmental tasks of each life span stage
- Understand the concept of Extension education and its importance
- Identify different types of clothing that are available in the market and evaluate its standards.

Course content

Unit 1

Basics of Home Science

Definition, meaning, components, branches or areas, philosophy and scope of Home Science. Linkages of Home Science with the basic Sciences and Social Sciences. Scientific and multi-disciplinary nature of Home Science. Graduate attributes of Home Science students. The Home Science Association of India- objectives and role. International Federation of Home Economics.

Unit 2

Home Science education at various levels

Nursery (pre)schools, Primary schools, Secondary and Higher Secondary Schools, Colleges and Universities, Teacher's and other professional colleges. Vocational education of Home Science education at various levels. Home Science as family and community science. Job opportunities in Home Science.

Unit 3

Food and Nutrition, Food Service Management and Dietetics:

Definition of food, Nutrition, nutrients. Balanced Diet- meaning and importance- RDA. Food Groups, Food Pyramid and dietary pattern.

Dietetics- principles of diet, meal planning, irregular meals, skipping meals, fast food, dieting, eating disorders, importance of exercise.

Food label and its importance.

Unit 4

Resource Management and Textiles and clothing

Resource Management- Concept and importance. Aspects of resource management.

Classification of resources- human and non-human, characteristics of resources. Steps in management. Goals- types and importance of goal setting.

Textiles and Clothing:

Textile: Meaning, definition, glossary, scope of textiles. Importance of Textile, origin of Textile and its classification.

Clothing: Meaning, definition, Importance of Clothing, selection of fabric for different age group.

Unit 5

Human Development and Home Science Extension and Communication

Human Development: meaning, importance and domains of Human Development. Growth and development- principles. Nature-nurture controversy. Stages of life span development.

Home science extension and communication: meaning, characteristics, objectives, components and dimensions. Communication- definition, types. Media- definition, classification and functions.

Reference books:

1. Chandra, A., Shah, A. and Joshi, U. (1989). Fundamentals of Teaching Home Science. Sterling Publishers Pvt Ltd., New Delhi.
2. Devdas Rajammal, P. (1977). Methods of Teaching Home Science. National Council of Education Research and Training, New Delhi.
3. Dahama, O.P. and Bhatnagar, O.P. (2012). Education and Communication for Development. Oxford and IBH Publishing Co. Pvt Ltd, New Delhi, India.
4. Nisha, M. (2006). Wings of Home Science. Kalpaz Publications, New Delhi, India.
5. Ray, G.L. (2013). Extension Communication and Management. Kalyani Publications, India.
6. Reddy, A.A. (2010). Extension Education. Sri Lakshmi Press, Bapatla, India.
7. Paraliker, Kalpana, R. (1990). The Art of Teaching Home Science. Evira Publication, Baroda.
8. Srilakshmi, B. (2015). Food Science. 3rd Edition. New Delhi: New Age International.
9. Suriakanthi, A. (2009). Child development. Kavitha publications, Gandhigram,

INTRODUCTION TO HOME SCIENCE

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Identify good design	3	2	2	2	2	2	3	3	2
CO2	List personal goals and values , set living standards	3	3	3	2	2	3	3	3	3
CO3	Comprehended key aspects of human growth and development and realize the importance of mastering developmental task of each life span stage.	2	3	2	1	2	3	3	3	2
CO4	Understand the concept of extension education and importance	3	2	3	2	3	3	3	3	3
CO5	Identify different type of clothing that are available in the market and evaluate its standards.	3	3	3	2	3	3	3	3	3

INTRODUCTION TO HOME SCIENCE - PRACTICAL

Code: 24HSUC1102

Credits: 1

Pd/Wk: 2

Marks: 100

Learning Objectives:

Enable the students to

- Understand the concept, scope and philosophy of Home Science.
- Appreciate the role of home science in nation building.
- Desirable attitude towards integrated rural and urban development
- Cultivate human values through learning home science

Course Outcomes:

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

Practical

1. Identification of fast foods in the market.
2. Food pyramid activity
3. Examination of food labels/ how to read the food label (refer from NIOS)
4. Identification of resources
5. Preparation of day schedule/ daily activities for a student during holidays
6. Goal setting- preparation of short-term and long-term goals
7. Identify the textile material
8. Illustrate a garment for kids.
9. Selection of fabric for different age group.
- 10 Drawing types of communication
11. Visit to broadcasting station
12. Visit to villages to observe extension activities
13. Visit to child care institutions to observe different child study methods
14. Observation of infants and recording their activities.
15. Debate on Nature-nurture controversy

INTRODUCTION TO HOME SCIENCE - PRACTICAL

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO1	Will get the awareness about the role of an Home Scientist in shaping the future of a family	3	2	2	2	2	2	3	3	2
CO2	Gain practical knowledge and skills in facing the basic issues in the Society	3	3	3	2	2	3	3	3	3
CO3	Will be well equipped to check the basic quality checks in a textile industry	2	3	2	1	2	3	3	3	2

FAMILY DYNAMICS

Code: 24HSUB1101

Credits: 4

Pd/Wk:4

Marks: 100

Learning Objectives

Enable the students to

1. Get an insight into self development
2. Acquire knowledge and insights about the dynamics of contemporary marriage and family systems in India
3. Become acquainted with the concept, goals and areas of adjustment in marital relationships and within the family

Course Outcomes

On Successful Completion of this course, the students will be able to

- Identify their relationship with family and society
- Describe the factors associated with successful marital life
- Gain the means to strengthen the intra-family relationships
- Find out tangible solutions for issues in the family

Course content

Unit-I Understanding the Self

- Self-Awareness—personality characteristics, cultural beliefs, values, expectations and ideas guiding behavior
- Self-identity— Identifying one's own philosophy and goals of life (influenced by personal history, socialization and context)
- Personality—factors that shape one's personality and its influence on behavior and interpersonal communications
- Self with family/parents/siblings, peers, social/professional organizations
- The impact of media on the self

Unit –II: Marriage

- Marriage as an institution : goals, rituals, functions, changes and challenges
- Mate Selection; factors influencing, considerations of exogamy and endogamy, changing trends, arranged and personal choice of mates.
- Preparation for marriage – Pre-marital guidance, Factors associated with success in Marriage
- Marital Counselling – Need and importance , types

Unit –III: The Family

- Definitions, functions, types (with reference to India)
- Family Life cycle – stages and sub-stages (beginning, expanding, contracting)
- Changing trends in India and factors influencing (social change, family values and ideologies, family structures)
- Alternate forms of family – Single parent, female headed, migrant, dual earner, reconstituted, surrogate

Unit –IV: Interpersonal relationships within the family

- Individual roles, rights and responsibilities within the family
- Family Interaction and communication – importance and methods of improvement
- Family cohesion- the role of effective communication, compassion, perspective-taking, role distribution, positive conflict resolution, and teamwork.

Unit –V: Family Crisis

Family Crisis – Meaning, Forms of family crisis: Marriage, divorce/separation, remarriage, financial instability, poor work-family balance, illness, death, childlessness, child abuse/neglect, family violence, peer pressure, addiction, rape, suicide, unemployment, natural disasters, epidemics and wars – Strategies for managing family crisis.

References:

1. Augustine, J.N (Ed). (1982). *The Family in Transition*, New Delhi. Vikapublishinghouse
2. Burgess, W. (1982) *The Family*. New York: American book Company.
3. Bushan, V (2003). *An Introduction to Sociology*, Kitab Mahal, New Delhi
4. Chaudhary, N., & Shukla, S. (2019). Family, identity, and the individual in India. In G. Misra (Ed.), *Psychology: Volume 2: Individual and the social: Processes and issues* (pp.143-189). New Delhi, India: Oxford University Press.
5. Rao, N. (1997). *Counselling and Guidance*. New Delhi: Tata Mcgraw Hill publishing company ltd.
6. Ratra Amiteshwar et al. (2006). *Marriage and Family: In Diverse changing Scenario*, Deep and Deep Publications Pvt. Ltd. New Delhi.
7. TISS (1991). *Research on Families with Problems in India; Issues and Implications*. Vol I & II. Bombay: TISS.

Text Books:

1. Dev, I. *The Basic Essentials of Counselling* New Delhi: Sterling Publishers Private Limited.

FAMILY DYNAMICS

Course Outcomes		Programme Specific Outcome (PSO)								
		PS O 1	PS O 2	PS O 3	PS O 4	PS O 5	PS O 6	PS O 7	PS O 8	PSO 9
CO I:	Explain the roles and functions of the family	3	3	2	2	1	3	1	2	1
CO2	Describe the factors associated with successful marital life	3	3	1	3	2	3	1	2	1
CO3	Identify the means to strengthen the intra-family relationships	3	3	1	2	2	1	1	2	2
CO4	Analyze the programmes for family welfare.	3	3	3	3	3	3	3	3	3

SEMESTER –II

FUNDAMENTALS OF HUMAN DEVELOPMENT

Code: 24HSUC1203

Credit: 3

Pd/Wk: 3

Marks: 100

Learning Objectives

Enable the students to

1. Understand the characteristics, needs and developmental tasks of different stages of life span
2. Explore the issues and challenges faced at various stages of life
3. Develop skills to work with human beings across life span.

Course Outcomes

On Successful completion of this course, the students will be able to

- Explain the need and importance of studying human growth and development across life span
- Identify and acquire skills in facing the challenges at each stage of life
- Apply the knowledge in handling human beings across life span.

Course Content

Unit –I: Pre-natal Development and Child Birth Process

Conception, Stages of prenatal development. Signs and symptoms of Pregnancy. Common discomforts and complications of Pregnancy. Factors influencing prenatal development.

Child Birth – stages and types of delivery. Post-natal care of the mother.

Infant and Maternal mortality – Causes and prevention.

Unit-II: Infancy and Babyhood

Infancy – Appearance of the new born- size – physical proportion and physiological functions; sensory abilities of the new born. Low birth weight, premature babies. Apgar test, care of the newborn, Immunization.

Infant feeding – Breast feeding and its advantages, bottle feeding and supplementary feeding

Development during Babyhood :Physical, motor, cognitive, language, social, and emotional development. Developmental tasks. Behavior problems and handling the problems.

Unit – III : Early Childhood and Late Childhood

Early and Late Childhood : Physical, motor, cognitive, language, social, and emotional development. Developmental tasks. Habit Formation.

Methods of Child study: Projective technique, observation, experimentation, case study (Elementary treatment), Needs and Rights of Children.

Unit -IV: Adolescence

Adolescence - Physical development - Prepubertal growth- changes in primary and secondary sexual characteristics in boys and girls. Mental, Social and emotional development during adolescent years. Developmental tasks.

Adolescent Problems: Identity Crisis, Peer relationship, Juvenile Delinquency, Depression, Eating disorders.

Unit –V: Adulthood

Early adulthood Characteristics of early adulthood; developmental tasks; Marital and Parenthoodadjustments

Middle adulthood Characteristics; developmental tasks; adjustment to physical changes, socialadjustments

Late adulthood Characteristics; developmental tasks; adjustment to physical changes, adjustments to retirement, adjustment to changes in Family life; living arrangements. Health problems.

References:

1. Anne Anastasi & Susana Urbin. (2022). Psychological testing 7th edition, Pearson India Education Services Pvt. Ltd, Chennai.
2. Berk, L.E. (2017). Child development (9th ed.). New Delhi: Prentice Hall.
3. Bhangaokar, R., & Kapadia, S. (in press). Human Development Research in India: A historical overview. In G. Misra (Ed.), Hundred years of Psychology in India. New Delhi: Springer.
4. Feldman, R., & Babu, N. (2009). Discovering the life span. New Delhi: Pearson
5. Kakar, S. (1998). The inner world. Psychoanalytic study of childhood and society in India. Delhi: Oxford University Press.
6. Kapadia, S. (2011). Psychology and human development in India. Country paper. International Society for the Study of Behavioural Development Bulletin Number 2, Serial No. 60, pp.37-42.
7. Keenan, T., Evans, S., & Crowley, K. (2016). An introduction to child development. Sage.
8. Lightfoot, C., Cole, M., & Cole, S. (2012). The development of children (7th ed.). New York: Worth Publishers.
9. Santrock, J. (2017). A topical approach to life span development (9th ed.). New NY.: McGraw-Hill Higher Education.
10. Singh, A. (2015). Foundations of Human Development: A life span approach. ND: Orient Black Swan.
11. Vasantha, R & Patri. (2004). Counselling Psychology. Authorpress, New Delhi.
12. Walsh, B.A., DeFlorio, L., Burnham, M.M., & Weiser, D.A. (2017). Introduction to Human Development and Family Studies. NY: Routledge

FUNDAMENTALS OF HUMAN DEVELOPMENT

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Explain the need and importance of studying human growth and development across life span	3	3	3	3	3	3	3	3	3
CO2	Identify and acquire skills in facing the challenges at each stage of life	3	3	3	3	3	3	3	3	3
CO3	Apply the knowledge in handling human beings across life span.	3	3	3	3	3	3	3	3	3

FUNDAMENTALS OF HUMAN DEVELOPMENT PRACTICAL

Code: 24HSUC1204

Credits: 1

Pd/Wk: 2 Marks: 100

Learning Objectives

To enable the students

- To understand the milestones on development of children
- To identify the issues and challenges faced by an individual in various stages of life span
- To orient towards various methods of child study.

Course Outcomes

- Gain skills in working with children and adults
- Plan and implement programmes for individuals in various age groups

Practical

1. Preparation of an album on developmental mile stones of children
2. Visit to Anganwadi
3. Plot and interpret Growth Monitoring Chart
4. Observation of child rearing practices of families in different social class
5. Organize an educational programme to young mothers on immunization and weaning
6. Carry out case studies of toddler, school going child, adolescent, middle aged and aged
7. Plan games and activities for school age children
8. Interviews of adolescent girls and boys to understand their life style and 21ehavior based on gender and socio-economic status
9. Study the health problems of middle aged and aged
10. Visit to old age homes

FUNDAMENTALS OF HUMAN DEVELOPMENT PRACTICAL

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO1	Gain skill in working with children and adults	3	3	2	2	3	3	2	3	3
CO2	Plan and implement programmes for individuals in various age groups.	3	2	2	3	3	3	2	2	2

FOOD MICROBIOLOGY

Code: 24HSUB1202

Credits: 4

Pd/Wk: 4

Marks: 100

Learning Objectives:

Enable the students to

1. Understand the role of microbes in food, health and disease.
2. Study the Microbes in relation to food spoilage, food borne diseases and food preservation.

Learning Outcomes:

On Successful Completion of this course, the students will be able to

- Explain the factors influencing the growth of microorganisms in food
- Identify the signs and symptoms of food spoilage and mode of prevention
- Enumerate the importance of food safety

Course content

Unit-I: Microbiology of Foods

Concept and its history. Microbes in Air, water and soil control and its destruction – Physical and chemical methods. . Food spoilage – Causes, Microbial growth in foods, factors affecting the growth of micro- organisms in food

Unit-II: Contamination and microorganism in spoilage of different kinds of foods

Cereals and cereal products, vegetables and fruits, fish and sea foods, milk and milk products, eggs, meat and meat products, canned and bottled food.

Unit -III: Contamination of water

Microorganisms in contaminated water, test for contamination, standards for drinking water.

Unit –IV: Food Borne Diseases

Sources, symptoms and methods of prevention and control.

Role of microorganisms in fermented foods – soyabean products vegetable and dairy foods, baked items, other preparations, uses of microbes in industry.

Unit-V: Examination of food borne diseases

Receiving report and assessment, investigation, identifying causative factors, association between food items and illness, sample collection and reporting.

References:

1. Annak.Joshua,(2001).Microbiology,PopularBookDepot.Chennai-18.
2. FrazierWilliamCandWesthoff,DennisC.FoodMicrobiology,TMH,NewDelhi,2004
3. Jay,James M.Modern Food Microbiology, CBS Publication, NewDelhi,2000
4. Ray,B. (2001) Fundamental Food Microbiology,2ndEdition, CRC press, BocaRaton FL.
5. R P Srivastava & Sanjeev Kumar (2014), Fruit and Vegetable Preservation (Principles and Practices), CBS Publishers and distributors Pvt Ltd, New Delhi.

FOOD MICRO BIOCOGY

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Explain the factors in fluencing the growth of micro organisms in food	3	3	2	2	2	3	3	3	3
CO2:	Identify the signs and symptoms of food spoil age and mode of prevention	3	3	3	2	2	3	3	3	3
CO3:	Enumerate the importance of food safety	3	3	3	2	3	3	3	3	3

SEMESTER-III

RESOURCE MANAGEMENT AND INTERIOR DESIGN

Code: 24HSUC2305

Credits: 3

Pd/Wk:3

Marks:100

Learning Objectives

Enable the students to

1. Learning to identify and manage the use of resources available for functional use
2. Setting realistic goals and being practical and prudent in the use and management of limited resources by making intelligent decisions
3. Becoming money, time and energy conscious in daily living.
4. Understand and apply the basic principles of art in Interior decoration.
5. Understand the elementary principles of planning a house and its interior arrangement

Course Outcome

On Successful Completion of this course, the students will be able to

- Understanding on the concepts related to family resource management
- Appreciation of the significance of management process in efficient use of resources
- Imbibing nuances of human values and standards for successful management and decision making
- Focus on management of human energy as a family resource
- Application of principles of design in everyday life.

Course Content

Unit-I: Introduction to Resource Management in Family Settings

Introduction to Management- meaning, definition, Managerial inputs-values, goals and standards – their inter relationship.

Resources - Concept, classification and characteristics of family resources. Significance of managing resources of the family.

Decision Making- Meaning, process of Decision making. Role of values, standards and goals indecision making process.

Management process: Steps in management process: Planning, Controlling and Evaluation.

Unit-II: Resource Management Process

Income- definition of family income, concept of income management, types of income steps in money management. Family life cycle, its stages and use of money.

Family budget- definition, importance, steps in making budget for a family, factor affecting the budget. Methods of handling money

Time-steps in making daily and weekly time and activity plan. Tools in time management- Peak loads and leisure time.

Energy – Types of effort, Concept of body posture, drudgery, fatigue- types. Activities, classification of activities (sedentary, moderate and heavy), methods of alleviating fatigue.

Work simplification- definition, importance, Principles of Work simplification, Mundel's Classes of Change

Unit –III: Interior design

Design: Meaning, types- Structural design and Decorative design, characteristics, elements of art and principles of design.

Colour: Qualities of colour – Prang colour system – colour harmonies; Application of the principles in simple designs.

Flower arrangement: Principles, types, materials used.

Unit–IV: House Plan and Arrangement

Site selection – factors to be considered. House Plans – types – reading of floor plans – drafting floor plans for middle and low income group families; Features of a house contributing to livability orientation, grouping, roominess, lighting and ventilation, circulation, storage facilities, privacy, flexibility, sanitation and economy.

Unit–V: Room Arrangement

Furniture – Selection, arrangement and care.

Furnishings – Type, Selection and care. Application of art principles in room arrangement.

Kitchen–different types –planning of kitchen. Work triangle.

References:

1. Education planning group .(2001).Home Management. Arya Publishing House, New Delhi
2. Deshpande,R.S.(1982).CheapandHealthHomesforMiddleClasses.UnitedBook Corporation, Pune.
3. Deshpande, R. S.(1982).Modern Ideal Homes for India. United Book Corporation, Pune
4. Goldstein,H. and Goldstein, V.(1958).Art in Everyday Life.Mac millan company.
5. Nickell, P.and Dorsey, J. M.(1978).Management in Family Living, 4th edition. John Wiley and Sons, New Delhi.
6. Soundararaj. S. (1996).A Text book of HouseholdArts,4thEdition,OrientLongman publishers Pvt. Ltd
7. Varghesese,M. A., Ogale N. N., and Srinivasan, K. (1994).Home Management. Viley Eastern.Ltd., New Delhi.

RESOURCE MANAGEMENT AND INTERIOR DESIGN

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO 1:	Understanding on the concepts related to family resource management.	3	3	3	3	3	3	3	3	3
CO2:	Application of the significance of management process in efficient use of resources.	2	3	2	3	2	2	2	3	3
CO3:	Imbibing nuances of human values and standards for successful management and decision making.	3	3	3	2	3	3	3	2	3
CO4:	Focus on management of human energy and family resource.	3	3	3	3	3	2	3	3	2

RESOURCE MANAGEMENT AND INTERIOR DECORATION-PRACTICAL

Code: 24HSUC2306

Credits: 1

Pd/Wk: 2

Marks: 100

Learning Objectives

Enable the students to

1. Understand and apply the basic principles of art in Interior decoration.
2. Understand the elementary principles of planning a house and its interior arrangement

Course Outcome

On Successful Completion of this course, the students will be able to

- Understanding on the concepts related to family resource management
 - Focus on management of human energy as a family resource
 - Application of principles of design in everyday life.
1. Personal values and related goals through short-term and long-term goals
 2. Identification of community and natural resources
 3. Identification and development of self as are source.-SWOC analysis
 4. Preparation of time plans for self during holidays
 5. Drafting family budget for different income groups
 6. Analysis of different work, work places and appliances as sources of drudgery
 7. Illustrate structural and decorative designs. Types of decorative design- Naturalistic, Stylized, Geometric and abstract design
 8. Illustrate the elements of art and principles of design.
 9. Practicing flower arrangement in different style. Exposure to Flower holding containers and accessories.
 10. Preparations of greeting cards and floor decorations
 11. Drawing floor plans for low and middle income group families
 12. House visit to observe the different types of kitchen
 13. Evaluation of room arrangement.

RESOURCE MANAGEMENT AND INTERIOR DECORATION-PRACTICAS

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Understanding on the concepts related to family resource management.	3	3	3	2	2	3	3	2	2
CO2:	Focus on management of human energy as a family resource.	2	2	3	3	3	3	2	3	3
CO3:	Application of principals of design in everyday life.	3	3	2	3	3	2	3	3	3

FUNDAMENTALS OF TEXTILES

Code: 24HSU2307

Credits: 3

Pd/Wk: 3

Marks: 100

Unit-I: Introduction to Textile Fibers

Definition, Meaning, Classification of Textiles Fibers-Natural fiber-cotton,Jute, silk, wool-manufacturing process, properties and end uses. Minor Textile fibers-coir, ramie, kapok, manufacturing process properties and uses.

Synthetic fibers- nylon, nylon 6,6, polyester, acrylic- modacrylic, olefins, spandex, Aramids, carbon fiber, glass fiber, metallic fibers, properties uses and cares.

Regenerated fiber and regenerated modified fibers - Viscose rayon, acetate, cup raammonium rayon, Bamboo, Modal, Soya, manufacturing process properties and its uses and cares. (Understanding Concepts only)

Unit-II: Spinning

Yarn construction – Definition- Directions of yarn Twist: Z, S twist, Yarn number or Yarn count –Direct and Indirect system. Process of yarn construction, Types of spinning, Dry, Wet, Melt, Conventional spinning-cotton system, woolen and worsted system, Non conventional spinning-Open End, Friction and Self Twist, Yarn classification – Simple yarn, Complex yarn, Textured yarns, Fancy yarns, Spun yarns.(Understanding Concepts only)

Unit-III Fabric construction

Definition, parts and functions of simple loom. Types of weaves- Basic weaves – Plain, Twill weave and Satin weaves, Decorative weave- Dobby, Jacquard ,Pile, Leno weave ,Lappet and Swivel weave. Knitting- Definition, classification of knitting- Warp and Weft knitting- properties and end uses.

Non-woven fabric - Definition, web formation and web bonding. Decorative fabric construction-Knotting, Lacing, Braiding and Felting–properties and end uses.

Unit-IV: Textile Finishing

Basic finishes-Singeing, Desizing, Scouring, Bleaching, Mercerizing, Napping, Calendaring. Special finishes –Antimicrobial, Waterproof finishes, Flame Resistant, Stain Resistant. Finishes suitable to Natural and Manmade fibers. (Understanding Concepts only)

Unit- V: Dyeing and Printing

Definition of Dyes, concept of Dyes, Classification of dyes, Dyes suitability to various fibers. Methods ofDyeing-Stockdyeing ,yarndyeing, piecedyeing, cross and union dyeing. Printing– Definition, Styles of printing-Direct, Discharge, Resist. Colour Fastness.

References:

1. A.J. Hall. "The standard hand book of Textiles", Wood head Publishing 8th edition 2004.
2. Clarke-Introduction to printing.
3. E.P.G. Gohl, L.D. Velensky, "Textile Science" CBS Publishers and Distributors, 2003
4. P.V. Vidyasagar, "Hand Book of Textiles", A. Mittal Publications, 2005
5. Sara J. Kadolph, "Textiles", Prentice Hall, 10th edition 2007

Textbooks:

1. Dantyagi, S. (1996). Fundamentals of Textiles and Their Care. New delhi.
2. Hollen. nand Saddler. J. Textiles macmillan \$co., New York.
3. Joseph M, Introductory Textile science-6th Ed., Fortworth Harcourt, Brace
4. Joseph. M. L. (1976) Essentials of Textiles Holt Ripen hart of Winston, New York.
Jovani och college publishers, 1993. Orient long man limited.
5. Textbook-Textile Science-Deepali Rastogi, Sheetal Chopra.
6. Tortora, P.G. (1978) Understanding Textiles New York Macmillan publishing. Inc.
7. Wingate, B.I. (1976). Textiles Fabrics and their selection. USA: Prentice Hall. Inc.

FUNDAMENTALS OF TEXTILES

Course Outcome (CO)	Programme Specific Outcome(PSO)								
	1	2	3	4	5	6	7	8	9
FUNDAMENTALS OF TEXTILES	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9
CO1: understand the basics of fibre and yarn	3	3	1	1	1	3	3	3	3
CO2: Analyze various fabric structure	3	3	1	1	1	3	3	3	3
CO3: Acquaintance the students in yarn structure and its process	3	3	1	1	1	3	3	3	3
CO4: understand the physical and chemical properties of fibre	3	3	1	1	1	3	3	3	3
CO5: Explore various textile finishes, dyeing and printing	3	3	1	1	1	3	3	3	3

FUNDAMENTALS OF TEXTILES PRACTICAL

Code: 24HSU2308

Credits: 1

Pd/Wk: 2

Marks: 100

Identify, prepare and analysis the following samples.

- Identification of fiber
- Burning Test
- Solubility test
- Microscopic structure
- Identification of Yarn
- Identify the direction of Yarn Twist
- Identification of different Fabric types
- Identification of weaves using pick glass
- Preparation of basic weaves
- Collect different weave samples
- Identification of printing types
- Identification of fabric defects

Reference

1. P.V.Vidyasagar, "HandBook of Textiles", A.Mittal Publications, 2005
2. Sara J. Kadolph, "Textiles", Prentice Hall, 10th edition 2007

FUNDAMENTALS OF TEXTILES PRACTICAL

Course Outcome (CO)	Programme Specific Outcome(PSO)								
	1	2	3	4	5	6	7	8	9
FUNDAMENTALS OF TEXTILES PRACTICAL	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9
CO1: understand the basics of fibre and yarn	3	3	1	1	1	3	3	3	3
CO2: Analyze various fabric structure	3	3	1	1	1	3	3	3	3
CO3: Acquaint the students in yarn structure and its process	3	3	1	1	1	3	3	3	3
CO4: understand the physical and chemical properties of fibre	3	3	1	1	1	3	3	3	3
CO5: Explore various textile printing	3	3	1	1	1	3	3	3	3

FOOD CHEMISTRY

Code: 24HSUB2303

Credits: 3

Pd/Wk: 3

Marks: 100

Learning Objectives:

Enable to the students

1. Understand the constituents of food and its composition.
2. Gain knowledge about the structure and properties of the food constituents.
3. Identify the chemical and physical changes that occur in food during processing.

Course Outcomes:

On successful completion of the course, the student will be able to

- Name and describe the general chemical structure of major components of foods (water, carbohydrates, protein and lipids)
- Explain how food constituents influence the quality characteristics of food.
- Predict how processing conditions are likely to change their activity of food components.
- Evaluate the changes in food behaviour due to heat, acid and alkali.

Course Content

Unit-I Physico-chemical properties of food constituents

Food Constituents: water, carbohydrate, protein, lipids, enzymes, pigments etc. role of water in food; free water and bound water; water activity in foods. Properties of water; true solutions, colloids and dispersions; Types of colloids: sols, gels, foams and emulsion and its applications.

Unit-II: Carbohydrates

Classification, structure and properties of simple and complex carbohydrates. Changes of carbohydrate on cooking -solubility, hydrolysis, caramelisation, retrogradation, Maillardre action and gelatinization of starch.

Unit-III: Lipids

Classification and Chemistry of lipids, properties and fat constant, edible fats and oils–hydrogenation, rancidity and emulsification.

Unit-IV: Proteins

Amino acids – classification, structure, composition, physio-chemical properties of amino acids and proteins; effect of heat acid, alkalion animal and vegetable protein.

Unit-V: Enzymes and Pigments

Enzymes meaning, classification, properties, mechanism of action, factors affecting enzyme activity; role of enzymes in food and its importance.

Pigments meaning, classification, composition; plant and animal pigments and its properties; pigment extraction, Effect of heat, acid and alkalion vegetable pigments.

References:

1. H.D.Belitz,W.Grosch and P.Schieberie (2009).Food Chemistry 4th edition Springer publications
2. John M.De Man (1999) Principles of Food Chemistry, Springer publications.
3. Ronsivalli,.L.J. and Vieira, E.R. (1992).Elementary Food Science, 3rdEdition, Chapman and Hall, NewYork.
4. Srinivasan Damodaran, Kirk L.Parkin and Owen R.Fennema (2007).Food chemistry (4thedition)CRC Press.

Textbooks:

1. Meyer,(2004).Food Chemistry,CBS Publishers and Distributers Pvt.Ltd ,New Delhi.
2. S A Iqbal & Y Mido (2005), Food Chemistry, Discovery Publishing House, New Delhi.
3. SeemaYadav,(1997).FoodChemistry,AnmolPublicationsPvt.Ltd.,NewDelhi.

E-resources

1. <http://epgp.inflibnet.ac.in>
2. <http://ecourseonline.iasri.res.in/course/view.php?id=89>
3. <http://egyankosh.ac.in>

Mooc

1. http://onlinecourses.swayam2.ac.in/cec20_ag10/preview

Food Chemistry

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO 1	Name and describe the general chemical structure of major components of foods (water, carbohydrates, protein and lipids)	3	3	3	3	3	3	3	2	3
CO 2 :	Explain how changes in overall composition are likely to change the reactivity of food components	3	3	2	3	3	2	3	3	2
CO 3:	Predict how processing condition sare likely to change the reactivity of food components	3	2	2	3	3	3	3	3	3
CO 4 :	Analyse the pigment changes during cooking of vegetable by addition of acid and alkali	3	2	2	2	3	1	2	2	2

FOOD CHEMISTRY PRACTICAL

Code: 24HSUB2304

Credits: 0+1

Pd/Wk: 2

Marks:100

Learning Objectives:

Enable the students to

1. Provide understanding of chemical properties of food constituents
2. Know the chemical interactions of food components
3. Examine the quality changes in food due to chemical actions
4. To familiarize analytical and experimental methods used to study food constituents.

Course Outcomes:

On successful completion of the course, the student will be able to

- Identify and examine the behavior of major constituents of the food
- Find/measure the major constituents using standard procedures.
- Apply and investigate the changes in food quality due to chemical interactions.
- Extract and measure the chemical substances in food.

1. Preparation of chemical reagents, buffers, enzyme solutions using water.
2. Estimation of total water content in food by hot air oven method.
3. Preparation of colloidal solutions such as gel, emulsion and foam
4. Qualitative test for carbohydrate
5. Determination of total sugar content by using refractometer
6. Estimation of acid and peroxide value of oil/fat
7. Market survey on edible oil/fat and its quality evaluation
8. Qualitative test for protein
9. Extraction of proteins by precipitation technique
10. Measuring enzyme activity in solution and study the factors influencing it.
11. Determine the extractability of plant pigments in aqueous and alcohol
12. Visit to food analysis lab.

Food Chemistry Practical

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO1	Name and describe the general chemical structure of major components of foods (water, carbohydrates, protein and lipids)	3	3	3	3	3	3	3	2	3
CO 2 :	Explain how changes in overall composition are likely to change the reactivity of food components	3	3	2	3	3	2	3	3	2
CO 3:	Predict how processing condition sare likely to change the reactivity of food components	3	2	2	3	3	3	3	3	3
CO 4 :	Analyse the pigment changes during cooking of vegetable by addition of acid and alkali	3	2	2	2	3	1	2	2	2

Semester- IV

Basics of Apparel Designing

Code: 24HSUC2409

Credits: 3

Pd/Wk:3

Marks:100

Learning Objectives:

Enable the students to

1. Impart knowledge of fabric manufacture and fabric characteristics
2. Impart knowledge of textile and clothing, selection
3. Impart knowledge on Textile care, maintenance

Learning Outcomes:

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

- Gain thorough knowledge in textile materials.
- Classify different finishing processes of textiles, preparatory process.
- know different dyeing process, dyeing equipments, printing process, laundering process, soap and detergent manufacturing process,

Unit-I: Body Measurements and Tools

Body Measurements – Importance, Principles of taking body measurements, Methods of taking body measurements for children, women, men, standard measurement chart for children, men and women. Preparation of fabric before construction. Tools used – Cutting tools, measuring tools, marking tools, general tools, pressing tools.

Unit II: Pattern Techniques

Pattern making – Introduction, glossary, Methods- Drafting, Draping and Flat Pattern. Drafting: Introduction, Preparation, Pattern drafting with personal measurement. Principles for pattern drafting. Preparing draft for basic bodice block for children.

Draping: Definition, types of dress form, Draping techniques. Flat pattern Techniques: Definition, Pivot method, Slash & spread method, measurement method. Creating styles through dart manipulation and relocation of dart.

Unit-III: Pattern Grading and Layout Planning

Pattern Grading: Introduction, Definition, Grading terminology, selecting a grading system, grading techniques, their advantages and disadvantages. Computer grading. Grading procedures. Grading of basic block using draft grading systems.

Layout planning- Introduction, Rule to remember in pattern layout. Types of layout.

Unit-IV: Pattern Alteration and Garment Fitting

Pattern alteration: Methods of identifying pattern alteration. General principles for pattern alteration. Common pattern alteration in a fitted bodice pattern.

Garment evaluation-Criteria of garment Fitting- Definition, Principles of Good Fit, Fitting Techniques. Fitting evaluation of Inner garment, Outer garment.

Unit-V: Wardrobe Analysis

Wardrobe planning- Introduction, Definition, Principles, Wardrobe analysis and steps involved in wardrobe planning, Factors to be considered while planning wardrobe for different age groups in a family.

Text Books

1. Draping for Fashion Design, Hilde Jaffe, Nurie Relis.
2. Dress Design – Draping and Flat Pattern, Hill House MS, Houghton Mifflin Co, London, USA.
3. The theory of Fashion Design, Brockman, Magritha, John Wiley Sons, New York.

References

1. Design through Draping, Sheldon, Marhta, Burgers Publishing company, Minneapolis, USA.
2. Modern Pattern Design, Popin, Harriet, Funk and Wagnalls, New York and London.
3. Practical Clothing Construction – Part I and II, Mary Mathews, Cosmic Press, Chennai (1986)
4. Sewing and Knitting – A Readers Digest, step- by – step guide, Readers Digest Pvt Ltd, Australia.
5. The Complete Book of Sewing – Dorling Kindersley Limited, London (1986)

Basics of Apparel Designing

Course Outcome (CO)	Programme Specific Outcome(PSO)								
	1	2	3	4	5	6	7	8	9
Basics of Apparel Designing	PS01	PS02	PS03	PS04	PS05	PS06	PS07	PS08	PS09
CO1: Basics in taking measurements for preparing metric patterns and commercial patterns.	3	3	1	1	1	3	3	3	3
CO2: To analyse in different pattern manipulation techniques and style development.	3	3	1	1	1	3	3	3	3
CO3: To develop new designer patterns from basic patterns	3	3	1	1	1	3	3	3	3
Co 4: To analyse the application of wardrobe planning	3	3	1	1	1	3	3	3	3

Basics of Apparel Designing Practical

Code: 24HSUC2410

Credits: 3

Pd/Wk:3

Marks:100

Learning Objectives:

Enable the students to

1. Impart knowledge of fabric manufacture and fabric characteristics
2. Impart knowledge of textile and clothing, selection
3. Impart knowledge on Textile care, maintenance

Learning Outcomes:

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

- Gain thorough knowledge in textile materials.
- Classify different finishing processes of textiles, preparatory process.
- know different dyeing process, dyeing equipments, printing process, laundering process, soap and detergent manufacturing process,

Unit-I: Basic stitches

Selection of fabrics, preparation of fabric for various hand stitches-Running, basting, hand overcast, hemming stitch, blind hemming and slip stitches.

Unit -II:

Selection of fabrics, preparation of fabric, **Seams**-plain, edge, single top, double top, Flat fell, French seam, lapped, piped, slot. **Seam finishes**-pinked, over cast, edge, herring bone.

Unit -III:

Fullness – Dart, Pleats, Tucks, yokes and Gathers and its varieties. Fasteners- Press button, hook and eye, shirt button, button hole and zips. Finishes – Neckline finishes – Facing, shaped, piping / binding, placket finishing

Unit-IV:

Design, draft and construct garment for Infants - Bib, panty, Jabla and A Line Frock

Unit-V:

Design, draft and construct garment for women – Saree Petticoat, Apron and Night Wear

References:

1. Edith Tomory, "A History of Fine Arts in India and the West" – Orient Longman Publishers 1982, reprinted 1999.
2. Family clothing – Tate of Glession, John Wiley & Sons Inc. Illinois
3. Gerry Cooklin, Introduction to Clothing Manufacture, Blackwell Science, UK, 1991
4. Harold Carr & Barbara Latham, The Technology of Clothing Manufacture, Oxford Pub, USA, 1994

5. HelIn Go worek,“ Drawing Course a step bysep Guide” Black well Publications.
6. Hideaki Chijiwa, Colour harmony–“A Guide to creative colour Combination”.
7. PracticalClothingConstructing-PartIandII,MaryMathews,CosmicPress,Chennai(1986)
8. PracticalcuttingandtailoringpartIIEshwasriAnwahi,LakhrajHansR.BPublications,Delhi
9. Stanyer,Peter,“TheCompleteBookofDrawingTechniques” –
ArcturusPublishingLimitedforBookMart Limited2003
10. Textiles fabrics and their selection-wingate IB, Allied publishers ltd, Chennai.
11. Zarapker System of Cutting- Zarapker.K.R, Navneet Publications ltd.

Basics of Apparel Designing Practical

Course Outcome (CO)	Programme Specific Outcome(PSO)								
	1	2	3	4	5	6	7	8	9
Basics of Apparel Designing Practical	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9
CO1: Knowledge about sewing machines types, uses and its care & maintenance.	3	3	1	1	1	3	3	3	3
CO2: Practice on different basic hand stitches and its application	3	3	1	1	1	3	3	3	3
CO3: Analyze and develop patterns for different types of yokes, collars, sleeves with style variations.	3	3	1	1	1	3	3	3	3
CO4: Application of various plackets, trimmings and accessories in the garments.	3	3	1	1	1	3	3	3	3

FUNDAMENTALS OF FOOD SCIENCE AND NUTRITION

Code: 24HSUC2411

Credits: 3

Pd/Wk: 3

Marks: 100

Learning objectives:

Enable the students to

1. Obtain knowledge of different food groups, their composition and nutrients present in the foods
2. Study the different methods of cooking and their effect on nutritive value of foods
3. Understand the vital link between foods, nutrition and health
4. Gain knowledge on functions, requirements and effects of deficiency of nutrients

Course Outcome

On Successful Completion of this course, the students will be able to

- Summarize and critically discuss the fundamental and applied aspects of Food Science and Nutrition. Able to explain the functions of specific nutrients in maintaining health and the basic concepts of cooking and processing methods.
- Identifying nutrient specific issues and apply the principles to solve practical as well as realworld problems.

Course Content

Unit-I: Introduction of Food Groups, Food Pyramid and Cooking Methods

Definition and Terms used in Food Science and Nutrition

. Health, Food, Nutrition, Nutrients: Macronutrients (Carbohydrates, Proteins and lipids) and Micronutrients (Vitamins and Minerals), and Malnutrition

. Various classifications of Foods and Food Groups

Definition, Classification and Functions of Foods, Basic Food Groups and Need for Grouping Foods and Application of Food Groups In Planning Adequate/ Balanced Diets

Culinary terms and Methods of Cooking

- An Overview of culinary terms
- Different Modes of heat transfer like Radiation, Conduction and Convection - Moist heat methods like Boiling, Simmering, Poaching, Steaming, Pressure cooking - Dry heat methods: Air as medium of cooking: Grilling, broiling, roasting, Baking , - Fat as medium of cooking: Sautéing, Shallow fat frying, Deep fat frying
- Combined (Moist and dry) Methods: Braising, Stewing
- Other cooking methods:-Microwave cooking, and Solar cooking.
- Advantages and Disadvantages of Cooking methods

Unit-II: Nutritional Significance of different Food Groups

Basic Concepts, classification, Composition, nutritive value and Role in Cookery
Cereals and Cereal Products- (a. Types of cereals: wheat, rice, millets, b) Cereal Products Flaked rice, puffed rice, wheat flour).
Pulses and Legumes, Fruits, and Vegetables Salt, Sugar and Jaggery
Nuts, oils and Oil seeds, Milk and Milk Products
Eggs, meat, poultry and fish Spices and Condiments

Unit-III: Macronutrients

Definition, Classification, Dietary Sources, Functions, Recommended Dietary Allowances, clinical signs and symptoms of Deficiency diseases and Excess of Energy, Carbohydrates, Proteins, Lipids, Water

Unit-IV: Minerals

Definition, Classification, Distribution of minerals in the body, Functions, sources, requirements and effects of deficiencies of Minerals of: Calcium, Phosphorus Magnesium, Sodium, Potassium, Selenium, Iron, Zinc, Iodine, Copper Fluorine

Unit-V: Vitamins

Classifications, functions, sources, Clinical signs and symptoms of deficiency, requirements of
Fat Soluble Vitamins - A, D, E and K
Water Soluble Vitamins-B Complex Vitamins- Thiamine, Riboflavin, Niacin, Pyridoxine, Folic acid, Cyanocobalamin and Vitamin C

References:

1. Longvah, T, Ananthan, R., Bhaskarachary, K., Venkaiah, K (2017). *Indian Food Composition Tables (IFCT)*, Indian Council of Medical Research, National Institute of Nutrition, Hyderabad.
2. Mahtab, S. Bamji, Kamala Krishnasamy, Brahman G.N.V (2012) *Text Book of Human Nutrition*,
3. Raina U, Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S (2010) *Basic Food Preparation: A Complete Manual*, 4th Edition, Orient Black Swan Ltd, Mumbai.
4. Sunetrac Roday (2017). *Food Science and Nutrition*, Oxford University Press, New Delhi. Third Edition, Oxford and IBH Publishing Co. P. Ltd., New Delhi.
5. Usha Chandrasekhar (2002) *Food Science and Application in Indian Cookery*, Phoenix Publishing House P. Ltd., New Delhi.

Textbooks:

1. Maney S (2008). *Foods, Facts and Principles*, 3rd Edition Published by Wiley Eastern, New Delhi.
2. Srilakshmi, B. (2024) *Food Science*, New Age International (P) Ltd., New Delhi.
3. Srilakshmi, B. (2024) *Nutrition Science*, New Age International (P) Ltd., New Delhi.

FUNDAMENTALS OF FOOD AND NUTRITION

Course Outcome	Programme Specific Outcome (PSO)								
	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO 1 : Summarize and critically discuss the fundamental and applied aspects of Food Science and nutrition	3	2	3	2	2	3	3	3	2
CO 2 : Able to explain the functions of specific nutrients in maintaining health and the basic concepts of cooking and processing methods	3	2	2	2	2	2	3	3	2
CO 3 : Identifying nutrient specific issues and apply the principles to solve practical as well as real world problems	2	3	3	3	3	3	3	3	3

FUNDAMENTALS OF FOOD SCIENCE AND NUTRITION PRACTICAL

Code: 24HSUC2412

Credits: 1

Pd/Wk: 2

Marks: 100

Practical

1. Market survey of locally available food items like cereals, pulses, fruits and vegetables, milk and milk products, fats and oils, nuts and oilseeds, sugar and jaggery, meat, fish, and poultry and miscellaneous food items like biscuits, jams, jellies, ketchup etc. and their cost.
2. Controlling techniques: Weights and measures - standard and household measures for raw and cooked foods.
3. Weights and Measures, Determination of Edible Portion of Foods, preparing market order and table setting.
4. Food Preparation, understanding the principles involved, nutritional quality and portion size of 5-7 commonly consumed recipes in each food group.
 - Cereals: rice, chapathi, poori, pastas etc
 - Pulses: Whole, dehusked- Dal, sambar, kootu, Chole, Rajmah, etc
 - Vegetables: Dry preparations, Curries
 - Milk and milk products: Kheer, Custard,
 - Egg preparations- Boiled, poached, fried, scrambled, omelettes
5. Preparation of sprouted legumes and malt powder.
6. Determination of nutritive value of selected Indian recipes by using food composition table.
7. Classify foods on the basis of nutrients: -Protein, Iron, Calcium, Vitamin A, Vitamin C.
8. Estimation of water and dry matter content of the foods
9. Estimation of starch content of food by anthrone method
10. Estimation of crude fibre content of the foods
11. Estimation of protein content of food by kjeldhal method
12. Determination of fat content of food by soxhlet method
13. Estimation of Vitamin C content of food
14. Determination of ash content of foods
15. Qualitative tests for minerals – Calcium, phosphorus & iron

HOME SCIENCE EXTENSION AND COMMUNICATION

Code: 24HSUC2413

Credits: 3

Pd/wk: 3

Marks : 100

Learning Objectives:

Enable the students to

1. Understand the concept of Communication and its role in exchange of information
2. Examine the models and barriers to communication
3. Develop skills in use of audio visual aids
4. Learn about the concept of Home science extension, extension approaches and models
5. Enhance the students in the selection and use of media in different socio-cultural environment

Course Outcome

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

- Gain knowledge on the need and importance of communication and its significance in exchange of information
- Analyse the models of Communication and role of traditional and modern media in societal development
- Perceive the importance of communication and extension in Home Science
- Acquire knowledge and develop skills on the use of audio visual aids.

Course Content

Unit -I: Communication Concepts

Meaning, definition, nature, scope and importance of communication. Functions of communication – information, command or instructive, influence or persuasive and integrative

Elements of Communication – Sender, Message, Channel, Receiver and Feed back

Means of Communication – Oral, Written, Sign –Symbol, signal, action, object.

Types of Communication– Formal and Informal Communication.

Pattern - one way, two way, circular, star, wheel

Unit –II: Communication Models

Models of Communication-Aristotle Model, Shanon – Weaver Model, Berlo Model, and Scharmm Model. Significance of models in communication.

Barriers to Communication – semantic, psychological, organizational and personal. How to overcome barriers.

Unit –III: Home Science Extension

Concept, need, components, Objectives, Characteristics, functions, principles and scope of Home science, Approaches to Home Science extension.

Communication methods in extension- individual method, group method, mass method
Advantages and limitations of each method.

Unit –IV: Audio visual aids

Audio – Visual aids – Meaning, classification – Audio aids, visual aids, Audio visual aids.

Factors influencing effectiveness of audio visual aids.Cone of Experience and its importance in communication. .

Unit-V: Mass Media

Mass media – Meaning, Characteristics, types – Radio, Television, Print media,

Print Media Vs Broadcast Media. New communication technologies – computers, e - mail, video conferencing, internet, cyber safes, social media (elementary understanding).

Traditional Media – Folk songs, puppets, Street play, drama and villupattu. Comparison between traditional media and modern media.

Textbooks:

1. Adivi Reddy (2009).Extension Education. Baptla: Sree Lakshmi Press.
2. Chandra, A., Shah, A. and Joshi, U. (1989). Fundamentals of Teaching Home Science. Sterling Publishers Pvt Ltd., NewDelhi.
3. Ray,G.L.(1994).Extension Communication and Management. Calcutta:Maya Prakash.

HOME SCIENCE EXTENSION AND COMMUNICATION

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO 1:	Gain knowledge on the need and importance of communication and its significance in exchange of information	3	3	2	2	2	1	2	3	2
CO 2:	Analyse the models of Communication and role of traditional and modern media in societal development	3	3	2	3	2	1	2	3	1
CO 3:	Perceive the importance of communication and extension in Home Science	3	3	3	2	2	1	2	2	2
CO 4:	Acquire knowledge and develop skills on the use of audio visual aids.	3	3	2	2	3	1	3	2	2

HOME SCIENCE EXTENSION AND COMMUNICATION PRACTICAL

Code: 24HSUC2414

Credits: 3

Pd/wk: 3

Marks: 100

Learning Objectives:

Enable the students to

1. Understand the importance of communication
2. Gain skills in planning and implementing educational programmes

Course Outcome

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

- Gain skills in interpersonal and intergroup communication
- Evaluate the various communication methods and materials

Practical

Developing skill in planning and conducting small group communication

1. Preparation of Communication Models
2. Interaction with villagers and understand the felt and unfelt need
3. Evaluation of readily available visual aids /poster
4. Planning, Preparation and evaluation of charts/posters in the Department of Health, Social Welfare.
5. Conduct an educational programme using folk media.
6. Organization of an exhibition in a village.
7. Exposure to traditional media.

References

1. Dahama,O.P and Bhatnagar O.P.(1995).Education and Communication for Development.New Delhi: Oxford and IBHCo.
2. Gupta,D.(2007).Development Communication in Rural Sector. New Delhi:Mukhopay Abhijeet Publication.
3. Reddy,A.A.(2001).Extension Education.Bapatla:SriLakshmiPress.
4. Rogers Everett,M.(2003).Diffusion ofInnovations,5thEd. New York:The Free Press
5. Singh, U.K and Nayak, A.K.(2007). Extension Education. New Delhi: Common Wealth Publishers

HOME SCIENCE EXTENSION AND COMMUNICATION PRACTICAL

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO 1:	Gail skills in interpersonal and intergroup communication.	3	2	3	3	2	2	3	3	3
CO 2:	Evaluate the various communication method and materials.	2	2	3	3	2	3	3	3	3

DEVELOPING CHALLENGES AND CHILDREN WITH DISABILITIES

Code: 24HSUC2415

Credits: 3

Pd/wk: 3

Marks: 100

Learning Objectives

Enable the students to

1. Acquire knowledge about identification and needs of children with disability
2. Understand the specific programmes and services available for children with disabilities
3. Gain skills in guiding the parents of children with disabilities

Course Outcomes

On Successful Completion of this course, the students will be able to

- Describe the causes, the characteristics, prevention and management of various disabilities
- Explain the various policies and programmes for children with disabilities
- Identify the various assistive technologies available for children with disabilities.

Course content

Units -I: Introduction to Childhood Disabilities

Defining disabilities, Models of disability Classifying disabilities, Social construction of disability, Demography, Rights of Children with Disabilities

Unit-II: Common Childhood Disabilities

Identification, Assessment and etiology with reference to Locomotor disability, Visual disability, Auditory and speech disability, Intellectual disability, Autism and Learning Disability

Unit -III: Family having children with disability

Families of children with disability, Role of parents in upbringing special children, Parental acceptance and coping with the presence of special child in the family, Prevention and management of different disabilities.

Unit –IV: Programmes and Policies for children with disabilities

Policies and laws related to children with disability, Intervention strategies adopted for children with disabilities, Educational practices- Special education and inclusion,

Unit –V: Assistive technologies for children with disabilities

Assistive technology - meaning, need, types benefits - the barriers to assistive technology. Scheme of Assistance to Disabled Persons For Purchase/ Fitting Of Aids & Appliances (ADIP)

References:

1. Balsara, M. (2011) Inclusive Education for special children. Newdelhi: Kanishka publishers
2. Chopra,G., (2012). Early Detection of Disabilities and persons with disabilities in the community.New Delhi: Engage publications
3. Chopra,G., (2012). Stimulating Development of Young Children with Disabilities at Anganwadi andat Home: A Practical Guide. New Delhi: Engage publications.
4. Jangira, N.K.(1997) "Special Educational Needs of Children and Young Adults: An Unfinished Agenda," Education and Children with Special Needs: From Segregation to Inclusion,Ed. SeamusHegarty, Mithu Alur, Thousand Oaks: Sage Publications Inc.
5. Karna, G. N. (1999). United Nations and rights of disabled persons: A study in Indian perspective.New Delhi: A.P.H. Publishing Corporation.
6. Mangal, S. K. (2007).Exceptional children: An introduction to special education. New Delhi: PrenticeHall of India
7. Mastropieri, M. A., & Scruggs, T. E. (2004). The inclusive classroom: Strategies for effectiveinstruction. NY: Pearson.
8. Mani, R. (1988). Physically handicapped in India. Delhi: Ashish Publishing House.
9. Sharma, N. (Ed)(2010). The Socail Ecology of Disability-Technical Series -3Lady Irwin College.Delhi: Academic Excellence

DEVELOPING CHALLENGES AND CHILDREN WITH DISABILITIES

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Describe the cause , the characteristics , prevention and management of various disabilities.	3	3	3	2	2	2	3	3	3
CO2:	Explain the various policies and programmes for children with disabilities.	2	2	3	2	3	3	3	2	3
CO3:	Identify the various technologies available for children with disabilities.	3	3	3	3	2	3	3	3	2

DEVELOPING CHALLENGES AND CHILDREN WITH DISABILITIES PRACTICAL

Code: 24HSUC2416

Credits: 3

Pd/wk: 3

Marks: 100

Learning Objectives

To enable the learners to

1. Identify and understand the characteristics of children with disabilities
2. Develop sensitivity towards parental coping and acceptance of the situation concerning disability in the family.

Course Outcomes

On Successful Completion of this course, the students will be able to

- Demonstrate first- hand experience of interacting and understanding children with disabilities.
- Describe the coping strategies adopted by parents and family while dealing with children with disability
- Plan and implement activities and programme for children with disability

Practical

1. Visits to organizations working with children with disabilities.
2. Observing children with disabilities in families and institutions.
3. Planning developmentally appropriate material for children with disabilities.
4. Exploring audio-visual sources with reference to children with disabilities and their families.
5. Interview the teachers of special school and parents to find out about their experiences, hopes, attitudes and difficulties faced.
6. Gather information of latest trends, services available etc. through newspapers, magazine and other media.

DEVELOPING CHALLENGES AND CHILDREN WITH DISABILITIES PRACTICAL

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO 1:	Demonstrate first – hand experience of interacting and understanding children with disabilities.	3	3	3	2	2	3	2	3	3
CO2:	Describe the coping strategies adopted by parents and family while dealing with children with disability.	3	2	3	3	3	2	3	3	2
CO3:	Plan and implement activities and programme for children with disabilities.	2	3	2	3	3	3	3	2	3

TRADITION TEXTILES OF INDIA

Code: 24HSUB2405

Credits: 4

Pd/wk: 4

Marks: 100

Unit -I Traditional Textiles

Status of traditional textiles of India. Evolution and socio – economic significance of Khadi, Handloom and weaver’s service centre. Factors affecting diversity of textiles.

Unit-II Printed Textiles

Printed Textiles- Bagru prints from Rajasthan, Sanganer prints from Rajasthan, Kalamkari from Andhra Pradesh

Unit -III Resist Dyed Textiles

Bandhani - Bandhani of Gujarat, Bandhej & Lehariya of Rajasthan,

Ikat- Patola of Gujarat, Bandhas of Odisha, Ikat Textiles of Andhra Pradesh

Unit –IV Hand-woven Textiles

Sarees- Banaras Brocades, Baluchari Saris, Jamdani Saris, Paithani Saris, Kanjeevaram Saris, Chanderi Saris.

Unit –V Hand-woven Textiles

Shawls- Kashmir Shawls, Kullu & Kinnaur Shawls, Wraps of North-east

Floor coverings- Carpets, Durries & Rugs

References:

1. Chattopadhyay and Kamal Devi (1975): Handicrafts of India, New Delhi, Indian Council of Cultural Relations
2. Daniel.H, (1974), “Printing”, Hawlin Publishers Ltd, London.
3. Hall.A.J, (1969), “The standard handbook of textiles”, Heywood books, London.
4. Lyle.D.S, (1976), “Modern Textiles”, John Wiley & Sons, London.

TRADITION TEXTILES OF INDIA

Course Outcome (CO)	Programme Specific Outcome(PSO)								
	1	2	3	4	5	6	7	8	9
TRADITION TEXTILES OF INDIA	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9
CO1: Knowledge about the traditions textiles of India.	2	3	3	2	1	1	2	3	3
CO2:Gathering information about printed textiles.	2	3	3	2	1	1	2	3	3
CO3: Understand the techniques of dyes and hand woven textiles.	2	3	3	2	1	1	2	3	3

SEMESTER –V

NORMAL AND THERAPEUTIC NUTRITION

Code: 24HSUC3517

Credits: 3

Pd/Wk:3

Marks: 100

Learning objectives:

Enable the students to

1. Study nutritional needs at different stages of life span
2. Gain experience in planning adequate diets for different age groups and for different income groups.
3. Understanding the principles involved in therapeutic diet modification, requirements, nutrient composition of human milk, artificial feeding.
4. Acquire knowledge on the clinical, biochemical changes and dietary management of various diseases.

Course Outcome

On Successful completion of this course, the students will be able to

- Design food plans and assess the adequacy of diets to meet the nutritional needs of humans at various stages of life cycle.
- On completion of the course students will be able to critically assess nutritional requirements of an individual.
- Develop the knowledge, skills and attributes required to meet entry level competency required for a dietician

Course Content

Unit-I Meal Planning

Food groups and concept of balanced diet, Food exchange list, Concept of Dietary Reference Intakes, purposes of recommending the Dietary Allowances, Factors affecting Recommended Dietary Allowances. Factors affecting meal planning and food related behavior. Dietary Diversity, Dietary guidelines for Indians and food pyramid.

Nutrition during adult years and old age:

Reference Man and Reference Woman, Food and Nutritional requirements for adults doing different activities.

Nutrition during Old age:

Processes of aging, Nutritional requirements of elders, Nutrition related problems of old age, Dietary guidelines and diet modifications

Unit-II: Nutrition in Pregnancy and Lactation

Physiological changes occurring during Pregnancy. Importance of food and nutritional care and requirement during pregnancy, General dietary and nutritional problems and complications.

Physiology and hormones involved in Lactation, Food supplements and galactagogues. Factors affecting the volume and composition of breast milk, Nutritional Requirements during lactation.

Unit-III: Nutrition in Infancy, Childhood & Adolescence

Growth and development of infants, Composition of human milk and Infant Milk Substitutes, Bottle feeding and related Problems, Weaning and Supplementary feeding foods, Feeding problems and complications. Use of growth charts and standards and prevention of growth faltering.

Growth and Development and Nutritional requirements of Pre School, School Going Children and Adolescence. Growth Spurt during Adolescence and importance of nutrients. Management of nutritional and behavioral Problems and eating disorders in childhood and adolescence.

Unit - IV: Basic concepts of diet therapy

Therapeutic adaptations of normal diet, principles of therapeutic diets. Routine Hospital Diets: clear fluid, full fluid, soft and normal diet Special feeding techniques - parenteral and enteral feeding. Role of dietitian in Nutritional care.

Obesity & Underweight - Aetiology, assessment, complications and principles of dietary management

Febrile conditions - Typhoid, Tuberculosis and Malaria - causes, symptoms, metabolic changes in fever and dietary management.

GI tract diseases- Diarrhea peptic ulcer, IBS, Liver diseases - Jaundice, Cirrhosis: - etiology, types, symptoms and dietary management

Unit –V: Diseases of the cardiovascular system

Atherosclerosis- etiology, symptoms, complications and principles of diet management.

Hypertension - etiology, types, symptoms and dietary management

Diabetes mellitus –etiology, types, symptoms, diagnosis, complications and dietary management, use of Food exchange list, glycemic index

Renal diseases – glomerular nephritis, nephrosis, acute renal failure, chronic renal failure, dialysis, Kidney stones: etiology, symptoms and dietary management

References:

1. Antia, P. (1989) Clinical Nutrition and Dietetics, Oxford University, Mumbai.
2. Davidson. S.S. Passmore, , Martin A. Eastwood. F. (1989) Human Nutrition and Dietetics, 9th Edition F & Sling stons Edinburgh and London
3. Longvah, T, Ananthan, R, Bhaskarachary, K, Venkaiah, K. (2017). *Indian Food Composition Tables (IFCT)*, Indian Council of Medical Research, National Institute of Nutrition, Hyderabad.

4. Mahan, L.K. and Escott-Stump, S. (2007): Krause's Food Nutrition and Diet Therapy, 12th Edition.
5. Mayrice. E. Shills, James, A. Olsen, Moshe Shihe, (2012) Modern Nutrition on Health and Disease, Vol .1 & 2, 11th edition, Lea and Pediger, Philadelphia.
6. Recommended Dietary Allowances and Estimated Average Requirements Nutrient Requirements for Indians – 2020. A Report of the Expert Group Indian Council of Medical Research National Institute of Nutrition. NIN, Hyderabad. W.B. Saunders Ltd.

Textbooks:

1. B. Srilakshmi, (2024) Dietetics, 9th edition, New Age international Private Ltd.
2. Mahtab, S, Bamji, Kamala Krishnasamy, Brahmam, G.N.V. (2019). *Text Book of Human Nutrition*, Fourth Edition, Oxford and IBH Publishing Co. P. Ltd., New Delhi.

Normal and Therapeutic Nutrition

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO 1	Design food plans and assess the adequacy of diets to meet the nutritional needs of humans at various stages of lifecycle.	3	3	3	1	2	3	3	3	3
CO 2	On completion of the course students will be able to critically assess nutritional requirements of an individual	3	2	3	3	3	3	3	3	3
CO 3	Develop the knowledge ,skills and attributes required to meet entry level competency required for a dietician	3	3	3	3	3	3	3	3	3

NORMAL AND THERAPEUTIC NUTRITION PRACTICAL

Code: 24HSUC3518

Credit: 1

Pd/Wk: 2

Marks: 100

Enable the students to

1. Study nutritional needs at different stages of life span
2. Gain experience in planning adequate diets for different age groups and for different income groups.

On Successful completion of this course, the students will be able to

- Design food plans and assess the adequacy of diets to meet the nutritional needs of humans at various stages of life cycle.
- On completion of the course students will be able to critically assess nutritional requirements of an individual.

Practical

1. Measurements and Standardisation of common food preparation
2. Planning and preparation of diet for pregnant women,
3. Planning and preparation of diet for lactating mother ,
4. Planning and preparation of diet for preschoolers,
5. Planning and preparation of diet for adolescents
6. Planning and preparation of diet for adult
7. Planning and preparation of diet for elderly
8. Planning and preparation of Routine hospital diets
9. Planning and preparation of low calorie diet for Obesity and Underweight
10. Planning and preparation of diet for Fever
11. Planning and preparation of bland diet for peptic ulcer
12. Planning of diet for Jaundice
13. Planning and preparation of diet for Type II Diabetes mellitus
14. Planning and preparation of diet for Acute glomerular nephritis

FAMILY CLOTHING

Code: 24HSUC3519

Credits: 3

Pd/Wk: 3

Marks: 100

Learning Objectives:

Enable the students to

1. Gain knowledge about clothing and accessories.
2. Gain information about fashion and selection of clothing.
3. Acquire knowledge about women and men clothing.
4. know gain knowledge about special wardrobe planning.

Learning Outcomes:

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

Design wardrobes, panning the wardrobe according to the age, sex and size.

Unit- I: Clothing

Introduction to family- definition, types. Clothing- Introduction, Definition and Importance of clothing. Clothing theories- Modesty Theory, Adornment Theory and Protection Theory. Functions of clothing. Factors influencing the choice of clothing materials for General and textile factors. Theories of fashion adoption. Fashion cycle and its importance.

Unit-II: Clothing Communication

Clothing communicates- Age, Sex, Marital status, Cultural influences, Physical appearance, Life style, Occupation, Economic status, Social status, Value and Attitudes, Political beliefs, Religious beliefs, Industrialization, Emotions, Interests. Factors affecting clothing - Economic factors, Consumer income, Sociological factors, Psychological factors

Unit-III Clothing Care

Laundry Equipment- Principles of laundering, methods of washing, Soaps and detergents – manufacture process , Quality , cleansing action and its uses.

Introduction to Care labels - its importance - Different systems of Care labeling - American - British - Canadian - Japanese - and International labeling – Eco-labeling.

Unit-IV Home Furnishing

Home Textiles- Introduction, Classification of home textiles and selection of materials. Area of applications of home textiles- floor coverings, furnishing, curtains and draperies, bed linens and kitchen linens. Factors affecting selection of home textile materials.

Unit-V Wardrobe Planning

Wardrobe planning for new born babies, toddler, pre schooler, schooler, Adolescence-(boys & girls).

Wardrobe planning for women-college going girls, office going women, pregnant women and lactating women aged women. Wardrobe planning for men-college going boys office going men adult men, old age man.

Text Books

1. Art and fashion is clothing selection, M.C.Gimsely and harriot.T., Novety, press,new York
2. Elements of design & apparel design, sumathy new age international pvt.ltd, 2002
3. Suzanne G.Marshall,hazel o.jockson M.Sue Stanley, mary ketgan (2000) "Indindualiy in clothing selection and personal Appearance" Phullis touchie specnt. New jersey,2nd edition.

References

1. Family clothing –Tate of glession, john wileys son Inc. illionis.
2. Tentiles fabrics and their selection-wingate IB,Allied publishers ltd,Chennai.

FAMILY CLOTHING

Course Outcome (CO)	Programme Specific Outcome(PSO)								
	1	2	3	4	5	6	7	8	9
Family Clothing	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9
CO1: Analyse various designs and fashion concepts in clothing for different age groups	3	3	3	1	2	1	2	3	1
CO2: Acquaint the students in clothing communication in various factors	3	3	3	1	2	1	2	3	1
CO3: Analyze different fabrics suitable for house hold linens	3	3	3	1	2	1	2	3	1
CO4: Students gain knowledge in care and maintenance of textile material	3	3	1	1	1	1	3	3	1

BASICS OF FASHION ILLUSTRATION

(Practical)

Code: 24HSUC3520

Credits: 1

Pd/Wk: 2

Marks: 100

Learning Objectives:

Enable the students to

- learn and convey the principles that relate to drawing
- learn the use of perspective and demonstrate knowledge of basic human proportion and anatomy.
- illustrate the various garment parts, ornaments and accessories

Learning Outcomes:

On Successful Completion of this course, the students will be able to

Do line drawing. Illustrate shirt, trouser and Gown varieties.

Unit-I: Lines and line drawings –object drawing and perspective view drawings

Unit-II: Enlarging and reducing motifs.

Unit-III: Drawing a stick figure for 8 & 10 Heads. Forming a fleshy figure over a stick figure.

Unit – IV: Garment details- Collars- varieties, Cuffs- varieties, Sleeves- varieties, Yokes- varieties, Neckline- varieties, Pockets- varieties

Unit- V: Illustration of shirt- varieties, Trouser -varieties, Gown - varieties, Frocks- varieties ,Skirt- varieties, Jacket- varieties, Sketching- folds and Curves of different fabric drapes.

References:

1. Advanced Fashion Sketch Book, Bina Abbing, OM Book Service, India (2007)
2. Anmol Roy "Fashion designing and technologies" 978-81-8411-304-4
3. Basic fashion design Styling 978-2-940411-39-9
4. Comdex Fashion Design-Vol-1 Fashion Concepts
5. Fashion Art for the Fashion Industry, Rita Gersten, Fairchild Books (1989)
6. Fashion Design illustration Children Ireland

7. Figure Drawing for Fashion, IsaoYajima, Graphic-Sha; First Edition(1987)
8. Harold Carr "Fashion design and product development"
9. Sapna sarkas"Fashion and sketch book"978-93-81031-39-1
10. verekes"Fashion designers handbook for adobe illustration Centers"978-1-4051- 6055-1

BASICS OF FASHION ILLUSTRATION

Course Outcome (CO)	Programme Specific Outcome(PSO)								
	1	2	3	4	5	6	7	8	9
Basics of Fashion Illustration	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9
CO1:Basic sketches and shadings using different mediums.	3	3	1	1	1	2	2	2	3
CO2: Analyze and illustrate various garment detailing for children, women and men wear.	3	3	1	1	1	2	2	2	3
CO3: Handle different mediums of rendering techniques and designing different types of fabrics.	3	3	1	1	1	2	2	2	3
CO4:Illustrate different poses and develop costumes on corquis for men, women and children.	3	3	1	1	1	2	2	2	3

EARLY CHILDHOOD CARE AND EDUCATION

Code: 24HSUC3521

Credits: 3

Pd/Wk: 3

Marks: 100

Learning Objectives

Enable the students to

1. Understand the importance of ECCE
2. Develop an insight into the educational thoughts of Indian and western educationists on ECCE
3. Develop awareness of ECCE policies and programmes in India
4. Gain skills in designing the curriculum for children below six years

Course Outcomes:

On Successful Completion of this course, the students will be able to

- Explain the importance of Early Childhood Years and Significance of intervention programmes for early childhood development
- Describe the policies and programmes of ECCE in India
- Plan developmentally appropriate activities for children in various age groups.
- Organize parent education programme.

Course Content

Unit–I: Concept and Significance of ECCE

Understanding terminologies, “Child”, “Childhood”, and “Early Childhood Care and Education”·Importance and significance of ECCE- Developmental Perspective, Neuroscience Perspective, Human Rights Perspective

Types of ECCE service delivery – Formal and informal; Government funded, Philosophy oriented, Laboratory nursery school, Franchise oriented

Unit–II: Policies and Programmes in ECCE in India

Contributions of Thinkers and Educationists in ECCE – educational thoughts of Froebel, John Dewey, Montessori, Gandhi, Tagore and Aurobindo on understanding of childhood and programmes and for young children.

History of Early Childhood Care and Education in India (Brief)

ECCE Policy Framework: National Policy on Education (1986), Article 45

In Indian Constitution and 86th Amendment, National Curriculum Framework (2005), ECCE in Right to Education (2010) and National Policy on ECCE (2013), Curriculum Framework for Early Childhood Care and Education 2012/2013, New Education Policy 2020.

Unit-III:Physical arrangements needed for an ideal ECCE centre

Building, site, safety, space; Furniture – types, shapes, safety. Other equipment – play equipment –selection, use and storage. Setting up the learning environment – indoor area, outdoor area, learning activity corners. Quality Standards as per ECCE policy.

Unit-IV:Early Childhood Curriculum

Definition and concept of curriculum: Curriculum Approaches – Subject centered, learner centered, community centered. Developmentally appropriate practice(DAP)–definition and core considerations, myths and consequences of developmentally inappropriate ECE practices .Components and essential features of developmentally appropriate ECCE curriculum. Planning a developmentally appropriate curriculum –approaches ,key principles and types of plans.

Unit-V: Organizational Management, Community Involvement and Evaluation of ECCE Programmes

Evaluation of ECCE programmes infrastructure, safety

ECCE professionals- competence, skill and methodology. Maintenance of records. Working with parents and community for continuity of home and school interactions. Evaluation of pre-school participation

References:

1. Aggarwal, J.C. (2007). Early Childhood Care and Education: Principles and Practices. Shipra: New Delhi.
2. Arni, K. and Wolf G. (1999). Child Art with Everyday Materials. TARAPublishing.
3. Fler, M. (2010). Early learning and development: Cultural – historical concepts in play. Cambridge: Cambridge University Press
4. Kaul, V. (2009). Early Childhood Education Programme. National Council of Educational Research and Training. New Delhi
5. Mohanty, J. Mohanty, B. (1996). Early childhood care and Education. Deep and Deep Publication, New Delhi.
6. Morrison, G.S. (2003). Fundamentals of early childhood education. Merrill/Prentice Hall:
7. Muralidharan, R. and Banerji, V. (1989) A Guide Booklet of Nursery Teachers, New Delhi: NCERT.
8. Swaminathan, M. (1998). The First five Years. Sage Publications
9. Virginia Singh, A. (1995). Playing to Learn: A training manual for Early Childhood Education. M. S. Swaminathan Research Foundation.

Early Childhood Care and Education

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO 1	Explain the importance of Early Childhood Years and Significance of intervention programmes for early childhood development	3	3	3	2	3	3	3	3	3
CO 2	Describe the policies and programmes of ECCE in India	3	3	3	3	3	2	3	3	3
CO 3	Plan Developmentally appropriate activities for children in various age groups.	3	3	3	2	2	3	2	3	3
CO 4	Organize parent education programme.	3	3	2	2	3	2	3	2	3

EARLY CHILDHOOD CARE AND EDUCATION PRACTICAL

Code: 24HSUC3522 Credits: 1 Pd/Wk: 2 Marks: 100

Learning Objectives

Enable the students to

1. Understand the various types of ECCE centres
2. Gain skills in designing curriculum for the preschool

Course Outcomes

On Successful Completion of this course, the students will be able to

- Prepare a plan for setting up an ECCE centre
- Plan developmentally appropriate activities for children in various age groups.
- Evaluate parent education programme

Practical

1. Visit to Anganwadi and assess physical infrastructure, facilities and resources available in the centre
2. Conduct Interview with AWW in order to understand the challenges faced by them and Interviews with 2-3 families regarding the access and satisfaction of ECD services
3. Visit to a Nursery school and assess physical infrastructure, facilities and resources available in the centre
4. Identify appropriate features of physical social environments that will promote all round development in young children
5. Identify, plan and record activities and methods of playful interactions to foster development in children birth –two years
6. Identify, plan and record activities and methods of playful interactions to foster development in children two –six years
7. Organise Workshops in any two of the following
 - Understanding childhood nutrition and health
 - Developing work sheets to teach concepts
 - Enhancing social and language skills
 - Music, movement and drama for children
8. Curriculum planning and space design
9. Methods and tools to assess progress of children and programme
10. Setting up a crèche /preschool

References:

1. Aggarwal, J.C. (2007). Early Childhood Care and Education: Principles and Practices. Shipra: New Delhi.
2. Arni, K. and Wolf, G. (1999). Child Art with Everyday Materials. TARAPublishing.
3. Fleer, M. (2010). Early learning and development: Cultural – historical concepts in play. Cambridge: Cambridge University Press
4. Kaul, V. (2009). Early Childhood Education Programme. National Council of Educational Research and Training. New Delhi

EARLY CHILDHOOD CARE AND EDUCATION PRACTICAL

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO 1:	Prepare a plan for setting up a ECCE centre.	3	3	2	3	2	3	3	3	3
CO2:	Plan developmentally appropriated activities for children in various age group.	2	3	3	3	3	3	3	2	2
CO3:	Evaluate parent education group.	3	2	3	2	3	2	3	3	2

PROGRAMME FOR RURAL FAMILIES

Code: 24HSUB3506

Credits: 2

Pd/Wk: 2

Marks: 100

Learning Objectives:

Enable the students to

1. Get acquainted with the ongoing programme for rural development and their implementation
2. be resourceful in guiding the rural women/communities to avail themselves of help under the programmes

Course Outcome

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

Know the economic, social,

Course Content

Unit –I: Economic Programmes

SGSY, PMRY, Mahalir Thittam, MGNREGS- Objectives, beneficiary selection, financial assistance, implementation and evaluation

Unit –II: Welfare programme

State Department of Social Welfare and District Disabled Rehabilitation Centre

Unit-III: Special Programmes

Employment, Education, Health and Sanitation

Energy and Environment

Unit –IV: Social Assistance Schemes at central and State level.

Unit –V: ICDS, Noon meal programme.

References:

1. Annual Report, Department of Rural Development, Ministry of Rural Development and Local Administration
2. Annual Report, Programme evaluation Organisation. Planning Commission, Government of India. New Delhi.
3. Current Five Year Plan, Planning Commission. Government of India, New Delhi.
4. Manuals on SGSY, PMRY, Mahalir Thittam published by the Department of Rural Development.
5. State Five Year Plan and Annual Plans. Government of Tamil Nadu, Chennai.

Programme for Rural Families Practical

Code: 24HSUB3507

Credits: 2

Pd/Wk: 4

Marks: 100

Practicals

1. Visit to DRDA to know the programmes implemented by them for socio economic development
2. Visit to Panchayat Union Office to understand the role of Grass root level functionaries in implementing programmes.
3. Visit to a Panchayat to learn the procedure followed for selection of beneficiaries for various programmes
4. Interaction with beneficiaries of various programmes at village level.
5. Preparation of a Case study for a beneficiary
6. Preparation of folder and book let on schemes implemented by the Department of Social Welfare.
7. Creating awareness among rural women on on going programmes.

SEMESTER-VI

Family Finance and Consumer Behaviour

Code: 24HSUC3624

Credits: 3

Pd/Wk: 3

Marks: 100

Learning Objectives:

Enable the students to

1. Provide situations to understand significance of family income and expenditure and saving for future
2. Register and react as responsible consumers
3. Analyze relevance of consumer movement in India
4. Gain knowledge on consumer protection Laws and Acts and reflect upon personal rights and responsibilities

Course Outcomes

On Successful Completion of this course, the students will be able to

- Becoming familiarized to the changing trends in consumerism
- Enriched Knowledge on market systems
- Emerge as informed consumers
- Review the benefits of planned financial management

Course Content

Unit-I: Consumer and the Market

Consumer: definition and meaning; consumer Vs customer; Role of consumers in the economy, National Income, Per Capita Income, Household wise distribution of income; Classification of Consumer goods; Consumer and the market: definition and classification of markets, types; Consumer behaviour: changing nature of consumer behaviour to suit modern market and business trends – concepts of C2C, B2B, B2C, C2B etc; Factors influencing Consumer behavior

Meaning, characteristics of buyer behaviour, buying motives – types; consumer buying process; Change in consumer purchase practices in the digital market – concept of e-commerce, m-commerce, online shopping etc; Extended use of plastic currency and cards

Unit –II: Household Income and Expenditure

Household Income – Types, Sources, Supplementation of family income, use of family income, Household expenditure: Items of expenditure, mental and written plans, Factors influencing expenditure pattern, Account maintenance: methods of account keeping like balance sheets, accountbooks, ledgers, income-expenditure records.

Personal finance management: Tax implications: significance in budgeting, calculation of personal income tax for an individual's monthly income; Engel's Laws of consumption.

Unit III: Family Savings and Credit practices

Consumer credit- Concept, meaning, need, sources, credit cards, credit services availed by the family members, types of loans availed by families.

Mortgages: Definition and conceptual meaning, significance in meeting emergent needs of expenditure; Financial security arrangements: Family savings and investments- need ,principles, channels of investment; Savings and savings institutions- Post office, Banks, Chit funds, Insurance.

Unit IV: Consumerism in India

Consumerism: genesis, consumer movement; Consumer problems – types, nature, causes and solutions. Consumer education: Meaning and definition; need and scope, objectives, aspects, methods, contents and resources.

Consumer aids: classification – Labels, Trademarks, Brand Names, Patents, Warranty, Guarantee., Unfair consumer practices: adulteration and faulty weights and measures.

Unit V: Consumer Protection

Consumer protection: concept, need and significance; Consumer rights and responsibilities in India Consumer organisation: Role of consumer forums and consumer courts in safeguarding consumers Consumer Protection Act 2019 (COPRA) , Alternative redressal mechanisms, Mediation centres; Standardization and quality control measures: Role of BIS, FPO, AGMARK and ISO.

References:

1. Gangawane,L.V.,andKhilareV.C.(2007). Sustainable Environmental Management : Dr Jayshree Deshp and eFest chrift Volume. Delhi: Daya
2. Gupta,C.B.,andNair,R.N.(2004).Marketing Management. New Delhi: Sultan Chand and Sons
3. Kathiresan,S. ,and Radha,V.(2004).Marketing. Chennai: Prasanna Publishers
4. KhannaS.R.,HanspalS.,KapoorS.,&AwasthiH.K.(2007).Consumer Affairs.NewDelhi:UniversitiesPress India Pvt.Ltd.
5. NairR.,andNairS,R.(2003).Marketing.New Delhi:Sultan Chand and Sons
6. Nair,S(2002).ConsumerBehaviour.NewDelhi:SultanChandandSons.
7. Pattanchetti,C.C.,andReddy(2002).PrinciplesofMarketing.Coimbatore:Rainbow Publishers

Family Finance and Consumer Behaviour

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO1 :	Becoming familiarized to the changing trends in consumerism	3	3	3	3	3	2	3	2	2
CO 2 :	Enriched Knowledge on market systems	3	3	2	3	2	2	3	3	2
CO 3:	Emergence in formed consumers	3	2	3	2	3	3	2	2	2
CO 4 :	Review the benefits of planned financial management	3	2	2	2	3	1	2	2	2

FAMILY FINANCE AND CONSUMER BEHAVIOUR PRACTICAL

Code: 24HSUC3625

Credits: 1

Pd/Wk: 2

Marks:100

1. Evaluation of labels and advertisements in the print media.
2. Evaluation and designing of labels for different type of products.
3. Visit to banks and post offices to understand their services and schemes.
4. Learning to fill up different forms in bank and post office for depositing money and other related services.
5. Identification of adulterants in food through simple tests at household level.
6. Debates on advantages and disadvantages of:
 - a. Online shopping
 - b. Credit and debit card usage
7. Visit to a consumer organization to understand their activities.
8. Learn to distinguish one mark from another from the logo and colour of logo like eco-labels, green labels
9. Calculation of Income Tax for an individual's monthly income
10. Creating awareness in a rural community on buying practices and purchasing behavior

References:

1. Gangawane, L.V., and Khilare V.C.(2007). Sustainable Environmental Management: Dr Jayshree Deshpande and Festchrift Volume. Delhi: Daya
2. Gupta, C.B., and Nair, R.N.(2004). Marketing Management. New Delhi: Sultan Chand and Sons
3. Kathiresan, S., and Radha, V.(2004). Marketing. Chennai: Prasanna Publishers

GENDER SENSITIZATION FOR EMPOWERMENT

Code: 24HSUC3626

Credits: 3

Pd/wk: 3

Marks: 100

Learning Objectives:

Enable the students to

1. Sensitize students about various dimensions of gender and development, legal rights and using gender tools and methodologies.

Course Outcomes:

On Successful Completion of this course, the students will be able to

- Trace the significance of gender development in national development
- Report the violence against two men at family and workplace.
- Get familiarize with legislations and policies for women

Unit I- Gender: A Social constriction: Understating concept:

Understanding concept: Gender, gender role, gender budgeting, gender auditing, gender mainstreaming, gender analysis matrix, gender in development, gender and development, Difference between gender equity and gender equality.

Unit-II:

Gender perspectives in development of women, social characteristics, role, responsibilities, resources and constraints.

Status – Meaning, Status of Women as per latest census report – Gender gaps and their implications, Shift from welfare to development and empowerment

Unit-III:

Report on CEDAW, National policy for empowerment of women, Gender analysis frame work- context, activities and resources.

Unit-IV: Gender Based Violence

Meaning, types- Physical violence, Psychological violence, Sexual violence, Socio economic violence Domestic violence and sexual harassment- causes and Gender based violence at different stages throughout life cycle.

Unit-V: Laws relating to Women

Marriage, dowry, divorce, Sexual Harassment and outraging the modesty of women, domestic violence, and protection of children from sexual offences, protection of women from sexual harassment at work place.

References:

1. Country Report.(1995). Department of Women and Child Development. Government of India.
2. National Perspective Plan for Women.(1988).New Delhi: Department of Women and Child Development. Government of India.
3. Rehman,M.M. and Biswal,K.K.(1993). Education, Work and Women. New Delhi: Common Wealth Publishers.
4. Sharma, O.C.(1994). Crime Against Women. NewDelhi: Sterling Publishers Private Limited.

Gender Sensitization for Empowerment

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO1	Trace the significance of gender development in national development	3	3	3	3	3	2	2	2	1
CO 2	Report the violence against women at family and workplace	3	3	3	2	1	1	-	3	2
CO 3	Get familiarize with legislation sand policies for women	3	3	2	3	3	1	2	3	2

GENDER SENSITIZATION FOR EMPOWERMENT PRACTICAL

Code: 24HSUC3627 Credits: 1 Pd/wk: 2 Marks: 100

Practical

1. Studying the status of women in selected village.
2. Discussion with community Based Organisation working for women.
3. Visit to District Social Welfare Office to know the programmes for women and gender budgeting.
4. Visit to All Women Police Station to know the legal provisions for women.
5. Preparation of paper clippings on Gender Based violence.
6. Interaction with rural women to know role of women in decision making process.
7. Arranging exhibition at village level to create awareness on women's rights.
8. Preparation of case studies on successful women.
9. Appraisal of budget proposals related to women and children welfare.
10. Allocation of funds under National Social Assistance programme

FOOD SERVICE MANAGEMENT

Code: 24HSUC3628

Credits: 3

Pd/Wk: 3

Marks: 100

Learning Objectives

Enable students to

- understand the organization in a hospital dietary service.
- gain knowledge on planning and organization of work in a dietary Department.
- comprehend the basic concepts in financial and personnel management.
- know the different styles of food service

Learning Outcomes:

On successful completion of the course, the student will be able to

1. Comprehend various food service systems.
2. Select appropriate purchasing procedures and manage issuing.
3. Develop skills in scaling up recipes for different cuisines.
4. Plan and forecast production schedules and manage finance effectively
5. Manage manpower and maintain sanitation and hygiene effectively.

Course Content

UNIT I: Introduction to food service:

Food Service Industry: Definition, types of catering- Hotel, Motel, Restaurant, Cafeteria and chain hotels. Welfare: Hospital, School lunch, Residential establishment and Industrial catering. Transport: Air, Rail, Sea and Space, Miscellaneous: Contract and outdoor. Food service systems- Conventional, commissary, satellite and assembly serve.

UNIT II: Planning space requirements and equipments

Physical plant, equipments and food purchase: Layout of kitchens, types of kitchens – planning of receiving preparation, storage and service area with relevant to spacing. Equipments- classification, electrical and non electrical equipments used for food storage, Preparation, serving, dishwashing and laundering. Factors involved in selection, use and care of major equipments.

UNIT III: Quantity Food Service

Definition, objectives, styles of service waiter service, self service, vending and mechanics of waiter service. Menu planning: Origin of menu, importance of menu planning. Types of menu- table d'hote menu, a la carte, Dujour, theme, static, cycle. Use of menus, menu construction, menu design, factors influencing menu planning, and standardization of recipes and portion control.

UNIT IV: Management Principles and functions of food service institutions

Principles and Functions: Principles and Planning, organising, directing, controlling, co-ordinating and evaluating. Management Tools-The Organization Chart, Job Description and specification, Time schedule, Work schedule, Job Analysis, Budget leadership style and training, decision making and communication.

Financial Management: Concept of food budget, Steps in budget planning, costing and food cost control, food costing and analysis, Records to be maintained- Book Keeping, system of book keeping, book of accounts- cash book, purchase book, sales book, purchase returns book, sales returns book and journals. Computer aided record maintenance and management.

UNIT V: Personnel management

Recruitment, selection and induction procedures, Employee facilities and benefits, welfare schemes and laws governing food service institutions.

Sanitation and Safety – Sanitation of Plant and Kitchen Hygiene, Personal Hygiene, First aid principles and practice, Health and Safety at work and use of fire extinguishers.

Overview of Registration and Licensing of Food Business operations as per FSSAI regulations

Textbooks:

1. Bobby George, (2006), Food and Beverage Service, Jaico Publishing House, Mumbai.
2. Kiran(2019), Production planning and control, 1st edition, eBook, ISBN: 9780128189375.
3. Kotler, P. (2019). Principles of Marketing, 13th edition, Pearson. 8. Prasad, L.M. (2019). Principles & practice of Management, Sultan Chand and sons.
4. Sethi, M., Malhan, S. (2007): Catering Management: An integrated approach, New Age International
5. Sudhir Andrews, (1999) Food and Beverage Service Training Manual, Tata McGraw Hill Publishing Company Ltd New Delhi

FOOD SERVICE MANAGEMENT

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO1 :	Suggest an efficient design by effective allocation of space to ensure smooth work flow in a hospital dietary.	2	2	2	2	3	3	2	2	2
CO 2 :	Plan and organize food production and service in a hospital dietary by effective utilization of resources.	3	2	3	2	3	3	3	2	3
CO 3:	Acquire good managerial skills	3	3	3	3	3	3	3	3	3

FOOD SERVICE MANAGEMENT- PRACTICAL

Code: 24HSUC3629

Credit:1

Pd/Wk: 2

Marks: 100

Learning Objectives

Enable students to

- understand the organization in a hospital dietary service.
- gain knowledge on planning and organization of work in a dietary Department.

Learning Outcomes:

On successful completion of the course, the student will be able to

1. Comprehend various food service systems.
2. Select appropriate purchasing procedures and manage issuing.

Course Content:

- 1. Quantity Cooking (Concepts, Principles, and Techniques):** Analysis of relationship between the purchase amount, edible portion and cooked weight of food ingredients and conversion, recipe standardization and conversion.
- 2. Preparing a plan for setting up of food service unit.** Physical and operational characteristics, regulations, budget, registration and licensing and advertising.
- 3. Planning and Organization of Meals for Institutional Feeding:** Midday snack for preschool children, Meals for college canteen, Meals for college hostel Mess and pricing.
- 4. Planning and Organization for Industrial Catering:** Railway catering, Air catering and Industrial catering and pricing.
- 5. Catering for Special Occasions and Events:** Birthday party, Mocktail party, Convention / Seminar / Conference and pricing.

FOOD SERVICE MANAGEMENT PRACTICAL

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Comprehend various food service system.	2	3	3	3	3	3	2	3	3
CO2:	Select appropriate purchasing procedures and manage issues.	3	3	2	2	3	2	3	2	3

INTRODUCTION TO ERGONOMICS

Code: 24HSUC3630

Credits: 4

Pd/Wk: 4

Marks: 100

Learning Objectives:

Enable the students to

1. Understand the fundamentals of ergonomics.
2. Build knowledge on human interaction with task and technology
3. Relate products, environments and performance on well being considering human characteristics and limitations

Learning Outcomes:

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

- Distinguish the terms referring to health and safety and ergonomics
- Identify and use ergonomic controls to reduce and prevent work-related disorders
- Comprehend interrelatedness of work, worker and work environment on productivity
- Adhere to safety principles during work performance
- Relate significance of anthropometry to work place designing

Course Content

1. Definition of ergonomics, principles of ergonomics and its application
2. Work-worker and workplace relationship.
3. Anthropometry: Meaning, importance, methods of taking measurements, applications of anthropometric measurements.
4. Household drudgery- definition, drudgery prone areas in home - Methods of alleviating drudgery.
5. Household equipment- introduction, definition, classification and base materials used in construction.
6. Work Environment – lighting, ventilation, noise space adequacy and its impact on worker performance
7. Posture – definition, impact on worker.

References:

1. Bridger, RS, (2003), 'Introduction to Ergonomics', 2nd Edition, Taylor & Francis.
2. Dul & Weerdmeester, (2003), 'Ergonomics for Beginners', Taylor & Francis.
3. Dul & Weerdmeester B., (2001), 'Ergonomics for beginners', London: CRC Press, UK.
4. McKeown & Twiss, (2001), 'Workplace Ergonomics: A Practical Guide', IOSH services.
5. Stephen Konz and Steve Johnson, (2007), 'Work Design: Occupational Ergonomics', 7th Edition Holcomb Hathway.

6. Wilson&Corlett,(2005),‘Evaluation of Human Work’,Taylor&Francis.

Text Books

1. Hughes P and Ferrett E., (2009), ‘Introduction to Health and Safety at Work’, Oxford, Elsevier Science.
2. ILO,(2001)‘Introduction to work study’,NewDelhi: Oxford & IBHpublishingCo.Ltd.,India.
3. Phillips,C.A,(2000),‘HumanFactorsEngineering’,NewYork:JohnWileyandSons,Inc.,USA.
4. StranksJ.,(2006),‘SafetyatWork’,Keyterms,Oxford,ElsevierScience.

INTRODUCTION TO ERGONOMICS

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Distinguish the terms referring to health and safety and ergonomics	3	1	2	2	2	2	3	3	1
CO2	Identify and use ergonomic control storeduce and prevent work-related disorders	3	3	3	3	3	3	3	3	3
CO3	Comprehend interrelated mess of work, worker and work environment on productivity	3	3	3	3	3	3	3	3	3
CO4	Adhere to safety principles during work per formance	2	3	1	1	1	3	3	3	3
CO5	Relate significance of anthropometry to work placed signing	3	3	1	1	1	1	3	3	3

COMMUNITY HEALTH AND NUTRITION

Code : 24HSUB3608

Credits: 3

Pd/Wk: 3

Marks: 100

Learning Objective:

Enable the students to

- understand the health system in the country and nutritional problems of a community
- learn the methods used for assessing the diet and nutritional status of a community
- know the on going intervention programmes for overcoming malnutrition in the community.
- acquire skill in conducting nutrition education

Learning Outcomes:

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

- assess the nutritional status of the community
- demonstrate various means of imparting nutrition education to the community

Course Content

Unit -I: Community Health: Concept of community health, Population dynamics, demographic transition, population explosion, health economics and Health care system in India, National Health Mission. Relation between health and nutrition. Nexus between poverty and malnutrition – PCD, micro nutrient deficiencies (Vitamin A, Nutritional Anaemia, IDD) prevalence of diet related non – communicable chronic diseases.

Unit -II: National Nutritional Policy and programmes

Action areas, National Nutritional goals, implementation strategy – Nutrition intervention for vulnerable groups, fortification of essential goods. Intervention programmes to combat malnutrition, ICDS programmes, Balwadi Nutrition programmes, noon meal programme.

Role of International Organizations in combating nutritional disorders – UNICEF, FAO, WHO.

Unit-III: Assessment of Nutritional status of the community

Objective methods – direct assessment – (a) Anthropometric measurements (b) Bio-physical method (c) Bio- chemical method (d) Clinical survey (e) Diet survey, Indirect methods. Food balance sheet, Agricultural data, ecological parameters and vital statistics – use of growth chart.

Unit -IV: Nutrition education

Meaning, need, principles, methods. Factors influencing nutrition related behavior, behavioral changes related to nutrition education. Use of IEC in nutrition education.

Nutrition and Food Security : Food and nutrition security : Definitions, concept and components. National, community and household level food security: current definitions globally and In India. National Food Security Act. Public distribution system.

Newer developments & strategies for improving nutritional status of populations such as Food fortification, Multi micronutrient fortification of complementary foods & supplementary nutrition for pregnant & lactating women

Unit –V: Food adulteration

Definition, adulterants in different foods, their ill effects and detection (house hold level techniques) contamination of food with toxic chemicals, pesticides and insecticides and; harmful micro – organisms – bacterial, fungal, parasitic; insect and rodent contamination of stored foods. Food standards – ISI. Agmark and food laws..

References:

1. National Nutrition Policy (1993). Govt. of India
2. Sree Devi.V. (1997). Nutrition Education. New Delhi: Discovery Publishing House
3. Swaminathan. M. (1985). Essentials of Food and Nutrition. Vol I and Vol. II Madras. Ganeshand company. Hyderabad
4. The state of Food insecurity in the world (2021) : The multiple dimensions of food security. FAO publication
5. Report of food insecurity in rural India: MS Swaminathan research Foundation
6. Park, K. (2009) Park's Textbook of Preventive and Social Medicine, 20th ed. Jabalpur M/s. Banarsidas Bhanot.
7. Gibney M.J., Margetts, B.M., Kearney, J. M. Arab, I., (Eds) (2004) Public Health Nutrition, NS Blackwell Publishing.

Text books:

8. Srilakshmi (2006). Food Science. New Delhi. New Age International Pvt.Ltd.
9. Srilakshmi (2008). Nutrition Science. New Delhi. New Age International Pvt.Ltd.
10. Mahtab, S, Bamji, Kamala Krishnasamy, Brahman, G.N.V. (2019). *Text Book of Human Nutrition*, Fourth Edition, Oxford and IBH Publishing Co. P. Ltd.,

COMMUNITY HEALTH AND NUTRITION

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Assess the nutritional status of the community.	3	3	2	3	2	3	2	3	2
CO2:	Demonstrate various means of imparting nutrition education to the community.	2	3	3	3	3	2	3	3	3

COMMUNITY HEALTH AND NUTRITION PRACTICAL

Code : 24HSU3609 Credits: 1 Pd/Wk: 2 Marks: 100

Learning Objective:

Enable the students to

1. learn the methods used for assessing the nutritional status of a community
2. acquire skill in conducting nutrition education

Learning Outcomes:

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

assess the nutritional status of the community demonstrate various means of imparting nutrition education to the community

Course Content

1. Assessing Nutritional status of various age-groups using Anthropometric measurements
2. Preparation of IEC materials for imparting nutrition education.
3. Nutrition education Program using charts, models
4. Demonstration of a low cost recipe.
5. Assessing Nutritional status of various age-groups using Anthropometric measurements
6. Visit to Observe the working of Nutrition and Health oriented Programs.(ICDS)

Text Books

1. Prabha Bisht, 2017, Community Nutrition in India, Star Publications, Agra
2. Suryatapadas, 2018, Textbook of Community Nutrition, 3rd Edition, Academic Publishers, West Bengal.
3. Srilakshmi.B, 2021, Nutrition Science, New Age International Publishers, New Delhi.

COMMUNITY HEALTH AND NUTRITION PRACTICAL

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO 1:	Assess the nutritional status of the community.	2	3	2	3	3	3	3	3	3
CO2:	Demonstrate various means of imparting nutrition education to the community.	3	3	3	2	3	2	2	2	3

EXTENSION EDUCATION SYSTEMS

Code: 24HSUC4731 Credit:4 Pd/Wk: 4 Marks : 100

Learning Objectives

To enable students to

1. understand the changing concept of extension
2. get acquainted with the trends in extension approaches and models
3. identify the support system development for extension education

Learning Outcomes

On Successful completion of this course , the students will be able to

- Explain the concept of Extension
- Describe various models of extension
- Consolidate earlier extension efforts in India
- Compile the global extension systems.

UNITS:

1. Conceptual analysis:

Extension – Meaning, changing concept of extension, philosophy, objectives, principles, functions, components of extension and dimension of extension education – Learning: meaning, process and principles of learning in extension.

2. Extension Models and approaches:

Models: Technology – innovation transfer model, social education model, indigenization model, social action /concretization models, empowerment / participation model, combination models.

Approaches: Integrated, area, cluster, target approach.

3. National Extension Systems:

Early extension efforts, Community Development Programme – genesis and growth, objectives, principles, critical appraisal of community development programme. ICAR extension system – Agricultural Universities, KVK, TTCs. Extension system of Ministry of Rural Development, Ministry of Women and Child Development. Development work by NGOs, Go-NGO collaboration.

4. Support structures and their functions:

Panchayat, Panchayat Union and DRDA, Local level voluntary agencies. People's organization at grass roots level – SHGs, elected panchayats. Grass Root Innovations (GRIs)

5. Extension system in other countries :

Comparative extension system of selected developed and developing countries: USA, Srilanka, Indonesia, China, Pakistan, Philippines and Bangladesh with brief history, approaches, organizational structure, linkage with research and extension methods used; its comparative analysis with Indian extension system.

References:

1. Albrecsht, H.et.al. (1989). Rural Development Series. Agricultural Extension Vol.I & II. Basic concepts and methods. Wiley Eastern Limited, New Delhi.
2. Dahama, O.P. and Bhatnagar, O.P. (2015). Education and Communication for Development 2ED .Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi.
3. Dantwala ML & Barmeda JN. 1990. Rural Development Approaches and Issues, Indian Ag.Dev. Since Independence. Oxford & IBH.
4. Khan. P.M. 2010. Text book of Extension Education. Himanshu publication.ISBN: 9788179062081
5. Pankajam, G (2000). Extension- Third Dimension of Education, Gyan Publishing House, New Delhi.
6. Ray, G.L. (2015). Extension communication and Management, Kalyani Publishers .
7. Rathore.S. and L.L.Somani. (2012). Extension Education and Rural Development. Agrotech publication . ISBN.10: 8183212581.
8. Reddy, A. (2001). Extension Education 7th ED . Sree Lakshmi Press, Bapatla.
9. Singh RP, Mathur PN & Kumar GAK. 1999. Extension Education - A Handbook for Extension Personnel. IFWA, IARI, New Delhi.
10. Supe.S.V. (2015). Text Book of Extension Education II ED. Agrotech Publishing Academy, Udaipur.ISBN: 978-81-8321-319-6
11. Shruti Madan Singh . (2015). A Brief Book on Extension Education. New vishal publication.

EXTENSION EDUCATION SYSTEMS

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Explain the concept of Extension	3	3	2	3	2	3	3	3	3
CO2:	Describe various modes of extension.	3	2	3	2	3	2	2	2	2
CO3:	Consolidate earlier extension efforts of India.	2	3	3	2	2	3	3	3	3
CO4:	Compile the global extension system.	3	3	2	3	3	2	2	2	2

ADVANCED FOOD SCIENCE AND NUTRITION

Code: 24HSUC4732

Credit:4

Pd/Wk:4

Marks : 100

Learning Objectives:

1. Familiarize the students with changes occurring in various foodstuffs as a result of processing and cooking
2. Enable the students to use the theoretical knowledge in various applications and food preparations.
3. Highlight the physiological and metabolic role of nutrients and their relationship to human health and wellbeing.
4. Plan and prepare the nutritional challenges during travel to extreme conditions such as hot, cold, high altitude and space.

Learning Outcomes:

On successful completion of this course the student will be able to apply:

- ✓ The characteristics and behaviour of food constituents during processing
- ✓ The changes in physiochemical and functional properties of food constituents due to processing
- ✓ Acute and chronic nutritional problems
- ✓ physiological changes and nutrition management in human body during exposure to extreme climatic conditions and emergencies

Course Content

UNIT I

Constituents of Foods: Structure and properties of water and ice; Types of water; Sorption phenomena; Water solution interactions; Phase transition of foods containing water; heat transfer during processing; relationship between viscosity and temperature; Water activity and food spoilage; Food dispersion: Colloidal system, and rheology of food dispersions; Structure, formation and stability of gels, sols, emulsion and foams.

Polysaccharides, Sugars and Sweeteners: Structure and composition of starch; Properties and characteristics of food starches; Effect of heat on food starch properties and the factors influencing gelatinization and dextrinisation changes; Modified food starches; Structure, composition and characteristics of non-starch polysaccharides, Role of starch and non-starch polysaccharides in food and

industrial applications; Properties of sugars and sweeteners: Sugars, syrups, sugar alcohols, potent sweeteners,

UNIT II

Proteins and Enzymes: Amino acid - types and their properties; Structure and composition of proteins; Classification and properties of proteins; Effect of heat on physio-chemical properties of proteins; Role of proteins in food products; Texturized vegetable protein, protein concentrate and isolates preparation methods; Enzymes: Classification and its nature; Mechanism of action; Factors influencing enzyme activity; Role of enzymes in food products;

UNIT III

Fat/Oil: Structure and composition of fat; properties of fat, Oil composition and the properties; Methods to determine the quality of fat/oil; Quality changes in fat/oil during storage and prevention of fat spoilage; Role of fat/oil in food products; Fat substitutes. role of food lipids in flavor, physiological effects of Lipids.

Food Colours and Flavours: Pigments classification, structure and properties; Effects of processing on stability of pigments in foods.

UNIT IV

Macro nutrients:

Energy: Energy requirements of individuals and groups: RDA, principles and the methods used for RDA measurement. Concept of energy balance, energy input and expenditure; Measurement of energy input and expenditure; factors influencing energy expenditure.

Carbohydrate, Protein, Lipid & Dietary fibre: Physiological functions, digestion, absorption, metabolism and utilization, food sources, requirements.

Water: Physiological functions, digestion, absorption, metabolism and utilization, food sources, requirements.

Micronutrients

Vitamins: Physiological functions, digestion, absorption, metabolism and utilization, food sources, requirements, deficiency and toxicity.

Minerals: Physiological functions, digestion, absorption, metabolism and utilization, food sources, requirements, deficiency and toxicity.

UNIT V

High altitude and space nutrition

Physiological changes due to high altitude; Acclimatization process; Altitude sickness and related health problems; Nutrient requirements and dietary management of mountaineers.

Space Nutrition: Need and scope for space travel; History of space travel; Physiological changes in astronauts; Nutrient requirement and dietary management during space travel.

References

1. Srilakshmi, B. (2018). Food Science, Eleventh edition, New Age International (P) Ltd., Publishers, New Delhi.
2. Desrosier, N.W. and James N. (2007). Technology of food preservation. AVI Publishers.
3. Potter, N. and Hotch Kiss, J.H. (2007): Food Science, Fifth edition, CBS Publishers and Distributors, New Delhi
4. Julians, B.O. (1985). Rice Chemistry and Technology, 2nd edition, American Association Chemists, St. Paul Mimesota, USA.
5. Charley, H. (1982). Food Science, 2nd edition, John Wiley & Sons, New York.
6. Arthey, D. and Ashurst, P.R. (1996). Fruit Processing, Blackie Academic & Professional, London
7. Meyer, L.H. 1974. Food Chemistry, AVI Publishing Co. Inc,
8. Manay, S. and Shadaksharamasamy, Food: Facts and Principles, New Age International (P) Publishers, New Delhi.

ADVANCE FOOD SCIENCE AND NUTRITION

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	The characteristics and behaviour of food constituents during processing.	3	3	3	3	3	3	3	3	2
CO2:	The changes in physiochemical and functional properties of food constituents due to processing.	2	3	2	2	3	3	2	2	3
CO3:	Acute and chronic nutritional problem.	3	2	3	2	3	2	2	2	3
CO4:	Physiological changes and nutrition management in human body during exposure to extreme climatic conditions and emergencies.	3	2	3	3	2	2	3	3	2

ADVANCED FOOD SCIENCE AND NUTRITION PRACTICAL

Code: 24HSUC4733

Credit: 1

Pd/Wk:2

Marks : 100

Learning Objectives:

1. understand the science behind cookery
2. explore the concept of food analysis

Learning Outcomes:

On successful completion of this course the student will be able to:

- ✓ Do various testing methods for determination of food constituents
- ✓ Know the influence of processing conditions on physiochemical properties of food constituents

Course contents:

Advanced Food Science

1. Effect of solutes on boiling point and freezing point of water
2. Effects of types of water on characteristics of cooked vegetables, pulses and cereals
3. Microscopic examination of plant starches and study the gelatinization on starch
4. Sugar cookery and the factors influencing the stages of sugar cookery
5. Physiochemical and functional properties of proteins
6. Preparation of protein concentrate/isolate
7. Role of fats in cookery as shortening agents in bakery products
8. Influence of heat on physicochemical properties of oil
9. Effect of acid, salt, alkali, heat and enzymes on pigments
10. Prevention of enzymatic browning reactions in cut fruits and vegetables

Advanced Nutrition

1. Determination of energy value of foods by using bomb calorimeter
2. Estimation of energy requirements of an individual by factorial approach
3. Qualitative tests for determination of carbohydrate
4. Estimation of crude and dietary fibre content of the foods
5. Qualitative tests for protein
6. Estimation of protein content of foods by kjeldhal method
7. Estimation of crude fat content of foods by soxhlet method
8. Determination of vitamin C content of the foods
9. Estimation of dry matter content of the foods

10. Qualitative tests for determination of phytochemicals

References

1. Srilakshmi (2017). Nutrition Science. 6th edition, New Age International Pvt. Ltd, New Delhi.
2. Shills, M.E., Olson, J., Shike, M. and Roos, C. (2005): Modern Nutrition in Health and Disease. 10th Edition .Williams and Williams. A. Beverly Co. London.
3. Mahan L K and Escott – Stump S (2004). Krause's Food Nutrition and Diet Therapy 10th Ed WB Saunders Ltd
4. Sree Devi.V. (1997). Nutrition Education. Discovery Publishing House, New Delhi.
5. Mahtab, S, Bamji, Kamala Krishnasamy, Brahmam, G.N.V. (2019). *Text Book of Human Nutrition*, Fourth Edition, Oxford and IBH Publishing Co. P. Ltd., New Delhi.

ADVANCED FOOD SCIENCE AND NUTRITION PRACTICAL

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Do various testing methods for determination of food constituents	2	3	3	2	3	3	2	3	3
CO2:	Know the influence of processing conditions on physiochemical properties of food constituents	3	2	3	3	2	2	3	2	2

ENTERPRISE DEVELOPMENT

Code: 24HSUC4734

Credit:4

Pd/Wk:4

Marks : 100

Learning Objectives:

- To enable the students to learn the Entrepreneurship Development.
- To make the students understand the Entrepreneurship opportunities.

Specific Learning Outcome:

After learning this paper the students will gain knowledge in Entrepreneurship, Entrepreneurial Development, Project Management, Finance and Marketing, small industry set up.

Unit I Introduction to Enterprise

Enterprise – Definition, Types of Enterprise – Sole proprietorship, Partnership, Co-operative society, Joint stock company-Definition Meaning, Functions, Objectives, roles.6 M's of an Entrepreneurship.

Unit II Opportunities in Fashion Entrepreneurship

Identifying Opportunities - Prospects of Fashion entrepreneurship - Fashion and Textile Design, Manufacturing and Distribution, Fashion Sales and Marketing, Fashion Retail; Fashion Entrepreneur Traits; Factors affecting entrepreneurship growth

Unit III Online Fashion business

Innovative entrepreneurship – entrepreneurship in the digital revolution era; Online Fashion Business – Four levels of online activity – email, text, skype, website, social media, online sales; Advertisement – types, implementation, advantage and its disadvantages

Unit IV Start-up Management

Start-up – Concept, Spiral model of a Startup; Steps for new Start-up – Pros and Cons of new business, Business plan, Company registration, Budget, Buying Equipment, Design and production cycle

Unit V Government Start-up Schemes and Policies

Textile and Apparel– Evolution and their advantages in India; Government scheme and policies – Start-up India, Make in India, AIM, STEP, Stand-up India, TREAD and other textile start-ups

References

1. Hambrick , D(1982), environmental scsnning and organization strategy, strategic management journal. 3(2).pp.159-174
2. SWOT analysis: Discover new opportunities, Manage and eliminate threats. "www.mindtools.com.loop. Retrieved 24 February 2018.
3. Carme Moreno-Gavara, Ana Isabel Jiménez-Zarco, "Sustainable Fashion: Empowering African Women Entrepreneurs in the Fashion Industry", 2019, Palgrave Macmillan
4. Marta Peris-Ortiz, Jean-Michel Sahut (eds.), "New Challenges in Entrepreneurship and Finance: Examining the Prospects for Sustainable Business Development, Performance, Innovation, and Economic Growth", 2015, Springer International Publishing
5. Ronny Baierl, Judith Behrens, Alexander Brem, "Digital Entrepreneurship: Interfaces Between Digital Technologies And Entrepreneurship", 2019, Springer
6. Agnieszka Skala, "Digital Startups in Transition Economies: Challenges for Management, Entrepreneurship and Education", 2019, Springer International Publishing
7. Michele M. Granger, Tina M. Sterling, Ann Cantrell, "Fashion Entrepreneurship: Retail Business Planning", 2019, Edition-3, Fairchild Books

Text Books:

1. Dynamics of Entrepreneurial Development Management Vasant Desai, Himalaya PublishingHouse.
2. Entrepreneurial Development S.S. Khanna Entrepreneurship & Small Business Management CL Bansal, Haranand Publication
3. Entrepreneurial Development in India Sami Uddin, Mittal Publication

ENTERPRISE DEVELOPMENT

Course Outcome (CO)	Programme Specific Outcome(PSO)								
	1	2	3	4	5	6	7	8	9
ENTERPRISE DEVELOPMENT	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9
CO1: Understand the types and role of an entrepreneur	3	2	1	1	1	1	3	3	3
CO2: Know how to become an independent entrepreneur	3	2	1	1	1	1	3	3	3
CO3: Identify various financial agencies available to acquire funds and asset benefits.	3	2	1	1	1	1	3	3	3
CO4: Plan and executing in starting new boutiques.	3	2	1	1	1	1	3	3	3

NUTRITIONAL BIOCHEMISTRY

Code: 24HSUB4710

Credits: 3

Pd/Wk:3

Marks: 100

Learning Objectives: Enable the students to

1. Understand the basic principles of biochemistry
2. Provide knowledge on the functions of biological systems in relation to nutritional biochemistry
3. Learn the metabolic pathways of nutritional significance

COURSE OUTCOMES:

On successful completion of the course the students will be able to

- Describe the role of enzymes and co enzymes in biological oxidation.
- Adequately explain the metabolism of carbohydrates, proteins and lipids
- Comprehend the metabolic pathways of carbohydrates, proteins and lipids.
- Explain the interrelationship of the macronutrient's metabolism.

Course Content

UNIT-I

Enzymes: Definition, Classification, Properties, Nomenclature, Mechanism of enzyme action, Factors affecting enzymatic activity, Co-enzyme and Enzyme Inhibition.

Biological Oxidation: Definition, High energy compounds and Electron transport chain.

UNIT-II

Carbohydrate: Classification. Glycolysis, TCA cycle, Gluconeogenesis, Pentose Phosphate Pathway , Blood Glucose Homeostasis.

UNIT-III

Classification of Proteins and Amino acids (structural and nutritional) Structure of protein - Primary, Secondary, Tertiary and Quaternary, Properties of Proteins, Hydrolysis, Denaturation, Precipitation, Coagulation. Catabolism of Proteins- Oxidative deamination, Transamination, Transdeamination and decarboxylation, Fate of Amino group and Fate of Carbon Skeleton. Urea cycle.

UNIT-IV

Lipids: Classification, chemical composition and Properties of Lipids. Classification of Fatty acids- Classification . Lipid Metabolism: Biosynthesis of fatty acid, β -Oxidation of fatty acids, ketone bodies Ketogenesis, Biosynthesis and Degradation of Cholesterol. Lipoproteins – classification and functions.

UNIT-V

Regulation Of Metabolism: Interrelationship between carbohydrate, fat and protein metabolism, hormonal regulation of carbohydrate, fat and protein metabolism. Nucleic

Acids: definition of nucleoprotein, Functions and components of nucleic acids. DNA and RNA – Types, Structure and function.

Related Experience

1. Qualitative tests for sugars – glucose, fructose, lactose, maltose and glucose.
2. Qualitative tests for proteins.

TEXT BOOKS

1. Ramadevi. (2016). Ambika Shanmugam's Fundamentals of Biochemistry for Medical Students. (8 ed.). India: Wolter Kluwer.
2. Satyanarayana, U. (2006). Biochemistry (3rd ed.). Kolkata: Books and Allied (P) Ltd.
3. Bender, D., Rodwell, V. W., Botham, K. M., Weil, P. A., Kennelly, P. J. (2018). Harper's Illustrated Biochemistry. (31st ed.). Thirty-First Edition. United States: McGraw-Hill Education.
4. Conn, E. E., Stump, P. K., Bruening, G. & Doi, R.H. (2009). Outlines Of Biochemistry. (5th ed.). India: Wiley India Pvt. Limited.
5. Fearon, W. R. (2014). An Introduction to Biochemistry. Netherlands: Elsevier Science.

REFERENCE

1. Vasudevan, D. M., S, S., Vaidyanathan, K. (2016). Textbook of Biochemistry for Medical Students. India: Jaypee Brothers, Medical Publishers Pvt. Limited.
2. Rama Rao, A. V. S. S. (2006). A Textbook of Biochemistry. India: UBS Publishers' Distributors Pvt. Limited.
3. Talwar, G. P., Sri Vatsava, L. N. & Moudgil, K. D. (1989). Textbook of Biochemistry and Human Biology. New Delhi, ND: Prentice Hall of India (P) Ltd.

NUTRITIONAL BIOCHEMISTRY

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Describe the role of enzymes and co enzymes in biological oxidation.	3	3	2	3	2	3	3	3	3
CO2:	Adequately explain the metabolism of carbohydrates, proteins and lipids.	3	2	3	2	3	2	2	2	2
CO3:	Comprehended and metabolic pathway of carbohydrates proteins and lipids.	2	3	3	2	2	3	3	3	3
CO4:	Explain the interrelationship of the macronutrients metabolism.	3	3	2	3	3	2	2	2	2

NUTRITIONAL BIOCHEMISTRY PRACTICAL

Code: 24HSUB4711

Credits: 1

Pd/Wk:2

Marks: 100

Learning Objectives:

1. impart knowledge on analyses of selected constituent in blood and urine sample

Learning Outcomes:

On successful completion of these units, students are expected to :

- acquire the skill in collection of blood and urine samples for testing
 - develop the skill in handling analytical equipments
 - perform blood and urine analysis and also interpret the condition of the individuals based on the biochemical changes.
1. Qualitative analysis of urine sugar, albumin, ketone bodies and bile salts
 2. Determination of Urine PH, Specific gravity
 3. Estimation of Urine–Sugar, Albumin, Bile salts, Calcium, Creatinine, Urea and Uric acid
 4. Methods of collection of blood. Separation of serum and plasma
 5. Estimation of glucose
 6. Estimation of serum creatinine
 7. Estimation of serum cholesterol
 8. Estimation of serum urea

References

1. H. Varley, Gowen Lock, A.H, William Heinemann : Practical Clinical Biochemistry , Medical books CBS publishers and Distributors Ltd, 5th Edition
2. Ramniksood : Text book of medical Laboratory technology, JAYPEE publisher, 2006.
3. Manual of Medical Laboratory Techniques, , JAYPEE Publisher, 1st Edition, 2008.
4. Ramakrishnan S, Sulochana K.N, Shankara S, M.K Ganesh, A Hemavathi: Laboratory Manual for practical Biochemistry, , JAYPEE publisher, 1st Edition, 2008.

NUTRITIONAL BIOCHEMISTRY PRACTICAL

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO 1:	Acquire the skill in collection of blood and urine sample for testing.	2	3	3	3	2	3	2	3	3
CO2:	Develop the skill in handling analytical equipment.	3	2	3	2	1	2	2	2	2
CO3:	Perform blood and urine analysis and also interpret the condition of the individual based on biochemical changes.	2	3	3	2	2	3	3	3	3

BEHAVIOUR CHANGE COMMUNICATION

Code: 24HSUC4835

Credit: 3 Pd/Wk: 3 Marks : 100

Learning Objectives

To enable the students to

1. To understand the concept and approaches of Behaviour Change Communication (BCC).
2. To gain insights into the inter-linkages between communication approaches and behavior change.
3. To learn the concepts and processes of advocacy for development and social change.

Learning Outcomes

On successful completion of this course, the students will be able to

- Explain the concept and approaches of Behaviour Change Communication (BCC).
- Describe the inter-linkages between communication approaches and behaviour change.
- Apply the concepts and processes of advocacy for development and social change

UNITS :

1. **Introduction to behaviour change communication** - Defining behaviour change, behaviour change communication The behaviour change process.

Behaviour change theories Guiding principles for BCC Characteristics of effective behaviour change communication programs
2. **Designing behaviour change communication programs** Defining the problem Identify target audience Conduct formative assessment Segment target population Define communication and behaviour change objectives Select communication channels Design key messages and materials Pre-test materials and messages
3. **Dissemination, implementation, monitoring and evaluation** of BCC programs Message dissemination Monitoring of BCC programs Evaluation and re-planning Evaluation of message effect
4. **Designing a communication strategy** Steps in designing a communication strategy Key elements of a communication strategy . 7 C's of effective health communication Command attention , Cater to the heart and head , Clarity of message Consistency checks Communicate a benefit Create trust Callfor action
5. **Advocacy:** Meaning, purpose and types of Advocacy, Tools, techniques and approaches to advocacy, Element and steps of an advocacy strategy, Planning advocacy campaigns for different stakeholders

References:

1. Ashford, J. B., LeCroy, C. W., & Lortie, K.L. (2010). Human Behavior in the Social Environment: A Multidimensional Perspective (4th ed.). Belmont CA: Wadsworth/Thomson Learning.
2. Atkin, C.K. & Rice, R.E. (2012) Theory and Principles of Public Campaigns. In C.
3. Atkins & R. Rice (EDS) Public Communication Campaigns. Newbury Park, CA: Sage
4. Bandura (Ed.), Self-efficacy in changing societies, pp. 1–45. New York: Cambridge University Press
5. Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. In
6. Kotler, P. & Lee, N. (2011). Social Marketing: Influencing Behaviors for Good, 4th Ed. Thousand Oaks, CA: Sage Publications. (K&L)
7. Subedi, N R, (2008). Advocacy Strategies and Approaches: A Training of Trainers Manual. International

Behaviour Change Communication

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Students will be able to bring changes in the community after understanding the concept of BCC	1	1	1	3	3	3	2	3	3
CO2	Develop skills in applying communication approaches and behaviour change.	2	3	3	3	3	3	3	3	3
CO3	Learn the concepts and processes of advocacy for development and social change	3	3	3	3	3	3	3	3	3

BEHAVIOUR CHANGE COMMUNICATION PRACTICAL

Code : 24HSUC4836

Credit: 1

Pd/Wk: 2

Marks : 100

Learning Objectives

To enable the students to

1. To understand the various types of audio visual aids
2. To gain skills in preparation of visual aids for behaviour change among adolescents.

Learning Outcomes

On successful completion of this course , the students will be able to

- Familiarise to use various audio visual aids
- Critically evaluate the television programmes and films
- Develop documentary film on health promotion

Practical

1. Operations of various Audio-visual Aids - OHP - Slide Projector - Filmstrip - Film Projector - LCD Projector - Epidioscope –
2. Preparation of Visual/non Projected Materials - Booklets - Pamphlets/leaflet - Invitation - Posters - Manuals - Cover pages for text and other books
3. Analysis of Television programs and films - A look at film-styles, genres: Dramatic, narrative lyrical, aesthetic, ritual, ideological. A discussion of film-psychology, and other Narrative analysis- Micro and macro analysis of aspects of the perception of films. Deconstruction, Literary analysis structure, Reading the film,
4. Video production – An introduction to program production equipments, techniques, production interviews, talks, discussions, features, documentaries. Research and planning: Writing and Scripting for news, broadcast, programs and documentaries - style, language and skills Production: Explore various concept and direction styles ranging from scripted, narrative and documentary movie-making traditions.
5. Develop EFP/documentary/ENG short films on behaviour change focusing -Post Production: editing.

BEHAVIOUR CHANGE COMMUNICATION PRACTICAL

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Explain the concept and approaches of behaviour change communication.	3	2	2	3	3	3	2	3	2
CO2:	Describe the inter linkage between communication approaches and behaviour change.	3	3	3	2	3	3	3	3	3
CO3:	Apply the concepts and processes of advocacy for development and social change.	3	2	3	2	2	2	3	2	3

FOOD PROCESSING TECHNOLOGY

Code: 24HSUC4837

Credits: 3

Pd/Wk: 3

Marks: 100

Learning Objectives:

Enable the students to

1. understand the science behind processing of foods and its impact on nutritive value of foods
2. provide in-depth knowledge on production of processed food products and the waste utilization techniques
3. understand the changes in physiocochemical properties of foods due to processing conditions.

Learning Outcomes:

On successful completion of the course, the student would know

- the concepts and principles of food processing
- the processed food products from plant and animal sources and the production method
- the by-products from food processing and its utilization

Course content

Unit I Cereal Processing and Technology:

Structure, composition and nutritive value of cereal grains such as rice, wheat, maize, barley, oats and rye; Processing and milling of rice, wheat, maize, barley, oats and rye;

Millets: Structure, composition and nutritive value and processing of millets; Cereal Products of rice, wheat and maize; By products utilization; breakfast cereals and extrusion;

Effect of processing on nutritive value of cereals; changes in physiochemical properties of cereal starch and protein due to processing.

UNIT II Pulse Processing and Technology:

Structure, composition and nutritive value of pulses; processing of pulses; Pulse products: Dals, flours, texturized vegetable protein, protein concentrates, isolates and hydrolysates; Byproducts utilization; Effect of processing on nutritive value and physiochemical properties of pulses.

Nuts and Oil Seeds Processing and Technology: Structure, composition and nutritive value of nuts and oilseeds; Oil extraction methods and refining process; byproducts utilization; Refined vegetable oil quality; Effect of processing on nutritive value and physiochemical properties of vegetable oils

UNIT III

Vegetables Processing and Technology:

Structure, composition and nutritive value of vegetables; post harvest changes in vegetables and storage; Preliminary processing of vegetables;

Vegetable products: Fermented and nonfermented and its shelf life; Vegetable waste utilization; Effect of processing on nutritive value and physiochemical properties of vegetables.

Fruits Processing and Technology: Structure, composition and nutritive value of fruits; post harvest changes in fruits and its storage; Concept of maturity, ripening and senescence; Fruit products: fermented and nonfermented; Effect of processing on nutritive value and physiochemical properties of fruits; Fruit waste utilization.

UNIT IV

Milk Processing and Technology:

Milk types, composition, physiochemical properties; Milk processing and its storage; Effects of processing on nutritive value and physicochemical properties of milk; Milk products: Fermented and non-fermented.

Egg Processing and Technology: Structure, composition and nutritive value of eggs; Egg quality evaluation methods; Egg processing and storage; Effect of processing on nutritive value and physiochemical properties of eggs; Egg products and its functionality.

UNIT V Meat Processing and Technology:

Meat types, structure, composition and nutritive value; Post mortem changes in meat; Meat processing and storage; Ageing and tenderization of meat;

Poultry: Muscle composition and nutritive value; Processing and storage of poultry meat; Preservation methods for poultry;

Fish composition and nutritive value; Selection criteria for fish; Processing and storage;

Meat products: Fermented and nonfermented; Byproducts utilization; Effect of processing on nutritive value and physiochemical properties of meat, poultry and fish.

References

1. Potter, N. and Hotch Kiss, J.H. (2007): Food Science, Fifth edition, CBS Publishers and Distributors, NewDelhi
2. Julians, B.O. (1985). Rice Chemistry and Technology, 2nd edition, American Association Chemists, St. Paul Mimesota, USA.
3. Charley, H. (1982). Food Science, 2nd edition, John Wiley & Sons, New York.
4. Gould, G.W. (1995). New Methods of Food Preservation, Blackie Academic and Professional, London
5. Arthey, D. and Ashurst, P.R. (1996). Fruit Processing, Blackie Academic & Professional, London
6. Desrosier, N.W. and James N. (2007). Technology of food preservation. AVI Publishers.
7. Srilakshmi, B. 2005. Food Science, New Age International (P) Ltd., Publishers, New Delhi.

FOOD PROCESSING TECHNOLOGY

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO1 :	Explain the concepts and principles of food processing	3	3	2	2	2	3	3	3	3
CO 2 :	Describe the unit operation in food processing	3	2	3	3	3	2	3	3	3
CO 3:	Identify the processed food products from plant and animal sources	3	2	3	1	2	3	3	3	3
CO 4 :	Know the by-products from food processing and its utilization	3	3	3	3	3	3	3	3	3

FOOD PROCESSING TECHNOLOGY PRACTICAL

Code: 24HSUC4838

Credits: 1

Pd/Wk: 2

Marks: 100

Practical

1. Market survey on processed foods available in the market
2. Preparation of cereal flours and determine its quality
3. Testing of wheat flour quality
4. Preparation of cereal based bakery products
5. Malting of cereals and pulses and evaluation of its quality
6. Extraction of vegetable pigment by solvent method
7. Minimal processing of fruits and vegetables
8. Drying of fruits and vegetables
9. Preparation of jam, squash, jelly
10. Preparation of flavoured milk
11. Preparation of panner
12. Preparation of ice creams
13. Evaluation of Egg quality
14. Visit to food processing industries

References

1. Srilakshmi, B. 2005. Food Science, New Age International (P) Ltd., Publishers, New Delhi.
2. Potter, N. and Hotch Kiss, J.H. (1996): Food Science, Fifth edition, CBS Publishers and Distributors, New Delhi
3. Julians, B.O. (1985). Rice Chemistry and Technology, 2nd edition, American Association Chemists, St. Paul Mimesota, USA.
4. Charley, H. (1982). Food Science, 2nd edition, John Wiley & Sons, New York.
5. Gould, G.W. (1995). New Methods of Food Preservation, Blackie Academic and Professional, London
6. Arthey, D. and Ashurst, P.R. (1996). Fruit Processing, Blackie Academic & Professional, Londo

BOUTIQUE PLANNING

Code: 24HSUC4839

Credit: 4 Pd/Wk: 4 Max Marks: 100

Objectives:

- To acquaint the students for better managerial skills on Boutique.
- To enable the students to understand the intricacies of retail business.

Specific Learning Outcome:

After learning this paper the students will gain knowledge in boutique planning, costing, interior designing, developing own boutique and function of marketing in boutique planning.

Unit I

Boutique interior planning- Boutique interiors and display locations, fixture and dressing, purchase display systems. Boutique management-types of boutique, planning, layout and storing. Inventory control-Definition, types, importance, remedies. Buying for boutique, Pricing merchandise and hiring.

Unit II

Business option and plans for boutique. Costing and funding agencies. Boutique display, Exterior of boutique, Illumination, masking and proscenia mannequins and 3d dressing. Props and promotion n floor .Role and importance of visual merchandising in today market place and colour pallets.

Unit III

Introduction to boutique management and terminologies. Fashion retailing-History, Scope, Importance. Types of retailing (Domestic and international), techniques. Retail marketing channels Boutique market place and its role. E- Commerce: Global retailing competition, E – retailing, online marketing, communication – Strategy of fashion communication.

Unit IV

Fashion marketing- Definition, Functions of marketing, concepts, product planning, product life cycle and product mix. Advertisement-Definition, importance and different methods ,media planning. Brands- Definition, trade mark, difference between brand and

trade mark. Functions of brands, types of brands.

Unit V

Fashion studio, Silhouette consultation, Effective sales techniques, boutique operations, brand building, competitive strategies and survey, market research. Fundamentals of window display and its various types of display settings. Tradeshow, fashion shows and trade organizations.

Text Books:

1. Fashion Design and Product Development, Harold Carr and John Pomeroy, Black well Science Inc, Cambridge (1992)
2. Fashion marketing, Mike Basey, Oxford University press, Wynford Drve, Don Mills, Ontario (1995) . .
3. Introduction to Fashion, Patrick John, B T Batsford Ltd, Ireland, Fullham road, London (1992).
4. Fashion From Concepts to Consumer, Stephens Frings, Prentice Hall, 7th Edition 2002.
5. Marketing Management, Philip Kotler, Prentice Hall, 7th Edition 1996
6. Fashion marketing and merchandizing Manmeet sodhia 81-272-1184-2

References:

1. Gastelino. M. Fashion Kaleidoscope, Rupa & Co. 1994.
2. Gibson. G. Vedomani, Retail Management, jaico Publishing house, Bangalore
3. Elaine Stone, The Dynamies of Fashion, Fairchild Publication
4. Brenda Sternquist international Retailing, Fairchild Publication, New York
5. Martin. M. Pegler, Store Window No.14, No 12, Visual reference Publishers, Newyork.

BOUTIQUE PLANNING

Course Outcome (CO)	Programme Specific Outcome(PSO)								
	1	2	3	4	5	6	7	8	9
BOUTIQUE PLANNING	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9
CO1: Manage and interpret various interior planning for boutiques	3	2	2	1	2	1	2	2	3
CO2: Apply various planning and costing in boutiques.	3	2	2	1	2	1	2	2	3
CO3: Organize different domestic and international way of retailing	3	2	1	1	1	1	2	2	3
CO4: Evaluate the visual merchandising process in various boutiques.	3	2	1	1	1	1	2	2	3

ADVANCED DIETETICS

Code: 24HSUC4840

Credit: 3

Pd/Wk: 3

Marks: 100

Learning Objectives:

1. understand the etiology, physiology and metabolic anomalies of acute and chronic diseases and patient needs
2. learn the effect of the various diseases on nutritional status and nutrient and dietary requirements

Learning Outcomes:

On successful completion of this course the student will be able:

- To intervene the metabolic anomalies of acute and chronic diseases.
- To plan menu for various diseases based on their nutritional status and dietary needs.

Course content

UNIT I

Nutrition Care Process: Assessment of patient needs based on interpretation of patient data – clinical, biochemical, biophysical and personal. Definition and history of dietetics, Dietetics in modern health care management. Classification of a dietitian; Role of dietitian- functions and Team approach in patient care.

Modification of normal diets to therapeutic diets, Understanding of routine hospital diets and enteral and parenteral feeding methods and formulas.

UNIT II

Dietary Management in Gastrointestinal tract Disorders: Etiology, metabolic & clinical aberrations, diagnosis, complications, treatment and diet therapy in GERD, peptic ulcer, dyspepsia, flatulence, inflammatory bowel disease, dumping syndrome, diverticular disease, hernia, hemorrhoids, intestinal failure, short bowel syndrome, bariatric surgery, ERAS guidelines. Perioperative nutrition, Recent ASPEN and ESPEN guidelines.

UNIT III

Dietary Management in Liver, Pancreas and Gall bladder Disease- Etiology, metabolic & clinical aberrations, diagnosis, complications, treatment and diet therapy in Jaundice, Hepatitis, Fatty liver and Cirrhosis- Alcoholic and Non-alcoholic liver diseases ,Pancreas- Pancreatitis and Gall Bladder- Cholelithiasis, cholecystitis.

Dietary Management in Metabolic Diseases : Etiology, metabolic & clinical aberrations, diagnosis, complications, treatment and diet therapy in Diabetes Mellitus – Type 1, Type 2 and Gestational diabetes and Endocrine disorders – Polycystic ovary disease, thyroid imbalances.

Dietary Management in Coronary Heart Diseases: Etiology, metabolic & clinical aberrations, diagnosis, complications, treatment and diet therapy in Atherosclerosis and Hypertension.

UNIT IV

Dietary Management in Infections: Etiology, metabolic & clinical aberrations, diagnosis, complications, treatment and diet therapy in Fevers and respiratory problems–Asthma, Bronchitis and Covid -19.

Dietary Management in Weight imbalances: Etiology, metabolic & clinical aberrations, diagnosis,

complications, treatment, and diet therapy in Weight optimisation.

Dietary Management in Renal diseases: Etiology, metabolic & clinical aberrations, diagnosis, complications, treatment and diet therapy in Acute and chronic glomerular nephritis, nephrotic syndrome, renal stones, ESRD and Dialysis. Recent KDOQI guidelines.

Dietary Management in Neurological disorders – Etiology, metabolic & clinical aberrations, diagnosis, complications, treatment, and diet therapy in Parkinsons, Multiple Sclerosis and Alzheimer's disease.

UNIT V

Dietary Management in Pulmonary Disorders and Cancer : Etiology, metabolic & clinical aberrations, diagnosis, complications, treatment and diet therapy in Chronic obstructive pulmonary disease and Recent ESPEN ONCO guidelines.

Dietary Management in Musculo– Skeletal disorders: Etiology, metabolic & clinical aberrations, diagnosis, complications and diet therapy in Osteoporosis, Arthritis and Rheumatic Heart Disease.

Dietary Management in Inborn errors of metabolism: Etiology, metabolic and clinical aberrations and complications, and diet therapy in PKU, Maple syrup disease, Glycogen storage disease, Lactose intolerance, Neiman-pick disease and Fabry disease.

REFERENCES

1. Mahan, L. K. and Escott Stump. S. (2016) Krause's Food & Nutrition Therapy 14th ed. Saunders-Elsevier
2. Shils, M.E., Shike, M, Ross, A.C., Caballero B and Cousins RJ (2005) Modern Nutrition in Health and Disease. 10th ed. Lipincott, William and Wilkins.
3. Williams, S.R. (2001). Basic Nutrition and Diet Therapy. 11th ed. Times Mirror Mosby College Publishing
4. World Cancer Research Fund& American Institute for Cancer Research (2007) Food, Nutrition, Physical Activity and the Prevention of Cancer- A Global Perspective. Washington E.D. WCRF.
5. Mahan L K and Escott – Stump S (2000); Krause's Food Nutrition and Diet Therapy 10th Ed W B Saunders Ltd.
6. Escott – Stump, S (1998): Nutrition and diagnosis related care 4th Edition, Williams and Wikins.
7. Garrow J S, James W P T and Ralph A (2000) Human Nutrition and Dietetics, 10th Edition, Churchill Livingstone.

ADVANCED DIETETICS

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	To intervene the metabolic anomalies of acute and chronic disease.	3	3	2	2	2	3	3	3	3
CO2:	To play menu for various disease based on their nutritional status and dietary need.	2	3	2	2	2	3	3	3	3

ADVANCED DIETETICS PRACTICAL

Code: 24HSUC4840

Credit: 1

Pd/Wk: 2

Marks: 100

Learning Objectives:

1. To enable the students to recommend and provide appropriate nutritional care for prevention/ and treatment of the various diseases.

Learning Outcomes:

- The students will be able to plan a day's menu based on the person/ patients disease condition.
- The students will be able to prepare nutritious/ hospital/ paediatric diet.

Course content

1. Practical experience in weighing and measuring food items
2. Preparation of clear and full liquid diets and soft diet.
3. Planning and preparing diet for:
 - Febrile condition
 - Surgical condition
 - Gastrointestinal disorders
 - Liver and Gall bladder disorders
 - Diabetes and Cancer
 - Cardio Vascular Disorders
 - Renal Disorders
 - Obesity and Underweight
 - Lactose free diet
 - Juvenile diabetes
 - Diet for inborn errors of metabolism
 - Cancer

REFERENCES

1. Mahan, L.K. and Escott-Stump, S. (2007): Krause's Food Nutrition and Diet Therapy, 12th Edition, W.B. Saunders Ltd.
2. Longvah, T, Ananthan, R, Bhaskarachary, K, Venkaiah, K. (2017). *Indian Food Composition Tables (IFCT)*, Indian Council of Medical Research, National Institute of Nutrition, Hyderabad.
3. Recommended Dietary Allowances and Estimated Average Requirements Nutrient Requirements for Indians – 2023. A Report of the Expert Group Indian Council of Medical Research National Institute of Nutrition.NIN, Hyderabad.
4. Dietary guidelines for Indians 2024. ICMR-NIN Expert committee, Indian Council of Medical Research

ADVANCED DIETETICS PRACTICAL

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	The students will be able to plan a day's menu based on the person / patients disease condition.	3	3	2	2	2	3	3	3	3
CO2:	The students will be able to prepare nutritious / hospital / paediatric diet.	2	3	2	2	2	3	3	3	3

Multidisciplinary Electives (Generic Electives)

BASICS OF FOOD AND NUTRITION

Code: 24HSUI1201

Credits: 3

Pd/Wk: 3

Marks: 100

Learning Objectives:

Enable the students to

1. familiarize students with fundamentals of food, nutrients and their relationship to Health
2. create awareness with respect to deriving maximum benefit from available food resources

Course Outcomes:

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

Course Content

Unit -I:

Basic concepts in food and nutrition, periods Basic terms used in study of food and nutrition Understanding relationship between food, nutrition and health, Functions of food-Physiological, psychological and social

Unit -II:

Nutrients: Functions, dietary sources and clinical manifestations of deficiency/ excess of the following nutrients: Carbohydrates, lipids and proteins, Fat soluble vitamins-A, D, E and K, Water soluble vitamins – thiamin, riboflavin, niacin, pyridoxine, folate, vitamin B12 and vitamin C, Minerals – calcium, iron and iodine

Unit -III:

Food Groups: Selection, nutritional contribution and changes during cooking of the following food groups: Cereals, Pulses, Fruits and vegetables, Milk & milk products Eggs, Meat, poultry and fish, Fats and Oils.

Unit -IV

Methods of Cooking and Preventing Nutrient Losses : Dry, moist, frying and microwave cooking Advantages, disadvantages and the effect of various methods of cooking on nutrients, Minimizing nutrient losses.

Unit -V:

Food Safety and Storage , Concept of food safety,Key terms, factors affecting food safety, recent concerns Food safety measures: basic concept of HACCP, Safe food handling practices and storing food safely and Food additives.

References:

1. Bamji MS, Rao NP, and Reddy V. Text Book of Human Nutrition; 2009; Oxford& IBH PublishingCo. Pvt Ltd.
2. Mudambi, SR and Rajagopal, MV. Fundamentals of Foods, Nutrition and Diet Therapy; Fifth Ed;2012; New Age International Publishers.
3. Srilakshmi B. Nutrition Science; 2012; New Age International (P) Ltd.
4. Srilakshmi B. Food Science; Fourth Ed; 2010; New Age International (P) Ltd.
5. Wardlaw GM, Hampl JS. Perspectives in Nutrition; Seventh Ed; 2007; McGraw Hill.
6. Lakra P, Singh MD. Textbook of Nutrition and Health; First Ed; 2008; AcademicExcellence.
7. Manay MS, Shadaksharaswamy. Food-Facts and Principles; 2004; New Age International (P)Ltd.
8. Potter NN, Hotchkiss JH. Food Science; Fifth Ed; 2006; CBS Publishers and Distributors.

NUTRITION THROUGH LIFE CYCLE

Code: 24HSUI1202

Credits: 3

Pd/Wk: 3

Marks: 100

Learning Objectives

- Understand the nutrition requirements
- Understand the role of nutrition in difference stages of life cycle and meal planning

Course Outcomes:

- Determine nutrient requirements/needs of individuals at different stages of life.
- Discuss the major nutrition related concerns at each stage of life.

Contents:

UNIT – I Nutrient in Pregnancy and Lactation

Nutritional status and general health, Physiological changes in pregnancy, Foetal under nutrition and consequences, Energy and calorie relationship in pregnancy weight gain ,Protein, vitamins and mineral nutrition in pregnancy ,Physiological adjustments during lactation, Diet of lactating women and nutritional requirements.

UNIT – II Nutrition during for infancy

Physiologic development, nutrient requirements composition of human milk and cows milk, Anti infective factors, formula preparation, weaning, supplementary and complementary feeding, growth monitoring, feeding and BW and premature infants.

UNIT – III Nutrition during preschool, children

Growth and development during preschool, children, adolescent, nutritional requirements, factors influencing food intake, nutritional concerns – PEM, Anemia, Dental caries, obesity, anorexia and bulimia

UNIT – IV Nutrition in adolescent and adult

Nutrition requirements during adolescent and adult age, physical activity and energy relationship, factors influencing food intake, nutritional concerns – Anemia, obesity, anorexia and bulimia

UNIT – V Nutrition in old age

Nutrition requirements during old age, physical activity and energy relationship, theories of aging, physiologic changes, nutritional needs, nutrition concerns – dysphagia and senility disorders, community nutrition programme for old age.

References

1. Mahtab, S, Bamji, Kamala Krishnasamy, Brahmam, G.N.V. (2019). *Text Book of Human Nutrition*, Fourth Edition, Oxford and IBH Publishing Co. P. Ltd., New Delhi.
2. B. Srilakshmi,(2014) Dietetics, 7thedition,New Age international Private Ltd
3. Mahan, L.K. and Escott-Stump, S. (2007): Krause's Food Nutrition and Diet Therapy,12thEdition, W.B. Saunders Ltd.
4. Mayrice. E. Shills, James, A.Olsen, Moshe Shihe, (2012) Modern Nutrition on Health and Disease, Vol.1 & 2, 11th edition, Lea and Pediger, Philadelphia.
5. Davidson. S.S. Passmore, ,Martin A. Eastwood. F. (1989)Human Nutrition and Dietetics, 9th Edition F & S Lingstons Edinburgh and London
6. Longvah, T, Ananthan, R, Bhaskarachary, K, Venkaiah, K. (2017). *Indian Food Composition Tables (IFCT)*, Indian Council of Medical Research, National Institute of Nutrition, Hyderabad.
7. Recommended Dietary Allowances and Estimated Average Requirements Nutrient Requirements for Indians – 2020. A Report of the Expert Group Indian Council of Medical Research National Institute of Nutrition. NIN, Hyderabad

NUTRITION THROUGH LIFE CYCLE

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Determine nutrients requirements / needs of individuals at different stages of life.	3	3	2	2	2	3	3	3	3
CO2:	Discuss the major nutrition related concerns at each stage of life.	2	3	2	2	2	3	3	3	3

FOOD HYGIENE AND SANITATION

Code: 24HSU11203

Credits: 3

Pd/Wk:3

Marks: 100

Learning Objectives:

Enable the students to

1. Understand about food laws and labelling.
2. Understand the need for consumer education.

Learning Outcomes:

On Successful Completion of this course, the students will be able to

- Identify causes of and prevention procedures for food-borne illness, intoxication, and infection.
- Demonstrate good personal hygiene and safe food handling procedures.
- Describe food storage and refrigeration techniques.
- Explain sanitation of dishes, equipment, and kitchens including cleaning material, garbage, and refuse.

Course Content

Unit –I: Basic Principles of Food Safety

Food contamination: definition, Sources of contamination, Difference between food poisoning and food infection, Safety in food processing-a. Food procurement; b. Storage; c. Handling; d. Preparation. Safety of leftover foods

Unit –II: Sanitation Procedures

Basic Principles of Hygiene and Sanitation, personal hygiene and Environmental hygiene, Methods of Sanitation and Hygiene , Sterilization and disinfection using heat and chemicals, Waste product handling and control- Solid and liquid waste disposal.

Unit –III: Sanitation of rooms for pest, rodent and insect control

Control of infestation- Pest control , insect and rodents -Cleaning and sanitizing- need for efficient cleaning program, cleaning agents, equipment's , Methods to wash, rinse and sanitizing food contact surfaces. Importance and methods of pest control; outlining methods of disposal of liquid, solid and gaseous waste

Unit –IV: Importance of Personal hygiene

General principles of hygiene – personal and environmental hygiene, hygienic practices in handling and serving foods, planning and implementation of training programme for health person.

Unit –V: Current Food Safety Standards in India

Current Food Safety regulations 2001, Food Safety and Standards Authority of India, objectives of developing food safety standards, enforcement of structure and procedure, role of food analyst, safety analysis, action by designated officer and report of food analyst, Food Safety

Management System (FSMS) Good Practices/ PRPs - HACCP, GMP, GHP Management Element / System, Statutory and regulatory requirements

References:

1. Sunetra Roday (2017). Food hygiene and sanitation. 2nd Ed. McGraw Hill Publications
2. Mahtab, S, Bamji S, Kamala Krishnasamy,.Brahmam G.N.V, *Text Book of Human Nutrition*, Third Edition, Oxford and IBH Publishing Co. P. Ltd., New Delhi, 2012.
3. Kiron Prabhakar. A Practical guide to food laws and regulations. 1st Ed. Bloomsbury.

Food Hygiene and Sanitation

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO1 :	Identify causes of and prevention procedures for food-borne illness, intoxication, and infection.	3	2	3	1	3	3	3	3	3
CO 2 :	Demonstrate good personal hygiene and safe food handling procedures.	3	3	3	3	3	3	3	3	
CO 3:	Describe food storage and refrigeration techniques.	3	3	3	2	3	1	2	3	3
CO 4:	Explain sanitation of dishes, equipment, and kitchens including cleaning material, garbage, and refuse.	3	3	3	3	3	3	3	3	3

BAKERY AND CONFECTIONERY

Code: 24HSUI1204

Credits: 3

Pd/Wk:3

Marks: 100

Learning Objectives

Enable students to

1. Gain a fundamental understanding of baking principles.
2. Learn about the roles of various major and minor ingredients in bakery products
3. Become familiar with the baking process and its operations.
4. Understand the quality parameters of bakery products.

Course Outcomes:

On successful completion of the course, the student will be able to

- ✓ Demonstrate a thorough understanding of basic baking concepts and principles.
- ✓ Identify and explain the roles of major and minor ingredients in bakery products.
- ✓ Apply knowledge of the baking process and operations to create various baked goods.

Course Content

UNIT I

Introduction of Bakery: definition, principles, types of baked and confectionary products. Major and minor equipment required to start a small bakery unit. Major and minor ingredient in baking: a) Major ingredients – flour, fat, sugar, and leavening agent – types, role in bakery b) Minor ingredients – milk, water, salt – types

UNIT II

Bread: a) Principles involved in the yeast products preparation, methods – straight dough method, salt delayed method, no dough time method, sponge and dough method, ferment and dough method. b) Processing – flying fermentation, bulk fermentation, knock back, dividing and rounding, intermediate proofing, molding and panning, final proofing, baking, depanning, cooling, slicing, packaging. c) Faults and remedies in baked bread, types of bread improvers.

UNIT III

Cake: a) Principles involved in the preparation of cake, sponge cake – types (fatless sponge, eggless sponge, plain sponge). b) Methods – sugar batter method, flour batter method, blending method, boiling method, sugar water method, all-in process method, foaming method. Icing and its types, cake decorations c) Faults and remedies in baked cakes.

UNIT IV

Biscuits and Cookies

- a) Principles involved in cookies preparation, methods for mixing cookies – single or one stage method, creaming or sugar batter method, blending or rub-in method, foaming method, flour batter method.
- b) Types – sheeted types, piped types, bar types, dropped types, rolled types. i. Different between biscuits and cookies. ii. Faults and remedies in baked biscuits and cookies.

UNIT V

Pastries and Confectionery: Pastries: types, short crust pastry, puff pastry, flaky pastry, philo (or) filo pastry, choux pastry, pain de sucre, faults in making pastry.

Confectionery: Types of confectionery: hard candies, toffees, marshmallows, etc., chocolate tempering, Chocolate designs, sugar work: caramels, fondant, and nougat, faults in making chocolate. Packaging and Storage of baked and confectionery. Sanitation and hygiene rules followed in the preparation of baked goods.

Text Books

1. Wayne Gisslen((2012), The Professional Baking, Sixth Edition, John Wiley & Sons publishings.
2. Pat Sinclair (2011), Basic Baking and beyond, Agate Publishings.
3. John Kingslee (2006), Professional Text to Bakery and Confectionary, First Edition, New Age International (P) Limited Publishers .
4. Yogambal Ashokkumar (2009),Theory of Bakery and Confectionery, Fifth Edition, PHI Learning Private Limited, New Delhi.

Websites

1. joyofbaking.com
2. bbcgoodfood.com
3. seriouseats.com/sweets

BAKERY AND CONFECTIONERY

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Demonstrate a thorough understanding of basic baking concepts and principals.	3	2	2	2	3	3	2	3	2
CO2:	Identify and explain the role of major and minor ingredients in bakery products.	3	3	3	2	3	3	3	2	3
CO3:	Apply knowledge of the baking process and operations to create various baked goods.	3	3	3	3	2	2	3	3	3

ADOLESCENCE AND LIFE SKILLS EDUCATION

Code: 24HSUI1205

Credits: 3

Pd/Wk: 3

Marks: 100

Objectives:

Enable the students to

1. understand the development, characteristics and issues of adolescents
2. realize the importance of life skills
3. gain skills in psycho-social competence

Course Outcomes:

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

- Describe the physical and psychological changes during adolescence
- Explain the core set of life skills
- Apply the knowledge and skills to handle day to day problems positively

Course Content

Unit –I: Adolescence

- Adolescence – Meaning, Characteristics.
- Changes during Adolescence : Physical and Psychological.
- Importance of healthy diet and healthy life style.

Unit –II: Issues and Concerns in Adolescence

- Health Issues :- Obesity underweight Anaemia.
- Reproductive Health Issues :- Menstrual Problems, Sexually Transmitted Diseases.
- Mental Health Issues :- Anxiety, Depression Suicide.
- Social Issues :- Peer Pressure, Substance abuse and Sexual Abuse.

Unit -III: Social Skills and Negotiation Skills

- Introduction to Life Skills :- Core life skills - importance.
- Self Awareness :- Definition, Types, Techniques used for self awareness : Johari WindowSWOT Analysis.
- Empathy : - Meaning differences between sympathy and empathy.
- Effective Communication: - Definition, Functions, Models, Barriers.
- Interpersonal Relationship: - Definition, Factors affecting relationships.

Unit –IV: Thinking Skills

- Creative and Critical Thinking:- Definition nature styles.
- Problem Solving :- Definition, Steps, Factors Influencing.
- Decision Making :- Definition, Process.

Unit –V: Coping Skills

- Coping with emotions: - Definition, Characteristics, types coping strategies.
- Coping with stress:- Definition, Stressors, Sources of Stress, Coping Strategies

References:

1. Berk, L.E(2017) Child Development (9th Edition) PH1 learning Pvt. Ltd. New Delhi.
2. RGNIYD. (2008) Facilitators manual on Enhancing Life Skills. Tamil Nadu.
3. Family Health Education tool kit for orphans and vulnerable children in India.
4. YUVA School Life Skills Programme : Handbook for Teachers, Vol. I – IV (2008). Department of Education and State Council of Educational Research and Training
5. Novak.G.Pelez, M.B (2004) Child and Adolescent Development : A Behavioral System Approach, Sage Publications, New Delhi.

ADOLESCENCE AND LIFE SKILLS EDUCATION

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Describe the physical and physiological changes during adolescence.	3	2	2	3	3	2	3	3	3
CO2:	Explain the core set of skills.	2	2	2	3	3	2	3	3	3
CO3:	Apply the knowledge and skills to handle day to day problem positively.	2	3	2	3	2	3	3	3	3

MANAGEMENT OF PRE-SCHOOL AND DAY CARE CENTRES

Code: 24HSUI1206

Credits: 3

Pd/Wk:3

Marks: 100

Objectives:

1. To gain insight into the requisites of setting up a preschool
2. To understand the process of planning and executing appropriate preschool curriculum.
3. To know the administrative strategies of preschool

Course outcome:

1. Understand the requirement of setting up a preschool
2. Recognize the importance of need based preschool curriculum
3. Apply the principles of preschool programme planning towards holistic development of children
4. Appraise the principles of play equipment based on different domain of development
5. Evaluate the overall preschool programmes with set indicators

Unit-I Introduction

Meaning, concept, role and importance of Pre-school. Minimum requirement to set a pre-school. Framing of Preschool curriculum and types of curriculum.

Infrastructure- Location, site, layout and building-arrangement of room, toys and furniture- types and toy selection, ventilation and lighting.

Unit- II:

Maintenance: Building-store, furniture, toys and equipment. Provision for safe drinking water, food, sanitary facilities and safety measures. License- approval and renewal

Unit- III:

Maintenance of Records: Need and importance of records-types of records-admission, progress, financial, equipment, correspondence, sickness of child and immunization.

Unit- IV:

Playground, play equipment - Types, criteria for selection- safety aspects-indoor and outdoor games. Planning time frame for each activity. Additional facilities needed for the creche

Unit- V

Maintenance and Registers - Attendance, stock, accounts, staff profile, services for children and daily diary. Activities for children: Audio-visual aid for children and its importance.

Financial management and budgeting.

References:

1. Ax line, V.M. (1964). Dibs in search of self. New York: Ballentine books 754
2. Clarke, P. (2001). Teaching & learning: the culture of pedagogy. New York: Sage
3. Thomson, C.L., Holmberg, M.C., Baer, D.M., Hodges, W. L., and Moore, S.G. (1978). An Experimental Analysis of Some Procedures to Teach Priming and Reinforcement Skills to Preschool Teachers. Monographs of the Society for Research in Child Development. 43 (4), pp 1-86.
4. Jaya, N. & Jayapoorani. N. (2004). Participation in a nursery school – Laboratory manual for students. Coimbatore: Saradalaya.
5. Tileston, D.W. (2005). Training Manual for Every Teacher, Chennai: Sage.
6. TN Forces and IAPE, (2000). Pre- school Curriculum, Activity based developmentally appropriate curriculum for preschoolers. Chennai

MANAGEMENT OF PRE-SCHOOL AND DAY CARE CENTRES

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO 1:	Understand the requirements of setting up a preschool.	3	2	3	3	3	2	2	3	3
CO2:	Recognise the importance of need based preschool curriculum.	3	2	2	3	3	2	3	3	3
CO3:	Apply the principal of preschool planning towards the holistic development of children.	2	2	2	3	3	2	3	3	3
CO4:	Applying the principal of play equipment based on different domain of development.	2	3	2	3	2	3	3	3	3
CO5:	Evaluate the overall preschool programmes with set indicators.	2	3	3	2	3	3	2	3	3

ARTS AND CRAFT OF INDIA

Code: 24HSUI1207

Credits: 3

Pd/Wk:3

Marks: 100

Learning Objectives:

- To provide opportunity for skill development in textile craft.
- To impart knowledge on handicraft textile products and its varieties.

Learning Outcome:

This paper will enable the students to learn the craft and its types like floral designing, lace making, rug making for decorative purpose.

Designing, Drafting, Cutting and making of household materials using following techniques:

- Quilting and quilt art
- Ceramics and glass craft
- Floral Design using fabric and paper for flower vase
- Lace making
- Rope making,
- Beadwork
- Paper craft– paper marbling, Quilling work
- Canvas work Applique work
- Patch work for table cloth
- Rug making
- Embroidery and its varieties
- Handi crafts wall hangers/pot decoration

REFERENCE

1. Interior decorating effects, Stewart and Sally Walton, Lorenz books – 2000.
2. The book of upholstery, Candace Ord Manroe, Pub – 1987 present books.
3. Design and detail, the Practical guide to styling a house, Tricia Guild of Elizabeth Wilhide. 1st pub Conran Octopus limit.
4. Sunset slip cover and bed spreads step by step instruction decorating ideas, Editor Christian Barne and Maureen Williams.
5. Dr.D.K.Aggarwal, House keeping management Amman publication, New Delhi.

ARTS AND CRAFT OF INDIA

Course Outcome (CO)	Programme Specific Outcome(PSO)								
	1	2	3	4	5	6	7	8	9
Arts and Craft of India	PS01	PS02	PS03	PS04	PS05	PS06	PS07	PS08	PS09
CO1: Understand the basic hand stitches and methods used in it	3	2	2	1	1	3	2	2	3
CO2: Practical knowledge on the decorative items.	3	2	2	1	1	3	2	2	3
CO3: Practical knowledge of on the development of craft items.	3	2	2	1	1	3	2	2	3

TRADITIONAL EMBROIDERY OF INDIA

Code: 24HSUI1208

Credits: 3

Pd/Wk:3

Marks: 100

Unit –I

Embroidery- Introduction, Tools and equipments. Introduction to basic and decorative hand embroidery stitches.

Unit –II

Hand embroidery - Prepare the samples using the following stitches running stitch, back stitch, chain stitch, lazy daisy, stem stitch, satin stitch, cross stitch , French knot and fly stitch.

Unit –III

Preparing samples of Following Indian embroideries using traditional motifs, stitches, colors & yarns – Kasuti of Karanataka, Embroidery of Sindh, Kutch and Kathiawar and Kashida of Jammu and Kashmir

Unit –IV

Preparing samples of Following Indian embroideries using traditional motifs, stitches, colors & yarns- Kantha of Bengal, Chikankari of Uttar Pradesh and Manipuri Embroidery

Unit –V

Preparing samples of Following Indian embroideries using traditional motifs, stitches, colors & yarns- Applique work of Bihar and Orissa, Phulkari of Punjab, Chamba Rumal of Himachal Pradesh and Gold and silver

References:

1. Chattopadhyaya K. (1985). Handicrafts of India. (Revised Edition). New Delhi: Indian Council for Cultural Relations.
2. Chattopadhyaya K.(1969) Carpets & Floor covering of India. Taraporevala.
3. Dhamija J. & Jain J. (1989) Hand woven Fabrics of India Mapin Publisher
4. Dongerkery Kamala (1951) Romance of Indian Embroidery Mumbai Thacker & Company.
5. Gillow J and Barnard N. (1991). Traditional Indian Textiles London: Thames and Hudson Ltd
6. Irwin J. and Hall M. (1971). Indian Painted and Printed Fabrics Ahmadabad: Calico Museum of Textiles.
7. Jamila B. B. (1958).Costumes and Textiles of India Bombay Taraporevala's treasure house of books.
8. Joshi I. (1963) Kasuti of Karnataka Bombay,Popular Prakashan
9. Lynton L. (1995). The Sari London: Thames and Hudson Ltd.
10. Marg Publication (1965) Textiles and Embroideries of India
11. Mehta R.J. Masterpieces of Indian Textiles

12. Murphy V. and Gill R. (1991). Tie-dyed Textiles of India London: Victoria and Albert Museum.
13. Naik S. (1996). Traditional Embroideries of India New Delhi: A.P.H. Publishing Corporation.
14. Naik S. D. (1996) Traditional Embroidery of India. APH Publishing,
15. Pandit S. (1976) Indian Embroidery
16. Pathak A. (2005). Pashmina New Delhi: Roli Books.
17. Untracht O. (1997). Traditional Jewellery of India London: Thames and Hudson Ltd.

TRADITIONAL EMBROIDERY OF INDIA

Course Outcome (CO)	Programme Specific Outcome(PSO)								
	1	2	3	4	5	6	7	8	9
Traditional embroidery of India	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9
CO1: Understand the basic hand stitches and methods used in it	3	2	2	1	1	3	2	2	3
CO2: Practical knowledge on the traditional embroideries of India and techniques used in it.	3	2	3	1	1	3	2	2	3
CO3: Development of various products using embroidery stitches	3	2	1	1	1	3	2	2	3

COMMUNICATION FOR DEVELOPMENT

Code: 24HSUI1209

Credits: 3

Pd/Wk:3

Marks: 100

Objectives:

Enable the students to

1. To understand the concept of development and development indicators
2. To gain insights into the concept of Development Communication, philosophy, theories and approaches
3. To examine the role of various media in development communication
4. To know the process of development reporting and development journalism
5. To understand the process and techniques of SBCC

Course Outcomes:

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

1. Understand the concepts of development and development indicators
2. Gain insights into the concept of Development Communication, philosophy, theories and approaches
3. Examine the role of various media and nuances of development reporting

Course Content

Unit -I: Concept of Development

Concept of development, Development goals, Characteristics of developing countries
Indices as a measure of human development, poverty, gender related development

Unit -II: Development Communication

Development Communication- concept, genesis, characteristics and philosophy
Types of communication and characteristics of Development Communication
Approaches to Development Communication
Models of Development Communication- Dominant Paradigm, Dependency Model, Basic Needs Model, New Paradigm of development

Unit -III: Media and Development Communication

Role of Traditional Media in Development Communication
Community Media: Types, Role in Development Communication, Difference from Mainstream Media
Role of Radio and Television for development communication

Unit -IV: Development Journalism

Definition, types of journalism, need for Development journalism
News reporting: definition of news, ingredients and qualities of news, news value, types of news reports, structure of news reports.

Unit -V: SBCC and Advocacy

Concept and relevance of SBCC: SBCC and Advocacy Approaches to SBCC, types and steps of advocacy SBCC- Strategy design and implementation.

References:

1. Kotler, P. & Lee, N. (2011). *Social Marketing: Influencing Behaviors for Good*, 4th Ed. Thousand Oaks, CA: Sage Publications. (K&L). 204-232.
2. Kumar, K. J. (2000). *Mass communication in India*. New Delhi: Jaico Publishing House.
3. McQuail, D. (2010). *Mass Communication Theory*. London: Sage Publications. Chapter 7. Page 161-188.
4. Melkote, S. & Steeves, L. (2013). *Communication for Development in the Third World*. New Delhi: Sage Publications.
5. Pannu, P. & Azaad, Y. T. (2012). *Communication Technology for Development*. New Delhi: I.K. International Publications. ISBN: 9789380578903. Page 65-80.
6. Servaes, Jan (2008). *Communication for Development and Social Change*. New Delhi, :Sage Publication

COMMUNICATION FOR DEVELOPMENT

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Understand the concept of development and development indicators.	3	2	2	3	3	2	3	3	3
CO2:	Gain insights into the concept of development communication, philosophy , theories and approaches.	2	2	2	3	3	2	3	3	3
CO3:	Examine the role of various media and nuances and development reporting.	2	3	2	3	2	3	3	3	3

PARTICIPATORY LEARNING AND ACTION

Code: 24HSUI12010

Credits: 3

Pd/Wk:3

Marks: 100

Learning Objectives:

Enable the students to

1. understand the participatory research methods
2. equip skills in applying PLA techniques in the field

Specific Learning Outcomes:

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

- getting familiarized with participatory research methods
- acquiring skills in employing participatory research methods in the field

Course Content

Unit –I: Participatory Research Methods

Meaning, need, concepts, Approaches – Rapid Rural Appraisal (RRA), Participatory Rural Appraisal (PRA), Participatory Learning and Action (PLA)

Unit –II: Participatory Learning and Action

Principles, Tools – Participatory Mapping, Facility Assessment, Ranking, Venn Diagram, Semi-structured Interview

Unit –III: Application of PLA methods in rural problem identification, problem analysis and project formulation.

References:

1. Neela Mukherjee (1997). Participatory Rural Appraisal Volume 1 of Studies in rural participation, Concept Publishing Company, New Delhi
2. Stringer, E. T. (2007) Action research (3rd ed.). Thousand Oaks, CA: Sage.

Text book:

1. Narayanasamy.N, (2009). Participatory Rural Appraisal: Principles, Methods and Application, SAGE Publications Ltd

PARTICIPATORY LEARNING AND ACTION

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Getting familiarized with participatory research methods.	3	3	3	2	3	1	3	2	3
CO2	Acquiring skills in employing participatory research methods in the field.	2	2	1	3	3	3	2	2	2

BASICS OF ART AND DESIGN

Code: 24HSUI12011

Credits: 3

Pd/Wk:3

Marks: 100

Objectives

1. Understand and apply the basic principles of art in Interior decoration.
2. Understand the elementary principles of planning a house and its interior arrangement

Course outcomes:

- Elements of art and principles of design and its application.
- Colour - its importance, characteristics and application in interior decoration.
- Able to arrange the Furniture in different styles
- Home lightings and its importance on daily day life.

Unit- I

Meaning of art and Design, types of Design- Structural design, Decorative design- Naturalistic design, Stylized design, Geometric design and abstract design.

Elements of arts- Line, form, shape, texture, pattern, color, light, space.

Principles of design- Proportion, balance, emphasis, rhythm and harmony

Unit- II

Concept of color, perception of color, prang's color wheel. Characteristics of color- hue, value and intensity, warm and cool colors, advancing and receding effects of colors.

Unit-III

Color schemes: Related color schemes - Monochromatic color scheme, Analogous color scheme. Neutral color scheme, accented neutral color scheme.

Complementary color schemes- Complimentary color scheme, Double complimentary color scheme, Split complimentary color scheme, Triad complimentary color scheme, Tetrad complimentary color scheme and poly chromatic color scheme.

Unit-IV

Meaning of furniture, types of furniture- based on materials, based on style. Furniture arrangement, factors to be considered in selecting furniture.

Unit-V

Lighting- terminologies, source of lights in buildings- Natural light, artificial light. Methods of artificial lighting in buildings- general light, task light, accent light.

References:

1. EducationPlanning group.(2001).HomeManagement.AryaPublishingHouse, New Delhi
2. Goldstein,H.andGoldstein, V.(1958).ArtinEverydayLife.Macmillancompany.
3. Varghesese,M. A., Ogale N. N., and Srinivasan, K. (1994).HomeManagement.VileyEastern.Ltd., NewDelhi.
4. Deshpande,R. S.(1982).CheapandHealthHomesforMiddleClasses.UnitedBookCorporation, Pune.
5. Deshpande, R. S.(1982).ModernIdealHomesforIndia.UnitedBookCorporation, Pune
6. Nickell, P.andDorsey, J. M.(1978).ManagementinFamilyLiving, 4th edition. JohnWileyandSons, NewDelhi.
7. Soundararaj. S. (1996).ATextbookofHouseholdArts,4thEdition,OrientLongman publishers Pvt. Ltd

BASICS OF ART AND DESIGN

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO 1:	Elements of art and principals of design and its application.	3	3	2	1	2	2	2	3	3
CO2:	Colour -its importance , characteristics and application in interior decoration.	3	2	2	3	3	2	3	3	3
CO3:	Able to arrange the furniture in different styles.	2	2	2	3	3	2	3	3	3
CO4:	Home lightening and its importance on daily day life	2	3	2	3	2	3	3	3	3

EVENT MANAGEMENT

Code: 24HSUI12012 Credits: 3 Pd/Wk:3 Marks: 100

Objectives:

1. The objective is to provide students with a conceptual framework of Event Management, Event Services, Conducting Event and Managing Public Relations.
2. To make the students aware about the different events.

Course Outcome:

- To learn the concepts related to various events.
- Awareness on the process of conducting events.
- Planning and Budgeting of the events.

Course content

Unit I

Introduction to event. Event- Meaning of event- Need for Event Management- Analysis of Event, Scope of Event.

Decision Makers-Event Manager. Record Keeping Systems.

Unit II

Event management procedure-Significance of proper event planning, role of event planning in establishing objectives, creating budgets, and managing resources.

Challenges in Event Planning: constraints, budget limitations and logistical issues.

Unit III

Conduct of an event-Define team management and its significance in event planning, Benefits of effective team management, Importance of clear communication and delegation of tasks, Team Building and Leadership

Unit IV

Public relations- Introductions to Public Relations- Concept- Nature- Importance- Limitations. SWOC Analysis.

Unit V

Corporate events-Planning of CorporateEvent, Job Responsibility of Corporate Events Organizer.

References:

1. Event Entertainment and Production – Author: Mark Sonderm CSEP Publisher: Wiley & Sons, Inc.
2. Swarup K. Goyal (2009). Event Management & Public Relations. Adhyayan Publisher.
3. Mathews, D. Special event production. ISBN 978-0-7506-8523-8

EVENT MANAGEMENT

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	To learn the concepts related to various events.	2	2	2	3	3	3	3	3	3
CO2:	Awareness on the processes of conducting events.	2	3	2	2	3	3	3	3	3
CO3:	Planning and Budgeting of the events.	2	2	2	2	3	3	3	3	3

iv) Ability Enhancement Courses (Discipline Centric Electives)

FOOD SAFETY AND QUALITY CONTROL

Code: 24HSUA2401

Credits:3

Pd/Wk:3

Marks: 100

Objectives:

Enable the students to

1. Learn the various aspects of food safety and quality control
2. know the methods of food analysis and quality standards for fresh and processed foods
3. understand the roles of national and international agencies in food quality assurance

Course Outcomes:

On Successful Completion of this course, the students will be able to

- the importance and functions of quality control unit in food industries
- explain the methods used for evaluation of food quality

Unit-I Introduction to Food Safety

Definition, concept, need and importance of food safety, factors affecting food safety. Food borne illness such as food infections and toxicants, natural and chemical toxicants: protease inhibitors, goitrogens, Phytates, pesticide and insecticide residues; adulterants and metallic contaminants.

Unit-II Food additives

Food additives meaning and types, food colours, flavoring agents, Artificial sweeteners, Preservatives, Antioxidants. Permissible limits of food additives, health hazards associated to food additives.

Unit-III Food Packaging & labelling

Food packaging meaning, types, functions, requirements and trends in packaging. Packaging materials and their barrier properties. Food labeling meaning, principles, requirements, nutritional labeling, and nutrition claims.

Unit-IV Quality Control

Food quality control meaning and concept, need and importance of quality control, food analysis meaning and types, food sampling meaning and importance, sampling techniques, chemical, microbiological, toxicological, sensory analysis of food. FSSAI standards for fresh and processed foods like mineral water, packaged foods, milk and milk products, fats and oils, fried foods and contaminants in spices, pickles, tea and coffee and fruit juices.

Unit-V Food laws and Regulations

Food laws and standards meaning, need and importance, National food legislation agencies FSSAI, ISI/ BIS, Agmark, APEDA. International Organization and Agreements – FAO, WHO, ISO, Codex Alimentarius, FDA, EU, etc. HACCP – Principles and Importance.

References:

1. Lawley,R.,CurtisL.andDavis,J.TheFoodSafetyHazardGuidebook,RSCpublishing,2004
2. Forsythe,SJ.MicrobiologyofSafeFood,BlackwellScience,Oxford,2000
3. David.A.Shapton,Naroh.F.Shapton(1991)PrinciplesandPractisesfortheSafeProcessingoffoods.Butterworth- Heineman,Ltd, Oxford.OX28Dp
4. Saramoramore Carolwallace(1997)HACCP.APracticalApproach.ChapmanandHall.
5. Rekha.S.Singhtal,Pushpa,R.Gulgarni, Hand book of indices of food quality and authenticity.
6. MortimoreS.andWallaceC.HACCP,Apracticalapproach,ChapmanandHill,London,1995
7. Manualofmethods-Analysisoffoods-FSSAI2016

Textbooks:

1. Manay,S.andShadaksharamasamy, Food: Facts and Principles. New Age International Publication, NewDelhi.
2. PieterneIA,Luning,WillemJ.Marcelis,Food Quality Management Technological and Managerial principles and practices, Wageningen,2009.

Food Safety and Quality Control

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO1 :	The importance and functions of quality control unit in food industries	3	3	3	3	3	3	3	3	3
CO 2 :	Explain the methods used for evaluation of food quality	3	3	3	3	3	3	3	3	3

HUMAN PHYSIOLOGY

Code: 24HSUA2402

Credits:3

Pd/Wk:3

Marks: 100

Learning Objectives:

Enable the students to

1. acquire knowledge of the various organs and physiological systems in the human body.
2. understand the functioning of the various systems in human body

Learning Outcomes:

On successful completion of the course, the student will be able to

- Explain the various physiological systems in the human body
- Sketch the structure and anatomy of different organs.
- Understand the complex mechanisms of the processes of digestion, absorption, excretion, gas exchange, reproduction and neuromuscular coordination.
- Able to integrate organ system physiology and the biochemical basis of disease.

Course Content

Unit –I: Introduction to Physiology and Digestive system

Review of cells and tissues – types. Structure and Functions of lymph System

Anatomy of Digestive System – Structure of digestive tract. Process of digestion and absorption- of Carbohydrate, Protein and Fat; Hormones of GI tract and its role in digestion, movements of GI tract; Liver, Gallbladder, Pancreas and its functions.

Unit –II: Respiratory system

Review of structure and functions. Mechanism of Respiration,, Transport of Respiratory Gases in Blood, Gaseous Exchange in Lungs and tissues Respiratory volumes

Excretory system: Review of structure and functions OF kidney. Nephron-Structure and functions Urine formation. Role of kidney in maintenance of pH of blood. Water - acid base balance, diuretics. Micturition.

Unit –III: Circulatory System

Blood-Composition and functions – RBC, WBC and Platelets. Erythropoiesis, Blood groups and coagulation, blood volume; Structure and functions of heart and blood vessels, junction tissues, cardiac cycle, ECG, . Blood pressure-factors influencing blood pressure.

Immune system: Cell mediated and humoral immunity. Activation of WBC and production of antibodies. Role in inflammation and defense.

Unit –IV: Endocrine and Reproductive system

Endocrine glands – Pituitary, thyroid, adrenals, pancreas- hormones of endocrine glands- its functions and role. Disorders of endocrine glands.

Reproductive system: General anatomy of female and male reproductive system. Menstrual cycle, spermatogenesis, Oogenesis, process of reproduction, Pregnancy and

parturition. Mammary glands- structure and lactation. Physiological changes in Menopause.

Unit –V: Nervous system

Structure and functions of brain, spinal cord and neuron, transmission of nerve impulse. Autonomic nervous system. Cerebrospinal fluid and its functions

Sense organs: Review of structure and function skin, eye, ear, nose and tongue in perception of stimuli.

Related Experiences:

1. Identification of blood cells- estimation of Hb, demonstration of blood grouping and coagulation. RBC and WBC count.
2. Recording of BP and pulse rate.
3. Determination of Bleeding Time (BT) and Coagulation Time (CT).
4. Detection of Blood group (Slide method).
5. Measurement of Hemoglobin level (Sahli's or Drabkin method)
6. Interpretation of a blood report

References:

1. Chatterjee, C.C. (1998). Human Physiology. Calcutta: Medical Allied Agency.
2. Evelyn, C. Pearce, (1997). Anatomy and Physiology for Nurses, 16th Edition, New Delhi: Jaypee Brothers.
3. Joshi, D.V. (1995). Prep Manual for Under Graduate Physiology, New Delhi: B.I Churchill Livingstone.
4. Winwood, R.S. and Smith, J.L. (1994). Sears's Anatomy and Physiology for Nurses London: ELBS with Edward Arnold.
5. Yadav, J. (1995). Text Book of Physiology for Dental Students. New Delhi: Jaypee Brothers Medical Publishers Private Limited.

Text book:

1. Subramaniam and Kutty, S.M. (2001). Text Book of Human Physiology. New Delhi: S.Chand & Company Ltd.

HUMAN PHYSIOLOGY

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO 1:	Explain the various physiological systems in the human body	3	3	3	3	3	3	3	2	3
CO2	Sketch the structure and anatomy of different organs.	3	3	3	2	3	3	3	3	3
CO3	Understand the complex mechanisms of the processes of digestion, absorption, excretion, gas	3	3	3	3	3	3	3	3	3
CO4	Exchange, reproduction and neuromuscular coordination.	3	3	3	3	3	3	3	2	3

Technology of Food Preservation

Code: 24HSUA2402

Credits: 3

Pd/Wk:3 Marks: 100

Objectives:

Enable the students to

1. learn the principles behind the methods of preservations
2. understand the stages of cookery and chemical characteristics in the preservation of fruits and vegetables
3. Acquire skills to preserve different types of food items based on their perishability.

Outcomes:

On Successful Completion of this course, the students will be able to

- Know the mechanism action behind the methods of preservation
- Identify the quality changes in food during storage and preservation
- Explore the preservation methods suitable for fresh and processed foods

Course Content

Unit –I: Concept of Food Preservation

Importance of Food Preservation, Types of Food spoilage by Micro organisms and by Enzymes, Basic Principles of Food Preservation.

Unit –II: Preservation by using natural preservatives

Sugar concentrates- general principles and methods of preparation of jam, jellies and marmalade, crystallized and glazed fruits, preserves, squashes and syrups. Theory of gel formation. Salt concentrates- general principle, role of ingredients, preparation of sauerkraut, dill and common Indian pickles.

Unit III: Preservation by using chemical preservatives

Nature and characteristics of chemical preservatives, organic and inorganic preservatives, permissible limits, health hazards associated to preservatives.

Unit –IV: Preservation by application of high and low temperature

Pasteurization, sterilization, canning methods advantages and limitations. Effect on nutritive value of foods

Chilling and refrigeration advantages and limitations. Effect on nutritive value of foods.

Unit V: Preservation by drying and fermentation

Methods of drying & dehydration, different types of driers, freeze drying- lyophilisation, packing & storage

Foods fermented by Yeasts and Bacteria, Common Fermented Foods: Dosa, idli, bun, bread, wine, etc.

References

1. Srivastava R.P. (2012), Fruit and vegetable preservation – Principles and Practices, International Book Distributing Co., (IBDC), New Delhi.
2. Maria Parloa (2009), canned fruit, preserves and jellies: Household methods of preparation, US Department of Agriculture, Washington.
3. Shafiur, Rahman, M. (2007), Handbook of Food Preservation, 2 nd edition, CRC press, New Delhi.

Text books:

1. Desrosier, N.W. and James N. (2007). Technology of food preservation. AVI Publishers
2. Gould, G.W. (1995). New Methods of Food Preservation, Blackie Academic and Professional, London
3. Girdharilal, G.S. et.al.. (1986). Preservation of Fruits and Vegetables. New Delhi: Publications and Information Division, ICAR.

TECHNOLOGY OF FOOD PRESERVATION

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO1 :	Know the mechanism action behind the methods of preservation	3	1	1	2	2	3	2	2	2
CO 2 :	Identify the quality changes in food during storage and preservation	3	2	1	2	2	3	1	2	2
CO 3:	Explore the preservation methods suitable for fresh and processed foods	3	1	2	2	2	2	2	2	3

FOOD HYGIENE AND SANITATION

Code: 24HSU403

Credits: 3

Pd/Wk:3

Marks: 100

Learning Objectives:

Enable the students to

1. Understand about food laws and labeling
2. Understand the need for consumer education

Learning Outcomes:

On Successful Completion of this course, the students will be able to

- Identify causes of and prevention procedures for food-borne illness, intoxication, and infection.
- Demonstrate good personal hygiene and safe food handling procedures.
- Describe food storage and refrigeration techniques.
- Explain sanitation of dishes, equipment, and kitchens including cleaning material, garbage, and refuse.

Course Content

Unit –I: Basic Principles of Food Safety

Food contamination: definition, Sources of contamination ,Difference between food poisoning and food infection ,Safety in food processing-a. Food procurement; b. Storage; c. Handling; d. Preparation
e. Safety of leftover foods

Unit –II: Sanitation Procedures

Basic Principles of Hygiene and Sanitation, personal hygiene and Environmental hygiene, Methods of Sanitation and Hygiene , Sterilization and disinfection using heat and chemicals, Waste product handling and control- Solid and liquid waste disposal.

Unit –III: Sanitation of rooms for pest, rodent and insect control

Control of infestation- Pest control , insect and rodents -Cleaning and sanitizing- need for efficient cleaning program, cleaning agents, equipment's , Methods to wash, rinse and sanitizing food contact surfaces. Importance and methods of pest control; outlining methods of disposal of liquid, solid and gaseous waste

Unit –IV: Importance of Personal hygiene

General principles of hygiene – personal and environmental hygiene, hygienic practices in handling and serving foods, planning and implementation of training programme for health person.

Unit –V: Current Food Safety Standards in India

Current Food Safety regulations 2001, Food Safety and Standards Authority of India, objectives of developing food safety standards, enforcement of structure and procedure, role of food analyst, safety analysis, action by designated officer and report of food analyst, Food Safety.

Management System (FSMS) Good Practices/ PRPs - HACCP, GMP, GHP Management Element / System, Statutory and regulatory requirements

References:

1. Sunetra Roday (2017). Food hygiene and sanitation. 2nd Ed. McGraw Hill Publications
2. Mahtab, S, Bamji S, Kamala Krishnasamy, Brahmam G.N.V, *Text Book of Human Nutrition*, Third Edition, Oxford and IBH Publishing Co. P. Ltd., New Delhi, 2012.
3. Kiron Prabhakar. A Practical guide to food laws and regulations. 1st Ed. Bloomsbury.
4. Pulkit Mathur (2018). Food Safety and Quality Control.

Food Hygiene and Sanitation

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO1 :	Identify causes of and prevention procedures for food-borne illness, in toxication , and infection.	3	2	3	1	3	3	3	3	3
CO 2 :	Demonstrate good personal hygiene and safe food handling procedures.	3	3	3	3	3	3	3	3	3
CO 3:	Describe food storage and refrigeration techniques.	3	3	3	2	3	1	2	3	3
CO 4:	Explain sanitation of dishes, equipment, and kitchens including cleaning material, garbage, and refuse.	3	3	3	3	3	3	3	3	3

HOUSE KEEPING

Code: 24HSUA2404

Credits: 3

Pd/Wk:3 Marks: 100

Learning Objectives:

Enable the students to

- 1.understand the basic principles of housekeeping in Food Service Institutions
- 2.gain experience in the selection, use and care of house keeping tools and equipments.

Learning Outcomes:

On Successful Completion of this course, the students will be able to

- describe the role of housekeeping department in any food service institutions
- manage the resources of the house keeping department effectively
- explain the safety and security needs of hospitality operations.

Course contentUnit –I:

Concept of House keeping,layout and organisation structure of housekeeping departments, role andresponsibilities of the housekeeping personnel, qualities of housekeeping staff.

Unit –II:

Cleaning equipments - mechanical and electrical equipments used for cleaning.
Laundry procedures-dry cleaning, valet service & stain removal.

Unit –III:

Fire prevention and control. Accident prevention, security measures. First –aid and pest control Linen room –Linen types, storing, stocktaking and distribution of linen. Inventory control, condemnation, Procedure & costing consideration.

Unit –IV:

Furniture selection and its types, flower arrangement – principles, preservation of flower and plant materials, window treatment , bed making, carpets.

Unit –V:

Special service - Telephone answering, guestroom inspection, guest loan items, lost and found, deep cleaning ,turn down service. Cost control in Housekeeping.

References:

1. Lilli Crap, D R and Cousins J A (1994) Food and Beverage Service, 4th Edition, Hodder and Stoughton.
2. Vijay Dhawan, (2009) Food and Beverage Service, 1st Edition, Frank Bros & Co., 2000 Braun, Verlagshans. of Spa Design.

Text books:

1. Sudhir Andrews, (1999) Food and Beverage Service Training Manual, Tata McGraw Hill Publishing Company Ltd New Delhi

House Keeping

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO 1 :	Describe the role of house keeping department in any food service institutions	3	3	1	1	1	3	2	2	3
CO 2 :	Manage there sources of the house keeping department effectively	2	2	1	1	1	3	1	1	3
CO 3:	Explain the safety and security needs of hospitality operations	3	1	1	3	1	3	2	3	3

THEORIES OF CHILD DEVELOPMENT

Code: 24HSUA2405

Credits: 3

Pd/Wk:3

Marks: 100

Objectives:

To enable the students

- To understand theoretical framework in child development

Course outcome:

- To help students understand and predict Child Development and Behavior.
- To develop a critical appraisal of important theoretical approaches in the study of Child development.
- To know the practical application of theory in Child Development and to promote research.

Course Outline

Unit 1: Introduction

Developmental theory: Definition of Theory, Functions of Theory; Theories in Perspective.

Unit 2: Psychoanalytic Perspective

Freud's Psychoanalytic / Psychodynamic/ Psychosexual Theory, Erickson's psychosocial

theory: General Orientation, Description of Stages, Contributions and Limitations.

Unit 3: Learning Theory Perspective

Classical Conditioning- Pavlov, Behaviourism- Watson, Operant Conditioning- B. F Skinner,

Observational Learning and Social Learning/ Social Cognitive Theory- Bandura. Contributions and Limitations

Unit 4: Cognitive and Language Perspective

Cognitive Learning Theory- Piaget, information processing theory- Neo- Piagetian Theorists,

Language Theory: The Learning View, The Nativist View, Interactionist view. Contributions and Limitations, Gardner's Theory of Multiple Intelligence

Unit5: Biological/ Ethological/ Evolutionary Perspective

Ethology Theory- Lorenz, Ethologically Oriented Theories- Bowlby, Ainsworth
Contextual/ Socio Cultural Theory- Vygotsky, Ecological Theory-Bronfenbrenner.
Contributions and Limitations

References

- Hetherington and Park (1999). Child Psychology: A Contemporary View point (5th edition). New York: Tata McGraw Hill
- Patterson, C.J (2009). Infancy and Childhood. International Ed. New York: McGraw Hill
- Santrock, J.W (2010). Child Development: An Introduction (12th International Ed). NewYork: McGraw Hill
- Shaffer, D.R, and Kipp, K (2007). Developmental Psychology: Childhood and Adolescence (7th Ed). Australia: Thomson Wadsworth.
- Segelman, C.K and Rider, E.A (2003). Human Development, New Delhi: Cengage Learning Pvt Ltd.
- Vasta, R. (Ed), (1992). Six Theories of Child Development: Revised Formulations and Current Issues. London: Jessica Kingsley Publishers Ltd.

THEORIES OF CHILD DEVELOPMENT

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	To help students understand and predict child development and behaviour.	3	3	3	3	3	3	3	3	3
CO2:	To develop a critical appraisal of important theoretical approaches in the	2	3	2	3	3	3	2	2	3
CO3:	To know the practical application of theory in child development and to promote research.	3	2	3	2	2	3	3	3	2

GERONTOLOGY

Code: 24HSUA2406

Credits: 3

Pd/Wk:3

Marks: 100

Objectives:

- To understand the theoretical perspectives of aging
- To study the process of aging
- To learn the adjustment patterns and changing lifestyles to aging

COURSE OUTCOMES

- Explain the key concepts associated with the study of aging and gerontology
- Apply theoretical perspectives to analyze current topics associated with the study of aging and gerontology.
- Understand the physical, social, familial, and community support networks for aging individuals
- Analyze end-of-life issues and decisions, as well as the topics of bereavement,
- Understand impact of aging on Biological/Physiological aspects; Psychological, Economic, Social and Spiritual aspects

UNIT-I Gerontology – Emergence and scope of gerontology; Concept of aging, Demographic profile of the aged in Indian Context

UNIT- II Theoretical Perspectives of Aging – Biological theories – wear and tear theory, free radical theory, cellular reproduction theory Disengagement theory, activity theory, Human Development theory, Continuity theory, Age Stratification theory, Labeling theory, Clinger's theory

UNIT- III Process of aging: Physical, Social, medical, psychological, occupational changes, Impact of aging on Biological/Physiological aspects; Psychological, Economic, Social and Spiritual aspects.

UNIT- IV Adjustment Patterns and changing life style in old age – Family pattern, Changing roles and the aging family-conjugal, Husband-wife relations, sexual adjustment; marital adjustment; Intergenerational family relations-Grand parenthood, Singlehood, life styles, factors influencing quality of life.

UNIT-V Work, Leisure retirement and bereavement – Work-meaning of work, individual motivation; Leisure; Retirement – benefits, Attitude towards retirement, bereavement, issues related to death.

References:

1. Kiyak, H. (1999). Social Gerontology - A Multidisciplinary Perspective (English) 5th Edition.
2. Allyn, Bacon and Ramamurti P.V. (2004), Handbook of Indian Gerontology (English) 01 Edition, Serial Publication
3. Krishnan, S. (2008), Fundamentals of Gerontology (English) 01 Edition, Akansha Publishing House
4. Dale, D. and Phillipson, C. (2010), The Sage Handbook of Social Gerontology, Sage Publications Ltd
5. Tattwamasi, P. (2015), Caring for the Elderly: Social Gerontology in the Indian Context, SAGE India.
6. Thara, L. B. (2002), Ageing: Indian Perspective, 1st edition, D.K. Print World Ltd
7. Chukwuma, E. (2011), The Theories of Aging, Lambert Academic Publishing
8. Tanuja, M. (2011), Problems of Elderly in Families Problems: Care & Support, Abuse & Neglect of Elderly in Families, Lambert Academic Publishing

GERONTOLOGY

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Explain the key concepts associated with the study of aging and gerontology.	3	3	3	3	3	3	3	3	3
CO2:	Apply theoretical perspectives to analyze current topics associated with the study of aging and gerontology.	2	3	3	3	3	2	2	2	2
CO3:	Understand the physical, social, familial and community support network for aging individuals.	3	2	2	3	2	2	3	3	3
CO4:	Analyze end of life issues and decisions, as well as the topics of bereavement.	2	3	3	2	3	3	3	3	3
CO5:	Understand impact of aging on Biological / Physiological aspects; Psychological, Economic, Social and Spiritual aspects.	3	3	3	3	3	3	2	2	2

DESIGNING AND FURNISHING LIFE-SPACE

Code: 24HSUA2407

Credits: 3

Pd/Wk:3

Marks: 100

Objectives:

Enable the students to

1. Comprehend the concept of life space
2. Learn skills of designing life space
3. Gain knowledge on different styles in furniture
4. Understand the role of furnishings in designing and decorating interiors

Course Outcomes:

On Success ful Completion of this course, the students will be able to

- Understand the various features in period style furniture
- Select and arrange furniture and furnishings in different rooms in residential spaces
- Knowledge on factors influencing planning of life space
- Develop confidence in decorating interiors using furniture and furnishings

Course Content

Unit-I: Concept of Life Space

Objectives and process of planning life space –biological needs, ecological concerns, cultural influences, psychological effects, utility, economy, beauty and character

Factors determining life space in interiors- people, location and orientation, resource available, activity zones in life space,

Unit-II: Furniture in the Life Space

Importance of furniture in relation to interiors, salient features of traditional, contemporary and modern styles in furniture

Furniture types-Modular furniture and mobile furniture; Case goods and upholstered furniture; multi-purpose furniture

Unit-III: Furniture Selection and Arrangement

Factors considered in selection of furniture to suit different spaces and purposes General guiding concepts in arrangement of furniture

Arrangement of furniture in different rooms; Care and maintenance of furniture

Unit-IV: Furnishings for Designing Life Space

Home furnishings as accessories, floor, wall and ceiling decorations, selection and use.

Types of windows, window treatments –

Hard (shutters, rollers, blinds, shades), Soft (curtains, draperies, swags, valances). Window accessories: chords, rings, rods, trims, and decorative products.

Unit-V: Home Furnishings and Accessories

Selection of furnishings based on background – walls, floors and ceilings Selection,

care and maintenance of different home furnishings-slip covers, cushion covers, bed linen, bath linens, and kitchen linens. Role of accessories as furnishing components-Functional and decorative-fabric based lamps, painting, wall hangings and soft toys.

References:

1. Arora. S. P. and Bindra S.P. (2005). Building construction. Delhi: Dhanpat Rai Publications
2. Bhavikatti, S.S., and Chitawadagi, M.V. (2019). (1st Ed.). Building Planning and Drawing. Hubli: Dreamtech Press
3. Faulkner, R. and Faulkner, S. (1987). Inside Today's Home. New York: Rinehart Winston, India.
4. Gandotra V., Shukul M., and Jaiswal N. (2011). Introduction to Interior Design and Decoration, New Delhi: Dominant publishers, India.
5. Jankowsky, W. (2001). Modern Kitchen Work Book. New Delhi: Rockport Publishers, India.
6. Maureen, M. (2004). Interior Design Visual Presentation-A Guide to Graphics, Models and Presentation Techniques. New Jersey: John Wiley and Sons.
7. Mendelson, C. (2005). Home Comforts: The Art and Science of keeping house. New York; London: Scriber Company
8. Premavathy, S. (2005). Interior Design and Decoration, New Delhi: CBS Publishers and Distributors, India.
9. Dutt, D.R. (2010). How Best to Plan and Build Your Home: A Total Guide for the Owner. New Delhi: Pustak Mahal (ISBN-13: 978-8122307559)
10. Stepat, D.V. (1991). Introduction to Home Furnishings. New York, London. : The Macmillan Company
11. Stuart, L. (2013). Furniture Design: An Introduction to Development, Materials and Manufacturing. London: Laurence King Publishing

DESIGNING AND FURNISHING LIFE-SPACE

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO I:	Understand the various features in period style furniture.	3	3	3	3	3	3	3	3	3
CO2:	Select and arrange furniture and furnishing in different rooms in residential spaces.	3	2	2	3	2	2	3	3	3
CO3:	Knowledge on factors influencing planning of life space.	2	3	3	2	3	3	2	2	3
CO4:	Develop confidence in decorating interior surfacing furniture and furnishing.	3	2	2	3	3	3	3	3	2

HOSPITALITY MANAGEMENT

Code: 24HSUA2408 Credits: 3 Pd/Wk:3 Marks: 100

Objectives

- Understand the structure and functioning of the hospitality industry.
- Develop knowledge of management principles specific to hospitality operations.
- Analyse operational strategies and best practices within hospitality sectors.
- Explore current trends and challenges in the hospitality industry.
- Prepare for effective leadership roles in hospitality management.

Course content

Unit 1: Introduction to Hospitality Industry:

Overview of Hospitality Industry-Definition and scope, Economic and social impacts

Sectors of Hospitality Industry- Lodging (hotels, resorts, etc.), Food and Beverage (restaurants, catering, etc.), Travel and Tourism, Recreation and Entertainment

Unit 2: Hospitality Management Fundamentals:

Management Principles- Planning, organizing, leading, and controlling, Decision-making processes

Human Resource Management- Recruitment and selection, Training and development, Employee motivation and retention

Unit 3: Operations Management in Hospitality

Lodging Operations- Front office management, Housekeeping management, Facility maintenance and security

Event and Conference Management- Event planning and coordination, Venue selection and management, Logistics and on-site operations

Unit 4: Marketing and Customer Service

Marketing Strategies- Market research and analysis, Branding and positioning, Digital marketing and social media

Sales Techniques- Sales strategies and tactics, Customer relationship management (CRM), Loyalty programs and incentives

Unit 5: Current Trends and Issues in Hospitality

Customer Service Excellence- Service quality and standards, Handling customer complaints, Enhancing guest experiences

Sustainability and Green Practices- Environmental impact and sustainability initiatives, Eco-friendly practices in operations, Corporate social responsibility (CSR)

Textbooks and References

- R. Walker Introduction to Hospitality Management by John
- J. Mullins Hospitality Management and Organisational Behaviour by Laurie
- Michael C. Sturman The Cornell School of Hotel Administration on Hospitality: Cutting Edge Thinking and Practice by

SOFT TOY MAKING

Code: 24HSUA2409 Credits: 3 Pd/Wk:3 Marks: 100

Objectives:

- To provide opportunity for skill development in soft toy making.

Specific Learning Outcome:

This paper will enable the students to make toys and its types, to give the knowledge about the soft toy making.

Unit I

Making of Toys – Classification of Toys – materials used – socks , cotton materials , Terry cloth, Felt materials and fur materials

Unit II

Designing – Measurement used – Pattern Making and developing Toys, Fish, Frog, Small Toys for case

Unit III

Designing – Tracing of patterns – Construction of soft Toys – dogs, duck, snakes

Unit IV

Preparation and hand made Toys – Monkey, parrot, squirrel

Unit V

Making of Soft Toys- Teddy bear, Dolphins and Elephant

Text Books

1. Making soft toys for children's - British book originally published in 1988. Pamela Peake
2. Little Blue - Pamela's books for a dollar or two on [Alibris](#).
3. 101 Soft toys from 1984 and was published in the U.S. by Arco.
4. [Scrap Saver's Stitchery](#) and [More Scrap Saver's Stitchery](#) (by Sandra Lounsbury Foote)

SOFT TOY MAKING

Course Outcome (CO)	Programme Specific Outcome(PSO)								
	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO1: Practice and Develop different types of toys.	3	3	1	1	3	1	1	1	3

FASHION GROOMING

Code: 24HSUA2410

Credits: 3

Pd/Wk:3

Marks: 100

Learning Objectives

- To develop knowledge and skills on grooming
- To acquire knowledge on basic personal care.
- To apply various techniques on self grooming and styling

Course outcome

After learning this course students will be able to do self grooming on their own . Develop different appearance related to fashion and then styling . Developing portfolio on styling.

Unit - I

Self Rolling of thread. Different types of waxes,- tools and equipments needed their work and process.

Unit -II

Self bleach, clean ups and product knowledge and skin care - Materials required , uses and process followed.

Unit - III

Different types of hair cutting - tools and equipments needed and procedures to be followed.

Unit - IV

Self manicure and pedicure - - tools and equipments needed and procedures to be followed. Different types of Facials procedures to be followed.

Unit - V

Self Make Up For Different Occasions - Different types of Saree draping, Make up tools and equipments used.

Text Books

1. Style & Grooming- Felix oberman.
2. Hand book of Attire and grooming by Cyrus .M.Gonda
3. Careers in Beauty and Grooming by Lerner and mark.

FASHION GROOMING

Course Outcome (CO)	Programme Specific Outcome(PSO)								
	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO1: Be able to do self grooming on their own	3	3	1	1	3	1	1	1	3
CO2: Develop different appearance related to fashion and styling	3	3	1	1	3	1	1	1	3

ENTREPRENEURSHIP DEVELOPMENT

Code: 24HSUA2411

Credits: 3

Pd/Wk:3

Marks: 100

Learning Objectives:

Enable the students to

1. Understand the process and procedures for taking up entrepreneurial programmes.
2. Develop an aptitude for Entrepreneurship development.
3. Prepare a draft proposal for funding

Learning Outcomes:

On Successful Completion of this course, the students will be able to

- Define entrepreneur and entrepreneurship.
- analyze the problems of entrepreneur
- identify the avenues for entrepreneurship
- select trade for preparation of proposal

Course ContentUnit –I:

Entrepreneurship – Entrepreneur and Entrepreneurship – meaning, need, transition from income generation to self employment and Entrepreneurship. Qualities of a good entrepreneur. Problems of entrepreneurs.

Unit –II:

Factors influencing entrepreneurial development – Economic, legal, social and psychological factors.

Unit –III:

Agencies supporting Entrepreneurial Development Programme – SIDCO, DIC, TIIC NSIC, MSME-Objectives, Programmes, Financial Assistance,

Unit –IV:

Schemes for assistance – State and Central level current schemes and programmes for individual and group support.

Unit –V:

Project proposal – Proposal format and content-steps in its preparation, Feasibility testing, SWOT analysis.

References:

1. Chunnawalla S.A. Sales Management, Himalayan publishing House New Delhi, 1999.
2. Dr.N.Rajan Nair, Sajith R. Nair Marketing, Sutan Chand and Sons, New Delhi, 2002
3. Vasant Desai, Project Management and entrepreneurship, Himalaya Publishing House, New Delhi, 2000.
4. David H. Moll, Entrepreneurship, prentice Hall of India, New Delhi 1999.
5. Frank Jerkins, Advertising, prentice Hall of India, New Delhi, 2000

Entrepreneurship Development

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO1 :	Define entrepreneur and entrepreneurship.	3	3	1	1	2	2	1	2	3
CO 2 :	Analyse the problems of entrepreneur	3	3	1	2	3	2	1	2	3
CO 3:	Identify the avenues for entrepreneurship	3	3	1	2	3	2	1	2	3
CO 4 :	Select trade for preparation of proposal	3	3	1	1	2	2	1	2	3

NGO MANAGEMENT

Code: 24HSUA2410

Credits: 3

Pd/Wk:3

Marks: 100

Learning Objectives

To enable the learners to

1. Develop and understanding of evolution, growth and development of Non-Government Organisations
2. Learn the legal frame work for establishing NGO's
3. Enhance skills and techniques of project evaluation / Resource Mobilization
4. Learn the concept of team building, peoples participation and self-understanding

Course Outcomes

On successful completion of this course , the students will be able to

- Explain the needs and importance of NGO's and Management
- Describe the concepts, principles of Project Management and Formulation of Detail Project Report
- Analyze the key issues in Government policies and programmes

Course Content

Unit-I. Concept of NGO

Meaning of NGO and GO: Difference between government organization(GO) and Non-government Organization (NGO) : Principles of NGO ; Characteristics of good NGO ; Structure and functions of NGO ; Classification of NGO Origin and development ofNGO

Unit-II. Legal Frame Work for Establishing NGO

Legal – rational structure of Non profits - Trust and Societies with special reference to Trust and Registration Acts ; Foreign contributions and Regulation Act (FCRA) ; Statutory obligations, Income Tax Exemption (80-G, 12-A and 35 NC) Rules and Regulations – Resource mobilization ; Methods and Techniques of fund raising ; International, national and local levels

Schemes for NGO's under various Ministries of Government of India ; NABARD and Human Rights Commission

Unit-III. Project and Management in NGO

Concept, objectives, principles and Types of projects ; Project implementation and management

Project planning matrix, project cycle management, identification and formulation of Detail project Report (DPR) with reference to action AID
 Monitoring and Evaluation – Network Analysis Programme (Project) Management and Review Techniques (PERT), Critical Path Method (CPM), Participatory Rural Appraisal (PRA) – Tools and Techniques, Strength, Weakness, Opportunity and Challenges (SWOC) analysis

Unit-IV. NGO Management

Organizational types and structures ; Ngo management competencies
 Team Building – concept and significance, Role of effective team building in management of NGO's
 People's participation – concept, meaning and objectives, role of people's participation in community development.
 Understanding Self – Formulation of Self-concept, Dimensions, Components
 Self-Assessment : Analysis & Action plan

Unit-V. Policies and Programmes

Government laws, partnership model, Governing Schemes through ministries /Department / Bodies, government grant-in-aid
 New regulations for NGO and government control
 National policy on voluntary sector under five year plans

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4. Joel, S.G.R., and Bhose. (2003). NGO's and Rural Development – Theory and Practice. New Delhi: Concept Publishing Company
5. John M. Riley. (2002). Stakeholders in Rural Development – Critical Collaboration in State – NGO Partnerships. New Delhi: Sage Publications
6. Julie Fisher. (2003). Governments, NGO's and the Political Development of the Third World. Jaipur: Rawat Publications
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8. Kalyan Sengupta. (2013). an Easy Guide to NGO. Kolkata: Book Corporation
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10. Ravi Shankar Kumar Singh. (2003). Role of NGO's in Developing Countries (Potentials, Constraints and Policies). New Delhi: Deep & Deep Publications (P) Ltd

NGO MANAGEMENT

Course Outcomes		Programme Specific Outcome (PSO)								
		PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9
CO 1:	Explain the needs and importance of NGO's and Management	3	3	3	3	3	3	2	3	3
CO2:	Describe the concepts, principles of Project Management and Formulation of Detail Project Report	2	3	2	2	3	3	3	2	3
CO3:	Analyze the key issues in Government policies and programmes	3	2	3	3	2	3	3	3	2