

FATIMA COLLEGE (AUTONOMOUS)



**Re-Accredited with “A++” Grade by NAAC (4th Cycle)
74th Rank in India Ranking 2019 (NIRF) by MHRD
Maryland, Madurai- 625 018, Tamil Nadu, India**

NAME OF THE DEPARTMENT: HOME SCIENCE

NAME OF THE PROGRAMME: UG

PROGRAMME CODE : UAHS

ACADEMIC YEAR : 2023-2024

VISION OF THE DEPARTMENT

To empower the potential Home Makers & Home Scientists with life management skills to face the multidimensional challenges and contribute towards the progress of Home and Nation.

MISSION OF THE DEPARTMENT

- Empowering the budding youth to play the dual role of bread winner and homemaker effectively.
- Making them economically independent and emotionally stable.
- Enhancing their managerial skills at home and in the workplaces.
- Instilling their leadership qualities and organizational capabilities.
- Promoting their entrepreneurial skills.
- Fine tuning their intellect on the recent advances.

PROGRAMME EDUCATIONAL OBJECTIVES (PEO)

PEO 1	Our graduates will excel in playing the dual role of home maker and bread winner through the knowledge gained in all the major areas of Home Science
PEO 2	The skills acquired through Home Science education enable the home scientists to fit various job roles in addition to becoming successful young entrepreneurs
PEO 3	They will be socially responsible citizens by exhibiting their professional competence by involving in lab to land programmes at regional, national, and international levels
PEO 4	Able to exhibit professional competence in diet planning and counselling.

GRADUATE ATTRIBUTES (GA)

Fatima College empowers her women graduates holistically. A Fatimite achieves all-round empowerment by acquiring Social, Professional and Ethical competencies. A graduate would sustain and nurture the following attributes:

I. SOCIAL COMPETENCE	
GA 1	Deep disciplinary expertise with a wide range of academic and digital literacy
GA 2	Hone creativity, passion for innovation and aspire excellence
GA 3	Enthusiasm towards emancipation and empowerment of humanity
GA 4	Potentials of being independent
GA 5	Intellectual competence and inquisitiveness with problem solving abilities befitting the field of research
GA 6	Effectiveness in different forms of communications to be employed in personal and professional environments through varied platforms
GA 7	Communicative competence with civic, professional, and cyber dignity and decorum
GA 8	Integrity respecting the diversity and pluralism in societies, cultures, and religions
GA 9	All – inclusive skill sets to interpret, analyze, and solve social and environmental issues in diverse environments
GA 10	Self-awareness that would enable them to recognize their uniqueness through continuous self-assessment in order to face and make changes building on their strengths and improving their weaknesses

GA 11	Finesse to co-operate exhibiting team-spirit while working in groups to achieve goals
GA 12	Dexterity in self-management to control their selves in attaining the kind of life that they dream for
GA 13	Resilience to rise instantly from their intimidating setbacks
GA 14	Virtuosity to use their personal and intellectual autonomy in being life-long learners
GA 15	Digital learning and research attributes
GA 16	Cyber security competence reflecting compassion, care and concern towards the marginalized
GA 17	Rectitude to use digital technology reflecting civic and social responsibilities in local, national, and global scenario
II. PROFESSIONAL COMPETENCE	
GA 18	Optimism, flexibility, and diligence that would make them professionally competent
GA 19	Prowess to be successful entrepreneurs and become employees of trans-national societies
GA 20	Excellence in local and global job markets
GA 21	Effectiveness in time management
GA 22	Efficiency in taking up initiatives
GA 23	Eagerness to deliver excellent service
GA 24	Managerial skills to identify, commend and tap potentials

III. ETHICAL COMPETENCE	
GA 25	Integrity and be disciplined in bringing stability leading a systematic life promoting good human behavior to build better society
GA 26	Honesty in words and deeds
GA 27	Transparency revealing one's own character as well as self-esteem to lead a genuine and authentic life
GA 28	Social and environmental stewardship
GA 29	Readiness to make ethical decisions consistently from the galore of conflicting choices paying heed to their conscience
GA 30	Right life skills at the right moment

PROGRAMME OUTCOMES (PO)

On completion of B.Sc. Home Science with Food Biotechnology Programme, the graduates would be able to

PO 1	Apply acquired scientific knowledge to solve complex issues
PO 2	Attain Analytical skills to solve complex cultural, societal, and environmental issues.
PO 3	Employ latest and updated tools and technologies to analyze complex issues.
PO 4	Demonstrate professional ethics that foster community, nation and environment building initiatives.

PROGRAMME SPECIFIC OUTCOMES (PSO)

On completion of B.Sc. Home Science with Food Biotechnology Programme, the graduates will have the following attributes

PSO1	Understanding the anatomy and functions of the various systems of the human body.
PSO 2	Acquisition of skills in analyzing& estimating various blood parameters.
PSO 3	Scientific knowledge in the area of food and nutrition, food processing and production.
PSO 4	Acquisition of skills in planning therapeutic diets and diet counseling
PSO 5	Scientific knowledge on the role of microbes in food processing and production.
PSO 6	Acquisition of knowledge and skills in front office operation and housekeeping.
PSO 7	Professional competence in planning different cuisines and styles of food service.
PSO 8	Scientific knowledge in the conversion of fiber to fabric and technical textiles.
PSO 9	Acquisition of skills in pattern making, garment construction, wardrobe planning, care of clothes, surface ornamentation and fashion illustration.
PSO 10	Digital literacy in designing garments using Fashion Studio software and calculating the nutritive value of foods using Nutri software
PSO 11	Understanding the basic aspects that are related to the growth of children at different stages.
PSO 12	Cognizance on children with special needs.
PSO 13	Obtain knowledge on developmental changes that occur at different stages of life span.
PSO 14	Vivid knowledge on the contemporary problems related to marriage & family
PSO 15	Perception on theories & philosophies of preschool education.

PSO 16	Professional competency in creche and preschool management
PSO 17	Creative thinking in application of elements & principles of design in interior decoration and clothing.
PSO 18	Professional competency in the management of family resources
PSO 19	Obtain skills in arrangement of tables and other accessories.
PSO 20	Develop skills in the application of colors, furniture arrangement, lightings, flower arrangement and management of resources in day- to-day life.
PSO 21	Professional competence attributing to an entrepreneur.
PSO 22	Acquire skills to transform the standard of living of rural people.
PSO 23	Practically assess the problems of people using participatory tools.

FATIMA COLLEGE (AUTONOMOUS), MADURAI-18**THE RESEARCH CENTRE OF HOME SCIENCE***For those who joined in June 2019 onwards***PROGRAMME CODE: UAHS****PART – I – TAMIL / FRENCH / HINDI- 12 CREDITS****PART – I – TAMIL****Offered by The Research Centre of Tamil**

S. NO	SEM.	COURSE CODE	COURSE TITLE	HRS	CRE DIT	CIA Mks	ESE Mks	TOT - MKs
1.	I	23TL1C1	General Tamil - I	5	3	40	60	100
2.	II	23TL2C2	General Tamil - II	5	3	40	60	100
3.	III	19TL3C3	Language- Epic Literature	5	3	40	60	100
4.	IV	19TL4C4	Language-Sangam Literature	5	3	40	60	100
			Total	20	12			

PART – I –FRENCH

Offered by The Department of French

S. NO	SEM.	COURSE CODE	COURSE TITLE	HRS	CRE DIT	CIA Mks	ESE Mks	TOT. MKs
1.	I	23RL1C1	PART 1 LANGUAGE FRENCH	5	3	40	60	100
2.	II	23RL2C2	PART 1 LANGUAGE FRENCH	5	3	40	60	100
3.	III	19RL3C3	PART 1 LANGUAGE FRENCH	5	3	40	60	100
4.	IV	19RL4C4	PART 1 LANGUAGE FRENCH	5	3	40	60	100
			Total	20	12			

PART – I – HINDI

Offered by The Department of Hindi

S.NO	SEM.	COURSE CODE	COURSE TITLE	HRS	CRE DIT	CIA Mks	ESE Mks	TOT. MKs
1.	I	23DL1C1	PART 1 LANGUAGE HINDI -	5	3	40	60	100
2.	II	23DL2C2	PART 1 LANGUAGE HINDI	5	3	40	60	100
3.	III	19DL3C3	PART 1 LANGUAGE HINDI -	5	3	40	60	100
4.	IV	19DL4C4	PART 1 LANGUAGE HINDI -	5	3	40	60	100
			Total	20	12			

PART – II -ENGLISH – 12 CREDITS

Offered by The Research Centre of English

S. NO	SEM.	COURSE CODE	COURSE TITLE	HRS	CREDIT	CIA Mks	ESE Mks	TOT - MKS
1.	I	23EL1L1	INTERMEDIATE COMMUNICATIVE ENGLISH	5	3	40	60	100
2.		23EL2L1	ENGLISH FOR EMPOWERMENT	5	3	40	60	100
3.		19EL1LA	ADVANCED COMMUNICATIVE ENGLISH	5	3	40	60	100
4.	II	19EL2LB	ENGLISH COMMUNICATION SKILLS (BASIC)	5	3	40	60	100
5.		19EL2LI	ENGLISH FOR EMPOWERMENT (INTERMEDIATE)	5	3	40	60	100
6.		19EL2LA	ENGLISH FOR CREATIVE WRITING (ADVANCED)	5	3	40	60	100
7.	III	19EL3LN	ENGLISH FOR DIGITAL ERA	5	3	40	60	100
8.	IV	19EL4LN	ENGLISH FOR INTEGRATED DEVELOPMENT	5	3	40	60	100
			Total	20	12			

ART – III -MAJOR, ALLIED & ELECTIVES – 95 CREDITS**Major Core Courses Including Practical: 60 CREDITS**

S.N O	SEM .	COURSE CODE	COURSE TITLE	HRS	CREDI T	CIA Mk s	ESE Mk s	TOT . Mks
1.	I	23N1CC1	HUMAN DEVELOPMENT	6	5	40	60	100
2.		23N1CC2	HUMAN DEVELOPMENT PRACTICAL	4	5	40	60	100
3.	II	23N2CC3	FOOD SCIENCE AND NUTRITION	6	5	40	60	100
4.		23N2CC4	BASIC COOKERY PRACTICAL	4	5	40	60	100
5.	III	19N3CC7	EXTENSION EDUCATION AND COMMUNICATI ON	5	4	40	60	100
6.		19N3CC8	FIBER TO FABRIC	4	3	40	60	100
7.		19N3CC9	LAB IN BASICS OF CLOTHING CONSTRUCTIO N	3	2	40	60	100

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8.	IV	19N4CC10	BASICS OF FOOD BIOTECHNOLOGY	5	4	40	60	100
9.		19N4CC11	CLOTHING AND FASHION	4	3	40	60	100
10.		19N4CC12	LAB IN CLOTHING AND FASHION	3	2	40	60	100
11.	V	19N5CC13	CRECHE AND PRE SCHOOL MANAGEMENT	6	4	40	60	100
12.		19N5CC14	LAB IN PRE SCHOOL ADMINISTRATION	4	2	40	60	100
13.		19N5CC15	HOUSING AND ART IN HOME	6	4	40	60	100
14.		19N5CC16	LAB IN ART IN EVERYDAY LIFE	4	2	40	60	100
15.	VI	19N6CC17	RESOURCE MANAGEMENT	5	4	40	60	100
16.		19N6CC18	LAB IN RESOURCE MANAGEMENT	3	2	40	60	100
17.		19N6CC19	CLINICAL NUTRITION AND DIETETICS	5	4	40	60	100
18.		19N6CC20	LAB IN CLINICAL NUTRITION AND DIETETICS	3	2	40	60	100

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19.	Total	84	60			
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ALLIEDCOURSES- 20 CREDITS

S.NO	SEM	COURSECODE	COURSE TITLE	HRS	CREDIT	CIA Mks	ESE Mks	TOT. MKs
1.	I	23C1GEN1	CHEMISTRY FOR BIOLOGICAL SCIENCES - I	3	2	40	60	100
2.		23C1GEN2	CHEMISTRY PRACTICAL FOR BIOLOGICAL SCIENCES - I	2	1	40	60	100
3.	II	23C2GEN3	CHEMISTRY FOR BIOLOGICAL SCIENCES - II	3	2	40	60	100
4.		23C2GEN4	CHEMISTRY PRACTICAL FOR BIOLOGICAL SCIENCES - II	2	1	40	60	100
5.	III	19N3AC1	CATERING & HOTEL MANAGEMENT	3	3	40	60	100
6.		19N3AC2	LAB IN CATERING & HOTEL MANAGEMENT	2	2	40	60	100
7.		19N4AC3	FOOD PRODUCTION AND SERVICE	3	3	40	60	100

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8.	IV	19N4AC4	LAB IN FOOD PRODUCTION AND SERVICE	2	2	40	60	100
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ELECTIVES-15 CREDITS

S.No	SEM	COURSECODE	COURSE TITLE	HRS	CREDIT	CIA Mks	ES E Mks	TOT - Mks
1.	I	23N1GE1	FOOD NUTRITION AND HEALTH	3	3	40	60	100
2.	I	23N1GE2	FOOD SCIENCE AND NUTRITION PRACTICAL	2	2	40	60	100
3.	II	23N2GE3	NUTRITION FOR HEALTH AND PHYSICAL FITNESS	3	3	40	60	100
4.	II	23N2GE4	NUTRITION AND WELLNESS PRACTICAL	2	2	40	60	100
3.	V	19N5ME1	TECHNICAL TEXTILES	5	5	40	60	100
2.	V	19N5ME2	FOOD BIOTECHNOLOGY	5	5	40	60	100
3.	VI	19N6ME3	FAMILY DYNAMICS	5	5	40	60	100
4.	VI	19N6ME4	NUTRITION FOR HEALTH AND FITNESS	5	5	40	60	100

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5.	VI	19N6ME5	FOOD AND DAIRY PROCESSING	5	5	40	60	100
6.	VI	19N6ME6	WOMEN AND ENTREPRENEURS HIP DEVELOPMENT	5	5	40	60	100

T – IV – 20 CREDITS

- **VALUE EDUCATION**
- **ENVIRONMENTAL AWARENESS**
- **NON-MAJOR ELECTIVE**
- **SKILL BASED COURSES**

S. No	SE M.	COURSE CODE	COURSE TITLE	HRS	CREDIT	CIA Mks	ESE Mks	TOT. Mks
1.	I	23G1VE	Personal Values	1	1	40	60	100
2.		23N1SE1	Non-Major Elective – Women's Health and Wellness (Offered to other major Students)	2	2	40	60	100
3.	I	23N1FC	Fundamentals of Home Science	2	2	40	60	100
4.	II	23G2VE	Values for life	1	1	40	60	100
5.		23N2SE2	Non-Major Elective - Women's Health and Wellness (Offered to other major Students)	2	2	40	60	100
6.	II	23N2SE3	Garment Embellishment Techniques	2	2	40	60	100
7.	III	19G3EE	Environmental Education	1	1	40	60	100
8.		19N3SB1	Entrepreneurial Skills – Surface Ornamentation	2	2	40	60	100
9.	IV	19G4EE	Environmental Education and Gender Studies	1	1	40	60	100
10.		19N4SB2	Entrepreneurial Skills – CAD	2	2	40	60	100

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11.	V	19N5SB3	Entrepreneurial Skills – Baking, Adulteration and Food Preservation	2	2	40	60	100
12.		19N5SB4	Entrepreneurial Skills – Participatory Rural Appraisal	2	2	40	60	100

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13.	VI	19N6SB5	Entrepreneurial Skills – Nutrition Counselling	2	2	40	60	100
12.		19N6SB6	Entrepreneurial Skills – Interior Design and Decoration	2	2	40	60	100

OFF-CLASS PROGRAMMES - ALL PART-V

SHIFT - I

S. No	SE M.	COURSE CODE	COURSE TITLE	HRS	CRE DIT	TOT. Mks
1.	I - IV	21A4PED	Physical Education	30/ SEM	1	100
2.		21A4NSS	NSS			
3.		21A4NCC	NCC			
4.		21A4WEC	Women Empowerment Cell			
5.		21A4ACUF	AICUF			

OFF-CLASS PROGRAMMES

ADD-ON COURSES

COURSE CODE	COURSE TITLE	HR S.	CRE DITS	SEME STER IN WHICH THE COURSE IS OFFERED	CIA Mks	ES E Mks	TOT AL Mks
19UAD1CA	COMPUTER APPLICATIONS (Offered by the	40	2	I & II	40	60	100

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COURSE CODE	COURSE TITLE	HR S.	CRE DITS	SEME STER IN WHIC H THE COUR SE IS OFFE RED	CIA Mks	ES E Mks	TOT AL Mks
	department of PGDCA for Shift I)						
23UAD1MDA/ 23UAD2MDS	ONLINE SELF LEARNING COURSE- Basic Multidisciplinar y Course – Arts /Science	40	2	II	40	60	100
21UAD3ES	Professional Ethics	15	1	III	40	60	100
21UAD4ES	Personality Development	15	1	IV	40	60	100
21UAD5ES	Family Life Education	15	1	V	40	60	100
21UAD6ES	Life Skills	15	1	VI	40	60	100
21UAD5HR	HUMAN RIGHTS	15	2	V	100	-	100
21UAD6RS	OUTREACH PROGRAMME- Reach Out to Society through Action ROSA	100	3	V & VI	100	-	100
21UAD6PR	PROJECT	30	4	VI	40	60	100
21UAD6RC	READING CULTURE	10/ Se mes ter	1	II-VI	-	-	-
TOTAL			20				

SELF LEARNING EXTRA CREDIT COURSES

COURSE CODE	COURSE	HR S.	CREDI TS	SEMES TER IN WHICH THE COURSE IS OFFER ED	CIA MK S	ES E MK S	TOTA L MAR KS
21UG1SLN	SELF LEARNING COURSES for ADVANCED LEARNERS Nutrition for Health and Fitness		2	I	40	60	100
21UG2SLNS	Basics of Psychology	-	2	II	40	60	100
21UG4SLZ	Public Health and Hygiene		2	IV	40	60	100
22UG4SLNC	Textile Colouration		2	IV	40	60	100
21UG5SLA	Consumerism		2	V	40	60	100

21UG6SLN	Hospital Management		2	VI	40	60	100
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OFF CLASS PROGRAMMES

COURSE CODE	COURSE	HR S.	CREDIT S	SEMESTER IN WHICH THE COURSE IS OFFERED	CIA MK S	ESE MK S	TOTAL MARK S
21UGVA H1	VALUE ADDED CRASH COURSE Hand Embroidery	-	2	ANY SEMESTER	40	60	100
21UGVA CH1	VALUE ADDED CERTIFICATE COURSE Montessori Aid Teaching	-	2	ANY SEMESTER	40	60	100

I B.Sc. HOMESCIENCE WITH FOOD BIOTECHNOLOGY
SEMESTER –I

For those who joined in 2023 onwards

PROGRA MME CODE	COURSE CODE	COURSE TITLE	CATEGO RY	HRS/WEE K	CREDITS
UAHS	23N1CC1	HUMAN DEVELOPMENT	Major Core	5	6

COURSE DESCRIPTION

This course gives a complete picture of the developmental changes takes place across the stages

COURSE OBJECTIVES

To enable students

Familiarize with the growth process from conception to confinement.

Know the development of an individual from infancy to old age.

Understand the physical, psychological, and social development of the individual from infancy to old age.

Develop an awareness of the problems of children, adolescent, and exceptional children.

UNITI **GROWTH AND DEVELOPMENT (20HRS.)**

Growth and Development

Meaning-growth and development, principles of governing growth and development,

Prenatal Period

Conception, Pregnancy- Symptoms, Stages of prenatal development – Period of gestation,

Period of embryo, Period of fetus. discomforts and complications

Practical - preparation of case study - observing various development-physical, motor, cognitive, creative, social, emotional, and intellectual of a particular child.

UNITII Infancy and Childhood (20HRS.)

Characteristics, physical, social, and emotional development, cognitive and language development during infancy, early childhood, and late childhood.

Children's play – meaning, types, importance stages. Parental disciplinary Techniques–merits and demerits

Practical – Analysis of various play techniques.

UNITIII Adolescence (15 HRS.)

Adolescence –physical and psychological changes, emotional, moral and social development, Problems of adolescence.

Delinquency–causes, prevention, and rehabilitation.

Practical - Socio-metric study of early adolescents. A survey on Juvenile Delinquency prevalence.

UNITIV Adulthood and Old Age (10HRS.)

Adulthood-Characteristics and developmental tasks, all aspects of development and vocational adjustments.

Old age-Characteristics of old age,physical changes ,psychological changes. Place of the aged in Indian Society **Practical** –Survey on problems of old age.

UNITV Exceptional Children(10HRS.)

Introduction to Children with Special Needs and identification & Educational Rehabilitation Gifted children Orthopedically challenged Mentally retarded Hearing impaired Visually handicapped Learning disability

Practical- Visit to an institution for exceptional children.

References

1. Hurlock E.B.,(1972).Child Development, NewYork: McGraw Hill Book company.
2. Hurlock, E.B.,(1995):DevelopmentalPsychology-
ALifeSpanApproach,5th(Ed.)NewYork:McGraw Hill Book Co.
3. Nanda V.K., (1998): Principles of Child Development, New Delhi:Anmol Publications Pvt.Ltd.
4. RajammalP.Devadas andJayaN.Muthu(2002).A Text book of Child Development,NewDelhi:Macmillan Publishers.
5. Singh,A.(2015).Foundations of Human Development:ALifeSpanApproach.NewDelhi:OrientBlack Swan.
6. SuriakanthiA.,(1997).ChildDevelopment–
AnIntroduction,TamilNadu:KavithaPublishers.
7. Swaminathan,M(1998).TheFirstFiveYears:ACriticalPerspectiveonEarlyChildhood
8. Careand Education in India. New Delhi: Sage Publications.

e- LearningResources

- i. http://www.wbnsou.ac.in/online_services/SLM/BED/SEM-01_A1.pdf
- ii. <https://ncert.nic.in/textbook/pdf/kepy104.pdf>
- iii. <https://egyankosh.ac.in/bitstream/123456789/17134/1/Unit-3.pdf>
- iv. https://www.cukashmir.ac.in/departmentsdocs_16/Growth%20&%20Development%20-%20Dr.%20Ismail%20Thamarasseri.pdf

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 CONCEPT OF HOME SCIENCE AND GROWTH & DEVELOPMENT (20HRS.)				
1.1	Meaning, Growth& Development Principles of growth and development.	3	Chalk & Talk	Black Board
1.2	. Pregnancy, Symptoms,	3	Chalk & Talk	LCD &White board
1.3	Prenatal stage - Period of gestation, Period of embryo and fetus	4	Lecture	PPT& Black Board
1.4	Pregnancy discomforts and complications.	4	Lecture	PPT &Specimens
1.5	- preparation of case study - observing various development-physical, motor, cognitive, creative, social, emotional, and intellectual of a particular child.	3	Lecture Lecture &Discussion	PPT &Smart Board
1.6	observing various development-creative, social, emotional, and intellectual of a particular child	3	Lecture &Discussion	Google classroom
UNIT -2 DEVELOPMENT STAGES (Infancy and Childhood) (20HRS.)				
2.1	Infancy Neonate and Partunate Characteristics Physical and motor, & cognitive Development	2	Lecture	PPT& Black Board

2.2	Emotional, language and social development of Infancy	2	Chalk &Talk	Green Board
2.3	Characteristics, physical and social development of early childhood,	3	Chalk & Talk	Black Board
2.4	Characteristics, emotional and cognitive development of early childhood.	3	Chalk & Talk	LCD &White board
2.5	Characteristics, physical, and social development of late child hood.	3	Chalk & Talk	LCD & Smart Board
2.6	Characteristics, emotional development, cognitive and language development during late child hood. stages.	2	Lecture	PPT & White board
2.7	Children's play – meaning, types. Importance of children's play	2	Lecture	PPT& Black Board
2.8	Parental disciplinary Techniques–merits and demerits.	2	Lecture	Google classroom
2.9	Analysis of various play techniques.	1	Demonstrati on	
UNIT -3 DEVELOPMENTAL STAGES (Adolescence) (15HRS.)				
3.1	Adolescence Physical and Motor development	2	Chalk & Talk	Black Board
3.2	Cognitive development	2	Lecture	PPT& Black Board
3.3	Emotional and Social	2	Chalk &	LCD &

	development		Talk	Smart Board
3.4	Language development and Problems	3	Chalk & Talk	Black Board
3.5	Problems of Adolescence	2	Chalk & Talk	Smart Board
3.6	Juvenile Delinquency causes	2	Chalk & Talk	Smart Board
3.7	Juvenile Delinquency causes and prevention	1	Chalk & Talk	Smart Board
3.8	Sociometric Study of Adolescence	1	Discussion	
UNIT -4 DEVELOPMENTAL STAGES (Adulthood- Old Age) (10HRS.)				
4.1	Middle Adulthood-Characteristics and developmental tasks, Changes in Physical characteristics.	2	Lecture	Smart Board
4.2	Changes in Cognitive, Social and Emotional characteristics,	2	Chalk & Talk	LCD
4.3	vocational adjustments	2	Lecture	PPT & White board
4.4	Old age-Characteristics of old age, physical changes,	1	Lecture	Smart Board
4.5	Psychological changes.	1	Lecture	Black Board
4.6	Place of the aged in Indian Society	1		
4.7	Problems associated with Old Age -Survey.	1	Chalk & Talk	LCD
UNIT -5 Exceptional Children (10HRS.)				
5.1	Exceptional Children Introduction to Children with Special Needs Identification	2	Lecture	Green Board

	&Educational Rehabilitation			Charts
5.2	Gifted children	1	Chalk & Talk	Green Board
5.3	Orthopedically challenged	1	Lecture	PPT & White board
5.4	Mental retardation,	1	Chalk & Talk	LCD
5.5	Mentally retarded	1	Chalk & Talk	Smart Board
5.6	Hearing impaired	1	Chalk & Talk	Smart Board
5.7	Visually handicapped	1	Chalk & Talk	Smart Board
5.8	Learning disability	1	Chalk & Talk	Smart Board
5.9	Practical- Visit to an institution for exceptional children	1	Chalk & Talk	Smart Board

CIA	
Scholastic	23
Non-Scholastic	2
	25

EVALUATION PATTERN

SCHOLASTIC				NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
15		3	5	2	25	75	100

UG CIA Components

		Nos		
C1	- Test (CIA 1)	1**	-	15 Mks
C2	- Test (CIA 2)	1**	-	15 Mks
C3	- Assignment	1	-	3 Mks
C4	- Quiz	2 *	-	5 Mks
C5	- Attendance		-	2 Mks

**** Average of C1 and C2 will be taken.**

***The best out of two will be taken into account**

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Describe the meaning and principles of growth & development and prenatal development	K1, K2	PSO11
CO 2	Explain developmental aspects during infancy, early and late childhood.	K1, K2	PSO13
CO 3	Evaluate developmental aspects during adolescence.	K1, K3	PSO11 and 13
CO 4	Identify the developmental tasks during adulthood and old age.	K2, K3	PSO12 and13

CO 5	Introduction Children with Special Needs and identification & Educational Rehabilitation	K4, K2	PSO12

Mapping of COs with PSOs

CO/ PSO	PS O1	PS O2	PSO 3	PS O4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO1 2
CO1	1	1	1	1	1	1	1	1	1	1	3	1
CO2	1	1	1	1	1	1	1	1	1	1	3	1
CO3	1	1	1	1	1	1	1	1	1	1	3	1
CO4	1	1	1	1	1	1	1	1	1	1	1	3
CO5	1	1	1	1	1	1	1	1	1	1	1	3
CO/ PSO	PS O1 3	PS O1 4	PSO 15	PS O1 6	PSO 17	PSO1 8	PSO 19	PSO 20	PSO 21	PSO 22	PSO 23	

CO1	3	1	1	1	1	1	1	1	1	1	1	
CO2	3	1	1	1	1	1	1	1	1	3	1	
CO3	3	1	1	1	1	1	1	1	1	1	1	
CO4	3	1	1	1	1	1	1	1	1	1	1	
CO5	1	1	1	1	1	1	1	1	1	1	1	

Mapping of COs with Pos

CO/ PSO	PO1	PO2	PO3	PO4
CO1	1	3	1	1
CO2	1	2	1	1
CO3	1	1	1	1
CO4	1	3	1	3
CO5	2	2		3

Note: Strongly Correlated – 3 " Moderately Correlated – 2

" Weakly Correlated - 1

COURSE DESIGNER:

Staff Name: Dr.S.Santhi

Forwarded By



(Dr.S.Santhi)

I B.Sc. HOMESCIENCE WITH FOOD BIOTECHNOLOGY

SEMESTER –I

(For those who joined in 2023 onwards)

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGO RY	HRS/WEEK	CREDITS
UG-UAHS	23N1CC2	Human Development	Practical	4	5

COURSE DESCRIPTION

The course provides a detailed insight on the basic developmental changes in different stages.

COURSE OBJECTIVES

Describe the developmental changes in different stages of life.

Use the different methods of child study.

Analyze the social development of adolescence

Identify the prevalence of Juvenile Delinquency locally.

Discuss the problems and characteristics of old age and exceptional children.

UNIT-I Developmental Changes

[12 Hrs]

Preparation of case study - observing various development-physical, motor, cognitive, creative, social, emotional, and intellectual development of a particular child.

UNIT-II Activities For PreSchool

[12 Hrs]

Planning activities for preschool programme – stories with suitable aids, rhymes, science experiments, indoor and outdoor games.

Visit to a preschool.

[12 Hrs]

UNIT-III Equipment

Socio - metric study of early adolescents.

Construction of low-cost play equipment

[12 Hrs]

UNIT-IV Old Age Problems

Survey on problems of old age.

UNIT-V Visit to an Institution

[12 Hrs]

Visit to an institution for exceptional children.

A survey on Juvenile Delinquency prevalence

REFERENCES:

TEXT BOOKS

- 1.Hurlock E.B.,(1972).Child Development,New York:McGrawHill Book company.
- 2.Hurlock, E.B.,(1995):Developmental Psychology-
A Life Span Approach,5th (Ed.)New York:McGraw Hill Book Co.
- 3..Nanda V.K., (1998): Principles of Child Development, New Delhi:
Anmol Publications Pvt. Ltd.
- 4.Rajammal P. Devadas and Jaya N. Muthu (2002). A Textbook of Child Development, New Delhi:
Macmillan Publishers.
- 5.Singh, A. (2015). Foundations of Human Development: A Life Span Approach. New Delhi:
Orient Black Swan.
- 6.Suriakanthi A.,(1997).Child Development–An Introduction,Tamil Nadu:Kavitha Publishers

REFERENCE BOOKS

Open Educational Resources:

1. http://www.wbnsou.ac.in/online_services/SLM/BED/SEM-01_A1.pdf
- 2.<https://ncert.nic.in/textbook/pdf/kepy104.pdf>
- 3.<https://egyankosh.ac.in/bitstream/123456789/17134/1/Unit-3.pdf>
- https://www.cukashmir.ac.in/departmentsdocs_16/Growth%20&%20Development

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 [12 Hrs]				
1.1	Preparation of case study.	4	Discussion	.
1.2	observing various development-physical, motor, cognitive, creative	4	Discussion	
1.3	social, emotional, and intellectual development of a particular child	4	Discussion	
UNIT -2 [12 Hrs]				
2.1	Planning activities for preschool programme	2	Lecture	Green Board Charts
2.2	stories with suitable aids, rhymes, science experiments	4	Chalk & Talk	Green Board
2.3	indoor and outdoor games	4	Discussion	Black Board
2.4	Visit to preschool	3	Demonstration	Charts
UNIT -3 [12 Hrs]				
3.1	Socio –metric study of early adolescents	4	Discussion	Green Board Charts
3.2	Construction of low cost equipment	8	Discussion	Green Board

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Explain developmental aspects during infancy, early and late childhood	K1, K4	PSO1
CO 2	Elaborate on activities of preschool.	K1, K2	PSO1, PSO2
CO 3	Describe the various play equipment.	K1, K3, K4	PSO1
CO 4	Outline the problems of old age.	K2, K4	PSO1
CO 5	Trace the growth of exceptional children.	K2, K4	PSO1

Mapping of COs with PSOs

CO/PSO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	3	2	2	3	2	2
CO2	3	3	2	3	2	2
CO3	3	3	3	3	2	2
CO4	3	3	2	3	2	2
CO5	3	3	2	3	2	2

Weightage of course contributed to each PSO	15	14	11	15	10	10
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Note: Strongly Correlated – 3, Moderately Correlated – 2, Weakly Correlated -1

COURSE DESIGNER:

Staff Name: Dr. S.Santhi

Forwarded By



(Dr.S.Santhi)

I B.Sc. HOME SCIENCE WITH FOOD BIO TECHNOLOGY

SEMESTER –I

For those who joined in 2023 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGOR Y	HRS/WEEK	CREDIT S
UAHS	23N1GE1	FOOD, NUTRITION AND HEALTH	Elective	3	3

COURSE DESCRIPTION

This course helps to understand the basic concepts of balanced diet for people of different ages besides focusing on the consequences of malnutrition and the deficiency diseases and the diseases caused due to poor hygiene.

COURSE OBJECTIVES

- To understand the components of health, nutrition and deficiency diseases of various nutrients
- To learn the menu planning methods for family members.
- To learn the clinical aspects of disease conditions and diet therapy.

UNITS

Unit I: Nutrition and dietary nutrients: [12 Hrs]

Basic concepts of Food: Components and nutrients. Concept of balanced diet, nutrient requirements and dietary pattern for different groups viz., adults, pregnant and nursing mothers, infants, school children, adolescents and elderly people.

Unit II: Macro nutrients and micronutrients: [12 Hrs]

Macronutrients. Carbohydrates, Lipids, Proteins- Definition, Classification, their dietary source and role. Micro nutrients. Vitamins- Water-soluble and Fat-soluble vitamins- their sources and importance. Important minerals viz., Iron, Calcium, Phosphorus, Iodine, Selenium and Zinc: their biological functions.

Unit III: Malnutrition and nutrient deficiency diseases: [12 Hrs]

Definition and concept of health: Common nutritional deficiency diseases- Protein Malnutrition (e.g., Kwashiorkor and Marasmus), Vitamin A deficiency, Iron deficiency and Iodine deficiency disorders- their symptoms, treatment, prevention and government initiatives.

Unit IV: Life style dependent diseases [12 Hrs]

Life style dependent diseases- hypertension, diabetes mellitus, and obesity their causes and

prevention. Social health problems- smoking, alcoholism, narcotics. Acquired Immuno Deficiency Syndrome (AIDS): causes, treatment and prevention.

Unit V: Diseases caused by microorganisms: [12 Hrs]

Food hygiene: Potable water- sources and methods of purification at domestic level. Food and Water-borne infections: Bacterial diseases: cholera, typhoid fever - viral diseases: Hepatitis, Poliomyelitis - Protozoan diseases: amoebiasis, giardiasis - Parasitic diseases: taeniasis and ascariasis their transmission, causative agent, sources of infection, symptoms and prevention. Causes of food spoilage and its prevention.

BOOK REFERENCES:

1. Antia F.P. (1989) *Nutrition Dietetics*, Oxford University Press
2. Mudambi, S.R. and Rajagopal, M.V. (2007). *Fundamentals of Foods, Nutrition and Diet Therapy*; Fifth Ed;; New Age International Publishers.
3. Srilakshmi B (2012) *Dietetics*, New Age International (P) Ltd.
4. Swaminathan M (1988) *Advanced textbook on Food and Nutrition*, Vol I and Vol II, The Bangalore Printing and Publishing Co., Ltd. Bamji, M.S.; Rao, N.P. and Reddy, V. (2009). *Text Book of Human Nutrition*; Oxford & IBH Publishing Co. Pvt Ltd.
1. Lakra, P. and Singh M.D. (2008). *Textbook of Nutrition and Health*; First Ed; Academic Excellence.
2. Gibney, M.J. et al. (2004). *Public Health Nutrition*; Blackwell Publishing.

JOURNAL REFERENCES:

1. The Indian Journal of Nutrition & Dietetics.
2. Clinical Journal of Nutrition & Dietetics

OPEN EDUCATIONAL RESOURCES:

1. <https://open.umn.edu/opentextbooks/textbooks/622>
2. <https://pressbooks.oer.hawaii.edu/humannutrition/>
3. https://en.wikibooks.org/wiki/Fundamentals_of_Human_Nutrition
4. <https://www.youtube.com/watch?v=sorIaN6vRBI>
5. <https://oer.galileo.usg.edu/cgi/viewcontent.cgi?article=1006&context=health-textbooks>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 Nutrition and dietary nutrients: [12 Hrs]				
1.1	Basic concepts of Food: Components and	4	Lecture	PPT

	nutrients. Concept of balanced diet,			
1.2	Nutrient requirements and dietary pattern for different groups viz., adults, pregnant and nursing mothers	5	Chalk & Talk	Black Board
1.3	Infants, school children, adolescents and elderly people	3	Chalk & Talk	Black Board
UNIT -2 Macro nutrients and micronutrients [12 Hrs] ..				
2.1	Macronutrients. Carbohydrates, Lipids, Proteins- Definition, Classification, their dietary source and role	4	Lecture	PPT
2.2	Micronutrients. Vitamins - Water-soluble and Fat-soluble vitamins- their sources and importance	4	Chalk & Talk	Black Board
2.3	Important minerals viz., Iron, Calcium, Phosphorus, Iodine, Selenium and Zinc: their biological functions	4	Lecture	PPT
UNIT -3 Malnutrition and nutrient deficiency diseases: [12 Hrs]				
3.1	Definition and concept of health: Common nutritional deficiency diseases	2	Lecture	PPT
3.2	Protein Malnutrition (e.g., Kwashiorkor and Marasmus)	3	Chalk & Talk	Black Board
3.3	Vitamin A deficiency- their symptoms, treatment, prevention and government initiatives	3	Chalk & Talk	Black Board

3.4	Iron deficiency - their symptoms, treatment, prevention and government initiatives	2	Lecture	PPT
3.5	Iodine deficiency disorders- their symptoms, treatment, prevention and government initiatives	2	Chalk & Talk	Black Board
UNIT -4 Life style dependent diseases [12 Hrs]				
4.1	hypertension, diabetes mellitus, and obesity their causes and prevention	4	Lecture	PPT
4.2	Social health problems- smoking, alcoholism, narcotics	4	Lecture	PPT
4.3	AcquiredImmuno Deficiency Syndrome (AIDS): causes, treatment and prevention	4	Chalk & Talk	Black Board
UNIT -5 Diseases caused by microorganisms [12 Hrs]				
5.1	Food hygiene: Potable water- sources and methods of purification at domestic level.	4	Chalk & Talk	Black Board
5.2	Bacterial diseases: cholera, typhoid fever - viral diseases: Hepatitis, Poliomyelitis	4	Chalk & Talk	Black Board
5.3	Protozoan diseases: amoebiasis, giardiasis - Parasitic diseases: taeniasis and ascariasis. Causes of food spoilage and its prevention	4	Lecture	PPT & White board

CIA	
Scholastic	23

Non Scholastic	2
	25

EVALUATION PATTERN

SCHOLASTIC				NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
15		3	5	2	25	75	100

UG CIA Components

		Nos	
C1	- Test (CIA 1)	1**	- 15 Mks
C2	- Test (CIA 2)	1**	- 15 Mks
C3	- Assignment	1	- 3 Mks
C4	- Quiz	2 *	- 5 Mks
C5	- Attendance		- 2 Mks

**** Average of C1 and C2 will be taken.**

***The best out of two will be taken into account**

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Describe different nutrition terms and determine the importance of	K2	PSO2

	nutrition in the different stages of lifespan.		
CO 2	Explain the role of macro and micronutrients in human nutrition.	K2	PSO2
CO 3	Estimate the functions and deficiency effects of macro and micronutrients.	K3	PSO2
CO 4	Analyze the principles of diet therapy in the management of life style dependent diseases.	K3	PSO3
CO 5	Determine the prevention and treatment of diseases caused by microorganisms	K4	PSO3

Mapping of COs with PSOs

CO / PSO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12	PSO 13	PSO 14	PSO 15
CO1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1
CO3	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1
CO4	1	2	3	1	1	1	1	1	1	1	1	1	1	1	1
CO5	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1

Mapping of COs with Pos

CO/ PSO	PO1	PO2	PO3	PO4
CO1	3	1	1	1
CO2	2	1	1	1
CO3	2	2	2	1
CO4	2	1	1	1
CO5	2	1	1	1

COURSE DESIGNER:

Mrs. D. Mouna

Forwarded By



(Dr.S.Santhi)

I.B. Sc. Home Science with Food Biotechnology
SEMESTER –I

For those who joined in 2023 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UG-UAHS	23N1GE 2	FOOD SCIENCE AND NUTRITION PRACTICAL	Practical	2	2

COURSE DESCRIPTION

This course provides culinary knowledge and imparts practical skills in food preparations.

COURSE OBJECTIVES

- To learn basic safety and sanitation practices related to food preparation.
- To practice accurate measuring techniques of the ingredients.
- To apply appropriate food preparation techniques in preparing recipes from different food groups.
- To identify and estimate sugars, protein and minerals in food samples.

UNITS

UNIT –I EXPERIMENTAL COOKERY AND PREPARATION OF RECIPES

(10 HRS.)

- Cereal cookery – Gelatinization, Dextrinization, cooking methods of rice, recipe preparations.
- Pulse cookery – Factors affecting cooking quality, recipe preparations.
- Vegetable cookery – Effect of cooking on pigments- Chlorophyll and Carotenoids, recipe preparation
- Fruit cookery – Factors affecting enzymatic browning, recipe preparations
- Milk & Egg cookery – Factors affecting cooking quality of egg, recipe preparations
- Fleshy foods cookery - recipe preparations

UNIT –II QUALITATIVE ANALYSIS OF MONOSACCHARIDE (10 HRS.)

Monosaccharide - Glucose, Fructose, Galactose

UNIT –III QUALITATIVE ANALYSIS OF DISACCHARIDES (10 HRS.)

Disaccharide - Sucrose, Lactose and Maltose

UNIT –IV QUALITATIVE ANALYSIS OF NUTRIENTS (5 HRS.)

- Protein
- Minerals

UNIT –V QUANTITATIVE ANALYSIS OF NUTRIENTS**(10 HRS.)**

- Reducing sugar
- Vitamin C

REFERENCES:

1. Thangam E. Philip (1995). *Modern Cookery*, Orient Longmans Limited, New Delhi.
2. Benion Marion (1980). *Introductory foods*, Macmillan, New York.
3. Fox B.A., Cameron A.G. (1982) *Food Science a Chemical Approach* Hodden and Stoughton Ltd., Great Britain.
4. Peckham G.C (1978) *Foundations of Food preparation* Macmillan Co, New York.

OPEN EDUCATIONAL RESOURCES:

1. <http://www.nin.res.in>
2. <http://www.cftri.res.in>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 EXPERIMENTAL COOKERY AND PREPARATION OF RECIPES				
1.1	Cereal cookery – Gelatinization, Dextrinization, cooking methods of rice, recipe preparations	2	Experimental cooking	Required ingredients and equipment
1.2	Pulse cookery – Factors affecting cooking quality, recipe preparations.	2	Experimental cooking	Required ingredients and equipment
1.3	Vegetable cookery – Effect of cooking on pigments- Chlorophyll and Carotenoids, recipe preparations	2	Experimental cooking	Required ingredients and equipment
1.4	Fruit cookery – Factors affecting enzymatic browning, recipe preparations	2	Experimental cooking	Required ingredients and equipment

1.5	Milk & Egg cookery –Factors affecting cooking quality of egg, recipe preparations Fleshy foods cookery - recipe preparations	2	Experimental cooking	Required ingredients and equipment
UNIT -2 QUALITATIVE ANALYSIS OF MONOSACCHARIDE				
2.1	Glucose	4	Lecture cum demonstration	Required chemicals and glasswares
2.2	Fructose	3	Lecture cum demonstration	Required chemicals and glasswares
2.3	Galactose	3	Lecture cum demonstration	Required chemicals and glasswares
UNIT -3 QUALITATIVE ANALYSIS OF DISACCHARIDES				
3.1	Sucrose	4	Lecture cum demonstration	Required chemicals and glass wares
3.2	Lactose	3	Lecture cum demonstration	Required chemicals and glass wares
3.3	Maltose	3	Lecture cum demonstration	Required chemicals and glass wares
UNIT -4 QUALITATIVE ANALYSIS OF NUTRIENTS				
4.1	Protein	3	Lecture cum demonstration	Required chemicals and glass wares
4.2	Minerals	2	Lecture cum demonstration	Required chemicals and glass wares
UNIT -5 QUANTITATIVE ANALYSIS OF NUTRIENTS				
5.1	Reducing sugar	5	Lecture cum demonstration	Required chemicals and glass wares
5.2	Vitamin C	5	Lecture cum demonstration	Required chemicals and glass wares

EVALUATION PATTERN

SCHOLASTIC				NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
10	10	10	5	5	40	60	100

C1 – Internal Test - 1

C2 – Internal Test - 2

C3– Model Practical Exam

C4 – Record

C5 – Non-Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Recall the principles of various cooking methods.	K1	PSO3
CO 2	Classify edible and non-edible portions of food stuffs	K2	PSO3
CO 3	Plan the preparation of recipes based on different food groups	K3, K4	PSO3
CO 4	Distinguish the factors affecting the food components during cooking process	K4	PSO3
CO 5	Identify sugars, protein and minerals present in food samples	K1, K3	PSO3
CO6	Explain the quantitative analysis of reducing sugar and ascorbic acid	K2, K3	PSO3

Mapping of COs with PSOs

CO/ PSO	PS O1	PS O2	PS O3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12
CO1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	1	1	1	1	1	1	1	1	1	1	1	1
CO3	1	1	1	1	1	1	1	1	1	1	1	1
CO4	1	1	1	1	1	1	1	1	1	1	1	1
CO5	1	1	1	1	1	1	1	1	1	1	1	1
CO/ PSO	PS O1 3	PS O1 4	PS O1 5	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO 22	PSO 23	
CO1	1	1	1	1	1	1	1	1	1	1	1	
CO2	1	1	1	1	1	1	1	1	1	3	1	
CO3	1	1	1	1	1	1	1	1	1	1	3	
CO4	1	1	1	1	1	1	1	1	1	1	1	
CO5	1	1	1	1	1	1	1	1	1	1	1	

Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	3	1	1	3
CO2	1	1	1	1
CO3	3	1	1	3
CO4	1	1	1	1
CO5	1	1	1	1

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2 ♦ Weakly Correlated -1

COURSE DESIGNER:

Mrs. C. Helen

Forwarded By



Dr. S. Santhi

I B.Sc. HOME SCIENCE WITH FOOD BIO TECHNOLOGY

SEMESTER –I

For those who joined in 2023 onwards

PROGRAM ME CODE	COURS E CODE	COURS E TITLE	CATEG ORY	HRS/W EEK	CREDITS
UG-UAHS	23NISE 1	Women' s Health & Wellnes s	Lecture	2	2

COURSE DESCRIPTION

This course helps to understand the basic concepts on health, nutrition and deficiency diseases of various nutrients

COURSE OBJECTIVES

To understand the diverse factors that has a bearing on women's health.

To Highlight different aspects of health that contributes to a good lifestyle for women across the globe.

UNITS

UNIT –I **NUTRITION AND HEALTH**

(15 HRS.)

Nutrition for Women - Dietary Guidelines for a healthy lifestyle, Current concepts pertaining to Balanced Diets, Nutrient requirements for young and older women with special focus on Protein, Iron, Vitamin D and Calcium, Factors affecting nutrient intake in women- Socioeconomic, Environmental conditions, Health conditions; Consequences of Eating disorders in young women.

UNIT –II **PHYSICAL HEALTH**

(15 HRS.)

Physical Health - Significance of Body weight and Body composition parameters, Benefits of Aerobic, Flexibility and Strength training exercises- on General health, Bone health, and risks associated with NCD's.

UNIT –III **REPRODUCTIVE HEALTH**

(10 HRS.)

Reproductive Health - Menstrual Health, Pregnancy and Lactation, Pre- and post-menopausal concerns- preventive measures, sexually transmitted diseases- an overview.

UNIT –IV **MENTAL HEALTH**

(10 HRS.)

Mental Health - Common mental health problems - Trends and issues relating to women, Depression, Anxiety and coping with Stress, Strategies to improve mental health- learning new skills and hobbies,

Relaxation techniques such as yoga and meditation..

UNIT –V SOCIAL HEALTH

(10 HRS.)

Social Health - Balancing home and career, strengthening relationships, enhancing communication skills and Personality Development, technological advancements and its impact, Dealing with domestic violence, and harassment issues.

REFERENCES:

TEXT BOOKS

1. Srilakshmi.B.(2010). *Food Science*, New age International Pvt.Ltd., New Delhi.
2. Swaminathan. M (2010), *Handbook of Food and Nutrition*, The Bangalore Press, Bangalore.

REFERENCE BOOKS:

2. Lanza di Scalea T, Matthews KA, Avis NE, et al. (2012) Role stress, role reward, and
3. mental health in a multiethnic sample of midlife women: results from the Study of
4. Women's Health Across the Nation (SWAN). *J Women's Health*; 21(5):481-489.
5. Mahan K and Sylvia E. Stump (2000) *Krause's Food Nutrition and Diet Therapy*,
6. Saunders, USA.. Minkin M. J. and Wright C. V. (2003) *The Yale Guide to Women's Reproductive*
7. *Health from menarche to menopause*. Yale University Press, London
8. 4.Sizer F. S. and Whitney E. (2014) *Nutrition: Concepts & Controversies*. 13 th Ed.,
9. Wadsworth, Cengage Learning, USA.. Sperry L. (2016) *Mental Health and Mental Disorders*. ABC-Clio, Californi
- Williams M.H., Anderson D.E., Rawson E.S. (2013) *Nutrition for Health, Fitness and Sport*. McGraw Hill, New York.. Wrzus C, Hänel M, Wagner J, Neyer FJ. (2013) Social network changes and life events across the life span: a meta-analysis. *Psychol Bull*;139(1):53-80..

OPEN EDUCATIONAL REFERENCES:

https://www.nhp.gov.in/social-health_pg
<https://ncert.nic.in/textbook/pdf/jehp112.pdf>
<https://ncert.nic.in/textbook/pdf/iehp113.pdf>
<https://ncert.nic.in/textbook/pdf/lebo104.pdf>
<https://www.nih.gov/health-information/social-wellness-toolkit>
<https://www.cdc.gov/reproductivehealth/womensrh/index.htm>
<https://www.nimh.nih.gov/health/topics/caring-for-your-mental-health>
<https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>

<https://www.cdc.gov/mentalhealth/learn/index.htm>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 NUTRITION AND HEALTH (15 HRS.)				
1.1	Definition – Health, Nutrition, Malnutrition, Adequate Nutrition	3	Chalk & Talk	Black Board
1.2	Balanced Diet, Nutritional status	4	Lecture	PPT
1.3	Definition of Fitness, Components of Fitness	4	Lecture	PPT
1.4	Types of physical activity and their energy consumption level	4	Lecture	Videos
UNIT -2 PHYSICAL HEALTH (15 HRS.)				
2.1	Physical Health - Significance of Body weight and Body composition Parameters.	5	Chalk & Talk	Black Board
2.2	Benefits of Aerobic, Flexibility and Strength training exercises- on General	5	Lecture	PPT
2.3	Bone health, and risks associated with NCD's	5	Lecture	PPT
UNIT -3 REPRODUCTIVE HEALTH HEALTH(10 HRS.)				
3.1	Reproductive Health - Menstrual Health, Pregnancy and Lactation,	4	Lecture	PPT
3.2	Pre- and post-menopausal concerns- preventive measures	4	Lecture	PPT
3.3	Sexually transmitted	2	Lecture	PPT

	diseases- an overview			
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UNIT -4 MENTAL HEALTH (12 HRS.)

4.1	Mental Health - Common mental health problems - ,	4	Chalk & Talk	Black Board
4.2	Trends and issues relating to women, Depression, Anxiety and coping with Stress,	4	Lecture	PPT
4.3	Strategies to improve mental health- learning new skills and hobbies, Relaxation techniques such as yoga and meditation	4	Chalk & Talk	Black Board

UNIT -5 SOCIAL HEALTH(10 HRS.)

5.1	Social Health - Balancing home and career, strengthening relationships.	4	Chalk & Talk	Black Board
5.2	Enhancing communication skills and Personality	3	Lecture	PPT
5.3	Development, technological advancements and its impact, Dealing with domestic violence, and harassment issues	3	Demonstration	PPT

CIA	
Scholastic	23
Non-Scholastic	2

	25
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EVALUATION PATTERN

SCHOLASTIC				NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
15		3	5	2	25	75	100

UG CIA Components

		Nos		
C1	- Test (CIA 1)	1**	-	15 Mks
C2	- Test (CIA 2)	1**	-	15 Mks
C3	- Assignment	1	-	3 Mks
C4	- Quiz	2 *	-	5 Mks
C5	- Attendance		-	2 Mks

**** Average of C1 and C2 will be taken.**

***The best out of two will be taken into account**

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Define the terminologies related to nutrition and health	K1	PSO3

CO 2	Describe the benefits of exercise	K2	PSO3
CO 3	Identify the problems of menstrual health	K1 & K3	PSO3
CO 4	Classify the mental health and strategies to improve mental health.	K2	PSO3
CO 5	Describe the social health and its relationship.	K3	PSO3

Mapping of COs with PSOs

CO/ PSO	PS O1	PS O2	PS O3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12
CO1	1	1	3	1	1	1	1	1	1	1	1	1
CO2	1	1	3	1	1	1	1	1	1	1	1	1
CO3	1	1	3	1	1	1	1	1	1	1	1	1
CO4	1	1	3	1	1	1	1	1	1	1	1	1
CO5	1	1	3	1	1	1	1	1	1	1	1	1
CO/ PSO	PS O1 3	PS O1 4	PS O1 5	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO 22	PSO 23	
CO1	1	1	1	1	1	1	1	1	1	1	1	
CO2	1	1	1	1	1	1	1	1	1	1	1	
CO3	1	1	1	1	1	1	1	1	1	1	1	
CO4	1	1	1	1	1	1	1	1	1	1	1	
CO5	1	1	1	1	1	1	1	1	1	1	1	

Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	2	2	2	2
CO2	2	2	2	2
CO3	2	2	2	2
CO4	2	2	2	2
CO5	1	1	1	1

Note: ♦ Strongly Correlated – **3** ♦ Moderately Correlated – **2** ♦ Weakly
Correlated -**1**

COURSE DESIGNER

Staff Name: Dr.C.Priyalatha

Forwarded By



(Dr.S.Santhi)

I B.Sc. – HOME SCIENCE WITH FOOD BIOTECHNOLOGY
SEMESTER –I

For those who joined in 2023 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	23N1FC	FUNDAMENTALS OF HOME SCIENCE	Lecture	2	2

COURSE DESCRIPTION

This course enlightens the students on the concept scope and role of Home Science in Nation building.

COURSE OBJECTIVES

- Understand the concept, scope and philosophy of Home Science.
- Appreciate the role of Home Science in Nation building
- The developmental tasks of different stages
- Familiarize with the growth process from conception to confinement.
- Know the development of an individual from infancy to old age.

UNITS

UNIT –I BASICS OF HOME SCIENCE (6HRS)

Definition, meaning, areas of specialization and scope of Home Science. -

Philosophy of Home Science. - Development of Home-Science as a discipline. Home Science education at various levels, Scope of Home Science in Higher secondary education ,colleges and universities

UNIT –II Linkages of Home Science (6HRS)

Linkages of Home Science with other disciplines -Psychology, Sociology, Economics, Interior Decoration and agriculture, Catering and Hotel Management, Biotechnology, Microbiology.

UNIT –III Home Science (6HRS)

The Art and Science of Managing Home. Family and Home Science, Ethics in daily life, Family, health and security

UNIT –IV. Carrier Opportunities in Home Science (6HRS)

Nutrition, Dietetics, Food Preservation, Housing and Resource Management. - Textiles and Clothing, Interior Design, Human Development Pre-School Education and Extension.

UNIT –V Home Science and National Development. (6HRS)

Role of Home Science in National Development, Home Science at National and at Global level-action Programs and Organization

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT 1 –BASICS OF HOME SCIENCE (6HRS)				
1.1	Definition, meaning, areas of specialization and scope of Home Science.	2	Chalk & Talk	Black Board
1.2	Philosophy of Home Science. - Development of Home-Science as a discipline	2	Chalk & Talk	LCD
1.3	Home Science education at various levels	1	Lecture	PPT & White board
1.4	Scope of Home Science in Higher secondary education ,colleges and universities	1	Lecture	Smart Board
UNIT -2 LINKAGES OF HOME SCIENCE(6HRS)				

2.1	Introduction	1	Lecture	LCD
2.2	Linkages of Home Science with other disciplines - Psychology, Sociology, Economics, Biotechnology, Microbiology	2	Chalk & Talk	LCD
2.3	Interior Decoration and agriculture, Catering and Hotel Management,	2	Lecture	PPT & White board
2.4	Biotechnology, Microbiology.	1	Discussion	PPT

UNIT -3 Home Science(6HRS)

3.1	The Art and Science of Managing Home	2	Lecture	Black board
3.2	Home Family and Home Science	2	Lecture	LCD
3.3	Ethics in daily life, Family, health and security	2	Chalk & Talk	LCD

UNIT -4 CARRIER OPPORTUNITIES IN HOME SCIENCE(6HRS)

4.1	Nutrition, Dietetics, Food Preservation,	2	Lecture	LCD
4.2	Housing. - Textiles and Clothing,Interior Design	2	Chalk & Talk	LCD
4.3	Pre-School Education and Extension	2	Lecture	PPT & White board

UNIT -5 HOME SCIENCE IN NATIONAL DEVELOPMENT(6HRS)

5.1	Role of Home Science	2	Lecture	LCD
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	in National Development.			
5.2	Home Science at National and at Global level	2	Chalk & Talk	LCD
5.3	Action Programs and Organization	2	Lecture	PPT & White board

CIA	
Scholastic	23
Non Scholastic	2
	25

EVALUATION PATTERN

SCHOLASTIC				NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
15		3	5	2	25	75	100

UG CIA Components

		Nos	
C1	- Test (CIA 1)	1**	- 15 Mks
C2	- Test (CIA 2)	1**	- 15 Mks
C3	- Assignment	1	- 3 Mks
C4	- Quiz	2 *	- 5 Mks
C5	- Attendance		- 2 Mks

**** Average of C1 and C2 will be taken.**

***The best out of two will be taken into account**

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Understand the concept, scope and philosophy of Home Science.	K1	PSO22
CO 2	Appreciate the role of Home Science in Nation building.	K2, K3	PSO22
CO 3	The developmental tasks of different stages.	K1,K2	PSO22
CO 4	Understand the linkages of Home Science.	K2, K4	PSO22
CO 5	Choose the carrier opportunities in Home Science.	K3, K4	PSO22

Mapping of COs with PSOs

[illegible]

Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	3	1	1	1
CO2	1	1	1	1
CO3	1	1	1	1
CO4	1	1	1	3
CO5	1	1	1	3

Note: ♦ Strongly Correlated – **3** ♦ Moderately Correlated – **2** ♦ Weakly Correlated – **1**

COURSE DESIGNER:
Dr. C. Priyalatha

Forwarded By



(Dr.S.Santhi)

I B.Sc. Home Science with Food Biotechnology

SEMESTER –II

For those who joined in 2023 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UG-UAHS	23N2CC3	FOOD SCIENCE And NUTRITION	Lecture	6	5

COURSE DESCRIPTION:

The course emphasizes on the composition of foods and the changes that occur during processing.

COURSE OBJECTIVES:

- Gain knowledge on the nutritive value of different foods and understand the classification of foods.
- Develop skills to prepare acceptable foods with regards to appearance palatability and nutritive value

UNITS

UNIT –I NUTRIENT CONTENT OF FOODS AND COOKING METHODS

(12 HRS.)

Classification of foods according to nutrient content. Food groups for balanced diets. Study of the different cooking methods- dry heat, moist and combination methods, solar cooking, microwave cooking-merits and demerits, dishes prepared by these methods.

UNIT –II CEREALS, MILLETS, PULSES, LEGUMES AND NUTS (12 HRS.)

Classification of Cereals, Structure, nutrient composition, storage, processing, milling, parboiling, scientific methods of preparation and cooking, acceptability and palatability of rice, wheat, maize and millets Cooking of starches-Dextrinization and gelatinization,retrogradation and resistant starch.

Pulses legumes Types, nutritivevalue,methodsofcooking,effectofsoakingandgermination,judicious combination of cereals and pulses- complementary effect, soya beans, fava beans and kesari dhal-methods to inactivate /remove toxins; storage.

Nuts-types, composition, market forms, roasting, steaming of nuts, nuts butters; uses in sweets, baking, and confectionery; Storage.

Oilseeds-types, methods of processing, uses and shelf life

UNIT –III VEGETABLES AND FRUITS

(12 HRS.)

Vegetables:

Classification, nutritive value, effect of cooking on colour, texture, flavour, appearance and nutritive value, Purchase - storage and preservation

Fruits:

Classification, nutritive value, changes during ripening, enzymatic browning, uses preservation.

UNIT –IV FLESH FOODS, EGGS AND MILK (12 HRS.)

Meats – structure, nutritive value, selection of meat, postmortem changes in meat, ageing, factors affecting tenderness of meat, methods of cooking and storage.

Poultry-types, nutritive value selection and cooking

Fish-classification, nutritive value, selection, storage, cooking and preservation

Eggs

Structure, nutritive value, methods of cooking, storage, preservation and uses in cookery; foam formation and factors affecting foam. formation

Milk and milk products

Nutritive value, kinds of milk, pasteurization, and homogenization, coagulation of milk, fermentation of milk; milk products - whole and skimmed milk, milk powders and yogurt, ghee, butter, cheese. Storage and preservation.

UNIT –V FATS AND OILS, SUGARS, FOOD ADJUNCTS AND BEVERAGES FATS AND OILS: (12 HRS.)

Types, sources-animal fats and vegetable fats, functions, processing-difference between cold pressed and regular cooking oils, hydrogenated fat, emulsification, rancidity, smoking point. Factors affecting absorption of oils while frying foods, harmful effects of reheated oils.

Sugars:

Types and market forms of sugars; stages of sugar cookery, crystallization, factors affecting crystallization, uses in confectionery.

Food adjuncts and food additives

Spices and condiments: classification, source, use in food preparation, Leavening agents, stabilizers, thickeners, anticaking agents, enzymes, shortenings, stabilizers, flavouring agents, colouring agents, sweeteners-use and abuse.

Food adulteration

Definition, common adulterants in food

Beverages

Classification-fruit based beverages; milk-based beverages nutritive. Value and uses, alcoholic beverages, coffee, tea and cocoa, malted.

beverages. Sources, manufacture, processing, and service; methods of preparation of coffee and tea.

REFERENCES:

1. Manay, S. and Shadaksharaswamy, M. (1987) Foods Facts and Principles. New Age International Publishers, New Delhi.
2. Peckham, G.C. and Freeland-Graves, J.H. (1979) Foundations of Food Preparation, 4th edition, Macmillan Publishing Co. Inc., New York.

3. Shewfelt R.L. (2015) Introducing Food Science. CRC Press, Taylor and Francis Group. Boca Raton
4. Srilakshmi B (2019) Food Science, (7th Ed.) New Age International Publishers
5. Thangam E. Philip, Modern Cookery for Teaching and the Trade Volume - 1&2 (6th Revised Edition), Orient Black
6. Vaclavik, V.A. and Elizabeth, W.C. (2013) Essentials of Food Science. 2nd ed. Springer Publication, New Delhi

e-Learning resources

- <https://ia801408.us.archive.org/20/items/textbookoffoodsc0000khad/textbookoffoodsc0000khad.pdf>
- <https://egyankosh.ac.in/handle/123456789/32947> <https://unacademy.com/content/kerala-psc/study-material/basic-food-science/>

OPEN EDUCATIONAL RESOURCES:

<http://www.nin.res.in>
<http://www.cftri.res.in>
<http://www.iifpt.edu.in>
<http://www.afsti.org>
<http://www.icfost.org>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 NUTRIENT CONTENT OF FOODS AND COOKING METHODS (12 HRS.)				
1.1	Classification of foods according to nutrient content. Study of the different cooking methods- dry heat, moist and combination methods, solar cooking, microwave cooking-merits	2	Chalk & Talk	Black Board

	and demerits, dishes prepared by these methods.			
1.2	Food groups for balanced diets.	2	Chalk & Talk	Black Board
1.3	Methods of cooking – merits and demerits of moist heat methods and dry heat methods	4	Lecture	PPT
1.4	Solar and microwave cooking.	2	Discussion	Videos
1.5	Dishes prepared by these methods	2	Lecture	Videos
UNIT -2 CEREALS, MILLETS, PULSES, LEGUMES AND NUTS (12 HRS.)				
2.1	Classification of Cereals, Structure, nutrient composition, storage, processing, milling, parboiling.	2	Chalk & Talk	Black Board
2.2	Scientific methods of preparation and cooking, acceptability and palatability of rice, wheat, maize and millets	1	Lecture	PPT
2.3	Cooking of starches- Dextrinization and gelatinization, retrogradation and resistant starch.	3	Chalk & Talk	Black Board
2.4	Pulses and legumes Types, nutritive value,	2	Lecture	Smart Board

	methods of cooking, effect of soaking and germination, judicious combination of cereals and pulses- complementary effect, soya beans, fava beans and kesari dhal- methods to inactivate /remove toxins; storage.			
2.5	Nuts -types, composition, market forms, roasting, steaming of nuts, nuts butters; uses in sweets, baking, and confectionery; Storage.	2	Lecture	Videos
2.6	Oilseeds -types, methods of processing, uses and shelf life	2	Demonstration	Fruits, vegetables, needed apparatus
UNIT -3 MEAT, POULTRY & FISH (12 HRS.)				
3.1	Meat - Composition, nutritive value and its role in cookery	4	Lecture	PPT
3.2	Poultry, Fish - Composition, nutritive value and its role in cookery	4	Lecture	PPT
3.3	Fish - Composition, nutritive value and its role in cookery	4	Lecture	PPT
UNIT -4 EGG, MILK & MILK PRODUCTS (12 HRS.)				

4.1	Eggs - Structure and nutritive value – Role of egg in cookery	5	Chalk & Talk	Black Board
4.2	Milk and milk products: Nutritive value	4	Chalk & Talk	Black Board
4.3	Different types of milk and its products	3	Lecture	PPT
UNIT -5 SPICES, CONDIMENTS, NUTS, OILSEEDS & BEVERAGES (12 HRS.)				
5.1	Spices and condiments – use and abuses	5	Lecture	PPT
5.2	Nuts and oilseeds –their nutritive value and importance of the diet	4	Chalk & Talk	Black Board
5.3	Beverages– Classification and its role in daily diet.	3	Discussion	Videos

CIA	
Scholastic	23
Non Scholastic	2
	25

EVALUATION PATTERN

SCHOLASTIC				NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
15		3	5	2	25	75	100

UG CIA Components

		Nos		
C1	- Test (CIA 1)	1**	-	15 Mks
C2	- Test (CIA 2)	1**	-	15 Mks
C3	- Assignment	1	-	3 Mks
C4	- Quiz	2 *	-	5 Mks
C5	- Attendance		-	2 Mks

**** Average of C1 and C2 will be taken.**

***The best out of two will be taken into account**

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES
CO 1	Define the basic concept and recent trends in food science and nutrition
CO 2	Classify the cooking methods
CO 3	Describe the composition of food groups
CO 4	Choose the suitable cooking methods for various food groups
CO 5	Identify the role of foods in Indian cookery

Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	3	1	1	1
CO2	1	1	1	1
CO3	1	1	1	1
CO4	1	1	1	3
CO5	1	1	1	3

COURSE DESIGNER:
Dr.C.Helen

Forwarded By



(Dr.S.Santhi)

I. B.Sc. Home Science with Food Biotechnology
SEMESTER –II

For those who joined in 2023 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGOR Y	HRS/WEEK	CREDITS
UG-UAHS	23N2CC4	BASIC COOKERY PRACTICAL	Practical	4	5

COURSE DESCRIPTION

This course provides culinary knowledge and imparts practical skills in food preparations.

COURSE OBJECTIVES

- To learn basic safety and sanitation practices related to food preparation.
- To practice accurate measuring techniques of the ingredients.
- To apply appropriate food preparation techniques in preparing recipes from different food groups.
- To identify and estimate sugars, protein and minerals in food samples.

UNITS

UNIT –I **INTRODUCTION TO BASIC COOKING SKILLS** (10 HRS.)

Introduction to different cooking methods,cooking terminology;equipment and techniques used for pre-preparation and for different cooking methods.

Methods of measuring and weighing liquids and dry ingredients. The use and care of simple kitchen equipment.

Introduction to food safety, sanitation and hygiene in the kitchen, Safe practices in handling knives, sharp instruments and materials at high temperature.

UNIT –II **CEREALS, MILLETS AND PULSES** (10 HRS.)

Cereals and Millets: Methods of combining fine and course cereal with Liquid(eg. Ragi porridge, ravaupma)

Method of cooking cereals and factors influencing texture and nutritive value-cooking rice by boiling and straining ,absorption method, steaming, pressure cooking, microwave cooking; Gelatinization and dextrinization

Preparationofrecipesusingrice-puttu,dosai,idli/idiappam,lemonrice,curd rice, coconut rice, fried rice, tamarind rice, tomato rice, mintpulao- a few

WheatandMilletpreparations-

Kesari,Phulka,poori,paratha,naan,ragiadaidai,samaicurdice,thinaiuppuma,-afew

Pulses:

Factors influencing texture, digestibility and nutritive value of whole gram/legumes and pulses-soaking, of sodab carbonate, addition of salt, water quality- hard and soft water, pressure cooking, boiling and straining.

Pulse preparations- Sundal, sambhar, sprouted green gram patchadi, Vadai, pongal, ompodi, green gram payasam, masala vadai, medhu vadai

UNIT –III **VEGETABLES AND FRUITS** (10 HRS.)

Vegetables: Basic cuts of vegetables-Slice and mince (onions) Shred(cabbage, spinach),dice(carrot),chop(tomato), grating(beetroot),and their uses in dishes. Changes in colour and texture of vegetables and nutritive value due to different methods of cooking, cooking medium and addition of acid/alkali.

Vegetable preparations–Poriyal, Aloo methi curry, vegetable cutlet, thoran, vegetable kurma, avial, keerai maseal, vegetable salad, vegetable soup, vegetable sandwich, kootu, mint chutney and carrot halwa.

Fruits:

Enzymaticbrowninginfruitsandmethodstopreventit.Fruitpreparations-stewed apple, banana fritters, fruit salad, fruit punch, fruit yoghurt and fruit smoothie, preserve/jam.

UNIT –IV EGGS, MILK AND MILK PRODUCTS, MEAT AND FISH: (5 HRS.)

Egg Cookery:

Boiling of eggs-hard and soft boiled eggs. Best method of boiling eggs. Prevention of Ferrous sulphide formation on the yolk. Poaching and frying. Coagulation of egg protein-stirred and baked custard

Egg preparations - egg curry, omelet, French toast, caramel custard (steamed), scrambled eggs and fried eggs- a few Factors affecting whipping quality of egg white- effect of salt, sugar, vinegar, fat and milk, type of container used and beaters, Stages of foam formation in whipped egg whites and their uses in cookery.

Milk and milk products

Curdling of milk using lime juice, butter milk, tomato juice,

Milk preparations

Cream of tomato soup, paneer masala, payasam, patchadi, thayir vadai, morkulumbu, basundhi, lassi, spiced buttermilk and baked macaroni and cheese.

Meat and Fish

Methods of tenderizing meat-Pounding, mincing addition of acids like curd/lime juice in marinade, addition proteolytic enzymes- raw papaya Effect of different methods of cooking on flavour, texture and appearance of meat and fish.

Meat preparations-mutton ball

curry, mutton vindaloo, mutton keema, liver fry, chicken spring roll, chicken sweet corn soup, chicken biryani. Sea food preparations- fish fry, fish moilee, fish cutlet, sweet and sour prawns.

UNIT –V SUGAR COOKERY, FATS AND OILS FOOD ADDITIVES AND RAISING AGENTS, SUGAR COOKERY (10 HRS.)

Stages of sugar cookery and uses. Preparation of sweets using different stages of sugar cookery

Fats and oils- Effect of temperature of oil on texture and palatability of foods-

Frying poor is at different temperatures

Smoking point of oil-bread cube test.

Emulsions-definition, Preparation of mayonnaise

Food additives and Raising agents

Role of MSG, sodium benzoate and KMS in food preparation and preservation, Natural versus synthetic preservatives, -Advantages and limitations Use of baking soda, baking powder, yeast in baking and food preparation-Prepare one dish with each of these

Uses of herbs and spices to enhance flavour.

REFERENCES:

1. Martland, R.E. and Welsby, D.A. (1980) Basic Cookery, Fundamental Recipes and Variations. William Heinemann Ltd., London.
2. Krishna Arora (2008) Theory of cookery, Frank Brothers & Co.,
3. Negi J (2013) Fundamentals of Culinary Art, S. Chand and Co.
4. Peckham, G.C. and Freeland-Graves, J.H. (1987) Foundation of food preparation. 4th ed. Macmillan Publishing Co, New York

5. Penfield MP and Ada Marie C (2012), Experimental Food Science, Academic Press, San Diego

e-Learning Resources:

- https://www.ihmnotes.in/assets/Docs/Books/Theory_of_Cookery.pdf
- <http://staffnew.uny.ac.id/upload/132318572/pendidikan/buku-esp.pdf>

OPEN EDUCATIONAL RESOURCES:

1. <http://www.nin.res.in>
2. <http://www.cftri.res.in>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 INTRODUCTION TO BASIC COOKING SKILLS (10 HRS.)				
1.1	Introduction to different cooking methods. Methods of measuring and weighing liquids and dry ingredients. The use and care of simple kitchen equipment.	3	Experimental cooking	Required ingredients and equipment
1.2	Cooking terminology; equipment and techniques used for pre-preparation and for different cooking methods.	3	Experimental cooking	Required ingredients and equipment
1.3	Safe practices in handling knives, sharp instruments and materials at high temperature.	4	Experimental cooking	Required ingredients and equipment

UNIT -2 CEREALS, MILLETS AND PULSES(10 HRS.)

2.1	<p>Cereals and Millets: Methods of combining fine and coarse cereal with Liquid (eg. Ragi porridge, rava upma)</p> <p>Method of cooking cereals and factors influencing texture and nutritive value - cooking rice by boiling and steaming, pressure cooking, microwave cooking; Gelatinization and dextrinization</p> <p>Preparation of recipes using rice - puttu, dosai, idli/idiappam, lemon rice, curd rice, coconut rice, fried rice, tamarind rice, tomato rice, mint pulao - a few</p> <p>Wheat and Millet preparations - Kesari, Phulka, poori, paratha, naan, ragi adai, samaicurdrice, thinai uppu ma</p>	4	Lecture cum demonstration	Required ingredients and equipment
2.2	<p>Pulses:</p> <p>Factors influencing texture, digestibility and nutritive value of whole gram/legumes and pulses -</p>	3	Lecture cum demonstration	Required ingredients and equipment

	soaking, addition of sodab carbonate, addition of salt, water quality- hard and soft water, pressure cooking, boiling and straining.			
2.3	Pulse preparations- Sundal, sambhar, sprouted green gram patchadi, Vadai, pongal, ompodi, green gram payasam, masala vadai, medhuvadai-a few	3	Lecture cum demonstration	Required ingredients and equipment

UNIT -3 VEGETABLES AND FRUITS (10 HRS.)

3.1	Vegetables: Basic cuts of vegetables-Slice and mince (onions) Shred(cabbage, spinach), dice(carrot), chop(tomato), grating(beetroot), and their uses in dishes. Changes in colour and texture of vegetables and nutritive value due to different methods of cooking, cooking medium and addition of acid/alkali.	4	Lecture cum demonstration	Required ingredients and equipment
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3.2	Vegetable preparations– Poriyal,Aloo methi curry,vegetablecutlet,thoran,vegetablekurma,avial,keeraimaseal,vegetablesalad,vegetablesoup,vegetablesandwich,kootu,mintchutneyand carrot halwa.	3	Lecture cum demonstration	Required ingredients and equipment
3.3	Fruits: Enzymaticbrowninginfruitsandmethodstopreventit.Fruitpreparations-stewed apple,bananafritters,fruitsalad,fruitpunch,fruityoghurtandfruit smoothie, preserve/jam.	3	Lecture cum demonstration	Required ingredients and equipment

UNIT -4 EGGS, MILK AND MILK PRODUCTS, MEAT AND FISH (5 HRS.)

4.1	Egg Cookery: Boiling of eggs-hard and soft boiled eggs. Best method of boiling eggs.Prevention of Ferrous sulphide formation on the yolk. Poaching and frying.Coagulation of egg protein-stirred and baked custard Egg preparations - egg curry, omelet, French	3	Lecture cum demonstration	Required ingredients and equipment
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	<p>toast, caramel custard (steamed), scrambled eggs and fried eggs- a few Factors affecting whipping quality of egg white –</p> <p>effect of salt, sugar, vinegar, fat and milk, type of container used and beaters, Stages of foam formation in whipped egg whites and their uses in cookery.</p> <p>Milk and milk products</p> <p>Curdling of milk using lime juice, buttermilk, tomato juice,</p> <p>Milk preparations</p> <p>Cream of tomato soup, paneer masala, payasam, patchadi, thayir vadai, morkulumbu, basundhi, lassi, spice buttermilk and baked macaroni and cheese.</p> <p>Meat and Fish</p> <p>Methods of tenderizing meat- Pounding, mincing addition of acids like curd/lime juice in marinade, addition of proteolytic enzymes- raw papaya Effect of different methods</p>			
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	of cooking on flavour, texture and appearance of meat and fish.			
4.2	Meat preparations- mutton ball curry, mutton vindaloo, mutton keema, liver fry, chicken spring roll, chicken sweet corn soup, chicken biriyani. Sea food preparations- fish fry, fish moilee, fish cutlet, sweet and sour prawns.	2	Lecture cum demonstration	Required ingredients and equipment

UNIT -5 SUGAR COOKERY, FATS AND OILS FOOD ADDITIVES AND RAISING AGENTS, SUGAR COOKERY (10 HRS.)

5.1	<p>Stages of sugar cookery and uses. Preparation of sweets using different stages of sugar cookery</p> <p>Fats and oils- Effect of temperature on oil texture and palatability of foods- Frying poor is at different temperatures</p> <p>Smoking point of oil-bread cube test.</p> <p>Emulsions- definition, Preparation of mayonnaise</p> <p>Food additives and Raising agents</p>	5	Lecture cum demonstration	Required ingredients and equipment
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5.2	<p>Role of MSG, sodium benzoate and KMS in food preparation and preservation. Natural versus synthetic preservatives, - Advantages and limitations</p> <p>Uses of baking soda, baking powder, yeast in baking and food preparation - Prepare one dish with each of these</p> <p>Uses of herbs and spices to enhance flavour.</p>	5	Lecture cum demonstration	Required ingredients and equipment

I B.Sc. HOME SCIENCE WITH FOOD BIO TECHNOLOGY

SEMESTER –II

For those who joined in 2023 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGOR Y	HRS/WEEK	CREDIT S
UG-UAHS	23N2GE3	NUTRITION FOR HEALTH AND PHYSICAL FITNESS	Lecture	3	3

COURSE DESCRIPTION

This course helps to understand the basic concepts on health, Fitness.

COURSE OBJECTIVES

- Understand the components of health, Fitness and benefits of Fitness
- To gain knowledge on Fitness and yoga methods

UNITS

UNIT –I NUTRITION AND HEALTH (15 HRS)

Health and Fitness Definition, Components and Relationship among Physical Fitness, Wellness and Health Personalized approach ,Benefits of fitness training.

UNIT –II Exercise Physiology and Nutrition for Physical Activity(15 HRS)

Pulmonary ,Cardio vascular Regulation and integration, Skeletal and neural control, Endocrines and exercise Nutrition & Physical performance Physical fitness: cardio respiratory fitness, muscular strength, muscular endurance, body composition and flexibility

UNIT III Physical Activity Training (10 HRS)

Aerobic and anaerobic training -To enhance Cardio Vascular Endurance, Flexibility and Body Composition, Measurement of PAL Benefits of Fitness training and Gadgets for measuring PA – Motorized Tread mill, (aerobic Fitness), Functional Trainer, Fluid Rower (Upper body), Elliptical Bicycle and Bicycle Ergometer (Lower body),.

UNIT –IV Diseases due to Faulty/Poor Food Habits and Physical Inactivity (10 HRS)

Life Style related diseases/disorders (Non communicable Disease

Conditions)Meaning Causative Factors and Diet Modification/evidence based guidelines for Underweight, Obesity, Diabetes mellitus, Hypertension, Cancer

Cardiovascular Disease, Anaemia

UNIT –V Exercise, Stress and Health Management (10HRS)

Stress Assessment and Management

Techniques-Exercise at medium and high altitudes, Underweight,

Overweight and Obesity, Relaxation

Techniques, Yoga and Meditation for Health, Clinical

Exercise

TEXT BOOKS

1Srilakshmi.B.(2010). *Food Science*, New age International Pvt.Ltd., New Delhi.

2. Swaminathan. M (2010), *Handbook of Food and Nutrition*, The Bangalore Press, Bangalore.

REFERENCE BOOKS:

3Benion Marion (1980). *Introductory foods*, Macmillan, New York,

4Gitanjali Chatterjee, ,(1999) *Handbook of Nutrition*, Rajat Publications.

5.Anjana Agarwal, Shobha A Udipi (2014) *Text book of Human Nutrition*, Jaypee Brothers Medical Publishers.

OPEN EDUCATIONAL REFERENCES:

1. <http://www.hanoverhornets.org/pe/wp-content/uploads/2017/01/nutritionnotes-2.pdf>
2. <https://school.eckovation.com/short-notes-nutrition/>
3. <https://ncert.nic.in/textbook/pdf/iehp104.pdf>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 NUTRITION AND HEALTH		(15 HRS.)		
1.1	Definition – Health, and fitness	2	Chalk & Talk	Black Board
1.2	Components and Relationship among PhysicalFitness,W ellness and Health	5	Lecture	PPT
1.3	Definition of Fitness, Components of	5	Lecture	PPT

	Fitness			
1.4	Personalized approach Benefits of fitness training	3	Lecture	Videos
UNIT -2 Exercise Physiology and Nutrition for Physical Activity (15 HRS.)				
2.1	Pulmonary ,Cardiovascular Regulation and integration, Skeletal and neural control,Endocrines and exercise Nutrition &&	5	Chalk & Talk	Black Board
2.2	Skeletal and neural control, Endocrines and exercise Nutrition &&	5	Lecture	PPT
2.2	Skeletal and neural control, Endocrines and exercise Nutrition &&	5	Lecture	PPT
2.3	Physical performance Physical fitness: cardio respiratory fitness, muscular strength, muscular endurance, body composition and flexibility	5	Lecture	PPT
UNIT -3 Physical Activity Training (10 HRS.)				
3.1	Aerobic and anaerobic training	3	Lecture	PPT

	-To enhance Cardio Vascular Endurance,			
3.2	Flexibility and Body Composition, Measurement of PAL, Benefits of Fitness training and Gadgets for measuring PA	3	Lecture	PPT
3.3	Motorized Treadmill, (aerobic Fitness), Functional Trainer ,Fluid Rower (Upper body), Elliptical Bicycle and Bicycle Ergometer (Lower body),	4	Lecture	PPT

UNIT -4 Diseases due to Faulty/Poor Food Habits and Physical Inactivity (10 HRS}

4.1	Life Style related diseases/disorders (Non communicable Disease Conditions)Meaning Causative Factors and Diet Modification,	2	Chalk & Talk	Black Board
4.2	Evidence based guidelines for Underweight, Obesity	3	Lecture	PPT
4.3	Diabetes mellitus, Hypertension, Cancer Cardiovascular Disease, Anaemia	5	Chalk & Talk	Black Board

UNIT -5 Exercise, Stress and Health Management (10HRS)				
5.1	Stress Assessment and Management Techniques-, Overweight and Obesity, Relaxation	2	Chalk & Talk	Black Board
5.2	Exercise at medium and high altitudes, Underweight	4	Lecture	PPT
5.3	Techniques, Yoga and Meditation for Health, Clinical Exercise	4	Demonstration	PPT

CIA	
Scholastic	23
Non Scholastic	2
	25

EVALUATION PATTERN

SCHOLASTIC				NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
15		3	5	2	25	75	100

UG CIA Components

		Nos		
C1	- Test (CIA 1)	1**	-	15 Mks
C2	- Test (CIA 2)	1**	-	15 Mks
C3	- Assignment	1	-	3 Mks
C4	- Quiz	2 *	-	5 Mks
C5	- Attendance		-	2 Mks

**** Average of C1 and C2 will be taken**

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Understand the concept of Nutrition and Health.	K1	PSO3
CO 2	Describe the physiological effect Nutrition for Physical Activity	K2	PSO3
CO 3	Understand the concept of aerobic and anaerobic training.	K1 & K3	PSO3
CO 4	Identify the faulty habits and Diseases	K2	PSO3
CO 5	Understand the concept of exercise and stress management.	K3	PSO3

Mapping of COs with PSOs

CO/ PSO	PS O1	PS O2	PSO 3	PS O4	PS O5	PSO 6	PSO 7	PSO 8	PS O9	PSO 10	PSO 11	PSO 12
CO1	1	1	3	1	1	1	1	1	1	1	1	1
CO2	1	1	3	1	1	1	1	1	1	1	1	1
CO3	1	1	3	1	1	1	1	1	1	1	1	1
CO4	1	1	3	1	1	1	1	1	1	1	1	1
CO5	1	1	3	1	1	1	1	1	1	1	1	1
CO/ PSO	PS O1 3	PS O1 4	PSO 15	PS O1 6	PS O1 7	PSO 18	PSO 19	PSO 20	PS O2 1	PSO 22	PSO 23	
CO1	1	1	1	1	1	1	1	1	1	1	1	
CO2	1	1	1	1	1	1	1	1	1	1	1	
CO3	1	1	1	1	1	1	1	1	1	1	1	
CO4	1	1	1	1	1	1	1	1	1	1	1	
CO5	1	1	1	1	1	1	1	1	1	1	1	

Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	2	2	2	2
CO2	2	2	2	2
CO3	2	2	2	2
CO4	2	2	2	2
CO5	1	1	1	1

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2

COURSE DESIGNER:

Staff Name: Dr.C.Priyalatha

Forwarded By



(Dr.S.Santhi)

I B.Sc. HOME SCIENCE WITH FOOD BIO TECHNOLOGY

SEMESTER –I

For those who joined in 2023 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGOR Y	HRS/WEEK	CREDIT S
UG-UAHS	23N2SE2	Women's Health & Wellness	Lecture	2	2

COURSE DESCRIPTION

This course helps to understand the basic concepts on health, nutrition and deficiency diseases of various nutrients

COURSE OBJECTIVES

To understand the diverse factors that has a bearing on women's health.

To Highlight different aspects of health that contributes to a good lifestyle for women across the globe.

UNITS

UNIT –I NUTRITION AND HEALTH

(15 HRS.)

Nutrition for Women - Dietary Guidelines for a healthy lifestyle, Current concepts pertaining to Balanced Diets, Nutrient requirements for young and older women with special focus on Protein, Iron, Vitamin D and Calcium, Factors affecting nutrient intake in women- Socioeconomic, Environmental conditions, Health conditions; Consequences of Eating disorders in young women.

UNIT –II PHYSICAL HEALTH

(15 HRS.)

Physical Health - Significance of Body weight and Body composition parameters, Benefits of Aerobic, Flexibility and Strength training exercises- on General health, Bone health, and risks associated with NCD's.

UNIT –III REPRODUCTIVE HEALTH

(10 HRS.)

Reproductive Health - Menstrual Health, Pregnancy and Lactation, Pre- and Post-Menopausal concerns- preventive measures, sexually transmitted diseases- an overview.

UNIT –IV MENTAL HEALTH

(10 HRS.)

Mental Health - Common mental health problems - Trends and issues relating to women, Depression, Anxiety and coping with Stress, Strategies to improve mental health- learning new skills and hobbies, Relaxation techniques such as yoga and meditation..

UNIT –V SOCIAL HEALTH

(10 HRS.)

Social Health - Balancing home and career, strengthening relationships, enhancing communication skills and Personality Development, technological advancements and its impact, Dealing with domestic violence, and harassment issues.

REFERENCES:

TEXT BOOKS

- 1.Srilakshmi.B.(2010). *Food Science*, New age International Pvt.Ltd., New Delhi.
2. Swaminathan. M (2010), *Handbook of Food and Nutrition*, The Bangalore Press, Bangalore.

REFERENCE BOOKS:

- 3.Lanza di Scalea T, Matthews KA, Avis NE, et al. (2012) Role stress, role reward, and
 - 4.mental health in a multiethnic sample of midlife women: results from the Study of
 - 5.Women's Health Across the Nation (SWAN). *J Women's Health*; 21(5):481-489.
 - 6.Mahan K and Sylvia E. Stump (2000) *Krause's Food Nutrition and Diet Therapy*,
 - 7.Saunders, USA.. Minkin M. J. and Wright C. V. (2003) *The Yale Guide to Women's Reproductive*
 - 8.*Health from menarche to menopause*. Yale University Press, London
 - 9.Sizer F. S. and Whitney E. (2014) *Nutrition: Concepts & Controversies*. 13 th Ed.,
 - 10.Wadsworth, Cengage Learning, USA.. Sperry L. (2016) *Mental Health and Mental Disorders*. ABC-Clio, Californi
- Williams M.H., Anderson D.E., Rawson E.S. (2013) *Nutrition for Health, Fitness and Sport*. McGraw Hill, New York.. Wrzus C, Hänel M, Wagner J, Neyer FJ. (2013) Social network changes and life events across the life span: a meta-analysis. *Psychol Bull*;139(1):53-80..

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https://www.nhp.gov.in/social-health_pg
<https://ncert.nic.in/textbook/pdf/jehp112.pdf>
<https://ncert.nic.in/textbook/pdf/iehp113.pdf>
<https://ncert.nic.in/textbook/pdf/lebo104.pdf>
<https://www.nih.gov/health-information/social-wellness-toolkit>
<https://www.cdc.gov/reproductivehealth/womensrh/index.htm>
<https://www.nimh.nih.gov/health/topics/caring-for-your-mental-health>
<https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response>
☐ <https://www.cdc.gov/mentalhealth/learn/index.htm>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 NUTRITION AND HEALTH			(15 HRS.)	

1.1	Definition – Health, Nutrition, Malnutrition, Adequate Nutrition	3	Chalk & Talk	Black Board
1.2	Balanced Diet, Nutritional status	4	Lecture	PPT
1.3	Definition of Fitness, Components of Fitness	4	Lecture	PPT
1.4	Types of physical activity and their energy consumption level	4	Lecture	Videos
UNIT -2 PHYSICAL HEALTH (15 HRS.)				
2.1	Physical Health - Significance of Body weight and Body composition Parameters.	5	Chalk & Talk	Black Board
2.2	Benefits of Aerobic, Flexibility and Strength training exercises- on General	5	Lecture	PPT
2.3	Bone health, and risks associated with NCD's	5	Lecture	PPT
UNIT -3 REPRODUCTIVE HEALTH HEALTH(10 HRS.)				
3.1	Reproductive Health - Menstrual Health, Pregnancy and Lactation,	4	Lecture	PPT
3.2	Pre- and Post-Menopausal concerns- preventive measures	4	Lecture	PPT
3.3	Sexually transmitted diseases- an overview	2	Lecture	PPT

UNIT -4 MENTAL HEALTH (12 HRS.)				
4.1	Mental Health - Common mental health problems - ,	2	Chalk & Talk	Black Board
4.2	Trends and issues relating to women, Depression, Anxiety and coping with Stress,	2	Lecture	PPT
4.3	Strategies to improve mental health- learning new skills and hobbies, Relaxation techniques such as yoga and meditation	2	Chalk & Talk	Black Board
UNIT -5 SOCIAL HEALTH (10 HRS.)				
5.1	Social Health - Balancing home and career, strengthening relationships,.	4	Chalk & Talk	Black Board
5.2	Enhancing communication skills and Personality	3	Lecture	PPT
5.3	Development, technological advancements and its impact, Dealing with domestic violence, and harassment issues	3	Demonstration	PPT

CIA	
Scholastic	23
Non Scholastic	2
	25

EVALUATION PATTERN

SCHOLASTIC				NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
15		3	5	2	25	75	100

UG CIA Components

Nos

C1	-	Test (CIA 1)	1**	-	15 Mks
C2	-	Test (CIA 2)	1**	-	15 Mks
C3	-	Assignment	1	-	3 Mks
C4	-	Quiz	2 *	-	5 Mks
C5	-	Attendance		-	2 Mks

**** Average of C1 and C2 will be taken.**

***The best out of two will be taken into account**

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S	PSOs ADDRESSED
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		TAXONOMY)	
CO 1	Define the terminologies related to nutrition and health	K1	PSO3
CO 2	Describe the benefits of exercise	K2	PSO3
CO 3	Identify the problems of menstrual health	K1 & K3	PSO3
CO 4	Classify the mental health and strategies to improve mental health.	K2	PSO3
CO 5	Describe the social health and its relationship.	K3	PSO3

Mapping of COs with PSOs

CO/ PSO	PSO1	PS O2	PSO 3	PSO 4	PS O5	PSO 6	PS O7	PS O8	PS O9	PS O 10	PS O1 1	PSO 12
CO1	1	1	3	1	1	1	1	1	1	1	1	1
CO2	1	1	3	1	1	1	1	1	1	1	1	1
CO3	1	1	3	1	1	1	1	1	1	1	1	1
CO4	1	1	3	1	1	1	1	1	1	1	1	1
CO5	1	1	3	1	1	1	1	1	1	1	1	1
CO/ PSO	PSO1 3	PS O1 4	PSO 15	PSO 16	PS O1 7	PSO 18	PS O1 9	PS O2 0	PS O2 1	PS O 22	PS O2 3	
CO1	1	1	1	1	1	1	1	1	1	1	1	
CO2	1	1	1	1	1	1	1	1	1	1	1	
CO3	1	1	1	1	1	1	1	1	1	1	1	
CO4	1	1	1	1	1	1	1	1	1	1	1	
CO5	1	1	1	1	1	1	1	1	1	1	1	

Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
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CO1	2	2	2	2
CO2	2	2	2	2
CO3	2	2	2	2
CO4	2	2	2	2
CO5	1	1	1	1

Note: ♦ Strongly Correlated – **3** ♦ Moderately Correlated – **2** ♦ Weakly Correlated -**1**

COURSE DESIGNER

Staff Name: Dr.C.Priyalatha

Forwarded By



(Dr.S.Santhi)

I B.Sc. HOME SCIENCE WITH FOOD BIOTECHNOLOGY
SEMESTER –II

For those who joined in 2023 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	23N2SE4	Nutrition and Wellness Practical	Practical	2	2

COURSE DESCRIPTION

To integrate and apply the principles of sound nutrition to help, assess and evaluate physical fitness, body composition and dietary pattern and their interrelationship.

COURSE OBJECTIVES

- Understand the components of health and fitness and the importance of nutrition in maintaining health
- Make nutritional, dietary, and physical activity recommendations to achieve fitness and well-being.
- Develop ability to evaluate fitness and well-being.

UNITS

UNIT –I HOLISTIC APPROACH TO FITNESS AND HEALTH (5 HRS.)

Effect of specific Nutrients on work Performance and physical fitness

UNIT –II EXERCISE FOR WEIGHT CONTROL (5 HRS.)

Exercise prescription in obesity and weight control –Prevention of weight cycling

UNIT–III EXERCISE FOR HEART

Exercise prescription in Hypertension and coronary Heart disease **(5 HRS.)**

UNIT –IV EXERCISE FOR BONE HEALTH (5HRS.)

Exercise prescription in osteoporosis

UNIT –V**EXERCISE FOR FITNESS****(5 HRS.)**

Exercise prescription for pre and post-natal fitness

REFERENCES:**TEXTBOOK:**1.Gupta L. C. & Kusium Gupta (1989). *Foods mid Nutrition, Facts and Figures*, Jayapahothas, New Delhi,**REFERENCE BOOKS:**2.Swaminathan M. (1988) *Advanced textbook of Food and Nutrition*, Vol. I and II, the Bangalore Printing and Publishing Co. Ltd.3.Gitanjali Chatterjee, ,(1999) *Handbook of Nutrition*, Rajat Publications.4.Srilakshmi.B.(2007). *Food Science*, New age International Pvt.Ltd.,NewDelhi.**OPEN EDUCATIONAL RESOURCES:**

1. <http://www.hanoverhornets.org/pe/wp-content/uploads/2017/01/nutritionnotes-2.pdf>
2. <https://school.eckovation.com/short-notes-nutrition/>
3. <https://ncert.nic.in/textbook/pdf/iehp104.pdf>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 HOLISTIC APPROACH TO FITNESS AND HEALTH				
1.1	Introduction to fitness and health	2	Demonstration	. Essential materials
1.2	Effect of specific Nutrients on work Performance and physical fitness	3	Demonstration	Essential materials
UNIT -2				
2.1	Exercise prescription in obesity and weight control –	2	Demonstration	Essential materials

2.2	Prevention of weight cycling	3	Demonstration	Essential materials
UNIT -3				
3.1	Exercise prescription in Hypertension	2	Demonstration	Essential materials
3.2	coronary Heart disease	3	Demonstration	Essential materials
UNIT - 4				
4.1	Exercise prescription in osteoporosis	2	Demonstration	Essential materials
4.1	Exercise prescription in osteoporosis	2	Demonstration	Essential materials
4.2	Exercise prescription in osteoporosis	2	Demonstration	Essential materials
UNIT-5				
5.1	Yoga	3	Demonstration	Essential materials

5.2	Meditation	4	Demonstration	Essential materials
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Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total
	T1 10 Mks.	T2 10 Mks.	Quiz 5 Mks.	Assignment 5 Mks	OBT/PPT 5 Mks	35 Mks.	5 Mks.	40Mks.
K1	2	2	-	-	-	4	-	4
K2	2	2	5	-	-	9	-	9
K3	3	3	-	-	5	11	-	11
K4	3	3	-	5	-	11	-	11
Non Scholastic	-	-	-	-	-		5	5
Total	10	10	5	5	5	35	5	40

CIA	
Scholastic	35
Non Scholastic	5
	40

✓ All the course outcomes are to be assessed in the various CIA components.

✓ The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are :

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC				NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
10	10	5	5	5	40	60	100

C1 – Average of Two Session Wise Tests

C2 – Average of Two Monthly Tests

C3 - Mid Sem Test

C4 – Best of Two Weekly Tests

C5 – Non – Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Recall the relationship of food and health.	K1	PSO3
CO 2	Describe terminologies related to fitness.	K1, K2,	PSO3 & PSO4
CO 3	Identify the different macro and micro nutrients.	K1, K3	PSO3 & PSO4
CO 4	Plan the balanced diet for different age groups.	K1, K2, K3 & K4	PSO3 & PSO4

Mapping of COs with POs

CO/ PO	PO1	PO2	PO3	PO4
CO1	3	1	2	2
CO2	3	1	2	2
CO3	3	1	2	2
CO4	3	1	2	2
CO5	3	1	2	2

Note: ♦ Strongly Correlated – **3** ♦ Moderately Correlated – **2** ♦ Weakly Correlated -**1**

COURSE DESIGNER

Mrs.D.Mouna

Forwarded By



(Dr.S.Santhi)

I B.Sc. HOME SCIENCE WITH FOOD BIOTECHNOLOGY
SEMESTER –II

For those who joined in 2023 onwards

PROGRA MME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/ WEEK	CREDITS
UAHS	23N2SE3	GARMENT EMBELLISHMENT TECHNIQUES	Lecture	2	2

COURSE DESCRIPTION

This skill-based paper aims at imparting hand embroidery and fabric painting techniques.

COURSE OBJECTIVES

- To develop skill in making hand embroidery stitches.
- To encourage students to apply embroidery on tablecloth, handkerchief, tops and blouse.
- To inculcate fabric painting technique in students and make them use this skill on clothing and household linen.

UNITS

UNIT –I Development of Design (6 HRS.)

Development of design from a basic motif applying the elements and principles of design.

UNIT –II Types of Stitches (6 HRS.)

Embroidery – Basic hand stitches like chain, satin, long and short, feather, back.

Self-Study: Lazy daisy, French knot, bullion knot, Herring bone, Buttonhole.

UNIT –III Application of Stitches (6 HRS.)

Application of embroidery stitches on table cloth, handkerchief, tops and blouse.

UNIT –IV Painting (6 HRS.)

Fabric painting study of paints & brush available, different methods of painting.

UNIT –V Painting Techniques**(6 HRS.)**

Application of fabric painting technique on place mats, pillow cover, saree and kameez.

REFERENCES:

- 1.Creative Craft in Fabric and Yarn . (1979). Gallery Press, London.
- 2.Gladys Cunnigharn. (1969). Singer Sewing Book. Golden press, New York.
- 3.Julia Barton. (1989). The Art of Embroidery. Merchurst Ltd., London.
- 4.Pamela Cabburn. (1976). The Needle Work's Dictionary. William and Morrow and Company, Inc. New York.
- 5.Reader's Digest. (1955). Complete Guide to Needlework.
- 6.Simon and Schuster. (1960). McCall's Treasury of Needle craft. Schuster Publishing, New York.
- 7.The ultimate Design Source Book for Crafters. (2007). Search Press Ltd, Kent, Australia.

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1				
1.1	Development of design	3	Chalk & Talk	Black Board
1.2	Application of elements and principles of design	3	Lecture	LCD
UNIT – 2				
2.1	Basic hand stitches	3	Lecture	PPT
2.2	Chain, Back, Satin, Long & short, Feather	3	Lecture	PPT
UNIT – 3				
3.1	Application of embroidery stitches on table cloth, hand	3	Specimen	PPT

	kerchief			
3.2	Application of stitches on tops and blouse	3	Specimen	PPT
UNIT – 4				
4.1	Study of paints and brush	3	Lecture	White Board
4.2	Different methods of painting	3	Lecture	PPT
UNIT – 5				
5.1	Fabric painting on placemats and pillow cover	3	Specimen	PPT
5.2	Fabric painting on saree and kameez	3	Specimen	PPT

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total	% of Assessment
	T1 10 Mks.	T2 10 Mks.	Quiz 5 Mks.	Assignment 5 Mks.	OBT/PT 5 Mks.	35 Mks.	5 Mks.	40Mks.	
K1	2	2	-	-	-	4	-	4	10 %
K2	2	2	5	-	-	9	-	9	22.5 %
K3	3	3	-	-	5	11	-	11	27.5 %
K4	3	3	-	5	-	11	-	11	27.5 %
Non Scholastic	-	-	-	-	-		5	5	12.5 %
Total	10	10	5	5	5	35	5	40	100 %

CIA	
Scholastic	35

Non Scholastic	5
	40

✓ **All the course outcomes are to be assessed in the various CIA components.**

✓ **The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are:**

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS	
C1	C2	C3	C4	C5	C6	CIA	ESE
10	10	5	5	5	5	40	60

C1 – Internal Test-1

C2 – Internal Test-2

C3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non - Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Illustrate a basic motif.	K2, K4	PSO9

C05	1	1	1	1	3	1	1	1	1	1	1	
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Mapping of

C0s with POs

CO/ PSO	PO1	PO2	PO3	PO4
C01	1	1	2	1
C02	1	1	2	1
C03	1	1	2	1
C04	1	1	2	1
C05	1	1	2	1

Note: ♦ Strongly Correlated – **3** ♦ Moderately Correlated – **2** ♦ Weakly Correlated – **1**

**COURSE DESIGNER:
MS. NANDHINI PRIYA**

Forwarded By



(Dr.S.Santhi)

II B.Sc. HOMESCIENCE WITH FOOD BIOTECHNOLOGY

SEMESTER-III

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WE EK	CREDIT S
UAHS	19N3CC7	EXTENSION EDUCATION AND COMMUNICATION	Lecture	5	4

COURSE DESCRIPTION

This course creates awareness on the principles of extension education and extension teaching methods

COURSE OBJECTIVES

- To understand the concept of community development and panchayat raj.
- To create awareness on women welfare scheme
- To impart knowledge on communication methods
- To develop skill in preparing audio-visual aids
- To understand different extension teaching methods.

UNITS

UNIT – I	EXTENSION EDUCATION	[15 HRS]
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Meaning, objectives and Principles of Extension and definition of Home science extension, Allied concepts Formal, Nonformal, Qualities, Role and Functions of Extension Workers

History of CDP in India, Panchayat Raj – Three tier system, Program Planning.

UNIT – II	WOMEN WELFARE PROGRAMMES	[15 HRS]
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RMK, IMY, MGNREGS, PMRY & National livelihood programme, National Rural livelihood mission, National Social Assistance Scheme ,TRYSEM, DWCRA, SHG, Women Welfare Programmes

UNIT – III	COMMUNICATION	[15 HRS]
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Communication Definition, Meaning, Objectives & Principles

Self Study-Elements of communication, barriers to communication

UNIT – IV	EXTENSION TEACHING METHODS	[15 HRS]
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Meaning and teaching, Classification of extension teaching methods

- i. Individual methods: Farm & home visit, farmer's call & personal letters.
- ii. Group methods: Result demonstration, method demonstration, group meetings, study tour.
- iii. Mass methods: Publications – Leaflet, Pamphlet, Folder, mass meetings, exhibition, campaign, newspaper, Radio and T.V.

UNIT – V	AUDIO-VISUAL AIDS	[15 HRS]
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Definition, Classification, criteria for selection and evaluation of audiovisual aids & Cone of Experience.

Audio Aids: E-Communication methods, Public address system, Radio

Visual Aids:

- i. Projected: Slides, filmstrip, opaque projection, overhead projection.
- ii. Non – projected: Chalkboard, Bulletin board, flannel graph, flash card, poster diagram, map, chart, graph, specimen and models.

Audio visual aids: Television, Motion pictures, Drama, Puppet show

REFERENCES

TEXTBOOK:

1. Adivi Reddy.(1973) *Extension Education*, Lakshmi Pub, Andrapradesh.

REFERENCE BOOKS:

1. Dhaina&BatnagarO.P.(1980) *Education and communication for Development*, Oxford Pub., New Delhi.
2. Roy, G.L. (1994). *Extension Communication and Management*, New Delhi,

OPEN EDUCATIONAL RESOURCES:

1. <https://www.economicdiscussion.net/india/community-development-cd-programme/21647>
2. <https://www.worldcat.org/title/extension-education-communication/oclc/808776384>
3. <http://eagri.org/eagri50/AEXT392/lec03.html>
4. <https://www.slideshare.net/MOHDAALENAVI/extension-teaching-84053118>
5. <http://studylecturenates.com/audio-visual-aids-in-education-definition-types-objectives/>
6. <http://lms.tanuvas.ac.in/mod/resource/view.php?id=39787>
7. <https://lidtfoundations.pressbooks.com/chapter/edgar-dale-and-the-cone-of-experience/>
8. https://www.queensu.ca/teachingandlearning/modules/active/documents/Dales_Cone_of_Experience_summary.pdf
9. https://en.wikipedia.org/wiki/Welfare_schemes_for_women_in_India
10. <https://wcd.nic.in/sites/default/files/24-05010215wcdmedia.pdf>
11. https://en.wikipedia.org/wiki/Panchayati_raj_in_India

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT 1 –Extension Education				
1.1	Meaning, objectives and Principles of Extension and definition of Home science extension	4	Chalk & Talk	Black Board
1.2	Allied concepts Formal, Nonformal	2	Chalk & Talk	LCD
1.3	Qualities, Role and Functions of Extension Workers	4	Lecture	PPT & White board
1.4	History of CDP in India	5	Lecture	Smart Board
1.5	Panchayat Raj – Three tier system & Program Planning	5	Lecture	Black Board
UNIT -2 WOMEN WELFARE PROGRAMMES				
2.1	Introduction	2	Lecture	LCD
2.2	RMK, IMY	4	Chalk & Talk	LCD
2.3	MGNREGS, PMRY	4	Lecture	PPT & White board
2.4	National livelihood programme, National Rural livelihood mission	3	Discussion	PPT

2.5	National Social Assistance Scheme	2	Lecture	Black board
UNIT -3 COMMUNICATION				
3.1	Communication Definition, Meaning	2	Lecture	Black board
3.2	Objectives & Principles	2	Lecture	LCD
3.3	Elements of communication	3	Chalk & Talk	LCD
3.4	Models of Communication	4	Lecture	PPT & White board
3.5	Barriers to communication	4	Discussion	PPT & White board
UNIT -4 EXTENSION TEACHING METHODS				
4.1	Extension Teaching methods -Teaching, Meaning and Definition.	1	Lecture	LCD
4.2	Classification of Teaching methods	1	Chalk & Talk	LCD
4.3	Individual methods: Farm & home visit, farmer's call & personal letters	3	Lecture	PPT & White board
4.4	Group methods: Result demonstration, method demonstration, group meetings, study tour.	5	Lecture	PPT & White board

4.5	Mass methods: Publications – Leaflet, Pamphlet, Folder and mass meetings.	5	Chalk & Talk	LCD
4.6	Mass methods: Exhibition, campaign, newspaper, Radio and T.V.	5	Discussion	PPT
UNIT -5 AUDIO- VISUAL AIDS				
5.1	AUDIO VISUAL AIDS - Definition, Classification	1	Lecture	LCD
5.2	Criteria for selection and evaluation of audiovisual aids & Cone of Experience.	3	Chalk & Talk	LCD

5.3	Audio Aids: E- Communication methods, Public address system, Radio	3	Lecture	PPT & White board
5.4	Visual Aids: Projected: Slides, filmstrip, opaque projection, overhead projection.	3	Lecture	PPT & White board
5.5	Visual Aids: Non - projected: Chalkboard, Bulletin board, flannel graph, flash card, poster diagram, map, chart, graph, specimen and models.	5	Chalk & Talk	LCD
5.6	Audio visual aids: Television, Motion pictures, Drama, Puppet show	5	Discussion	PPT

	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total
Levels	T1	T2	Quiz	Assignment	OBT/PPT			
	10 Mks.	10 Mks.	5 Mks.	5 Mks	5 Mks	35 Mks.	5 Mks.	40Mks.
K1	2	2	-	-	-	4	-	4
K2	2	2	5	-	-	9	-	9
K3	3	3	-	-	5	11	-	11

K4	3	3	-	5	-	11	-	11
Non Scholastic	-	-	-	-	-		5	5
Total	10	10	5	5	5	35	5	40

CIA	
Scholastic	35
Non Scholastic	5
	40

✓ All the course outcomes are to be assessed in the various CIA components.

✓ The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are:

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

C1 – Internal Test-1

C2 – Internal Test-2

C3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non - Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Define the concepts of Home Science Extension Education.	K1	PSO22
CO 2	Describe the various welfare-programmes for women	K2, K3	PSO22
CO 3	Explain the principles and models of communication	K1,K2	PSO22

CO 4	Classify the extension teaching methods.	K2, K4	PSO22
CO 5	Construct audio –visual aids.	K3, K4	PSO22

Mapping of C0s with PSOs

CO/ PSO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12
CO1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	1	1	1	1	1	1	1	1	1	1	1	1

CO3	1	1	1	1	1	1	1	1	1	1	1	1
CO4	1	1	1	1	1	1	1	1	1	1	1	1
CO5	1	1	1	1	1	1	1	1	1	1	1	1
CO/ PSO	PSO 13	PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO 22	PSO 23	
CO1	1	1	1	1	1	1	1	1	1	3	1	
CO2	1	1	1	1	1	1	1	1	1	3	1	
CO3	1	1	1	1	1	1	1	1	1	3	1	
CO4	1	1	1	1	1	1	1	1	1	3	1	
CO5	1	1	1	1	1	1	1	1	1	3	1	

Mapping of C0s with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	3	1	1	1
CO2	1	1	1	1

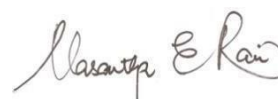
C03	1	1	1	1
C04	1	1	1	3
C05	1	1	1	3

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated

COURSE DESIGNER:

Dr. C. Priyalatha

Forwarded By



(Dr.Vasantha Esther Rani)

II B.Sc. – HOME SCIENCE WITH FOOD BIOTECHNOLOGY

SEMESTER –III

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N3CC8	FIBRE TO FABRIC	Lecture	4	3

COURSE DESCRIPTION

This course enlightens the students on the various steps in the conversion of fibre into fabric. It also deals with the dyeing and printing techniques.

COURSE OBJECTIVES

- The course will make the students
- To gain knowledge on the various textile fibres, their manufacture, spinning and weaving operations.
- To understand the basic and functional finishes applied on fabrics and the qualities imparted.
- To develop skill to choose appropriate dyes and printing technique for a given fabric.

UNITS

UNIT –I CLASSIFICATION AND MANUFACTURING PROCESS OF TEXTILE

FIBRES

(15HRS.)

Classification of textile fibres

blends and mixtures. Manufacturing process of:

1. Natural fibres Cotton, Linen, Wool Silk and Asbestos
2. Man-made fibres Rayon, Nylon, Polyester, Acrylic and Glass

Self-Study: Minor fibres – Jute, Hemp, Kapok, Coir.

UNIT –II FIBRE IDENTIFICATION, PROPERTIES AND SPINNING

(10 HRS.)

1. Identification of textile fibres
2. Physical properties of fibres

3. Yarn making Spinning
4. Types of yarn simple, complex and novelty.

Self-Study: Mechanical and Chemical spinning

UNIT -III FABRIC MANUFACTURING TECHNIQUES (15 HRS.)

1. Weaving basic plain, twill, satin; Fancy weaves Pile, Dobby and Jacquard.
2. Non-woven Knitting, felting, and bonding

UNIT -IV FABRIC FINISHING (10 HRS.)

1. Basic singeing, scouring, bleaching, mercerizing, sizing, calendering, tentering.
2. Functional water proofing, water repellency, fire proofing, moth proofing, sanforising, crease recovery.

UNIT -V DYEING AND PRINTING (10 HRS.)

1. Classification of dyes, application to different fibres, stages of dyeing.
2. Printing: Hand: Resist, stencil, screen and block.
3. Machine: Rotary Screen Printing, Roller Printing

REFERENCES:

TEXTBOOK:

1. Dantyagi, S. (1996). Fundamentals of textiles and their care. Orient Longman Limited, New Delhi.

REFERENCE BOOKS:

1. Gordon Cook, J. (2001). Handbook of Textile Fibres. Woodhead Publishing Ltd, England.
2. Howard L. Needles. (2001). Textile Fibres, Dyes, Finishes and

Processes. Standard Publishers Distributors, Delhi.

3. Lord, P.R. & Mohamed, M.H. (2001) Weaving: Conversion of yarn to Fabric. Woodhead Publishing Ltd, England.

4. Rattan, J.B. (2001). Modern Textile Technology. Abhishek Publications, Chandigarh.

5. Sara J Kadolph. (2009). The Textiles. Dorling Kindersley India Pvt., Ltd.

6. Vidyasagar, P. V. (1998). Handbook of Textiles. Mittal Publications.

7. Murphy, W.S. (2003). Handbook of Weaving. Abhishek Publications, Chandigarh.

OPEN EDUCATIONAL RESOURCES:

<https://en.wikipedia.org/wiki/Textile>

<https://www.amazon.in/Spinning-Tillie-Walden-ebook/dp/B074ZGMTY2>

<https://www.textileebook.com/2019/04/principles-of-textile-finishing-asim-kumar-roy-choudhury.html>

<https://textilestudycenter.com/library/>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 CLASSIFICATION AND MANUFACTURING PROCESS OF TEXTILE FIBRES				
1.1	Classification of textile fibres, Blends and mixtures	2	Chalk & Talk	Black Board
1.2	Cotton, Linen	4	Chalk & Talk	Black Board
1.3	Wool, Silk	4	Lecture	PPT
1.4	Asbestos, Glass	1	Chalk & Talk	Black Board

1.5	Rayon, Nylon	2	Chalk & Talk	Black Board
1.6	Polyester, Acrylic	2	Chalk & Talk	Black Board
UNIT -2 FIBRE IDENTIFICATION, PROPERTIES AND SPINNING				
2.1	Identification of textile fibres	3	Lecture	PPT

2.2	Physical properties of fibres	3	Chalk & Talk	Black Board
2.3	Yarn making – Spinning	2	Chalk & Talk	Black Board
2.4	Types of yarn – Simple, complex and novelty	2	Chalk & Talk	Black Board
UNIT – 3 FABRIC MANUFACTURING TECHNIQUES				
3.1	Weaving – Definition, parts and functions of a loom	1	Chalk & Talk	Black Board
3.2	Basic weaves: Plain, Twill, Satin	4	Chalk & Talk	Black Board
3.3	Pile and Dobby weave	2	Chalk & Talk	Black Board
3.4	Jacquard weave	2	Chalk & Talk	Black Board
3.5	Knitting	2	Chalk & Talk	Black Board

3.6	Felting, Bonding	4	Chalk & Talk	Black Board
UNIT – 4 FABRIC FINISHING				
4.1	Singeing, Scouring	1	Chalk & Talk	Black Board
4.2	Bleaching, Mercerising, Sizing	2	Chalk & Talk	Black Board
4.3	Calendering, Tentering	2	Chalk &	Black

			Talk	Board
4.4	Water proofing, water repellency, fire proofing, moth proofing	3	Chalk & Talk	Black Board
4.5	Sanforising, crease recovery	2	Chalk & Talk	Black Board

UNIT – 5 DYEING AND PRINTING				
5.1	Classification of dyes	2	Chalk & Talk	Black Board
5.2	Application of dyes to different fibres, Stages of dyeing	2	Chalk & Talk	Black Board
5.3	Hand printing: Resist, Stencil, Screen and Block	3	Lecture	PPT
5.4	Roller, Rotary screen	3	Lecture	PPT

	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total	
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Levels	T1 10 Mks .	T2 10 Mks .	Qui z 5 Mks .	Assignme nt 5 Mks	OBT/PP T 5 Mks	35 Mks.	5 Mks.	40Mks .	% of Assessme nt
K1	2	2	-	-	-	4	-	4	10 %
K2	2	2	5	-	-	9	-	9	22.5 %
K3	3	3	-	-	5	11	-	11	27.5 %

K4	3	3	-	5	-	11	-	11	27.5 %
Non Scholast ic	-	-	-	-	-		5	5	12.5 %
Total	10	10	5	5	5	35	5	40	100 %

CIA	
Scholastic	35
Non Scholastic	5
	40

✓ All the course outcomes are to be assessed in the various CIA components.

✓ The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are:

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

C1 – Internal Test-1

C2 – Internal Test-2

C3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non - Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Classify the textile fibres and describe the manufacturing process of natural, manmade and minor textile fibres.	K2	PSO8
CO 2	Identify the fibre content of the fabric.	K1, K3	PSO8
CO 3	Illustrate and give examples of yarns and weaves.	K2, K4	PSO8

CO 4	Choose the basic and functional finishes based on the end use of the material.	K1, K3	PSO8
CO 5	Restate in own words the pros and cons of natural and synthetic dyes.	K1	PSO8
CO 6	Describe the hand and machine printing techniques.	K1	PSO8

Mapping of COs with PSOs

CO/ PSO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO	PSO	PSO
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										10	11	12
CO1	1	1	1	1	1	1	1	3	1	1	1	1
CO2	1	1	1	1	1	1	1	3	1	1	1	1
CO3	1	1	1	1	1	1	1	3	1	1	1	1
CO4	1	1	1	1	1	1	1	3	1	1	1	1
CO5	1	1	1	1	1	1	1	3	1	1	1	1
CO/ PSO	PSO 13	PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO 22	PSO 23	
CO1	1	1	1	1	1	1	1	1	1	1	1	
CO2	1	1	1	1	1	1	1	1	1	1	1	
CO3	1	1	1	1	1	1	1	1	1	1	1	
CO4	1	1	1	1	1	1	1	1	1	1	1	
CO5	1	1	1	1	1	1	1	1	1	1	1	

Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	1	1	2	1
CO2	1	1	2	1
CO3	1	1	2	1
CO4	1	2	2	2
CO5	1	2	2	2

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2 ♦

Weakly Correlated -1

COURSE DESIGNER:
Dr.R.Latha

Forwarded by



(Dr.Vasantha Esther Rani)

II B.Sc. HOME SCIENCE WITH FOOD BIOTECHNOLOGY

SEMESTER –III

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N3CC9	BASICS OF CLOTHING CONSTRUCTION LAB	Practical	3	2

COURSE DESCRIPTION

This practical paper aims at imparting skill in the basics of stitching a garment.

COURSE OBJECTIVES

- To familiarize students with the parts and functions of the sewing machine.
- To impart skill in constructing seams, darts, tucks, pleats and gathers.
- To make the students apply appropriate edge finishes to garments.
- To develop skill in attaching pockets and yokes to dresses.

UNITS

UNIT -I

(5 HRS.)

Parts and functions of the sewing machine, use and care.

UNIT -II

(10 HRS.)

Seams and seam finishes: plain seam, flat fell seam, French seam, single top stitching, double top stitching.

UNIT -III

(10 HRS.)

Fullness: Darts, tucks, pleats, gathers and shirrs.

UNIT -IV**(10 HRS.)**

Edge finishing: Bias binding, facing and hems.

UNIT -V**(10HRS.)**

Pockets and yokes.

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1				
1.1	Parts and functions of the sewing machine	3	Chalk & Talk	Black Board
1.2	Use and care of sewing machine	2	Demonstration	Sewing machine
UNIT - 2				
2.1	Seams: plain, flat fell, French	5	Demonstration	Sewing machine
2.2	Seam Finishes: Single top stitching, double top stitching	5	Demonstration	Sewing machine
UNIT - 3				
3.1	Fullness: Darts, Tucks, Pleats	5	Demonstration	Sewing machine
3.2	Gathers and Shirrs	5	Demonstration	Sewing machine

UNIT - 4				
4.1	Edge finishing: Bias binding, facing	5	Demonstration	Sewing machine
2.2	Types of hems	5	Demonstration	Sewing machine
UNIT - 5				
5.1	Pockets	5	Demonstration	Sewing machine
5.2	Yokes	5	Demonstration	Sewing machine

EVALUATION PATTERN

SCHOLASTIC				NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
10	10	10	5	5	40	60	100

C1 – Internal Test - 1

C2 – Internal Test - 2

C3 – Model Practical Exam

C4– Record

C5 –Non-Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Identify the parts and functions of the sewing machine.	K1, K3	PSO9
CO 2	Construct various seams and seam finishes.	K3	PSO9
CO 3	Build samples for introducing fullness in a garment.	K3	PSO9
CO 4	Choose and apply appropriate edge finishes like binding, facing and hems.	K1, K3	PSO9
CO 5	Illustrate and develop pockets and yokes	K2, K4	PSO9

Mapping of COs with PSOs

[illegible]

C02	1	1	1	1	1	1	1	1	1	1	1	
C03	1	1	1	1	1	1	1	1	1	1	1	
C04	1	1	1	1	1	1	1	1	1	1	1	
C05	1	1	1	1	1	1	1	1	1	1	1	

Mapping of C0s with POs

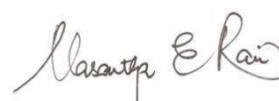
CO/ PSO	PO1	PO2	PO3	PO4
C01	1	1	1	2
C02	1	1	1	2
C03	1	1	1	2
C04	1	1	1	2
C05	1	1	1	2

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2
 ♦ Weakly Correlated -1

COURSE DESIGNERS:

1. Dr.R.Latha
2. Ms.J.JosephineJesintha

Forwarded By



(Dr.Vasantha Esther Rani)

II B.Sc. HOME SCIENCE WITH FOOD BIOTECHNOLOGY
SEMESTER –III
For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N3AC1	CATERING AND HOTEL MANAGEMENT	Lecture	3	3

COURSE DESCRIPTION

This course describes the role of front office and housekeeping in Hotel Management

COURSE OBJECTIVES

- Learn the functions of the front office and Housekeeping
- Understand their importance in increasing the revenue of hotels

UNITS

UNIT –I INTRODUCTION TO HOTEL INDUSTRY (9 Hrs.)

Hotel – Definition, Evolution of Hotel industry, Types of hotels, Organization chart of a hotel – small and large, Types of catering establishment, Star classification and its features.

UNIT –II FRONT OFFICE MANAGEMENT (9 Hrs.)

Front office- Definition, Importance of front office, Front office organization layout, sections of front office. Duties and responsibilities of front office staff, Types of room, Types of plans, Types of room rates.

UNIT–III HOTEL RESERVATION AND RECEPTION (9Hrs.)

Reservation – Definition, Types of reservation, Reservation- procedure, Sources of reservation, Modes of reservation.
 Reception - Duties and responsibilities of lobby manager, Guest luggage handling procedure, C- form.
 Front office accounting – Definition, Types of account, Types of posting in a guest account, Safeguard of hotel credit facility, Foreign currency exchange

Registration - Check in and Checkout procedure, Guest cycle.

UNIT -IV HOUSEKEEPING MANAGEMENT

(9 Hrs.)

Housekeeping department- Definition, Importance, Organization chart, Duties and responsibilities of housekeeping staff, Interdepartmental relationship of front office and housekeeping.

Bed making- Procedure of bed making.

Room report- Preparation of room report, Check lists.

Linen- Classification of linen, Modes of obtaining linen.

Furnishings- Soft furnishings, Floor furnishings-Carpets and Wallcovering.

UNIT -V CLEANING AND LAUNDRY MANAGEMENT

(9 Hrs.)

Laundry procedures, laundry equipment, Stain removal.

Cleaning- Methods, Cleaning agents Classification, Selection of cleaning equipment,

Self-study: Uniform- Selection, Code, and maintenance of staff uniform.

REFERENCES:

TEXTBOOK:

1. Andrews.S.(1995).*Hotel Front Office Training Manual*, Tata McGraw Hill, New Delhi.

REFERENCE BOOKS:

1. Allen D.M. (1992). *Accommodation and cleaning service*, Vol II Management
2. Andrews.S.(1982). *Housekeeping Training Manual*, Tata McGraw Hill, New Delhi.
3. Negi Jagmohan (2007). *Managing Hotel and Restaurants*, Authors Press

OPEN EDUCATIONAL REFERENCES:

1. <https://ncert.nic.in/textbook/pdf/lehe104.pdf>
2. <https://drive.google.com/file/d/1mrFlogclLZqR1VLDsqI4ikqvTI2sOB8n/view>
3. <https://www.ihmnotessite.net/front-office>
4. <https://www.ihmnotessite.net/accomodation>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 INTRODUCTION TO HOTEL INDUSTRY				
1.1	Hotel – Definition, Evolution of Hotel industry, Types of hotels.	3	Lecture	PPT
1.2	Organization chart of a hotel – small and large.	2	Chalk & Talk	Black Board
1.3	Types of catering establishment.	2	Chalk & Talk	Black Board
1.4	Star classification and its features.	2	Chalk & Talk	Black Board

UNIT -2 FRONT OFFICE MANAGEMENT				
2.1	Front office- Definition, Importance of front office, Front office organization layout.	3	Chalk & Talk	Black Board
2.2	Sections of front office. Duties and responsibilities of front office staff.	3	Lecture	PPT
2.3	Types of room, Types of plans, Types of room rates.	3	Lecture	PPT, Video
UNIT -3 HOTEL RESERVATION AND RECEPTION				

3.1	Reservation – Definition, Types of reservation, Reservation- procedure, Sources of reservation, Modes of reservation.	2	Chalk & Talk	Black Board
3.2	Reception - Duties and responsibilities of lobby manager.	2	Chalk & Talk	Black Board
3.3	Guest luggage handling procedure, C- form.	1	Chalk & Talk	Black Board
3.4	Front office accounting – Definition, Types of account, Types of posting in a guest account, Safeguard of hotel credit facility, foreign currency exchange.	2	Chalk & Talk	Black Board
3.5	Registration - Check in and Checkout procedure, Guest cycle.	2	Chalk & Talk	Black Board
UNIT -4 HOUSEKEEPING MANAGEMENT				

4.1	Housekeeping department- Definition, Importance, Organization chart.	2	Chalk & Talk	Black Board
4.2	Duties and responsibilities of housekeeping staff, Interdepartmental relationship of front office and house Keeping.	2	Lecture	PPT
4.3	Bed making- Procedure of bed making. Room report- Preparation of room report, Check lists.	2	Lecture	PPT

4.4	Linen- Classification of linen, Modes of obtaining linen. Furnishings- Soft furnishings, Floor furnishings-Carpets and Wall covering.	3	Chalk & Talk	Black Board
UNIT -5 CLEANING AND LAUNDRY MANAGEMENT				
5.1	Laundry procedure	2	Lecture	PPT, Video
5.2	Laundry equipment	2	Chalk & Talk	Black Board
5.3	Stain removal	1	Chalk & Talk	Black Board
5.4	Cleaning- Methods	2	Lecture	PPT
5.5	Selection of cleaning equipment	1	Lecture	PPT
5.6	Cleaning agents Classification	1	Lecture	PPT, Video

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total	% of Assessment
	T1	T2	Quiz	Assignment	OBT /PPT				
	10 Mks	10 Mks	5 Mks.	5 Mks	5 Mks	35 Mks.	5 Mks.	40Mks	
K1	2	2	-	-	-	4	-	4	10 %
K2	2	2	5	-	-	9	-	9	22.5 %
K3	3	3	-	-	5	11	-	11	27.5 %

K4	3	3	-	5	-	11	-	11	27.5 %
Non Scholastic	-	-	-	-	-		5	5	12.5 %
Total	10	10	5	5	5	35	5	40	100 %

CIA	
Scholastic	35
Non Scholastic	5
	40

✓ All the course outcomes are to be assessed in the various CIA components.

✓ The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are:

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

C1 – Internal Test-1

C2 – Internal Test-2

3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non - Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Identify the different types of catering establishments and front office management.	K3	PSO6
CO 2	Explain the functions of front office department.	K2	PSO6
CO 3	Plan reservation and registration procedure.	K3	PSO6
CO 4	Describe the management and functioning of housekeeping department.	K2	PSO6
CO 5	Classify the cleaning agents and equipment.	K2	PSO6

Mapping of COs with PSOs

CO/ PSO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12
CO1	1	1	1	1	1	3	1	1	1	1	1	1
CO2	1	1	1	1	1	3	1	1	1	1	1	1

CO3	1	1	1	1	1	3	1	1	1	1	1	1
CO4	1	1	1	1	1	3	1	1	1	1	1	1
CO5	1	1	1	1	1	3	1	1	1	1	1	1
CO/ PSO	PSO 13	PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO 22	PSO 23	
CO1	1	1	1	1	1	1	1	1	1	1	1	
CO2	1	1	1	1	1	1	1	1	1	1	1	
CO3	1	1	1	1	1	1	1	1	1	1	1	
CO4	1	1	1	1	1	1	1	1	1	1	1	
CO5	1	1	1	1	1	1	1	1	1	1	1	

Mapping of COs with POs

CO/ PSO	P01	P02	P03	P04
CO1	1	1	1	2
CO2	1	1	1	2
CO3	1	1	1	2
CO4	1	1	1	2
CO5	1	1	1	2

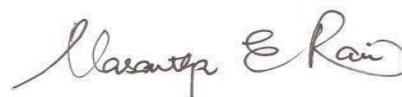
Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2 ♦

Weakly Correlated -1

COURSE DESIGNER:

- Mrs. P. Magdalene Virjini**
- Mrs. J. Josephine Jesintha**

Forwarded By



(Dr.Vasantha Esther Rani)

II B.Sc. HOME SCIENCE WITH FOOD BIOTECHNOLOGY

SEMESTER –III

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N3AC2	CATERING AND HOTEL MANAGEMENT - LAB	Practical	2	2

COURSE DESCRIPTION

This course gives a practical knowledge and hands on experience on the front office Management and housekeeping skills.

COURSE OBJECTIVES

- Filling of various documents used in front Office
- Registration procedures
- Handling reservations and telephone Manners
- Use of cleaning equipment and cleaning agents for various surfaces
- Bed making procedures

UNITS

UNIT –I HOTEL ORGANIZATION (6 HRS.)

Identification of organization structure of different star hotels.

UNIT –II RESERVATION AND REGISTRATION (6 HRS.)

Reservation and registration procedure.

UNIT-III BED MAKING (6HRS.)

Bed making procedure.

UNIT –IV FRONT OFFICE OPERATION (6 HRS.)

Exhibiting front office process.

UNIT –V HOUSEKEEPING

Understanding Cleaning equipment and agents of different hotels. (6 HRS.)

REFERENCES:

1. Allen D.M. (1992). *Accommodation and cleaning service*, Vol II Management
2. Andrews.S.(1995). *Hotel Front Office Training Manual*, Tata McGraw Hill, New Delhi.
3. Andrews.S.(1982). *House Keeping Training Manual*, Tata McGraw Hill, New Delhi.
4. Negi Jagmohan (2007). *Managing Hotel and Restaurants*, Authors Press .

OPEN EDUCATIONAL REFERENCES:

1. <https://ncert.nic.in/textbook/pdf/lehe104.pdf>
2. <https://drive.google.com/file/d/1mrFlogclLZqR1VLDsqI4ikqvTI2sOB8n/view>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 HOTEL ORGANIZATION				
1.1	Identification of organization structure of different star hotels.	6	Chalk & Talk	Sample Hotel Records & Brochures
UNIT -2 RESERVATION AND REGISTRATION				
2.1	Reservation and registration procedure layout.	6	Demonstration	Sample Hotel Registers and Files
UNIT -3 BED MAKING				

3.1	Bed making procedure.	6	Demonstration	Essential Materials
UNIT -4 FRONT OFFICE OPERATION				

4.1	Exhibiting front office process.	6	Role Play	Essential Materials
UNIT -5 HOUSEKEEPING				
5.1	UnderstandingCleaning equipment and agents of different hotels.	6	Demonstration	Samples

EVALUATION PATTERN

SCHOLASTIC				NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
10	10	10	5	5	40	60	100

C1 – Internal Test - 1

C2 – Internal Test - 2

C3 – Model Practical Exam

C4 – Record

C5 – Non – Scholastic

COURSE OUTCOMES

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

CO2	1	1	1	1	1	1	1	1	1	1	1	
CO3	1	1	1	1	1	1	1	1	1	1	1	
CO4	1	1	1	1	1	1	1	1	1	1	1	
CO5	1	1	1	1	1	1	1	1	1	1	1	

Mapping of COs with Pos

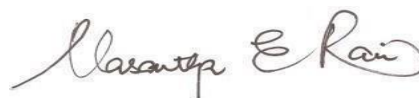
CO/ PSO	P01	P02	P03	P04
CO1	1	1	1	2
CO2	1	1	1	2
CO3	1	1	1	2
CO4	1	1	1	2
CO5	1	1	1	2

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2 ♦
Weakly Correlated -1

COURSE DESIGNER:

1. Mrs. P. Magdalene Virjini
2. Mrs. J. Josephine Jesintha

Forwarded By



(Dr.Vasantha Esther Rani)

II B.Sc. HOME SCIENCE WITH FOOD BIOTECHNOLOGY
SEMESTER –III

For those who joined in 2019 onwards

PROGRAM ME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEE K	CREDITS
UAHS	19N3SB1	ENTREPRENEURIAL SKILLS – SURFACE ORNAMENTATION	Lecture / Practical	2	2

COURSE DESCRIPTION

This skill-based paper aims at imparting hand embroidery and fabric painting techniques.

COURSE OBJECTIVES

- To develop skill in making hand embroidery stitches.
- To encourage students to apply embroidery on tablecloth, handkerchief, tops and blouse.
- To inculcate fabric painting technique in students and make them use this skill on clothing and household linen.

UNITS

UNIT –I

(6 HRS.)

Development of design from a basic motif applying the elements and principles of design.

UNIT –II

(6 HRS.)

Embroidery – Basic hand stitches like chain, satin, long and short, feather, back.

Self-Study: Lazy daisy, French knot, bullion knot, Herring bone, Buttonhole.

UNIT -III

(6 HRS.)

Application of embroidery stitches on table cloth, handkerchief, tops and blouse.

UNIT -IV

(6 HRS.)

Fabric painting study of paints & brush available, different methods of painting.

UNIT -V

(6 HRS.)

Application of fabric painting technique on place mats, pillow cover, saree and kameez.

REFERENCES:

- 1.Creative Craft in Fabric and Yarn . (1979). Gallery Press, London.
- 2.Gladys Cunnigharn. (1969). Singer Sewing Book. Golden press, New York.
- 3.Julia Barton. (1989). The Art of Embroidery. Merchurst Ltd., London.
- 4.Pamela Cabburn. (1976). The Needle Work's Dictionary. William and Morrow and Company, Inc. New York.
- 5.Reader's Digest. (1955). Complete Guide to Needlework.
- 6.Simon and Schuster. (1960). McCall's Treasury of Needle craft. Schuster Publishing, New York.
- 7.The ultimate Design Source Book for Crafters. (2007). Search Press Ltd, Kent, Australia.

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1				
1.1	Development of design	3	Chalk & Talk	Black Board
1.2	Application of elements and principles of design	3	Lecture	LCD
UNIT – 2				
2.1	Basic hand stitches	3	Lecture	PPT
2.2	Chain, Back, Satin, Long & short, Feather	3	Lecture	PPT
UNIT – 3				
3.1	Application of embroidery stitches on table cloth, hand kerchief	3	Specimen	PPT
3.2	Application of stitches on tops and blouse	3	Specimen	PPT
UNIT – 4				
4.1	Study of paints and brush	3	Lecture	White Board
4.2	Different methods of painting	3	Lecture	PPT
UNIT – 5				

5.1	Fabric painting on placemats and pillow cover					3	Specimen		PPT
5.2	Fabric painting on saree and kameez					3	Specimen		PPT
Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total	% of Assessment
	T1	T2	Quiz	Assignment	OBT/PP T				
	10 Mks.	10 Mks.	5 Mks.	5 Mks.	5 Mks.	35 Mks.	5 Mks.	40Mks.	
K1	2	2	-	-	-	4	-	4	10 %
K2	2	2	5	-	-	9	-	9	22.5 %
K3	3	3	-	-	5	11	-	11	27.5 %
K4	3	3	-	5	-	11	-	11	27.5 %
Non Scholastic	-	-	-	-	-		5	5	12.5 %
Total	10	10	5	5	5	35	5	40	100 %

	35
CIA	
Scholastic	
Non Scholastic	5
	40

✓ All the course outcomes are to be assessed in the various CIA components.

✓ The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are:

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS	
C1	C2	C3	C4	C5	C6	CIA	ESE
10	10	5	5	5	5	40	60

C1 – Internal Test-1

C2 – Internal Test-2

C3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non - Scholastic

COURSE OUTCOMES

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

PSO	13	14	15	16	17	18	19	20	21	22	23	
CO1	1	1	1	1	1	1	1	1	1	1	1	
CO2	1	1	1	1	1	1	1	1	1	1	1	
CO3	1	1	1	1	3	1	1	1	1	1	1	
CO4	1	1	1	1	1	1	1	1	1	1	1	
CO5	1	1	1	1	3	1	1	1	1	1	1	

Mapping of COs with POs


CO/ PSO	PO1	PO2	PO3	PO4
CO1	1	1	2	1
CO2	1	1	2	1
CO3	1	1	2	1
CO4	1	1	2	1
CO5	1	1	2	1

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2 ♦
Weakly Correlated -1

COURSE DESIGNER:

1. Dr.R.Latha
2. Ms.D.Mouna

Forwarded By



(Dr.Vasantha Esther Rani)

II B.Sc. HOME SCIENCE WITH FOOD BIOTECHNOLOGY

*For those who joined in 2021 onwards
(Offered as Interdisciplinary Course with Home Science)*

PROGRAMM E CODE	COURSE CODE	COURSE TITLE	CATEGOR Y	HRS/WEE K	CREDIT S
UAZO	21UG4SLZ	PUBLIC HEALT H & HYGIE NE	Self Learning	-	2

COURSE DESCRIPTION

The course is designed to introduce life threatening medical scenarios and to instruct the student how to recognize and respond appropriately to each given situation.

COURSE OBJECTIVES

- To recognize and avoid hazards within her or environment.
- To develop skills necessary for immediate and temporary care care of victims of
- variouscases.

UNITS

UNIT I - NUTRITION AND HEALTH

Role of international health organization: WHO – UNICEF. Concept of health,

Indicators of health.Importance of Nutrition. Nutritional requirements for the special

groups (pregnant mother, lactating mother and children).Protein calorie Malnutrition

(PCM), National nutrition programme.

UNIT II: ENVIRONMENT AND HEALTH

Water borne diseases – types, symptoms and treatment.Purification of water
- large scale for drinking purpose (slow sand and rapid sand filtration methods).
Chlorination of well water.Sanitation.Excreta - Methods of disposal - -types of latrines.
National health programmes in India.

UNIT III: COMMUNICABLE AND NON COMMUNICABLE DISEASE

Epidemiology of Communicable disease- prevention and control -Diarrhoeal diseases-

Zoonoses-Viral hemorrhagic fevers - Primary infections of the brain- Mycobacterial

infections- Emerging disease threats- Severe Acute Respiratory Syndrome (SARS) and Avian flu- Dengue, SwineFlu, Chikungunya. Epidemiology, prevention and control of noncommunicable diseases-

Rheumatic heart disease- Infective endocarditis- Ischaemic heart disease- Respiratory diseases - Program related to Communicable and Non Communicable diseases

UNIT IV: FAMILY PLANNING, MATERNAL AND CHILD HEALTH

Family Planning - Objectives and methods - temporary and permanent methods.

Maternal Mortality Rate (MMR) - Causes and prevention. Infant Mortality Rate (IMR) - Causes and prevention. Problems of the aged Geriatrics. Immunization schedule for children.

UNIT V: FIRST AID

Heart attack - Fire accident –Accident – Injuries- Fractures – Stroke- Poison- Electric Shock – Gasleakage - Snake bite and Dog bite

REFERENCE BOOKS

Park J.E., (2017). *Textbook Of Preventive Social Medicine* 24 Th Edition. BanarsidasBhanot Publishers.

1. Vidhya R., (2002). *Hand Book of Preventive and SocialMedicine*. **Publisher:** JPB; Ninethedition
2. Sudhar R., Wagh P., Vinod B., Kakade, Jiwan P.S., (2015). *Public Health*
3. *AndHygiene* Paperback – 2015. Success Publications; First Edition edition (2015).
4. Kumaresan, V., Sorna Raj R., Public Health and Hygiene. Saras Publication
5. Paho, Padro N.A., (2003). *Zoonoses and Communicable DiseasesCommon to Man and*
6. *Animals* (PAHO Scientific Publications S.) 2003. World Health Organization; 3rd Revised edition edition.

Digital Open Educational Resources

1. <https://www.healthline.com/health/food-nutrition>
2. <https://www.who.int/health-topics/nutrition>
3. <https://www.healthline.com/health/first-aid>

ATION

Internal	External
Assignment – 20 Marks	Objective – 20 Marks
Test – 20Marks	Essay Type Qns. – 40 Marks

Total	- 40Marks	Total	- 60Marks
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On the successful completion of the course, students will be able to:

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Discuss the importance, requirement of nutrition for Mother and children	K2	PSO1,PSO4 &PSO11
CO 2	Summarizes about types water borne disease and its remedies	K2	PSO1, PSO4
CO 3	Explain the temporary and permanent methods of family planning	K2	PSO1, PSO4 &PSO8
CO 4	Outlines the types of maternity problems and child health	K2	PSO1 &PSO8
CO 5	Explain the first aid for major health problems	K2	PSO1, PSO3& PSO4

Mapping COs Consistency with PSOs

CO/ PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
CO1	3			3							1	
CO2	3			3								
CO3	3			3				1				
CO4	1							1				
CO5	2		2	3								

Note: ♦ Strongly Correlated – 3


♦ ModeratelyCorrelated – 2

WeaklyCorrelated -1

1. Dr. N. Nagarani (Zoology)

2. Mrs. C. Helen (Home Science)

Forwarded BY


Dr. A. TAMIL SELVI
 Head, Dept. of Zoology
FATIMA COLLEGE (AUTONOMOUS)
 MADURAI-625 018

**IIB.Sc. HOME SCIENCE WITH FOOD BIOTECHNOLOGY
SEMESTER –IV**

For those who joined in 2019 onwards

PROGRAM ME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDIT S
UAHS	19N4CC10	BASICS OF FOOD BIOTECHNOLOGY	Lecture	5	4

COURSE DESCRIPTION

This course describes the concepts of biotechnology, role of microorganism in food industry

COURSE OBJECTIVES

- To enable students to understand the concepts of biotechnology
- To gain knowledge on role of microorganism in food industry

UNITS

UNIT –I INTRODUCTION

(15HRS.)

Biotechnology –Definitions – Branches - Biotechnology in India.

Food Biotechnology - Scope, Importance and applications in fields of medicine, agriculture, industry and environment. Microorganisms associated with food biotechnology – Bacteria, Yeast, Mould

Self- Study: Applications in fields of medicine, agriculture

UNIT –II MICROORGANISMS ASSOCIATED WITH FOOD

BIOTECHNOLOGY

(15 HRS.)

Spoilage, contamination and preservation of foods

Factors affecting microbial growth, Microbial kinetics

UNIT –III PRODUCTION OF CULTURES FOR FOOD FERMENTATION

(15HRS.)

Culture of food microbes - Preparation of nutrient media, Sterilization and disinfection, inoculation techniques, Staining methods, Microbial examination.

UNIT –IV FERMENTATION TECHNOLOGY

(15 HRS.)

Fermentation – Definition, Fermentation process, Fermented food Products – Yoghurt, Cheese, Tempeh, saurkraut, Idli, Dosa. Advantages of fermented products

Self-Study: Advantages of fermented products

UNIT –V SINGLE CELL PROTEIN

(15HRS.)

Single cell Protein: Definition, Microorganisms used for SCP production, Substrates, procedure for production of SCP, Biomass recovery, Advantages of SCP, Limitations of SCP.

REFERENCES:

TEXTBOOK:

1. Frazier, (1989) *Food Microbiology*, THM Publications

REFERENCE BOOKS:

1. Gupta, P.K. (1995). *Elements of Biotechnology*, Rastogi Publications, Meerut.
2. Jay, (1987). *Modern Food Microbiology*, CBS Publishers,
3. Rita Singh. (2004). *Food Biotechnology*, Global Vision Publishing House, Delhi.
4. Singh, B. D (2004). *Biotechnology Expanding Horizons*, Kalyani Publishers, Ludhiana.
5. Sri Ram Sridhar (2005). *Enzyme Biotechnology*, Dominant Publishers and Distributors, New Delhi.

OPEN EDUCATIONAL REFERENCES

1. <https://microbenotes.com/category/biotechnology/>
2. <https://www.rug.nl/research/irees/research/edulink-fsba/fsba-course-modules/fsba-module-2-unit-1-notes-english.pdf>
3. <https://www.onlinebiologynotes.com/single-cell-protein-scp-substrate-and-steps-involved-in-production/>
4. <https://openstax.org/books/microbiology/pages/1-3-types-of-microorganisms#>
5. <https://courses.lumenlearning.com/boundless-microbiology/chapter/food-preservation/#:~:text=Preservation%20usually%20involves%20preventing%20the,or%20otherwise%20reduce%20food%20spoilage.>
6. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6723656/>
7. <https://courses.lumenlearning.com/boundless-microbiology/chapter/microbial-culture-methods/>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT 1 - BIOTECHNOLOGICAL APPROACHES IN FOOD PROCESSING				
1.1	Biotechnology – Definitions – Branches	2	Chalk &Talk	Black Board
1.2	Biotechnology in India.	2	Chalk & Talk	LCD
1.3	Food Biotechnology - Scope, Importance and applications in fields of medicine, agriculture, industry and environment	4	Lecture	PPT & White board
1.4	Microorganisms associated with food biotechnology – Bacteria	3	Lecture	Smart Board
1.5	Microorganisms associated with food biotechnology – Yeast, Mould	2	Lecture	Black Board
1.6	Applications of Biotechnology	2	Discussion	Google classroom
UNIT -2 BASICS OF MICROBIOLOGY				

2.1	Spoilage and contamination of foods	4	Lecture	LCD
2.2	Preservation of foods	4	Chalk & Talk	LCD
2.3	Factors affecting microbial growth	4	Lecture	PPT & White board
2.4	Microbial kinetics	3	Discussion	PPT
UNIT -3 PRODUCTION OF CULTURES FOR FOOD FERMENTATION				
3.1	Culture of food microbes - Preparation of nutrient media	3	Lecture	LCD
3.2	Sterilization and disinfection Methods	2	Lecture	LCD
3.3	Inoculation techniques.	4	Chalk & Talk	LCD
3.4	Staining methods	4	Lecture	PPT & White board
3.5	Microbial examination	2	Lecture	PPT & White board
UNIT -4 FERMENTATION TECHNOLOGY				
4.1	Fermentation – Definition	1	Lecture	LCD
4.2	Fermentation process – Types	4	Chalk & Talk	LCD

4.3	Fermented food Products – Yoghurt, Cheese	3	Lecture	PPT & White board
4.4	Tempeh, Saurkraut,	3	Lecture	PPT & White board
4.5	Idli, Dosa.	2	Chalk & Talk	LCD
4.6	Advantages of fermented products	2	Discussion	PPT
UNIT -5 SINGLE CELL PROTEIN				
5.1	Single cell Protein – Definition	1	Lecture	LCD
5.2	Microorganisms used for SCP production	3	Chalk & Talk	LCD
5.3	Substrates used for SCP production	3	Lecture	PPT & White board
5.4	procedure for production of SCP	4	Lecture	PPT & White board
5.5	Biomass recovery	2	Chalk & Talk	LCD
5.6	Advantages of SCP, Limitations of SCP.	2	Discussion	PPT

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total	% of Assessment
	T1 10 Mks.	T2 10 Mks.	Quiz 5 Mks.	Assignment 5 Mks	OBT/PP T 5 Mks	35 Mks.	5 Mks.	40Mks.	
K1	2	2	-	-	-	4	-	4	10 %
K2	2	2	5	-	-	9	-	9	22.5 %
K3	3	3	-	-	5	11	-	11	27.5 %
K4	3	3	-	5	-	11	-	11	27.5 %
Non Scholastic	-	-	-	-	-		5	5	12.5 %
Total	10	10	5	5	5	35	5	40	100 %

CIA	
Scholastic	35
Non Scholastic	5
	40

✓ All the course outcomes are to be assessed in the various CIA components.

✓ The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are:

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

C1 – Internal Test-1

C2 – Internal Test-2

C3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non – Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Define the concepts of biotechnology, its branches and scope	K1	PSO5
CO 2	Classify the food microorganism, Identify the factors affecting the microbial growth, explain spoilage and contamination of foods, identify the methods of preservation of foods	K2, K3	PSO5
CO 3	Explain the techniques of preparation of culture media, sterilization, inoculation and staining	K2	PSO5
CO 4	Build knowledge on fermentation process and its application	K3	PSO5
CO 5	Infer the production of single cell protein	K4	PSO5

Mapping of COs with PSOs

CO/ PSO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO10	PSO11	PSO12
CO1	1	1	1	1	3	1	1	1	1	1	1	1
CO2	1	1	1	1	3	1	1	1	1	1	1	1
CO3	1	1	1	1	3	1	1	1	1	1	1	1

CO4	1	1	3	1	3	1	1	1	1	1	1	1
CO5	1	1	3	1	3	1	1	1	1	1	1	1
CO/ PSO	PSO 13	PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO2 2	PSO2 3	
CO1	1	1	1	1	1	1	1	1	1	1	1	
CO2	1	1	1	1	1	1	1	1	1	1	1	
CO3	1	1	1	1	1	1	1	1	1	1	1	
CO4	1	1	1	1	1	1	1	1	1	1	1	
CO5	1	1	1	1	1	1	1	1	1	1	1	

Mapping of COs with POs

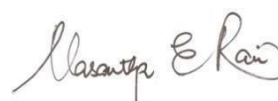
CO/ PSO	PO1	PO2	PO3	PO4
CO1	1	1	1	1
CO2	3	3	3	1
CO3	3	3	3	1
CO4	3	3	3	1
CO5	3	3	3	1

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2

♦ Weakly Correlated -1

COURSE DESIGNER:
Mrs.J.JosephineJesintha

Forwarded By



(Dr.Vasantha Esther Rani)

II.B.Sc.HOME SCIENCE WITH FOOD BIOTECHNOLOGY
SEMESTER –IV

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N4CC11	CLOTHING AND FASHION	Lecture	4	3

COURSE DESCRIPTION

This course aims at imparting knowledge on basics of clothing construction, clothing selection, care and wardrobe planning. It also deals with fashion industry, fashion promotion and fashion illustration.

COURSE OBJECTIVES:

- To enable students to develop skills in clothing construction and care of clothes.
- To introduce the concept of fashion.
- To develop fashion sketching techniques.

UNITS

UNIT –1 BASICS OF CLOTHING CONSTRUCTION

(10 HRS.)

- a) Preparation of fabric,
- b) Techniques of patterns making – drafting, draping and flat pattern
- c) Pattern layout.

Self- Study: Importance of body measurement

UNIT –II CLOTHING SELECTION, CARE AND WARDROBE PLANNING

(15HRS.)

1. Wardrobe planning – principles, clothing inventory, spending plan,

shopping skill and accessories.

2. Water – hardness, methods of softening.
3. Soaps and detergents
4. Bleaching agents
5. Dry cleaning.

Self- Study: Factors influencing the choice of clothes – age, sex, income, family size, occupation, customs and tradition, climate, fashion, occasion and suitability.

UNIT –III INTRODUCTION TO FASHION

(10 HRS.)

- a) Definition of Fashion, Style Classic, Fad.
- b) Terms related to fashion industry – Mannequin, Boutique, Fashion shows, Apparel, Catalogue, Haute Couture, forecasting.
- c) Fashion – origin, concept, fashion cycle and trends.

UNIT –IV FASHION INDUSTRY AND FASHION PROMOTION

(10 HRS.)

- a) Structure of the Fashion industry
- b) Structure of the Fashion market
- c) Techniques for fashion promotion – fashion advertising, fashion conferences, trade fairs, Exhibition, fashion shows, fashion journalism and window display.

UNIT –V FASHION ILLUSTRATION

(15 HRS.)

- a) Elements and Principles of design
 - b) Designing casual wear using templates
 - c) Designing party wear using templates
 - d) Designing kids wear using templates

REFERENCES:

TEXTBOOK:

1. Erwin, M.D. (1975). Clothing for Moderns. The Mac Millan Company, New York.

REFERENCE BOOKS

1. Anne Allen & Julian Seaman. (2005). Fashion Drawing – The Basic Principles. Replika Press Pvt. Ltd, India
2. Gini Stephens Frings. (2005). Fashion – From Concept to Consumer. Pearson Education.
3. Jay Diamond & Ellen Diamond. (1997). The World of Fashion. Fair Child Publications, New York.
4. Mary Mathews. (1985). Practical Clothing Construction Part I and II. Chennai.
5. Retu, T. (1998). Hand book for Fashion Designing. Mittal Publications, New Delhi.
6. Sharon Lee Tate. (2004). Inside Fashion Design. Pearson Education.
7. Tracy Diane & Tom Cassidy. (2005). Colour Forecasting. Blackwell Pub

OPEN EDUCATIONAL RESOURCES:

1. <https://fitnyc.libguides.com/fashiondesign/patternmaking>
2. http://metalab.uniten.edu.my/~ridha/PrinCiplesOf_Design/referenc es/Elements-and-Principles-of-Design.pdf

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 BASICS OF CLOTHING CONSTRUCTION				
1.1	Preparation of fabric	3	Chalk & Talk	Black Board
1.2	Techniques of pattern making- drafting, draping and flat pattern	4	Chalk & Talk	Black Board

1.3	Pattern layout	3	Lecture	PPT
UNIT – 2 CLOTHING SELECTION, CARE AND WARDROBE PLANNING				
2.1	Wardrobe planning	4	Lecture, Discussion	PPT
2.2	Water	3	Chalk & Talk	Black Board
2.3	Soaps and detergents	3	Chalk & Talk, Specimen	Black Board
2.4	Bleaching agents	2	Chalk & Talk	Black Board
2.5	Drycleaning	3	Chalk & Talk	Black Board
UNIT – 3 INTRODUCTION TO FASHION				
3.1	Definition of Fashion, Style, Classic, Fad	3	Lecture	PPT
3.2	Mannequin, Boutique, Fashion shows, Apparel, Catalogue, Haute Couture, Forecasting	3	Chalk & Talk	Black Board
3.3	Fashion – Origin, concept, fashion cycle and trends	4	Lecture	PPT
UNIT – 4 FASHION INDUSTRY AND FASHION PROMOTION				
4.1	Structure of the fashion industry	3	Chalk & Talk	Black Board

4.2	Structure of the fashion market	3	Chalk & Talk	Black Board
4.3	Techniques for fashion promotion	4	Lecture	PPT
UNIT – 5 FASHION ILLUSTRATION				
5.1	Elements and Principles of design	3	Lecture	PPT
5.2	Designing Casual wear	4	Discussion, Specimen	PPT
5.3	Designing party wear	4	Discussion, Specimen	PPT
5.4	Designing kids wear	4	Discussion, Specimen	PPT

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total	% of Assessment
	T1	T2	Quiz	Assignment	OBT/PP T				
	10 Mks .	10 Mks .	5 Mks .	5 Mks	5 Mks	35 Mks.	5 Mks.	40Mks .	
K1	2	2	-	-	-	4	-	4	10 %
K2	2	2	5	-	-	9	-	9	22.5 %
K3	3	3	-	-	5	11	-	11	27.5 %

K4	3	3	-	5	-	11	-	11	27.5 %
Non Scholastic	-	-	-	-	-		5	5	12.5 %
Total	10	10	5	5	5	35	5	40	100 %

CIA	
Scholastic	35
Non Scholastic	5
	40

✓ **All the course outcomes are to be assessed in the various CIA components.**

✓ **The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are:**

K1- Remember, **K2-**Understand,**K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON – SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

C1 – Internal Test-1

C2 – Internal Test-2

C3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non - Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Identify the different techniques of pattern making and pattern layout.	K1, K3	PSO9
CO 2	Explain the principles of wardrobe planning and factors to be remembered in the selection of clothes.	K2	PSO9
CO 3	Summarize the laundering agents.	K2	PSO9
CO 4	Recall the terms related to fashion industry, fashion cycle and fashion trends.	K1	PSO9
CO 5	Describe the structure of fashion industry, fashion market and fashion promotion techniques.	K2	PSO9
CO 6	Illustrate and apply elements and principles of design on casual wear, party wear and kids wear.	K2, K4	PSO9 & PSO17

Mapping of COs with PSOs

CO/ PSO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO1 0	PSO1 1	PSO 12
CO1	1	1	1	1	1	1	1	1	3	1	1	1
CO2	1	1	1	1	1	1	1	1	3	1	1	1
CO3	1	1	1	1	1	1	1	1	3	1	1	1
CO4	1	1	1	1	1	1	1	1	3	1	1	1
CO5	1	1	1	1	1	1	1	1	3	1	1	1
CO/ PSO	PSO 13	PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO 22	PSO 23	
CO1	1	1	1	1	1	1	1	1	1	1	1	
CO2	1	1	1	1	1	1	1	1	1	1	1	
CO3	1	1	1	1	1	1	1	1	1	1	1	
CO4	1	1	1	1	1	1	1	1	1	1	1	
CO5	1	1	1	1	1	1	1	1	1	1	1	

Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	1	1	1	2
CO2	1	1	1	2
CO3	1	1	1	2
CO4	1	1	1	2
CO5	1	1	1	2

Note: ♦ Strongly Correlated – 3

♦ Moderately Correlated – 2

♦ Weakly Correlated -1

COURSE DESIGNER:

Dr.R.Latha

Forwarded By

A handwritten signature in black ink, appearing to read 'Vasantha E Rani', written in a cursive style.

(Dr.Vasantha Esther Rani)

II B.Sc.HOME SCIENCE WITH FOOD BIOTECHNOLOGY
SEMESTER –IV

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N4CC12	CLOTHING AND FASHION - LAB	Practical	3	2

COURSE DESCRIPTION

This course makes the students to become skillful in constructing garments and creating fashion sketches.

COURSE OBJECTIVES

- To impart skill in drafting and construction of garments.
- To train students in fashion illustration.

UNITS

UNIT –I (12 HRS.)

Drafting paper pattern and construction of

(i) Baby's Night Gown

(ii) Six Gore Saree petticoat

UNIT –II (12 HRS.)

Drafting paper pattern and construction of

(i) Nighty

(ii) Salwar Kameez

UNIT –III (7 HRS.)

Drawing flesh figure using 8 head theory.

UNIT –IV (7 HRS.)

Drawing shoes, handbags, hats and hairstyles.

UNIT –V

(7 HRS.)

Developing sketches based on themes

REFERENCE BOOKS:

1. Anne Allen & Julian Seaman. (2005). Fashion Drawing – The Basic Principles. Replika Press Pvt. Ltd, India
2. Gini Stephens Frings. (2005). Fashion – From Concept to Consumer. Pearson Education.
3. Jay Diamond & Ellen Diamond. (1997). The World of Fashion. Fair Child Publications, New York.
4. Mary Mathews. (1985). Practical Clothing Construction Part I and II. Chennai.
5. Retu, T. (1998). Hand book for Fashion Designing. Mittal Publications, New Delhi.
6. Sharon Lee Tate. (2004). Inside Fashion Design. Pearson Education.
7. Tracy Diane & Tom Cassidy. (2005). Colour Forecasting. Blackwell Pub

OPEN EDUCATIONAL RESOURCES:

1. <https://fitnyc.libguides.com/fashiondesign/patternmaking>
2. <http://metalab.uniten.edu.my/~ridha/PrinCiplesOf Design/references/Elements-and-Principles-of-Design.pdf>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1				
1.1	Drafting of Baby's Night Gown	3	Chalk & Talk	Black Board
1.2	Construction of Baby's Night Gown	3	Demonstration	Sewing Machine
1.3	Drafting of Saree Petticoat	3	Chalk & Talk	Black Board

1.4	Construction of Saree Petticoat	3	Demonstration	Sewing Machine
UNIT – 2				
2.1	Drafting of Nighty	3	Chalk & Talk	Black Board
2.2	Construction of Nighty	3	Demonstration	Sewing Machine
2.3	Drafting of Salwar Kameez	3	Chalk & Talk	Black Board
2.4	Construction of Salwar Kameez	3	Demonstration	Sewing Machine
UNIT – 3				
3.1	Drawing flesh figure using * head theory	7	Demonstration	Black Board
UNIT – 4				
4.1	Drawing shoes, hand bags	4	Demonstration	Black Board
4.2	Drawing hats and hairstyles	3	Demonstration	Black Board
UNIT – 5				
5.1	Developing sketches based on themes – festive occasions	3	Lecture	PPT

5.1	Casual wear, party wear, executive wear using elements and principles of design	4	Lecture	PPT
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EVALUATION PATTERN

SCHOLASTIC				NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
10	10	10	5	5	40	60	100

C1 – Internal Test - 1

C2 – Internal Test - 2

C3 – Model Practical Exam

C4 – Record

C5 – Non – Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Construct baby garment and saree petticoat.	K3	PSO9
CO 2	Plan drafting and construct nighty and salwar kameez.	K3	PSO9

CO 3	Build flesh figure using 8 head theory.	K3	PSO9
CO 4	Choose and draw different hairstyles and accessories.	K1, K3	PSO9 & PSO17
CO 5	Illustrate casual wear, party wear and festive wear based on themes.	K2, K4	PSO9 & PSO17

Mapping of COs with PSOs

CO/ PSO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12
CO1	1	1	1	1	1	1	1	1	3	1	1	1
CO2	1	1	1	1	1	1	1	1	3	1	1	1
CO3	1	1	1	1	1	1	1	1	3	1	1	1
CO4	1	1	1	1	1	1	1	1	3	1	1	1
CO5	1	1	1	1	1	1	1	1	3	1	1	1
CO/ PSO	PSO 13	PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO 22	PSO 23	
CO1	1	1	1	1	1	1	1	1	1	1	1	
CO2	1	1	1	1	1	1	1	1	1	1	1	
CO3	1	1	1	1	1	1	1	1	1	1	1	
CO4	1	1	1	1	3	1	1	1	1	1	1	
CO5	1	1	1	1	3	1	1	1	1	1	1	

Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	1	1	1	3
CO2	1	1	1	3
CO3	1	1	1	3
CO4	1	1	1	3
CO5	2	1	1	3

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2
 ♦ Weakly Correlated -1

COURSE DESIGNER:

1.Dr.R.Latha

2. Ms.J.JosephineJesintha

Forwarded By



(Dr.Vasantha Esther Rani)

II B.Sc. HOME SCIENCE WITH FOOD BIOTECHNOLOGY
SEMESTER –IV

For those who joined in 2019 onwards

PROGRAMM E CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEE K	CREDIT S
UAHS	19N4AC3	FOOD PRODUCTION AND SERVICE	Lecture	3	3

COURSE DESCRIPTION

This course provides knowledge on the production of food in different styles and the service procedure.

COURSE OBJECTIVES

- To understand the concept of Catering and Food Production.
- To learn different types of cuisine and service types.

UNITS

UNIT –I CLASSIFICATION OF RAW MATERIALS (9HRS.)

Aims and objectives of cooking Food – Classification of Raw Materials
Self -study: Pre preparation of Ingredients – Methods of mixing Foods – cooking methodology for Indian, Continental and Chinese Cookery.

UNIT –II SOUPS, SAUCES AND SALADS (9 HRS.)

Stocks and Sauces -Definition, Types of stocks and Roux
Derivatives- Soups and Sauces- Types of soups and sauces
Salads -- Definition, classification and preparation- Recipes for simple and compound salads, salad Dressings –Preparation of Salad Dressing.

UNIT –III STANDARDIZATION AND MENU PLANNING (9 HRS.)

Selection procedures for Meat (pork, mutton, Beef), Poultry, Fish, Cuts of Meat, Poultry, Fish.
Standardization of recipes, quality standards and portion control, Utilization of left over.

Menu – Definition, Types of menus, Menu planning

UNIT –IV FOOD AND BEVERAGE SERVICE

(9HRS.)

Food and Beverage Service – Introduction, Definition, various outlets for food and beverage services.

Type of service - Russian, French, English and Indian, Etiquettes of service staff. Qualities of a waiter, waiting at the table. Table setting – buffet setting. Table wares -Crockery, cutlery and hollow wares. Napkin folding.

UNIT –V MANAGEMENT OF FOOD AND BEVERAGE PRODUCTION

DEPARTMENT

(9 HRS.)

Management for food and beverage of food production department– Principle and functions of management. Organizational chart,Tools of management.

REFERENCES:

TEXTBOOK:

1. Andrews.S (1982). *Food and Beverage Service Training Manual* , Tata McGraw Hill, New Delhi,

REFERENCE BOOKS:

1. Jitendar ,M.D.(2000). *Catering Management*, Denumant Publication, New Delhi.
2. Jones&Merricks (1995). *The Management of Food Service operation*, Cassell Publication, London.
3. Sethi &Mathan.(1997).*Catering Management* – An integration approach, New Age International, Chennai,
4. Thangam Phillip (1992). *Modern cookery*, Orient Longman, Mumbai,

OPEN EDUCATIONAL RESOURCES:

1. <http://www.cocktailtimes.com>
2. <http://www.Food and beverages skills.org>
3. <http://www.wpi.edu/Pubs/E-project/Available/E-project-031405-135846/unrestricted/IQP.pdf>
4. http://www.sciencedaily.com/articles/t/transgenic_plants.htm
5. <https://ncert.nic.in/textbook/pdf/lehe104.pdf>
6. <https://drive.google.com/file/d/1mrFlogclLZqR1VLDsqI4ikqvTI2sOB8n/view>
7. <https://www.ihmnotessite.net/front-office>
8. <https://www.ihmnotessite.net/accomodation>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 CLASSIFICATIONOF RAW MATERIALS				
1.1	Aims and objectives of cooking Food	1	Chalk & Talk	Black Board
1.2	Classificationof Raw Materials	2	Chalk & Talk	LCD
1.3	Pre preparation of Ingredients	2	Lecture	PPT & White board
1.4	Methods of mixing Foods	2	Lecture	Smart Board
1.5	Cooking methodology for Indian, Continental and Chinese Cookery.	2	Lecture	Black Board
UNIT -2 SOUPS, SAUCES AND SALADS				
2.1	Stocks and Sauces - Definition, Types of stocks and Roux	1	Lecture	Black Board
2.2	Derivatives- Soups and Sauces- Types of soups and sauces	1	Chalk &Talk	Green Board
2.3	Types of sauces	2	Chalk & Talk	LCD
2.4	Salads -- Definition, classification and preparation	1	Lecture	PPT & White board

2.5	Recipes for simple and compound salads	2	Lecture	Smart Board
2.6	salad Dressings –Preparation of Salad Dressing.	2	Chalk & Talk	Black Board
UNIT -3STANDARDIZATION AND MENU PLANNING				
3.1	Selection procedures for Meat (pork, mutton, Beef), Poultry, Fish	2	Chalk & Talk	Black Board
3.2	Cuts of Meat, Poultry, Fish.	1	Chalk & Talk	LCD
3.3	Standardization of recipes,	2	Lecture	PPT & White board
3.4	Quality standards and portion control	1	Lecture	Smart Board
3.5	Utilization of left over	1	Lecture	Black Board
3.6	Menu – Definition, Types of menus, Menu planning.	2	Lecture	PPT & White board
UNIT –IV FOOD AND BEVERAGE SERVICE				
4.1	Food and Beverage Service – Introduction, Definition	1	Chalk & Talk	Black Board
4.2	various outlets for food and beverage services.	1	Chalk & Talk	LCD
4.3	Type of service - Russian, French, English and Indian,	1	Lecture	PPT & White

				Board
4.4	Etiquettes of service staff	1	Lecture	Smart Board
4.5	Rules for waiting at the table	2	Lecture	Black Board
4.6	Table setting – buffet setting	1	Discussion	LCD
4.7	Table wares -Crockery, cutlery and hollow wares.	1	Chalk & Talk	LCD
4.8	Napkin folding	1	Chalk & Talk	LCD
UNIT –V MANAGEMENT OF FOOD AND BEVERAGE PRODUCTION DEPARTMENT				
5.1	Management for food and beverage of food production department	1	Chalk & Talk	Black Board
5.2	Principles of management	2	Chalk & Talk	LCD
5.3	functions of management	2	Lecture	PPT & White board
5.4	Organizational chart of management	2	Lecture	Smart Board
5.5	Tools of management.	2	Lecture	Black Board

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total	% of Assessment
	T1	T2	Quiz	Assignment	OBT/PP T				
	10 Mks	10 Mks	5 Mks	5 Mks	5 Mks	35 Mks.	5 Mks.	40Mks	
K1	2	2	-	-	-	4	-	4	10 %
K2	2	2	5	-	-	9	-	9	22.5 %
K3	3	3	-	-	5	11	-	11	27.5 %
K4	3	3	-	5	-	11	-	11	27.5 %
Non Scholastic	-	-	-	-	-		5	5	12.5 %
Total	10	10	5	5	5	35	5	40	100 %

CIA	
Scholastic	35
Non Scholastic	5
	40

✓ All the course outcomes are to be assessed in the various CIA components.

✓ The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are:

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

C1 – Internal Test-1

C2 – Internal Test-2

C3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non - Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
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CO5	1	1	1	1	1	1	1	1	1	1	1	
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Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	1	1	1	3
CO2	1	1	1	3
CO3	1	1	1	3
CO4	1	1	1	3
CO5	1	1	1	3

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2 ♦
Weakly Correlated -1

COURSE DESIGNER:

1. Dr.S.Shanthi
2. Mrs.J.JosephineJesintha

Forwarded By



(Dr.Vasantha Esther Rani)

II B.Sc.HOME SCIENCE WITH FOOD BIOTECHNOLOGY
SEMESTER –IV

For those who joined in 2019 onwards

PROGRA MME CODE	COURSE CODE	COURSE TITLE	CATEGO RY	HRS/WEEK	CREDITS
UAHS	19N4AC4	FOOD PRODUCTION AND SERVICE LAB	Practical	2	2

COURSE DESCRIPTION

This practical course develops the skills on the production and service of the food.

COURSE OBJECTIVES

- To acquire the skill on planning the course menu
- To prepare the food on various styles

UNITS

FOOD PREPARATION

UNIT –I Preparation of soups, salads and desserts (6 HRS.)

UNIT –II Main dish (Indian, Continental and Chinese) (6HRS.)

UNIT –III Side dish (Indian, Continental and Chinese (6 HRS.)

UNIT –IV Course menu (6 HRS.)

FOOD SERVICE

UNIT -V Types of service, Cover laying, Table setting and

Napkin folding (6 HRS.)

REFERENCE BOOKS:

1. Jitendar ,M.D.(2000). *Catering Management*, Denumant Publication, New Delhi.

2. Jones & Merricks (1995). *The Management of Food Service operation*, Cassell Publication, London.
3. Sethi & Mathan. (1997). *Catering Management – An integration approach*, New Age International, Chennai,
4. Thangam Phillip (1992). *Modern cookery*, Orient Longman, Mumbai,

OPEN EDUCATIONAL RESOURCES:

- a) <http://www.cocktailtimes.com>
- b) <http://www.Food and beverages skills.org>
- c) <http://www.wpi.edu/Pubs/E-project/Available/E-project-031405-135846/unrestricted/IQP.pdf>
- d) 135846/unrestricted/IQP.pdf
- e) http://www.sciencedaily.com/articles/t/transgenic_plants.htm

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT –I Preparation of soups, salads and desserts				
1.1	FOOD PREPARATION Preparation of Soups	2	Hands on Training	White board
1.2	Preparation of Salads	2	Hands on Training	LCD & White board
1.3	Preparation of Desserts	2	Hands on Training	Demonstration
UNIT –II Main dish (Indian, Continental and Chinese)				
2.1	Topic 2 Main dish (Indian)	2	Hands on Training	White board

2.2	Subtopics Main dish (Continental)	2	Hands on Training	White board
2.3	Main dish (Chinese)	2	Hands on Training	White board
UNIT -III Side dish (Indian, Continental and Chinese)				
3.1	Topic 3 Side dish (Indian)	2	Hands on Training	Demonstrati on
3.2	Subtopics Side dish (Continental)	2	Hands on Training	Demonstrati on
3.3	Side dish (Chinese)	2	Hands on Training	Demonstrati on
UNIT -IV Course menu				
4.1	Topic 4 Preparation of course Menu -Indian	2	Lecture& Hands on Training	White board
4..2	Subtopics Preparation of course Menu -Continental	2	Lecture &Hands on Training	Demonstrati on
4.3	Preparation of course Menu -Chinese	2	Lecture &Hands on Training	Demonstrati on
UNIT -V Types of service, cover laying, table setting and napkin folding				
5.1	Topic5 Types of service	3	Lecture& Hands on Training	LCD & White board

5.2	Subtopics Cover laying and table Setting	2	Hands on Training	Demonstrati on
5.3	Vegetable Carving and Napkin folding	1	Lecture	Demonstrati on

EVALUATION PATTERN

SCHOLASTIC				NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
10	10	10	5	5	40	60	100

C1 – Internal Test - 1

C2 – Internal Test - 2

C3 – Model Practical Exam

C4 – Record

C5 – Non – Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	COURSE OUTCOMES (CO) Plan and prepare starters and desserts	K1,K2	PSO3 and PSO7

Mapping of COs with POs

CO/ PSO	P01	P02	P03	P04
CO1	1	3	1	1
CO2	1	3	1	1
CO3	1	3	1	1
CO4	1	3	1	1
CO5	1	3	1	1

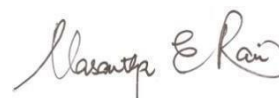
Note: ♦ Strongly Correlated – 3

♦ Moderately Correlated – 2

♦ Weakly Correlated -1

COURSE DESIGNER:
Dr.S. Santhi

Forwarded By



(Dr.Vasantha Esther Rani)

II B.Sc. HOME SCIENCE WITH FOOD BIOTECHNOLOGY
SEMESTER –IV

For those who joined in 2019 onwards

PROGRAMM E CODE	COURS E CODE	COURSE TITLE	CATEGORY	HRS/WE EK	CREDITS
UAHS	19N4SB 2	ENTREPRENEURIAL SKILLS – CAD	Lecture / Practical	2	2

COURSE DESCRIPTION

This course imparts skill in designing fashion garments, texture mapping and application of suitable accessories and background using Fashion Studio software.

COURSE OBJECTIVES

- To train the students in drawing basic silhouettes.
- To impart skill in designing fashion garments.

UNITS

UNIT –I (10 HRS.)

Drawing basic silhouettes

Self- Study: Drawing accessories

UNIT –II (5 HRS.)

Texture mapping – introducing colours and designs

UNIT –III (5 HRS.)

Colour way studio

UNIT –IV (5 HRS.)

Introducing pleat and fold

UNIT –V (5 HRS.)

Draping

REFERENCE BOOKS

1. Anne Allen & Julian Seaman. (2005). Fashion Drawing – The Basic Principles. Replika Press Pvt. Ltd, India.
2. Erwin, M.D. (1975). Clothing for Moderns. The Mac Millan Company, New York.
3. Gini Stephens Frings. (2005). Fashion – From Concept to Consumer. Pearson Education.
4. Jay Diamond & Ellen Diamond. (1997). The World of Fashion. Fair Child Publications, New York.
5. Mary Mathews. (1985). Practical Clothing Construction Part I and II. Chennai.
6. Retu, T. (1998). Hand book for Fashion Designing. Mittal Publications, New Delhi.

OPEN EDUCATIONAL RESOURCES:

<https://en.wikipedia.org/wiki/Textile>

<https://www.amazon.in/Spinning-Tillie-Walden-ebook/dp/B074ZGMTY2>

<https://www.textileebook.com/2019/04/principles-of-textile-finishing-asim-kumar-roy-choudhury.html>

<https://textilestudycenter.com/library/>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1		TITLE		
1.1	Drawing basic silhouettes	1	Lecture	Fashion Studio Software
2.1	Texture mapping – introducing colours and	1	Lecture	Fashion Studio

	Designs			Software
3.1	Colour way studio	4	Lecture	Fashion Studio Software
4.1	Introducing pleat and fold	1	Lecture	Fashion Studio Software
5.1	Draping	1	Lecture	Fashion Studio Software

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total	% of Assessment
	T1 10 Mks.	T2 10 Mks.	Quiz 5 Mks.	Assignment 5 Mks	OBT/PP T 5 Mks	35 Mks.	5 Mks.	40Mks.	
K1	2	2	-	-	-	4	-	4	10 %
K2	2	2	5	-	-	9	-	9	22.5 %
K3	3	3	-	-	5	11	-	11	27.5 %
K4	3	3	-	5	-	11	-	11	27.5 %
Non Scholastic	-	-	-	-	-		5	5	12.5 %
Total	10	10	5	5	5	35	5	40	100 %

CIA	
Scholastic	35
Non Scholastic	5
	40

✓ All the course outcomes are to be assessed in the various CIA components.

✓ The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are :

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS	
C1	C2	C3	C4	C5	C6	CIA	ESE
10	10	5	5	5	5	40	60

C1 – Internal Test-1

C2 – Internal Test-2

C3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non – Scholastic

CO5	1		1	1	1	1	1	1	1	1	3	1	1
CO/ PSO	PSO 13		PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO2 2	PSO2 3	
CO1	1		1	1	1	1	1	1	1	1	1	1	
CO2	1		1	1	1	3	1	1	1	1	1	1	
CO3	1		1	1	1	1	1	1	1	1	1	1	
CO4	1		1	1	1	1	1	1	1	1	1	1	
CO5	1		1	1	1	1	1	1	1	1	1	1	

Mapping of COs with Pos

CO/ PSO	P01	P02	P03	P04
CO1	1	1	3	1
CO2	3	1	3	1
CO3	2	1	3	1
CO4	3	1	3	1
CO5	3	1	3	1

Note: ♦ Strongly Correlated – 3

♦ Moderately Correlated – 2

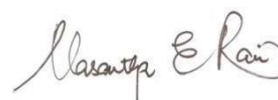
♦ Weakly Correlated -1

COURSE DESIGNER:

1. Dr.R.Latha

2. Ms.J. JosephineJesintha

Forwarded By



(Dr.Vasantha Esther Rani)

SELF LEARNING INTERDISCIPLINARY COURSE

SEMESTER –IV

Offered by The Research Centre of Home Science and Department of Chemistry

(For those who joined in 2021 onwards)

PROGRAM ME CODE	COURS E CODE	COURSE TITLE	CATEGORY	HRS/W EEK	CREDITS
UAHS	22UG4SLNC	Textile Colouration	Self Learning	-	2

COURSE DESCRIPTION

This course enlightens the students on the textile fibres, dyes and the coloration process. It also deals with the application process of mordant and disperse dyes.

COURSE OBJECTIVES

C01: To gain knowledge about textile fibres and dyes

C02: To understand the textile coloration process

C03: To develop familiarity with the machinery used for dyeing and the application process

C04: To study the concept of mordant dyes and properties

C05: To learn about disperse dyes and the process of dispersion

UNITS

UNIT –I FIBRES AND DYES

Classification of textile fibres, types of dyes, suitability to textile fibres.

UNIT –II COLORATION PROCESS

Stages of dyeing. Methods of dyeing fabrics: jet dyeing, jig dyeing, pad dyeing and beam dyeing.

UNIT –III MACHINERY AND APPLICATION

Machinery: Conical-pan-loose-stock machine, The Hussong machine, Package dyeing machine, The Winch dyeing machine.

Application process: Forces by which dye molecules are bound to fibre (i) ionic force (ii)

hydrogen bonding(iii) van der Waals forces (iv) covalent chemical linkages

UNIT -IV MORDANT DYES

Introduction -Natural mordant dyes - Synthetic mordant dyes- structure and properties of Eriochrome Black A and Alizarin.

UNIT -V DISPERSE DYES

Introduction – Ion amines, disperse acetate dyes and solacet dyes - Chemical structure of disperse dyes- Dispersion process -Function of dispersing agents

UNIT -VI DYNAMISM (Evaluation Pattern-CIA only)

REFERENCES:

1. Shailaja D.Naik, Jacquie A Wilson, 'Surface Designing of Textile Fabrics', New Age International(P) Ltd; Publishers, New Delhi (2006)
- 2.P.V.Vidyasagar, 'Handbook of Textiles', Mittal Publications, New Delhi (1998)
3. Susheela Dhantyagi, 'Fundamentals of Textiles and their care', Orient Longman, New Delhi. (1991)
4. B.K.Sharma—Industrial Chemistry , Goel Publishing co,1997
5. R.Chatwal —Synthetic Dyes||-Himalayan Publishing House,1995
6. V.A.Shenai, Chemistry of Dyes and Principles of Dyeing.

WEB REFERENCES:

link.springer.com

www.keycolour.net

www.slideshare.net

textileinsight.blogspot.com

Britannica.com/topic/textile/dyeing-and-printing

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1		TITLE		
1.1	FIBRES AND DYES	-	-	MATERIALS GIVEN
2.1	COLORATION PROCESS	-	-	MATERIALS GIVEN

3.1	MACHINERY AND APPLICATION	-	-	MATERIALS GIVEN
4.1	MORDANT DYES	-	-	MATERIALS GIVEN
5.1	DISPERSE DYES	-	-	MATERIALS GIVEN
6.1	DYNAMISM	-	-	MATERIALS GIVEN

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total	% of Assessment
	T1	T2	Quiz	Assignment	OBT/PT				
	10 Mks.	10 Mks.	5 Mks.	5 Mks	5 Mks	35 Mks.	5 Mks.	40Mks.	
K1	2	2	-	-	-	4	-	4	10 %
K2	2	2	5	-	-	9	-	9	22.5 %
K3	3	3	-	-	5	11	-	11	27.5 %
K4	3	3	-	5	-	11	-	11	27.5 %
Non Scholastic	-	-	-	-	-		5	5	12.5 %
Total	10	10	5	5	5	35	5	40	100 %

CIA	
Scholastic	35
Non Scholastic	5
	40

- ✓ All the course outcomes are to be assessed in the various CIA components.
- ✓ The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are :
K1- Remember, K2-Understand, K3-Apply, K4-Analyse

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS	
C1	C2	C3	C4	C5	C6	CIA	ESE
10	10	5	5	5	5	40	60

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Able to identify fibres and dyes	K2, K4	PSO9 & PSO10
CO 2	Plan the colouration process	K3	PSO10 & PSO17
CO 3	Choose appropriate application process	K1, K3	PSO10
CO 4	Identify physical properties of moderent dyes	K1, K3	PSO10
CO 5	Able to know the chemical structure of dyes	K3	PSO10

Mapping of COs with PSOs

CO	PSO 1		PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12
----	-------	--	-------	-------	-------	-------	-------	-------	-------	-------	--------	--------	--------

CO1	1		1	1	1	1	1	1	1	3	3	1	1
CO2	1		1	1	1	1	1	1	1	1	3	1	1
CO3	1		1	1	1	1	1	1	1	1	3	1	1
CO4	1		1	1	1	1	1	1	1	1	3	1	1
CO5	1		1	1	1	1	1	1	1	1	3	1	1
CO/ PSO	PSO 13		PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO 22	PSO 23	
CO1	1		1	1	1	1	1	1	1	1	1	1	
CO2	1		1	1	1	3	1	1	1	1	1	1	
CO3	1		1	1	1	1	1	1	1	1	1	1	
CO4	1		1	1	1	1	1	1	1	1	1	1	
CO5	1		1	1	1	1	1	1	1	1	1	1	

Mapping of COs with Pos

CO/ PSO	P01	P02	P03	P04
CO1	1	1	3	1
CO2	3	1	3	1
CO3	2	1	3	1
CO4	3	1	3	1
CO5	3	1	3	1

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2 ♦ Weakly
Correlated -1

COURSE DESIGNER:

1.Dr.R.Latha

2.Dr.B.Vinsha

IIIB.Sc. HOMESCIENCE WITH FOOD BIOTECHNOLOGY

SEMESTER –V

For those who joined in 2019 onwards

PROGRA MME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/ WEEK	CREDITS
UAHS	19N5CC13	Creche and Preschool Management	Lecture	6	4

Course Description:

This course imparts a comprehensive theoretical knowledge on the management of crèche and preschool management

Course Objectives:

- To disseminate the knowledge on the theories of philosophers.
- To teach them the various type of Preschools.
- Enable them to learn the principles and curricula of the preschool

UNITS

UNIT –I EARLY CHILDHOOD CARE AND DEVELOPMENT (16 HRS.)

Importance of Children's Environment, Early childhood Care and Development.

Self-Study: Psychological, Nutritional and Healthcare of Preschool Children

UNIT –II CRECHE MANAGEMENT (18 HRS.)

Need for crèche – a supportive Agency. Role of a care taker – planning activities for children, care of an infant – sleep, feeding, and hygienic aspects Prevention of accidents, special requirements – furniture, rooms, play equipment's and utensils

UNIT –III PRESCHOOL EDUCATION (18 HRS.)

Preschool – Meaning, Objectives, Significance, Functions. Views of educationists – Rousseau, Pestalozzi, Froebel, Dewey, Montessori

UNIT –IV PRESCHOOL PROGRAMME (18 HRS.)

Preschool Programme- Principles involved, a day's schedule

Preschool curriculum – types – child controlled, teacher controlled, child teacher mutually controlled

UNIT –V ORGANISATION OF A PRESCHOOL CENTRE (20HRS.)

Physical set up- building equipment, Play definition, importance of play.

Play equipment for preschool children, selection and maintenance

Preschool staff and personnel,

Records and reports maintained in preschool.

Self -Study: Home School relationship.

REFERENCES:

TEXTBOOK:

1. Chowdhry. A & Chowdhry. R, *Pre-school children – Development care and Education*, New Age International CP Limited, NAIP publishing, Chennai, 2002.

REFERENCE BOOKS:

1. Devadas R.P. & Jaya.N (1991), *Textbook of Child Development*, Macmillan India limited, India
2. Hurlock E. B, (2004). *Child Development*, (6th ed). McGraw Hill Inc., New York.
3. Moony S. G (2013). *Theories of childhood: an introduction* Dewey, Montessori, Erikson, Piaget, and Vygotsky, Trade paperback, USA.
4. Santrock J.W, (2014) *Child Development*, McGraw Hill Inc., New York.

OPEN EDUCATIONAL RESOURCES:

1. <https://libguides.humboldt.edu/openedu/cd>
2. <https://guides.skylinecollege.edu/oersbysubject/education>
3. <https://library.piercecollege.edu/oer/childdevelopment>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 EARLY CHILDHOOD CARE AND DEVELOPMENT				
1.1	Topic 1 Importance of children's environment. Theory	8	Chalk & Talk	Black Board
1.2	Subtopic Early childhood care and development.	8	Chalk & Talk	LCD & White board
UNIT -II CRECHE MANAGEMENT				
2.1	Topic 2 Need for crèche – a supportive Agency. Role of a care taker.	3	Lecture	PPT& Black Board
2.2	Subtopic Planning activities for children.	3	Chalk & Talk	Green Board
2.3	Topic 3 Care of an infant – sleep, feeding, and hygienic aspects	3	Chalk & Talk	Black Board and PPT
2.4	Subtopics Prevention of accidents.	3	Chalk & Talk	LCD & White board
2.5	Special requirements – furniture, rooms.	3	Chalk & Talk	LCD & Smart Board
2.6	Play Equipment's and utensils	3	Lecture	PPT & White board

UNIT -III PRESCHOOL EDUCATION				
3.1	Topic 4 Preschool – Meaning, Objectives, Significance, Functions.	3	Chalk & Talk	Black Board
3.2	Subtopic Views of educationists – Dewey, Rousseau	3	Lecture	PPT& Black Board
3.3	Views of educationists – Pestalozzi,	3	Chalk & Talk	LCD & Smart Board
3.4	Views of educationists – Froebel	3	Chalk & Talk	Black Board
3.5	Views of educationists – Montessori	3	Chalk & Talk	Smart Board
3.6	Views of educationists – Mahatma Gandhi	3	Lecture	PPT & White board
UNIT -IV PRESCHOOL PROGRAMME				
4.1	Topic5 Preschool Programme- Principles involved	6	Lecture	Smart Board
4.2	Subtopics A day's schedule Music, Story, Creative activity, Games, Science Experience	6	Lecture	PPT
4..3	Preschool curriculum – types – child controlled, teacher controlled, child teacher mutually controlled	6	Chalk & Talk	LCD
UNIT -V ORGANISATION OF A PRESCHOOL CENTRE				
5.1	Topic 6 Physical setup – building and equipment	5	Lectureand Group Discussion	Models
5.2	Play equipment for preschool children - Selection and maintenance	5	Lecture	Green Board Charts

5.3	Play Definition, Importance of play. Preschool staff and personnel	5	Lecture	Smart Board
5.4	Records and reports maintained in preschool	5	Lecture	Black Board

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholas tic Marks C6	CIA Total
	T1 10 Mks.	T2 10 Mks.	Quiz 5 Mks.	Assignm ent 5 Mks	OBT/P PT 5 Mks	35 Mks.	5 Mks.	40Mks.
K1	2	2	-	-	-	4	-	4
K2	2	2	5	-	-	9	-	9
K3	3	3	-	-	5	11	-	11
K4	3	3	-	5	-	11	-	11
Non Scholastic	-	-	-	-	-		5	5
Total	10	10	5	5	5	35	5	40

CIA	
Scholastic	35
Non Scholastic	5
	40

K1- Remember, K2-Understand, K3-Apply, K4-Analyse

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

Mapping of C0s with PSOs

[illegible]

2												
CO 3	1	1	1	1	1	1	1	1	1	1	1	1
CO 4	1	1	1	1	1	1	1	1	1	1	1	1
CO 5	1	1	1	1	1		1		1	1	1	1
CO / PS O	PSO 13	PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO 22	PSO 23	
CO 1	3	1	3	1	1	1	1	1	1	1	1	
CO 2	1	1	1		1	1	1	1	1	1	1	
CO 3	1	1	3	3	1	1	1	1	1	1	1	
CO 4	1	1	3	3	1	1	1	1	3	1	1	
CO 5	1	1	1	3	1	1	1	1	1	1	1	

Mapping of COs with Pos

CO/ PSO	PO1	PO2	PO3	PO4
CO1	1	1	1	1
CO2	1	1	1	1
CO3	1	3	1	1
CO4	1	1	1	3
CO5	1	1	1	1

Note: ♦ Strongly Correlated – 3

♦ Moderately Correlated – 2

♦ Weakly Correlated -1

COURSE DESIGNER:
Dr.S.SANTHI

Forwarded By



(Dr.Vasantha Esther Rani)

IIIB.Sc. HOMESCIENCE WITH FOOD BIOTECHNOLOGY

SEMESTER -V

For those who joined in 2019 onwards

PROGR MME CODE	COURSE CODE	COURSE TITLE	CATEGO RY	HRS/WE EK	CREDITS
UAHS	19N5CC14	PRESCHOOL ADMINISTRATION LAB	Practical	4	2

Course Description:

This course helps the students to develop constructive knowledge on the various skills in managing the crèche and preschool.

Objectives:

To teach how to

1. Plan a preschool programme –activities for children.
2. Prepare audio visual aids to support teaching
3. Prepare a play equipment.
4. Manage the preschool

UNITS

UNIT -I. (10HRS)

Developing Stories with suitable aids for Preschool Children

Preparing audio visual aids for informal talk

UNIT -II (10HRS)

Compose rhymes with expression and action for Preschool Children

UNIT -III (20 HRS)

Developing creative activities for Preschool Children

Planning science experience for Preschool Children

UNIT -IV**(10HRS)**

Construct low-cost play equipment for children.

Planning for indoor and outdoor games

UNIT -V**(10HRS)**

Preparing picture book for Readiness activity.

Preschool participation in celebration and in health programmes

REFERENCES

1. Chowdhry. A & Chowdhry. R, Pre-school children – Development care and Education, New Age International CP Limited, NAIP publishing, Chennai, 2002.
2. Moony S.G(2013). Theories of childhood :An introduction Dewey, Montessori, Erikson, Piaget, and Vygotsky, Tradepaperback, USA.

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1				
1.1	Topic 1 Developing stories with suitable aids for Preschool Children.	5	Hands on Experiences	Black Board
1.2	Subtopic Preparing audio visual aids for informal talk.	5	Hands on Experiences/Demonstration	LCD & White board
UNIT-II				
2.1	Topic 2 Compose rhymes with expression on different themes	5	Lecture/Hands on Experiences	PPT & Black Board
2.2	Subtopic Music and action for Preschool Children	5	Hands on Experiences	
UNIT -III				

3.1	Topic 3 Developing creative activities for Preschool Children	10	Chalk &Talk Hands on Experiences	Black Board
3.2	Subtopic Planning science experience for Preschool Children	5	Lecture/ Hands on Experiences	PPT& Black Board
3.3	Developing a creative Album	5	Chalk & Talk Hands on Experiences	LCD & Smart Board
UNIT -IV				
4.1	Topic 4 Construct low-cost play equipment for children.	6	Lecture/Hands on Experiences	Worksho ps
4.2	Subtopics Planning for indoor and outdoor games	4	Hands on Experiences	
UNIT -V				
5.1	Topic 5 Preparing picture book for Readiness activity.	4	Lecture/ and Group Discussion	Models
5.2	Subtopics Preschool participation in festival celebration and in health programmes	3	Hands on Experiences	Green Board Charts
5.3	Participation in Parent teacher Programmes	3	Group Work	Smart Board

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
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CO 1	Construct the knowledge in developing stories, rhymes, and creative activities on their own.	K1, K2	PSO11& PSO13
CO 2	Develop skills on the preparation of low-cost play equipment for preschool children	K3	PSO15
CO 3	Organise and administer Preschool programme and PTA meetings	K1, K4	PSO15 & PSO16
CO 4	Plan and organize indoor and outdoor games for preschool children	K2, K3	PSO15 & PSO16
CO 5	Explore their skills in strengthening the health concepts of children	K3, K4	PSO16

EVALUATION PATTERN

SCHOLASTIC				NON – SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
10	10	10	5	5	40	60	100

C1 – Internal Test – 1

C2 – Internal Test – 2

C3 – Model Practical Exam

C4 – Record

C5 – Non – Scholastic

Mapping of COs with PSOs

CO / PS O	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12
CO 1	1	1	1	1	1	1	1	1	1	1	3	1
CO 2	1	1	1	1	1	1	1	1	1	1	1	1
CO 3	1	1	1	1	1	1	1	1	1	1	1	1
CO 4	1	1	1	1	1	1	1	1	1	1	1	1
CO 5	1	1	1	1	1	1	1	1	1	1	1	1
CO / PS O	PSO 13	PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO 22	PSO 23	
CO 1	3	1	3	1	1	1	1	1	1	1	1	
CO 2	1	1	3		1	1	1	1	1	1	1	
CO 3	1	1	3	3	1	1	1	1	1	1	1	
CO 4	1	1	3	3	1	1	1	1	3	1	1	
CO 5	1	1	1	3	1	1	1	1	1	1	1	

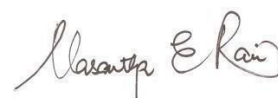
Mapping of COs with Pos

CO/ PSO	P01	P02	P03	P04
CO1	1	1	1	1
CO2	1	1	1	1
CO3	1	3	1	1
CO4	1	1	1	3
CO5	1	1	1	1

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2
 ♦ Weakly Correlated

COURSE DESIGNER:
1.Dr.S.SANTHI

Forwarded By



(Dr.Vasantha Esther Rani)

III B.Sc. HOMESCIENCE WITH FOOD BIOTECHNOLOGY

SEMESTER -V

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N5CC15	Housing and Art in Home	Lecture	6	4

COURSE DESCRIPTION

This course elicit knowledge on all aspects of housing and application of art in home.

COURSE OBJECTIVES

- Gain basic knowledge of art principles and gain skills in their application in the home.
- Understand basics of house planning.
- Understand the housing problems and social effects of housing in India.
- Gain basic knowledge of principles of maintenance of house.

UNITS

UNIT – I	ART IN HOME	(15 HRS)
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Design-Meaning, Types, Characteristics

Elements of Design – Line, Shape, Form, Colour, Size, Texture, Light, Space and Pattern.

UNIT – II	PRINCIPLES OF DESIGN	(15 HRS)
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Principles of Design – Harmony, Balance, Proportion, Rhythm, Emphasis

Colour – Prang colour system, Classes of colour, Colour harmony-related & contrast Colour.

UNIT – III	TRENDS IN INTERIOR DESIGN	(20 HRS)
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Furniture – Selection, use and care, furniture arrangement in various rooms.

Accessories – Selection, use and care, Flower Arrangement – Types – Basic

principles

Lighting – Requirements of good lighting, types – based on reflection and purpose-Natural and Artificial lightning.

UNIT – IV	HOUSING AND ENVIRONMENT	(20 HRS)
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Functions of house, selection of site, Principles of planning, Interior and exterior finishes – Wall, Floor and Ceiling, Landscape gardening – meaning, basic principles and units, Desirability of owning Vs renting a house.

UNIT – V	HOUSING DEVELOPMENT IN INDIA	(20HRS)
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Housing shortage in India, causes of housing problems in India, Role of Tamil Nadu Housing Board & NBO in Housing Development

Self- study– Daily, weekly, periodical cleaning of house, Domestic pests and measures. Purification of water – household & large scale.

Waste management-solid waste-burning, dumping and composting.

REFERENCES:

TEXTBOOK:

1. Mullick.P.(2007) *Text Book of Home Science*, Kalyani Publishers, Ludhiyana.

REFERENCE BOOKS:

REFERENCES

2. Bettar and Lockarty (1961), *Design for you*, Jotiss Wiley & Sons, Inc., New York.
3. Faulkner, R & Faulkner. S (1960). *Inside Today's Home*, Rinc Hart and Winston Inc. New York,
4. Goldstein H. & Goldstein V.(1978). *Art in Everyday life*, The Macmillan Company, New York,
5. Gross I.H, Grandall E.W, & Knoll H.M. (1975) *Management for modern families*
6. Mullick.P.(2007) *Text Book of Home Science*, Kalyani Publishers, Ludhiyana.
7. Nickell & Dorsey, J.N (1976). *Management in Family Living*, Indian Edition,
8. Rutt, A.H.,(1967). *Home Furnishings* Wiley Easters Private Ltd., New Delhi.

OPEN EDUCATION RESOURCE:

1. <https://www.homesandgardens.com/news/7-elements-of-design>
2. <https://www.hatchdesign.ca/principles-of-interior-design-part-1-balance/>
3. <https://hmhub.me/accessories-interior-decoration/>
4. <https://designingidea.com/types-of-flooring-materials-for-interior-design/>

5. <https://homedesignlover.com/interior-design/choosing-flooring-materials/>
6. <https://happho.com/different-materials-used-flooring/>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT 1 ART IN HOME				
1.1	Introduction	1	Chalk & Talk	LCD
1.2	Design – Meaning, Types, Characteristics	4	Chalk & Talk	Black Board
1.3	Elements of Design – Line, Shape, Form	3	Lecture	PPT & White board
1.4	Elements of Design – Colour, Size	3	Lecture	Smart Board
1.5	Elements of Design – Light and Space, Pattern	4	Lecture	Black Board
UNIT -2 PRINCIPLES OF DESIGN				
2.1	Principles of Design – Harmony, Balance	3	Lecture	LCD
2.2	Principles of Design – Proportion, Rhythm, Emphasis	3	Chalk & Talk	LCD
2.3	Colour – Prang colour system	3	Lecture	PPT & White board
2.4	Classes of colour	3	Discussion	PPT
2.5	Colour harmony – related & contrast	3	Lecture	Black board
UNIT -3 TRENDS IN INTERIOR DESIGN				
3.1	Furniture – Selection, use and care, Furniture arrangement in various rooms	4	Lecture	Black board

3.2	Accessories – Selection, use and care	4	Chalk & Talk	LCD
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3.3	Flower arrangement – Types – Basic principles	5	Demonstration,Hands on Experience	Black board
3.4	Lighting – Requirements of good lighting	3	Lecture	PPT & White board
3.5	Lighting – Types – Based on reflection and purpose	4	Discussion	PPT & White board

UNIT -4 HOUSING AND ITS ENVIRONMENT

4.1	Functions of house	2	Lecture	LCD
4.2	Selection of site	2	Chalk & Talk	LCD
4.3	Principles of planning	4	Lecture	PPT & White board
4.4	Interior and exterior finishes – Wall, Floor, and Ceiling	5	Lecture	PPT & White board
4.5	Landscape gardening – meaning, basic principles and units	4	Chalk & Talk	LCD
4.6	Desirability of owning Vs renting a house	3	Lecture	Black Board

UNIT -5 HOUSING DEVELOPMENT IN INDIA

5.1	Housing shortage in India, causes of housing problems in India	3	Lecture	LCD
5.2	Role of Tamil Nadu Housing Board & NBO in Housing Development	3	Chalk & Talk	LCD
5.3	Daily, weekly, periodical cleaning of House	3	Discussion	Black Board

5.4	Domestic pest and measures	3	Discussion	Black Board
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5.5	Purification of water – household & large Scale	4	Discussion	Black Board
5.6	Waste management – solid waste – burning, dumping and composting	4	Lecture	PPT

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total
	T1 10 Mks.	T2 10 Mks.	Quiz 5 Mks.	Assignment 5 Mks	OBT/PPT 5 Mks	35 Mks.	5 Mks.	40Mks.
K1	2	2	-	-	-	4	-	4
K2	2	2	5	-	-	9	-	9
K3	3	3	-	-	5	11	-	11
K4	3	3	-	5	-	11	-	11
Non Scholastic	-	-	-	-	-		5	5
Total	10	10	5	5	5	35	5	40

CIA	
Scholastic	35
Non Scholastic	5
	40

All the course outcomes are to be assessed in the various CIA components.

The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are :

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON – SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

C1 – Internal Test-1

C2 – Internal Test-2

C3– Quiz

C4 – Assignment

C5 –OBT/PPT

C6 – Non – Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Classify the types, elements of design.	K2,K4	PSO17
CO 2	Explain the principles of design, and its application in interiors.	K1, K2	PSO17
CO 3	Construct house plan and landscaping.	K3,K4	PSO17
CO 4	Describe the housing problems and remedies.	K2	PSO17
CO 5	Build skills in interior designing.	K3, K4	PSO17

Mapping of COs with PSOs

CO/ PSO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12
CO1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	1	1	1	1	1	1	1	1	1	1	1	1
CO3	1	1	1	1	1	1	1	1	1	1	1	1
CO4	1	1	1	1	1	1	1	1	1	1	1	1
CO5	1	1	1	1	1	1	1	1	1	1	1	1
CO/ PSO	PSO 13	PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO 22	PSO 23	
CO1	1	1	1	1	3	1	1	1	1	1	1	
CO2	1	1	1	1		3	1	1	1	1	1	
CO3	1	1	1	1	1	1	3	1	1	1	1	
CO4	1	1	1	1	1	1	1	3		1	1	
CO5	1	1	1	1	1	1	1	1	2	1	1	

Mapping of COs with Pos

CO/ PSO	P01	P02	P03	P04
CO1	1	1	1	1
CO2	1	2	1	1
CO3	1	1	3	1
CO4	1	1	1	1
CO5	1	1	1	1

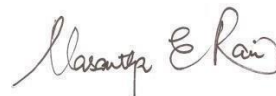
Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2

♦ Weakly Correlated -1

COURSE DESIGNER:

Dr. C. Priyalatha

Forwarded By



(Dr.Vasantha Esther Rani)

III B.Sc. HOMESCIENCE WITH FOOD BIOTECHNOLOGY
SEMESTER –V

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N5CC16	Art In Everyday Life Lab	Practical	4	2

COURSE DESCRIPTION

This course imparts skill in decorating the interior based on art principles.

COURSE OBJECTIVES

- To impart knowledge on principles of design.
- To train students to set table for different occasions.
- To prepare wall hangings for different rooms.

UNITS

UNIT –1

(10 HRS)

Identification of elements and principles of design on art object.

UNIT—10 HRS)

Setting the table for various occasions like birthdayparty, formal dinner, and buffet

UNIT—3

(20 HRS)

Design and development of a wall hanging based on the principles of mounting pictures.

UNIT –4

(10 HRS)

Application of related and contrasting color harmonies on various crockeries.

UNIT—5

(10 HRS)

Survey on types of crockery and cutlery available in the market.

REFERENCE BOOKS:

1. Faulkner, R & Faulkner. S (1960). *Inside Today's Home*, Rinc Hart and Winston Inc. New York,
2. Goldstein H. & Goldstein V.(1978). *Art in Everyday life*, The Macmillan Company, New York,

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT 1				
1.1	Identification of elements and	5	Chalk & Talk	Black Board
1.2	Principles of design on art object.	5	Chalk & Talk	Black Board
UNIT -2				
2.1	Setting the table for various occasions like birthday party	5	Demonstration	PPT
2.2	Setting the table for various occasions like formal dinner	3	Demonstration	PPT
2.3	Setting the table for various occasions like Buffet	2	Demonstration	PPT
UNIT -3				
3.1	Design of a wall hanging based on the principles of mounting pictures.	10	Demonstration	Models
3.2	Development of a wall hanging	10	Demonstration	Models

	based on the principles of mounting pictures.			
UNIT -4				
4.1	Application of related and contrasting colour harmonies on various crockeries.	10	Demonstration,Group work	Crockeries
UNIT -5				
5.1	Survey on types of crockery and cutlery available in the market.	10	Lecture	Discussion

EVALUATION PATTERN

SCHOLASTIC				NON – SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
10	10	10	5	5	40	60	100

C1 – Internal Test – 1

C2 – Internal Test – 2

C3 – Model Practical Exam

C4 – Record

C5 – Non – Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Recall the elements and principles of design.	K1	PSO19
CO 2	Organize the table for various occasions.	K3	PSO19
CO 3	Construct a wall hanging.	K3,K4	PSO19
CO 4	Illustrate a suitable design on crockery.	K2	PSO19
CO 5	Describe the recent trends in crockery and cutlery.	K1,K2	PSO19

Mapping of COs with PSOs

CO/ PSO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12
CO1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	1	1	1	1	1	1	1	1	1	1	1	1
CO3	1	1	1	1	1	1	1	1	1	1	1	1
CO4	1	1	1	1	1	1	1	1	1	1	1	1
CO5	1	1	1	1	1	1	1	1	1	1	1	1
CO/ PSO	PSO 13	PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO 22	PSO 23	
CO1	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
CO2	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
CO3	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	
CO4	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>1</u>	<u>1</u>	<u>1</u>	
CO5	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	

Mapping of COs with Pos

CO/ PSO	P01	P02	P03	P04
C01	3	3	3	1
C02	3	3	3	1
C03	3	3	3	1
C04	3	3	3	1
C05	3	3	3	1

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2 ♦

Weakly Correlated -1

COURSE DESIGNER:
Dr. C. Priyalatha

Forwarded By



(Dr.Vasantha Esther Rani)

III B.Sc. HOME SCIENCE WITH FOOD BIOTECHNOLOGY

SEMESTER -V

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N5ME1	Technical Textiles	Lecture	5	5

COURSE DESCRIPTION

This course offers deep insight into the various application areas of technical textiles.

COURSE OBJECTIVES

- To acquaint students with the concept of technical textiles and its scope.
- To know the applications of various types of technical textiles.

UNITS

UNIT -I INTRODUCTION TO TECHNICAL TEXTILES (10 HRS.)

Definition and scope of technical textiles, milestones in the development of technical textiles, textile processes and applications.

UNIT -II GEOTEXTILES (15 HRS.)

Introduction, types, essential properties- mechanical, filtration and chemical resistance. Natural fibre geotextiles, applications for natural geotextiles.

UNIT -III MEDICAL TEXTILES (20 HRS.)

Introduction, areas of application, fibres used, non-implantable materials, extracorporeal devices, implantable materials, healthcare/ hygiene products.

Self-Study: Healthcare and hygiene products.

UNIT -IV PROTECTIVE TEXTILES (15 HRS.)

Introduction, types, short term survival- drowning and extreme low temperatures, ballistic protection, protection from fire.

Long term survival - extreme weather conditions, high temperatures and associated hazards, chemical, microbiological and radiation hazards.

UNIT –V (TRANSPORTATION) MOBILE TEXTILES (15 HRS.)

Introduction, textiles in passenger cars, textiles in other road vehicles- heavy goods vehicles, buses and coaches. Rail applications, Textiles in aircraft.

Self- Study: Marine applications.

REFERENCES:

TEXTBOOK:

1. Horrocks, A.R. & Anand, S.C. Handbook of Technical Textiles. Wood Head Pub. Ltd., England.

REFERENCE BOOKS:

2. Howard L.Needles. (2001). *Textile Fibres, Dyes, Finishes and Processes*. Standard Publishers Distributors, Delhi.
3. Rattan, J.B. (2001). *Modern Textile Technology*. Abhishek Publications, Chandigarh.
4. Vidyasagar, P. V. (1998). *Handbook of Textiles*. Mittal Publications.

OPEN EDUCATIONAL RESOURCES:

1. <https://www.fibre2fashion.com/industry-article/826/technical-textiles-an-over-view>
2. https://en.wikipedia.org/wiki/Technical_textile
3. <https://www.thebalancesmb.com/geotextiles-types-and-advantages-of-using-geotextiles-844579>
4. <https://www.jasonmills.com/blog/medical-textiles/>
5. <https://www.fibre2fashion.com/industry-article/1763/advanced-protective-textiles>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 INTRODUCTION TO TECHNICAL TEXTILES				
1.1	Definition and scope of technical textiles	2	Chalk & Talk	Black Board
1.2	Milestones in the development of technical textiles	3	Lecture	LCD
1.3	Textile processes	2	Lecture	PPT & White board
1.4	Applications	3	Lecture	PPT & White board
UNIT -2 GEO TEXTILES				
2.1	Introduction and types of Geotextiles	3	Lecture	White board
2.2	Essential properties-mechanical, filtration and chemical resistance	4	Chalk & Talk	Black board
2.3	Natural fibre geotextiles	4	Lecture	PPT
2.4	Applications for natural geotextiles	4	Lecture	PPT
UNIT - 3 MEDICAL TEXTILES				
3.1	Introduction, areas of application, fibres used	4	Chalk &Talk	Black Board
3.2	Non-implantable materials	4	Lecture	PPT
3.3	Extracorporeal devices	4	Lecture	LCD
3.4	Implantable materials	4	Lecture	PPT
3.5	Healthcare and hygiene products	4	Lecture	PPT

UNIT – IV PROTECTIVE TEXTILES				
4.1	Introduction and types	5	Discussion	PPT
4.2	Short term survival	5	Lecture	LCD
4.3	Long term survival	5	Lecture	LCD
UNIT – V TRANSPORTATION TEXTILES				
5.1	Introduction and types	3	Lecture	LCD
5.2	Textiles in cars and heavy goods vehicles	4	Lecture	PPT
5.3	Rail applications	4	Lecture	PPT
5.4	Textiles in aircraft	4	Lecture	PPT

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total	% of Assessment
	T1 10 Mks.	T2 10 Mks.	Quiz 5 Mks.	Assignment 5 Mks	OBT/PT 5 Mks	35 Mks.	5 Mks.	40Mks.	
K1	2	2	-	-	-	4	-	4	10 %
K2	2	2	5	-	-	9	-	9	22.5 %
K3	3	3	-	-	5	11	-	11	27.5 %
K4	3	3	-	5	-	11	-	11	27.5 %
Non Scholastic	-	-	-	-	-		5	5	12.5 %
Total	10	10	5	5	5	35	5	40	100 %

CIA	
Scholastic	35
Non Scholastic	5
	40

All the course outcomes are to be assessed in the various CIA components. The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are :

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON – SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

C1 – Internal Test-1

C2 – Internal Test-2

C3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non – Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Identify the application areas of Technical Textiles.	K1, K3	PSO8
CO 2	Describe the types of Geo Textiles, their properties and applications.	K1	PSO8
CO 3	Organise the four areas of Medical Textiles.	K3	PSO8
CO 4	Choose the appropriate protective textiles for short term and long-term survival.	K1, K3	PSO8
CO 5	Restate in own words the application of technical textiles for various modes of transport.	K1	PSO8

Mapping of C0s with PSOs

[illegible]

Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
C01	3	1	1	1
C02	3	3	3	3
C03	3	1	3	3
C04	3	3	3	3
C05	3	3	3	3

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2 ♦
Weakly Correlated -1

COURSE DESIGNER:
Dr.R.Latha

Forwarded By



(Dr.Vasantha Esther Rani)

III B.Sc. Home Science with Food Biotechnology
SEMESTER –V

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N5ME2	Food Biotechnology	Lecture	5	5

COURSE DESCRIPTION

The course offers knowledge on the scope, importance and the basic aspects of biotechnology relating to foods

COURSE OBJECTIVES

- To enlighten the students on role of enzymes in food industries.
- To create awareness on biotechnological aspects of food additives
- To gain knowledge in plant and animal biotechnology

UNITS

UNIT –I ENZYMES (15HRS.)

Definition, Properties of enzymes, Microorganisms producing enzymes, Methods of enzyme production, **Self study : Enzymes produced - a- amylases, lipases, proteases, Use of enzymes in food industry – Proteases, glucose oxidase, catalase, lactase.**

UNIT –II ENZYMES IN FRUIT JUICES AND BREWING INDUSTRY (15 HRS.)

Enzymes used in the production of fruit juices, beer and distilled alcoholic drinks, processing steps of wine and beer.

UNIT –III FOOD ADDITIVES (15HRS.)

Organic acids – Production of citric acid, acetic acid, lactic acid

Sweeteners - Production of HFCS and glucose syrup
Microbial colour, Microbial flavours

Modification of starch and Oilseeds

UNIT –IV FOOD AND PLANT, ANIMAL BIOTECHNOLOGY (15HRS.)

Application of Plant and Animal Biotechnology in the Food industry.

Regulations and Oversight of Biotechnology

Fruits and Vegetables, Milled Corn Product and Milled Soy Products,

Golden rice, Vegetable oil.

Fish, Meat, Milk and Milk products

UNIT –V GENETICALLY MODIFIED FOODS (15HRS.)

Basic concepts of DNA structure, definition of Genetically modified foods, types and techniques of Genetically modified foods, health and safety concerns of Genetically modified foods for human consumption

Advantages and disadvantages of Genetically modified foods

Ethical issues of Genetically modified foods

REFERENCES:

1. Dubey, R.C.(1996) *A textbook of Biotechnology*, S. Chand and Company Ltd., New Delhi
2. Gupta, K. (1995). *Elements of Biotechnology*, Rastogi Publications, Meerut.
3. Sriram Sridhar. (2005) *Enzyme Biotechnology*, Dominant Publishers and Distributors, New Delhi
4. Rita Singh. (2004) *Food Biotechnology*, Global Vision Publishing House, Delhi.
5. Trevor Palmer. (2004). *Enzymes: Biochemistry, Biotechnology and Clinical chemistry*; Affiliated East West Press Pvt ltd., New Delhi.

OPEN EDUCATIONAL REFERENCES:

1. <http://www.businessdictionary.com/definition/food-biotechnology.html>
2. [HTTP://WWW.MROTHERY.CO.UK/GENETECH/GENETECHNOTES.HTM](http://www.mrothery.co.uk/genetech/genetechnotes.htm)
3. [HTTP://WWW.WPI.EDU/pUBS/e-PROJECT/aVAILABLE/e-PROJECT-031405-135846/UNRESTRICTED/iqp.PDF](http://www.wpi.edu/pubs/e-project/available/e-project-031405-135846/unrestricted/iqp.pdf)
4. [HTTP://OER.FUNALEDU.NG/WP-CONTENT/UPLOADS/2017/10/btg-307-food-biotechnology-i-](http://oer.funaledu.ng/wp-content/uploads/2017/10/btg-307-food-biotechnology-i-)

DEFINITION-AND-sCOPE-OF-FOOD-bIOTECHNOLOGY-bY-dR.-
fRIDAY-nWALO.PPT

5. [HTTPS://WWW.NCBI.NLM.NIH.GOV/BOOKS/nbk235032/](https://www.ncbi.nlm.nih.gov/books/nbk235032/)
6. [HTTPS://ACTASCIENTIFIC.COM/asag/PDF/asag-03-0438.PDF](https://actascientific.com/asag/PDF/asag-03-0438.PDF)
7. [HTTPS://WWW.RESEARCHGATE.NET/PUBLICATION/312875936 a
PPLICATIONS OF food biOTECHNOLOGY](https://www.researchgate.net/publication/312875936_aPPLICATIONS_OF_food_biOTECHNOLOGY)

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 ENZYMES				
1.1	Enzymes – Definition, Properties of enzymes	2	Chalk & Talk	Black Board
1.2	Microorganisms producing enzymes	2	Chalk & Talk	LCD
1.3	Methods of enzyme production	4	Lecture	PPT & White board
1.4	Enzymes produced - a-amylases, lipases, proteases,.	3	Lecture	Smart Board
1.5	Use of enzymes in food industry – Proteases, glucose oxidase, catalase, lactase	4	Lecture	Black Board
UNIT -2 ENZYMES IN FRUIT JUICES AND BREWING INDUSTRY				
2.1	Enzymes used in the production of fruit juices	3	Lecture	Black Board
2.2	Enzymes used in the production of beer and distilled alcoholic drinks	4	Chalk & Talk	LCD
2.3	processing steps of wine	4	Lecture	PPT & White board
2.4	processing steps of beer.	4	Lecture	Smart

				Board
UNIT -3FOOD ADDITIVES				
3.1	Organic acids – Production of citric acid, acetic acid, lactic acid	4	Lecture	Black Board
3.2	Sweeteners - Production of HFCS and glucose syrup	4	Lecture	PPT & White board
3.3	Microbial colour	2	Lecture	Smart Board
3.4	Microbial flavours	3	Chalk & Talk	LCD
3.5	Modification of starch and Oilseeds	2	Lecture	PPT & White board

UNIT -4 FOOD AND PLANT,ANIMAL BIOTECHNOLOGY				
4.1	Application of Plant and animal Biotechnology in Food industry	2	Lecture	PPT &White board
4.2	Regulation and oversight of biotechnology	3	Chalk & Talk	LCD
4.3	Fruits and Vegetables	3	Chalk & Talk	LCD
4.4	Milled Soy Products,Milled Corn Products	2	Lecture	Black Board
4.5	Golden rice, Vegetable oil	3	Lecture	PPT &White board
4.6	Meat,Fish, Milk and Milk products	2	Lecture	PPT & White board
UNIT -5GENETICALLY MODIFIEDFOODS				
5.1	Basic concepts of DNA structure		Lecture	PPT &

		2		White board
5.2	Definition of Genetically modified foods	1	Lecture	PPT & White board
5.3	types and techniques of Genetically modified foods	3	Chalk & Talk	LCD
5.4	Health and safety concerns of Genetically modified foods for human consumption	3		
5.5	Advantages and disadvantages of genetically modified foods	2	Chalk & Talk	LCD
5.6	Ethical issues of Genetically modified foods	4	Lecture	Black Board

Levels	C1	C2	C3	C4	C5	Total Scholas tic Marks	Non Scholas tic Marks C6	CIA Total	% of Assessm ent
	T1 10 Mk s.	T2 10 Mk s.	Qui z 5 Mk s.	Assignm ent 5 Mks	OBT/P PT 5 Mks			40Mk s.	
K1	2	2	-	-	-	4	-	4	10 %
K2	2	2	5	-	-	9	-	9	22.5 %
K3	3	3	-	-	5	11	-	11	27.5 %
K4	3	3	-	5	-	11	-	11	27.5 %
Non Scholast ic	-	-	-	-	-		5	5	12.5 %
Total	10	10	5	5	5	35	5	40	100 %

CIA	
Scholastic	35
Non Scholastic	5
	40

All the course outcomes are to be assessed in the various CIA components. The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are :

K1- Remember, **K2**-Understand, **K3**-Apply, **K4**-Analyse

EVALUATION PATTERN

SCHOLASTIC					NON – SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

C1 – Internal Test-1

C2 – Internal Test-2

C3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non – Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
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Mapping of COs with POs

CO/ PSO	P01	P02	P03	P04
CO1	3	3	3	1
CO2	3	3	3	1
CO3	3	3	3	1
CO4	3	3	3	1
CO5	3	3	3	1

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2 ♦
Weakly Correlated -1

COURSE DESIGNER:
Mrs.J. JosephineJesintha

Forwarded By



(Dr.Vasantha Esther Rani)

III B.Sc. HOME SCIENCE WITH FOOD BIOTECHNOLOGY

SEMESTER –V

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N5SB3	Entrepreneurial Skills – Baking Adulteration and Food Preservation	Lecture / Practical	2	2

COURSE DESCRIPTION

This course gives hands-on training in the preparation, display of various baked, preserved food products and identification of adulterants in commercially available foods.

COURSE OBJECTIVES

- To understand the principles of baking of various bakery products
- To understand the principles of food preservation and preparation of preserved foods.
- To develop skills for setting up a production unit.

UNITS

UNIT –I INTRODUCTION TO BAKERY AND BAKERY TECHNIQUES

(6HRS.)

Introduction to Bakery, Baking Techniques – Bread, Cake, Biscuits & Cookies

UNIT –II FOOD PRESERVATION

(6 HRS.)

Introduction, Classification and use of preservatives

UNIT –III METHODS OF FOOD PRESERVATION

(6 HRS.)

Methods of Food preservation, Preparation of Jam, Jelly, Squash, Tuttyfrutti, Marmalade, Vathal, Vadagam.

UNIT –IV FOOD ADULTERATION

(6 HRS.)

Self-study -Types of Adulterants, Methods of Adulteration and Identification of Adulterants.

UNIT –V FOOD ADDITIVES

(6 HRS.)

Additives – Functions, Uses, Importance, Antioxidants, Coloring matter, Emulsifying agent and Stabilizers

REFERENCES:

TEXTBOOK:

1. Dearosier. N.N(1975). *The Technology of Food Preservation*.

REFERENCE BOOKS:

1. Lai G. Sideleappa G.B. (1987), *Preservation of Fruits and Vegetables* ICAR, New Delhi.
2. Parvinder S. Bali (2009). *Food Production Operations*, Oxford University Press, New Delhi.
3. Srilakshmi. B, (2008), *Food science*, New age international publishers.
4. Sudesh Jood&Neelani (2002) *Food Preservation*.
5. Thangam E. Philip, (1981). *Modern Cookery*, Vol I, Orient Longman, Mumbai.

• OPEN EDUCATIONAL RESOURCES

1. <https://www.onlinebiologynotes.com/food-preservation-from-microbial-spoilage-principle-and-methods/>
2. <https://www.cliffsnotes.com/study-guides/biology/microbiology/food-microbiology/food-preservation>
3. <https://www.intechopen.com/books/food-additives/introductory-chapter-introduction-to-food-additives>
4. <https://gcwgandhinagar.com/econtent/document/1589361321Unit%20V%20Food%20adulteration.pdf>
5. <http://www.ihmfaridabad.com/study-material/sem3-fsq-unit7.pdf>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 INTRODUCTION TO BAKERY AND BAKERY TECHNIQUES				
1.1	Introduction to Bakery	2	Chalk & Talk	Black Board
1.2	Baking Techniques – Bread, Cake, Biscuits & Cookies	4	Demonstration, Hands on Training	Lab
UNIT -2 FOOD PRESERVATION				
2.1	Introduction	1	Lecture	Black Board
2.2	Classification of preservatives	2	Chalk & Talk	LCD
2.3	Uses of preservatives	2	Lecture	Black Board
UNIT -3 METHODS OF FOOD PRESERVATION				
3.1	Methods of Food preservation	2	Chalk & Talk	Black Board
3.2	Preparation of Jam, Jelly, Squash, Tuttyfrutti, Marmalade, Vathal, Vadagam	4	Hands on Training	Lab
UNIT -4 FOOD ADULTERATION				
4.1	Types of Adulterants	2	Chalk & Talk	Black Board
4.2	Methods of Adulteration	2	Lecture	LCD

4.3	Procedure for identifying adulterants in foods	2	Demonstration, Hands on Training	Lab
UNIT -5 FOOD ADDITIVES				
5.1	Additives – functions, uses, importance antioxidants, coloring matter,	3	Chalk & Talk	Black Board
5.2	emulsifying agent and stabilizers.	3	Lecture	LCD

Evels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total
	T1 10 Mks.	T2 10 Mks.	Quiz 5 Mks.	Assignment 5 Mks	OBT/PPT 5 Mks	35 Mks.	5 Mks.	40Mks.
K1	2	2	-	-	-	4	-	4
K2	2	2	5	-	-	9	-	9
K3	3	3	-	-	5	11	-	11
K4	3	3	-	5	-	11	-	11
Non Scholastic	-	-	-	-	-		5	5
Total	10	10	5	5	5	35	5	40

CIA	
Scholastic	35
Non Scholastic	5
	40

All the course outcomes are to be assessed in the various CIA components.

The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are:

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON – SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

C1 – Internal Test-1

C2 – Internal Test-2

C3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non – Scholastic

Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
C01	2	2	2	3
C02	2	2	2	3
C03	2	2	2	3
C04	2	2	2	3
C05	2	2	2	3

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2 ♦
Weakly Correlated -1

COURSE DESIGNER:

1. Mrs.J.JosephineJesintha

Forwarded By



(Dr.Vasantha Esther Rani)

III B.Sc. HOMESCIENCE WITH FOOD BIOTECHNOLOGY SEMESTER –V

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N5SB4	Entrepreneurial Skills – Participatory Rural appraisal	Lecture	2	2

COURSE DESCRIPTION

This course enlightens the students on concept of participatory rural appraisal.

COURSE OBJECTIVES

- To enable the students to understand the concept of participatory rural appraisal.
- To develop knowledge on tools of participatory rural appraisal.
- To impart knowledge on different types of mapping.
- To train students to prepare project appraisal.
- To apply different resources in mapping.

UNITS

UNIT – I	INTRODUCTION TO PRA	[6 HRS]
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PRA- Introduction, Meaning, Importance, History and nature of Participatory Appraisal and Planning

UNIT – II PRINCIPLES AND TYPES OF PRA[6 HRS]

Application of PRA in Rural Setting – Principles of PRA - Tools of PRA: Timeline, Trend change, Seasonal calendar, Daily routine

UNIT – III MAPPING AND MODELLING [6 HRS]

Self- study -Mapping – Social and Resource mapping

UNIT – IV RANKING METHODS [6 HRS]

Concept of wealth, health, Pair wise and Matrix Ranking

UNIT – V PROJECT FORMULATION [6 HRS]

Focus Group Discussion, Income and Expenditure Matrix, Problem Analysis

and Project Formulation, Reports and Documentation.

REFERENCES:

TEXTBOOK:

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

REFERENCE BOOKS:

1. Neelamukherjee (1997). Participatory Rural Appraisal volume I of studies in rural participation, concept publishing company, New Delhi.
2. Stringer, E.T. (2007). Action research (3rd ed). Thousand oaks, A: Sage Publications Ltd.

OPEN EDUCATIONAL RESOURCES:

1. <http://ecoursesonline.iasri.res.in/mod/page/view.php?id=15475>
2. <http://www.slideshare.net/pria87/Ranking-Methods>
3. <http://www.nzdl.org/cgi-bin/library?e=d-00000-00---off-0cdl--00-0---0-10-0---0---0direct-10---4-----0-1l--11-en-50---20-about---00-0-1-00-0--4---0-0-11-10-0utfZz-800&cl=CL2.6&d=HASH01fd3098cbe6ad79c6ae84c1.5.4>=1>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT 1 - INTRODUCTION TO PRA				
1.1	Introduction, meaning, importance	2	Chalk and talk	Black Board
1.2	History and nature of Participatory Appraisal and planning	4	Chalk and talk	LCD
UNIT -2 PRINCIPLES AND MENU OF METHODS				
2.1	Application of PRA in Rural setting, principles of PRA	2	Lecture	LCD
2.2	Tools of PRA- Timeline, trend change, seasonal calendar, daily routine	4	Chalk and talk	LCD
UNIT -3 MAPPING AND MODELLING				

3.1	Self -study and mapping	2	Chalk and talk	Black board
3.2	Social and Resource Mapping	4	Lecture	LCD
UNIT -4 RANKING METHODS				
4.1	Concept of health, wealth	2	Lecture	LCD
4.2	Pairwise and Matrix ranking	4	Chalk and talk	LCD
UNIT -5 PROJECT FORMULATION				
5.1	Focus group Discussion, Income and Expenditure Matrix	3	Lecture	LCD
5.2	Problem analysis and Project formulation	3	Chalk and talk	LCD

	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total
Levels	T1 10 Mks.	T2 10 Mks.	Quiz 5 Mks.	Assignment 5 Mks	OBT/PPT 5 Mks	35 Mks.	5 Mks.	40Mks.
K1	2	2	-	-	-	4	-	4
K2	2	2	5	-	-	9	-	9
K3	3	3	-	-	5	11	-	11
K4	3	3	-	5	-	11	-	11
Non Scholastic	-	-	-	-	-		5	5
Total	10	10	5	5	5	35	5	40

CIA	
Scholastic	35
Non Scholastic	5
	40

All the course outcomes are to be assessed in the various CIA components. The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are :

K1- Remember, **K2**-Understand, **K3**-Apply, **K4**-Analyse

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

C1 – Internal Test-1

C2 – Internal Test-2

C3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non – Scholastic

Mapping of COs with POs

CO/ PSO	P01	P02	P03	P04
C01	1	1	1	1
C02	1	2	1	1
C03	1	1	1	1
C04	1	1	1	3
C05	1	1	1	1

Note: ♦ Strongly Correlated – 3

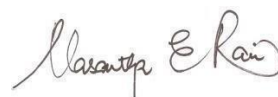
♦ Moderately Correlated – 2

♦ Weakly Correlated -1

COURSE DESIGNER:

Dr. C. Priyalatha

Forwarded By



(Dr.Vasantha Esther Rani)

III B.Sc. HOMESCIENCE WITH FOOD BIOTECHNOLOGY
SEMESTER –V

For those who joined in 2019 onwards

PROGRAMM E CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/ WEEK	CREDIT S
UAHS	21UG5SLA	CONSUMERISM	SELF LEARNING		2

COURSE DESCRIPTION

The course spells out the consumerism ,types of consumerism, Rights and Responsibilities of consumer.

COURSE OBJECTIVES

To enable students

1. To outline the concepts of consumerism
2. To develop an understanding on rights and responsibilities.
3. To describe the consumer protection act and redressal agencies

UNITS

UNIT- I

Definition – Meaning – Objectives of Consumerism – Characteristics -Importance-
Advantages –Disadvantages of consumerism –Consumer Wants Vs Needs

UNIT- II

Types of Consumerism – Factors leading to Consumerism - Consumer Rights and
Responsibilities-

UNIT- III

Consumer behaviour –Importance ,objectives, consumer Research process,Environmental
factors affecting consumer behaviour.

UNIT- IV

Importance of Consumer Protection – Legal Protection to Consumers-
ways and means of consumer protection- Redressal Agencies Under The Consumer Protection Act

UNIT- V

Green Consumerism-Meaning- Necessity of Green Consumerism- Importance --Reactions to Green Consumerism

OPEN EDUCATION RESOURCE

<https://www.economicsdiscussion.net/india/consumer-protection/consumerism-in-india/31802>

<https://www.yourarticlelibrary.com/essay/essay-on-consumerism/50837>

<https://www.jstor.org/stable/1250712?seq=1>

<https://www.iare.ac.in> >files

EVALUATION

Internal	External
Assignment – 20 Marks	Objective – 20 Marks
Test – 20Marks	Essay Type Qns. – 40 Marks
Total – 40Marks	Total – 60Marks

Course Outcome

On completion of the course the student will be able to

CO		Level
CO1	Understand the concepts of consumerism	K1
CO2	Understand the importance of types of consumerism and their rights	K2
CO3	Describe the importance of consumer Protection	K3
CO4	Build skills in Green Consumerism	K3
CO5	Infer the consumer movement	K4

Mapping COs Consistency with PSOs

CO/ PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
CO1	3			3							1	
CO2	3			3								
CO3	3			3				1				
CO4	1							1				
CO5	2		2	3								

Note: ♦ Strongly Correlated – 3
WeaklyCorrelated -1

♦ ModeratelyCorrelated – 2

♦

COURSE DESIGNER
Dr.C.Priyalatha

FORWARDED BY

Vasanth E Rani

(Dr. Vasantha Esther Rani)

III B.Sc. HOMESCIENCE WITH FOOD BIOTECHNOLOGY

SEMESTER –VI

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N6CC17	Resource Management	Lecture	6	4

COURSE DESCRIPTION

This course offers knowledge on managing resources like time, money and energy. It also deals with consumerism and standard of living.

COURSE OBJECTIVES

- Understand the housing values and goals.
- Understand the importance of Family Resource Management in family and personal living.
- Develop ability to apply Family Resource Management concepts in living situations to improve quality of family life.
- Appreciate the role of successful financial management in satisfying family living.

UNITS

UNIT – I	MANAGEMENT PROCESS	[15 HRS]
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Management- Meaning, Elements of management (planning, controlling and evaluation). Decision Making- Meaning, Steps in decision making, Types, Values, Goals, and Standards.

Self Study: Characteristics of a good home maker.

UNIT – II	RESOURCES	[15 HRS]
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Types of resources- Human, Non-human resources
Time and Energy Management.

Work simplification- Principles and Techniques.

Labour Saving Devices- Major and Minor, Selection, Use and Care.

UNIT – III	MONEY MANAGEMENT	[15 HRS]
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Family income – types, sources of income, supplementing Family Income. Income management – Family Budget and its main items and steps in making budget. Engel's law of consumption, Law of Diminishing Marginal Utility, Law of Substitution, Financial Records of House, Savings.

UNIT – IV	STANDARD OF LIVING	[15 HRS]
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Meaning, Factors affecting standard of living, reasons for low standard of living, Remedial measures to overcome low standard of living.

Self -Study: Remedial measures to overcome low standard of living.

UNIT – V	CONSUMERISM	[15 HRS]
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Self-study -Meaning of consumer, Consumerism, Problem faced by consumers Adulteration, Faulty weights and measures, misleading advertisements. Problem of purchasing – When, Where, How, how much to buy? Types of labels, Consumer rights, consumer protection acts, consumer court, CGSI, Green Consumerism.

REFERENCES:

TEXTBOOK:

1. Gross, I.H., Crandall, E.W. & Knoll, H. M (1975) *Management for Modern Families*,

REFERENCE BOOKS

1. Bigelow H.P.(1953) Family finance, J.B. Lippincott Co.
2. Dewett, K.K. & Varma (1976). Elementary Economics Theory, S. Chand and Company Ltd. New Delhi,
3. Gisban, L.B., (1971) .Economics of Consumers, American book Co,
4. Gordan (1971).Economics of Consumers, American book Co,
5. Maneesh.S. (2006). Home Management and Family Finance, Dominant Publishers and Distributors, New Delhi.
6. Mullick.P., (2007) Text Book of Home Science, Kalyani Publishers, Ludhiyana.
7. Nickell & Dorsey (1976), Management in Family living, Indian Edition,
8. Swarison, V (1981). Introduction to Home Management, Mac Milan and Co.,
9. Thankamma, J. (1965) .Food Adulteration, Mac Milan Co., New Delhi.

OPEN EDUCATIONAL RESOURCES:

1. <https://nios.ac.in/media/documents/srsec321newE/321-E-Lesson-10.pdf>
2. https://www.brainkart.com/article/Decision-Making_33511/
3. <https://www.brainkart.com> > article > Family
4. <https://www.yourarticlelibrary.com> > home-management
5. <https://www.yourarticlelibrary.com/family/family-budgeting-advantages-disadvantages-and-types-of-budget/47910>
6. <https://www.investopedia.com/ask/answers/013015/what-does-law-diminishing-marginal-utility-explain.asp>
7. https://www.brainkart.com/article/Money-Management_33515/

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT 1 – Management Process				
1.1	Management- Meaning Introduction	2	Chalk & Talk	Black Board
1.2	Elements of management (planning, controlling and evaluation).	3	Chalk & Talk	LCD
1.3	Decision Making- Meaning, Steps in decision making, Types	5	Lecture	PPT & White board
1.4	Values, Goals, and Standards	4	Lecture	Smart Board
1.5	SelfStudy: Characteristics of a good home maker.	1	Discussion	Black Board

UNIT -2 Resources				
2.1	Types of resources- Human, Non-human resources	2	Lecture	LCD
2.2	Time Management	3	Chalk & Talk	LCD
2.3	Energy Management	3	Lecture	PPT & White board
2.4	Work simplification- Principles and Techniques.	5	Discussion	PPT
2.5	Labour Saving Devices- Major and Minor, Selection, Use and Care.	2	Lecture	Black board
UNIT -3 Money Management				
3.1	Family income – types, sources of income, supplementing Family Income.	3	Lecture	Black board
3.2	Income management – Family Budget and its main items and steps in making budget.	4	Lecture	LCD
3.3	Engel's law of consumption	2	Chalk & Talk	LCD
3.4	Law of Diminishing Marginal Utility, Law of Substitution	3	Lecture	PPT & White board
3.5	Financial Records of House, Savings.	3	Discussion	PPT & White board
UNIT -4 Standard Of Living				
4.1	Introduction and meaning	1	Lecture	LCD
4.2	Factors affecting	4	Chalk &	LCD

	standard of living		Talk	
4.3	reasons for low standard of living	4	Lecture	PPT & White board
4.4	Remedial measures to overcome low standard of living	4	Chalk & Talk	LCD
4.5	Self Study: Remedial measures to overcome low standard of living	2	Discussion	PPT
UNIT -5 Consumerism				
5.1	-Meaning of consumer, Consumerism	1	Lecture	LCD
5.2	Problem faced by consumers Adulteration, Faulty weights and measures,	4	Chalk & Talk	LCD
5.3	misleading advertisements . Problem of purchasing – When, Where, How, how much to buy	3	Lecture	PPT & White board
5.4	Types of labels	1	Lecture	PPT & White board
5.5	Consumer rights consumer protection acts, consumer court,	4	Chalk & Talk	LCD
5.6	Consumer Guidance society of India	2	Discussion	PPT

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total
	T1	T2	Quiz	Assignment	OBT/PPT			
	10 Mks.	10 Mks.	5 Mks.	5 Mks	5 Mks	35 Mks.	5 Mks.	40Mks.

K1	2	2	-	-	-	4	-	4
K2	2	2	5	-	-	9	-	9
K3	3	3	-	-	5	11	-	11
K4	3	3	-	5	-	11	-	11
Non Scholastic	-	-	-	-	-		5	5
Total	10	10	5	5	5	35	5	40

CIA	
Scholastic	35
Non Scholastic	5
	40

All the course outcomes are to be assessed in the various CIA components.

The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are :

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

C1 – Internal Test-1

[illegible]

CO/ PSO	PSO 13	PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO2 2	PSO2 3	
CO1	1	1	1	1	3	3	1	3	1	1	1	
CO2	1	1	1	1	3	3	1	3	1	1	1	
CO3	1	1	1	1	3	3	1	3	1	1	1	
CO4	1	1	1	1	3	3	1	3	1	1	1	
CO5	1	1	1	1	3	3	1	3	1	1	1	

Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	1	1	1	1
CO2	1	2	1	1
CO3	1	1	3	1
CO4	1	1	1	1
CO5	1	1	1	1

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2
 ♦ Weakly Correlated -1

COURSE DESIGNER:
Dr. C. Priyalatha

Forwarded By



(Dr.Vasantha Esther Rani)

III B.Sc. HOMESCIENCE WITH FOOD BIOTECHNOLOGY
SEMESTER –VI

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N6CC18	Resource Management Lab	Practical	3	2

COURSE DESCRIPTION

This course trains the students in managing the resources efficiently.

COURSE OBJECTIVE.

- To understand the concepts of furniture
- To select the different types of lighting
- To develop skill in bouquet making

UNITS

UNIT-1

[5HRS]

Furniture Arrangement for living room, dining room , kids room ,teenages room (girl ,boy) and master room.

UNIT-2

[10 HRS]

Types of Lighting-Direct ,Indirect and Diffused lightning.

UNIT- 3

[10HRS]

Arranging flowers in various styles for different areas, Vertical,Horizontal,Diagonal, Japanese, Mass,Crescent and S –bend.

UNIT- 4

[5 HRS]

Market-survey on availability of accessories for Kitchen,Living,Dining and Bed room.

UNIT-5**[15 HRS]**

Application of principles for efficient money, energy, and time management.

References

1. Maneesh.S. (2006). Home Management and Family Finance, Dominant Publishers and Distributors, New Delhi.
2. Mullick.P., (2007) Text Book of Home Science, Kalyani Publishers, Ludhiyana.
3. Nickell & Dorsey (1976), Management in Family living, Indian Edition, Swarison, V (1981). Introduction to Home Management, Mac Milan and Co.,

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT 1				
1.1	Furniture Arrangement for living room, dining room	2	Chalk & Talk	PPT
1.2	kids room, teenagers room (girl ,boy) and master room.	3	Chalk & Talk	PPT
UNIT -2				
2.1	Types of Lightning - Direct, Indirect	5	Lecture	Black board
2.2	Diffused lightning.	5	Chalk & Talk	PPT
UNIT -3				
3.1	Arranging flowers in various styles for different areas- Vertical,	3	Demonstration	PPT
3.2	Horizontal, Diagonal, Japanese	3	Demonstration	PPT

3.3	Mass, Crescent and S-bend	4	Demonstration	PPT
UNIT -4				
4.1	Market survey on availability of accessories for Kitchen , Living	3	Discussion Group work	Black board
4.2	Dining and Bed room.	2	Discussion	PPT
UNIT -5				
5.1	Application of principles for efficient money	5	Lecture/Hands on Experience	LCD
5.2	energy and time management	10	Lecture/Hands on Experience	Black board

EVALUATION PATTERN

SCHOLASTIC				NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
10	10	10	5	5	40	60	100

C1 – Internal Test - 1

C2 – Internal Test - 2

C3 – Model Practical Exam

C4 – Record

C5 – Non – Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Plan suitable furniture for different rooms	K4	PSO20
CO 2	Choose appropriate modes of lighting.	K1, K3	PSO20
CO 3	Illustrate and create various styles of flower arrangement.	K2	PSO20
CO 4	Classify accessories for home interiors.	K2, K4	PSO20
CO 5	Restate in own words the principles of resource management.	K1	PSO20

Mapping of COs with PSOs

CO/ PSO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12
CO1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	1	1	1	1	1	1	1	1	1	1	1	1
CO3	1	1	1	1	1	1	1	1	1	1	1	1
CO4	1	1	1	1	1	1	1	1	1	1	1	1
CO5	1	1	1	1	1	1	1	1	1	1	1	1
CO/ PSO	PSO 13	PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO 22	PSO 23	
CO1	1	1	1	1	3	3	3	1	1	1	1	
CO2	1	1	1	1	3	3	3	1	1	1	1	
CO3	1	1	1	1	3	3	3	1	1	1	1	
CO4	1	1	1	1	3	3	3	1	1	1	1	
CO5	1	1	1	1	3	3	3	1	1	1	1	

Mapping of COs with POs

CO/ PSO	P01	P02	P03	P04
C01	3	3	1	1
C02	3	3	1	1
C03	3	3	1	1
C04	3	3	1	1
C05	3	3	1	1


Note: ♦ Strongly Correlated – 3
Weakly Correlated -1

♦ Moderately Correlated – 2

COURSE DESIGNER:

Dr. C. Priyalatha

Forwarded By



(Dr.Vasantha Esther Rani)

III B.Sc. HOME SCIENCE WITH FOOD BIOTECHNOLOGY
SEMESTER –VI

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N6CC19	Clinical Nutrition and Dietetics	Lecture	5	4

COURSE DESCRIPTION

The course gives a detailed picture of the normal & therapeutic nutrition, highlighting the importance, recommended dietary allowance, medical nutrition therapy for various stages of life cycle and all disease conditions.

COURSE OBJECTIVES

- Learn the principles of meal planning, plan and prepare meals for families at different income levels and for special groups.
- Gain knowledge and develop skills and techniques in the planning and preparation of therapeutic diets for nutritional deficiencies.
- To recommend and provide appropriate nutritional care, prevention, and treatment of various diseases

UNITS

UNIT –I NUTRITIONFOR DEVELOPMENTAL MILESTONES (20 HRS.)

Meal Planning – Principles of planning meals, meal pattern and its modification to suit to different disease conditions.

1. Nutrition during pregnancy – importance – changes nutritional requirements and complication.
2. Nutrition during lactation – importance, advantages of breast feeding, need for enhanced nutritional requirements.
3. Nutrition during infancy – nutritional requirement, weaning – methods – low-cost supplementary foods.

4. Nutrition for Preschoolers – nutritional requirements, inculcating feeding habits.
5. Nutrition for school children and adolescents – nutritional requirements in adolescence- nutritional problems of adolescents.
6. Geriatric nutrition – changes during old age, nutritional requirements during old age, nutrition related problems of old age.

Self-Study: Nutrition for school children and adolescents – nutritional requirements in adolescence- nutritional problems of adolescents.

UNIT –II DIET THERAPY

(15 HRS.)

Diet therapy – Objectives of therapeutic diets

1. Routine Hospital diet –
 - a. a.TPN b. EN
2. Modification of diets in different diseases,

Etiology /Pre-disposing factors, clinical symptoms and modification of diets for

- a. Obesity and Underweight
- b. Diabetes mellitus
- c. Febrile disease conditions – Typhoid (acute), Tuberculosis (chronic) and Malaria (intermittent).
- d. Gastrointestinal disorders – Peptic- ulcer, diarrhoea, constipation

Self Study: Anemia – types.

UNIT–III THERAPEUTIC DIETS FOR HEART, KIDNEY & LIVER DISEASES

(15HRS.)

Etiology or Pre-disposing factors, clinical symptoms and modification of diets for

- a) CVD-Hypertension and Atherosclerosis.
- b) Diseases of urinary tract – Nephritis, Nephrosis, Renal failure.
- c) Diseases of the liver – Hepatitis and Cirrhosis

UNIT –IV DIET IN AIDS AND CANCER

(10 HRS.)

Etiology of Pre-disposing factors, clinical symptoms and modification of diets for

- a) Cancer
- b) AIDS

Allergy- symptoms, types of reactions & treatment-elimination diet.

Burns- symptoms, classification & dietary management.

UNIT -V COMMUNITY NUTRITION

(15 HRS.)

Malnutrition – etiology and measures to overcome

Assessment of nutritional status

Nutrition Education

Nutrition Intervention Programme – CMNMP, ICDS

National and International Organisations

FAO, WHO, UNICEF, CARE, CFTRI and NIN

Self -Study:Malnutrition – etiology and measures to overcome

REFERENCES:

TEXTBOOK:

1. Antia H. P (1989) *Clinical Nutrition and Dietetics* Oxford University press

REFERENCE BOOKS:

1. Carroll, A. Lutz (1997) *Nutrition for Diet Therapy*, Edition – 2, F. A. Davis Company, Philadelphia.
2. Davidson S. Passmore, R. Brock J. K. & Truwell A. S.(1975) *Human Nutrition and Dietetics*, The English Language Book Society and Churchill.
3. Ghosh S (1976). *The feeding and care of Infant and Young children*
4. Gupta L. C. & Kusium Gupta (1989). *Foods and Nutrition, Facts and Figures*, Jayapahothas, New Delhi,
5. Passmore R. Eastwood (1986) *Human Nutrition and Dietetics*, Longman Group Ltd.,
6. Raheena Begum, A. (1989). *Textbook of food, nutrition and dietetics*, Stanley Publishers,
7. 8. Skinner Paul (2000) Development of a medical nutrition therapy protocol for female collegiate athletes, J. AM. Diet ASS 101
8. 9. Swaminathan M. (1988) *Advanced textbook of Food and Nutrition*, Vol. I and II, the Bangalore Printing and Publishing Co., Ltd.,
9. Williams S.R (1977). *Nutrition and Diet Therapy* C.V. Mosby CO.

Open Educational Resources:

1. <https://clinical-nutrition.imedpub.com/>
2. <http://egyankosh.ac.in/bitstream/123456789/33402/1/Unit-8.pdf>
3. <http://egyankosh.ac.in/bitstream/123456789/33399/1/Unit-9.pdf>

4. <http://egyankosh.ac.in/bitstream/123456789/33394/1/Unit-11.pdf>
5. <http://egyankosh.ac.in/bitstream/123456789/33387/1/Unit-14.pdf>
6. <https://www.subhartidde.com/slms/M.Sc%20-202%20Clinical%20and%20Therapeutic%20Nutrition.pdf>
7. www.who.int/mediacentre/cardiovascular_diseases
8. www.cdc.gov/diabetes/pubs/factsheets/kidney.htm

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 NUTRITION FOR DEVELOPMENTAL MILESTONES				
1.1	Meal Planning – Principles of planning meals, meal pattern and its modification to suit to different disease conditions.	2	Chalk & Talk	Black Board
1.2	Nutrition during pregnancy – importance – changes nutritional requirements and complication.	3	Chalk & Talk	Black Board
1.3	Nutrition during lactation – importance, advantages of breast feeding, need for enhanced nutritional requirements.	3	Lecture	PPT & White board
1.4	Nutrition during infancy – nutritional requirement, weaning – methods – low cost supplementary foods.	3	Chalk & Talk	Black Board
1.5	Nutrition for Preschoolers – nutritional requirements, inculcating feeding habits.	3	Lecture	Black Board
1.6	Nutrition for school children and adolescents – nutritional requirements in	3	Discussion	Black Board

	adolescence- nutritional problems of adolescents.			
1.7	Geriatric nutrition – changes during old age, nutritional requirements during old age, nutrition related problems of old age.	3	Lecture	LCD
UNIT -2 DIET THERAPY				
2.1	Diet therapy – Objectives of therapeutic diets	1	Chalk & Talk	Black Board
2.2	Routine Hospital diet – a.TPN b. EN	3	Lecture	LCD
2.3	Obesity and Underweight	3	Chalk & Talk	Black Board
2.4	Diabetes mellitus	3	Lecture	LCD
2.5	Febrile disease conditions – Typhoid (acute), Tuberculosis (chronic) and Malaria (intermittent).	2	Chalk & Talk	Black Board
2.6	Gastrointestinal disorders – Peptic- ulcer, diarrhea, constipation	3	Lecture	PPT & White board
UNIT -3 THERAPEUTIC DIETS FOR HEART, KIDNEY & LIVER DISEASES				
3.1	CVD-Hypertension and Atherosclerosis	5	Lecture	PPT & White board
3.2	Diseases of urinary tract – Nephritis, Nephrosis, Renal failure.	5	Lecture	LCD
3.3	Diseases of the liver – Hepatitis and Cirrhosis	5	Lecture	PPT & White board
UNIT -4 DIET IN AIDS AND CANCER				

4.1	Etiology of Pre-disposing factors, clinical symptoms and modification of diets for Cancer	5	Lecture	LCD
4.2	Etiology of Pre-disposing factors, clinical symptoms and modification of diets for AIDS	5	Lecture	PPT & White board
UNIT -5 COMMUNITY NUTRITION				
5.1	Malnutrition – etiology and measures to overcome	2	Chalk & Talk	Black Board
5.2	Assessment of nutritional status	3	Lecture	PPT & White board
5.3	Nutrition Education	2	Demonstrations	Charts
5.4	Nutrition Intervention Programme – CMNMP, ICDS	2	Chalk & Talk	Black Board
5.5	FAO, WHO, UNICEF	3	Lecture	LCD
5.6	CARE, CFTRI and NIN	3	Lecture	LCD

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total
	T1 10 Mks.	T2 10 Mks.	Quiz 5 Mks.	Assignment 5 Mks	OBT/PPT 5 Mks	35 Mks.	5 Mks.	40Mks.
K1	2	2	-	-	-	4	-	4
K2	2	2	5	-	-	9	-	9

K3	3	3	-	-	5	11	-	11
K4	3	3	-	5	-	11	-	11
Non Scholastic	-	-	-	-	-		5	5
Total	10	10	5	5	5	35	5	40

CIA	
Scholastic	35
Non Scholastic	5
	40

All the course outcomes are to be assessed in the various CIA components.

The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are :

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

C1 – Internal Test-1

C2 – Internal Test-2

C3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non – Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Identify the principles of meal planning in nutrition through life cycle.	K1, K3	PSO3&PSO4
CO 2	Recall the nutritive value of foods for planning diets	K1	PSO3
CO 3	Recognize the etiology and symptoms of diseases	K1, K2	PSO3&PSO4
CO 4	Examine skills in preparation of therapeutic diets	K4	PSO3&PSO4
CO 5	Solve problem of malnutrition through intervention programmes	K3	PSO3&PSO4

Mapping of C0s with PSOs

[illegible]

C03	1	1	1	1	1	1	1	1	1	1	1	
C04	1	1	1	1	1	1	1	1	1	1	1	
C05	1	1	1	1	1	1	1	1	1	1	1	

Mapping of C0s with POs

CO/ PSO	P01	P02	P03	P04
C01	3	3	1	2
C02	3	3	1	1
C03	3	3	2	1
C04	3	3	2	1
C05	3	3	1	2

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2
 ♦ Weakly Correlated -1

COURSE DESIGNER:

1.Dr.Vasantha Esther Rani

2. Mrs.D.Mouna

Forwarded By



(Dr.Vasantha Esther Rani)

III B.Sc. HOME SCIENCE WITH FOOD BIOTECHNOLOGY
SEMESTER –VI

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N6CC20	Clinical Nutrition and Dietetics Lab	Practical	3	2

COURSE DESCRIPTION

The course provides hands-on experience in the planning, formulation and calculation of nutrients for various stages of life cycle and deficiency disorders/degenerative diseases.

COURSE OBJECTIVES

- To enable the students to know the importance of the various stage of life cycle.
- To plan and prepare food for various therapeutic conditions.
- To alleviate deficiency disorders by planning diets rich in particular diseases.
- To share the knowledge from lab to land.

UNITS

UNIT –I **(5 HRS.)**

Planning meals for families at low, medium, and high-income levels.

UNIT –II **(10 HRS.)**

Planning, Preparation and serving of meals for

a) Expectant woman

- b) Lactating woman
- c) Preschool children
- d) School going children

UNIT –III

(10 HRS.)

Planning, Preparation and serving of meals for

- e) Adolescents – boys, girls
- d) Adult woman – Lady Lecturer
- e) Adult Man – Hard working
- f) Old man

UNIT –IV

(10 HRS.)

Planning, preparation and service of diets for

- a) Post operative conditions
- b) Obesity
- c) Diabetes Mellitus
- d) Peptic Ulcer
- e) Hypertension, Atherosclerosis

UNIT –V

(10 HRS.)

Planning, preparation and service of diets for

- f) Liver disorders - Cirrhosis
- g) Renal disorders Nephritis
- h) Anaemia, Vitamin A deficiency disease
- i) Kwashiorkor, Marasmus
- j) Cancer

REFERENCE BOOKS:

1. Carroll, A. Lutz (1997) *Nutrition for Diet Therapy*, Edition – 2, F. A. Davis Company, Philadelphia.
2. Davidson S. Passmore, R. Brock J. K. & Truwell A. S. (1975) *Human Nutrition and Dietetics*, The English Language Book Society and Churchill.
3. Ghosh S (1976). *The feeding and care of Infant and Young children*
4. Gupta L. C. & Kusium Gupta (1989). *Foods and Nutrition, Facts and Figures*, Jayapahothas, New Delhi,
5. Passmore R. Eastwood (1986) *Human Nutrition and Dietetics*, Longman Group Ltd.,

Open Educational Resources:

1. <https://clinical-nutrition.imedpub.com/>
2. <http://egyankosh.ac.in/bitstream/123456789/33402/1/Unit-8.pdf>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1				
1.1	Planning meals for families at low, medium and high income levels.	5	Preparation & Demonstration	Essential materials and utensils
UNIT -2				
2.1	Planning, Preparation and serving of meals for a) Expectant woman b) Lactating woman c) Preschool children d) School going children	10	Preparation & Demonstration	Essential materials and utensils
UNIT -3				
3.1	Planning, Preparation and serving of meals for e) Adolescents – boys, girls d) Adult woman – Lady Lecturer e) Adult Man – Hard working f) Old man	10	Preparation & Demonstration	Essential materials and utensils
UNIT -4				
4.1	Planning, preparation and service of diets for a) Post operative conditions b) Obesity c) Diabetes Mellitus d) Peptic Ulcer e) Hypertension & Atherosclerosis	10	Preparation & Demonstration	Essential materials and utensils

UNIT -5				
5.1	Planning, preparation and service of diets for f) Liver disorders Cirrhosis g) Renal disorders Nephritis h) Anaemia, Vitamin A deficiency disease i) Kwashiokar, Marasmus j) Cancer	10	Preparation & Demonstration	Essential materials and utensils

EVALUATION PATTERN

SCHOLASTIC				NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
10	10	10	5	5	40	60	100

C1 – Internal Test - 1

C2 – Internal Test - 2

C3 – Model Practical Exam

C4 – Record

C5 – Non – Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Recall the principles of meal planning	K1	PSO3
CO 2	Choose and prepare balanced diets	K3	PSO3&PSO4
CO 3	Describe the dietary modification	K2	PSO3&PSO4
CO 4	Plan and prepare/execute therapeutic diets	K3, K4	PSO3&PSO4
CO 5	Construct diet for deficiency diseases	K3	PSO3&PSO4

Mapping of COs with PSOs

CO/ PSO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO1 0	PSO 11	PSO 12
CO1	1	1	3	1	1	1	1	1	1	1	1	1
CO2	1	1	3	3	1	1	1	1	1	1	1	1
CO3	2	1	3	3	1	1	1	1	1	1	1	1
CO4	1	1	3	3	1	1	1	1	1	1	1	1
CO5	1	1	2	3	1	1	1	1	1	1	1	1
CO/ PSO	PSO 13	PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO2 2	PSO 23	
CO1	1	1	1	1	1	1	1	1	1	1	1	
CO2	1	1	1	1	1	1	1	1	1	1	1	
CO3	1	1	1	1	1	1	1	1	1	1	1	
CO4	1	1	1	1	1	1	1	1	1	1	1	
CO5	1	1	1	1	1	1	1	1	1	1	1	

Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	3	3	1	2
CO2	3	3	1	1
CO3	3	3	2	1
CO4	3	3	2	1
CO5	3	3	1	2

COURSE DESIGNER:

Dr.Vasantha Esther Rani

Mrs.D.Mouna

Forwarded By



(Dr.Vasantha Esther Rani)

III B.Sc. HOME SCIENCE WITH FOOD BIOTECHNOLOGY

SEMESTER –VI

For those who joined in 2019 onwards

PROGRA MME CODE	COURSE CODE	COURSE TITLE	CATEGO RY	HRS/WE K	CREDITS
UAHS	19N6ME3	FAMILY DYNAMICS	Lecture	5	5

COURSE DESCRIPTION

This course describes the dynamics of the family with reference to its structure, function, problems, and supportive programmes.

COURSE OBJECTIVES

- To acquaint the students with the problems associated with the marital life,
- To orient the students with the current family problems specially on the disintegration of family and the solving methods.
- To give them thorough knowledge on reproductive health education.

UNITS

UNIT –I ADULthood AND MARRIAGE (15 HRS.)

Adulthood early, middle, and late adulthood characteristics and psychological changes.

Marriage - definition, functions, types Monogamy, polygamy, and polyandry and group marriage

Marital adjustments and factors affecting marital life

Guidance and Counseling need, method, and Supportive Agencies.

UNIT –II FAMILY (15 HRS.)

Family – Meaning, characteristics and functions -essential and non-essential.

Types based on – structure, Authority and Marriage.

Family disintegration – reasons and remedial measures

UNIT –III FAMILY CRISIS (15 HRS.)

Crisis and Crisis management – definition,

Classification – usual and expected, unexpected.

Prolonged illness, Bereavement, unemployment,

Suicide, Divorce, Separation, Alcoholism and Drug addiction Stress

management

UNIT –IV WELFARE OF THE AGED AND CHILDREN WITH SPECIAL NEEDS (15 HRS.)

Welfare programme for the aged. Welfare programme for the children with special needs – Institutions, Services, Programmes and concessions for children with special needs

UNIT –V POPULATION EDUCATION AND FAMILY WELFARE (15HRS.)

Population – Definition, Population growth and Population explosion, causes and effect of population explosion

Self-Study: Population education, - definition, population education at various levels

Family planning methods- programmes, adolescent reproductive health education.

PRACTICALS

- i. A study on family structure and family problems
- ii. Visit to family counseling center
- iii. Visit to Old Age Home.

REFERENCES

TEXTBOOK:

- 1. Devadas R.P & Jaya (1991) *Text Book of Child Development* Macmillan India Ltd, Madras.

REFERENCE BOOKS:

1. Helen, B. (1995) *Developing Child*, Harper Collins Publishers, New York.
2. 3. Hurlock E.B, (1981) *Developmental psychology: a life-span approach*
3. Tata McGraw -Hill, New York.
4. 4. Hurlock E. B, (2004). *Child Development*, (6th ed), McGraw Hill Inc., New York
5. Sharma R.N (1986). *Indian Social Problems*. Media Promoters and Publishers Pvt Ltd Mumbai,
6. 6. Suria Kanthi A. (2004) *Child development- An introduction*. Kavitha Publications, Gandhigram, Tamil Nadu

OPEN EDUCATIONAL RESOURCES:

1. <https://guides.lib.uconn.edu/humandevelopment/oer>
2. <http://egyankosh.ac.in/handle/123456789/55008>
3. https://oer.uoch.edu.pk/home/watch_lecture/2131/130595

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1ADULthood AND MARRIAGE (15HRS.)				
1.1	Topic 1- Adulthood Early Middle and Late adulthood Characteristics and Psychological changes.	5	Chalk&Talk, discussion	Black Board
1.2	Subtopic - Marriage Definition Functions, Types Monogamy, polygamy, and polyandry and group marriage .	4	Lecture	LCD &White board
1.3	Marital adjustments and factors affecting marital life	4	Lecture anddiscussion	
UNIT -II FAMILY (18 HRS.)				
2.1	Topic 2- Family Meaning, characteristics Functions -essential and non-essential.	5	Lecture	PPT& Black Board
2.2	Subtopic Types based on – structure, Authority and Marriage	5	Chalk & Talk	Green Board
2.3	Topic 3 Family disintegration – reasons and remedial measures.	5	Chalk &Talk,Group Discussion	Black Board and PPT
UNIT -III FAMILY CRISIS (15 HRS.)				
3.1	Topic 4- Crisis Crisis and Crisis management – definition, Classification – usual and expected,	3	Chalk & Talk	Black Board&LC D

	unexpected.			
3.2	Prolonged illness, Suicide Bereavement,	3	Lecture	PPT& Black Board
3.3	Desertion, Divorce, Separation	3	Chalk & Talk	LCD & Smart Board
3.4	Alcoholism and Drug addiction unemployment	3	Chalk & Talk	Black Board
3.5	Stress ManagementTechnique s	3	Chalk & Talk, Group Discussion, Demonstration	Smart Board
UNIT –IV WELFARE OF THE AGED AND CHILDREN WITH SPECIAL NEEDS (15 HRS.)				
4.1	Topic5 Welfare programme for the aged. Government and Non-Govt	5	Lecture	Smart Board
4.2	Subtopics Welfare programme for the children with special needs – Institutions,andService s	5	Lecture	PPT
4..3	Programmes and concessions for children with special Needs	5	Chalk & Talk	LCD
UNIT –V POPULATION EDUCATION AND FAMILY WELFARE (15HRS.)				
5.1	Topic 6 Population – Definition, Population growth and Status	5	Lecture and Group Discussion	Models
5.2	Population Explosion, Causes and effect of population explosion	5	Lecture	Green Board Charts
5.3	Adolescent Reproductive health education	5	Lecture/Discussion	PPT

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total
	T1 10 Mks.	T2 10 Mks.	Quiz 5 Mks.	Assignment 5 Mks	OBT/PPT 5 Mks	35 Mks.	5 Mks.	40Mks.
K1	2	2	-	-	-	4	-	4
K2	2	2	5	-	-	9	-	9
K3	3	3	-	-	5	11	-	11
K4	3	3	-	5	-	11	-	11
Non Scholastic	-	-	-	-	-		5	5
Total	10	10	5	5	5	35	5	40

CIA	
Scholastic	35
Non Scholastic	5
	40

✓ All the course outcomes are to be assessed in the various CIA components.

✓ The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are:

K1- Remember, K2-Understand, K3-Apply, K4-Analyse

COURSE OUTCOMES

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

CO2	1	3	1	1	1	1	1	1	1	1	1	
CO3	1	3	1	1	1	1	1	1	1	1	1	
CO4	1		1	1	1	1	1	1	1	1	1	
CO5	1	2	1	1	1	1	1	1	1	3	3	

Mapping of COs with POs

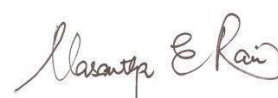
CO/ PSO	P01	P02	P03	P04
CO1	1	1	1	1
CO2	3	1	1	1
CO3	3	1	1	1
CO4	1	1	3	1
CO5	1	1	1	1

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2
 ♦ Weakly Correlated -1

COURSE DESIGNER:

1.Dr.S.SANTHI

Forwarded By



(Dr.Vasantha Esther Rani)

III B.Sc. HOME SCIENCE WITH FOOD BIOTECHNOLOGY

SEMESTER –VI

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N6ME4	Nutrition For Health and Fitness	Lecture	5	5

COURSE DESCRIPTION

To integrate and apply the principles of sound nutrition to help, assess and evaluate physical fitness, body composition and dietary pattern and their interrelationship.

COURSE OBJECTIVES

- Understand the components of health and fitness and the importance of nutrition in maintaining health
- Make nutritional, dietary, and physical activity recommendations to achieve fitness and well-being.
- Develop ability to evaluate fitness and well-being.

UNITS

UNIT –I HOLISTIC APPROACH TO FITNESS AND HEALTH (15 HRS.)

Introduction to fitness and health; Classification of physical activity based on energy expenditure; Assessment of nutritional status

UNIT –II ENERGY SYSTEMS (15 HRS.)

Aerobic and anaerobic energy system, Energy input and output, Shifts in Carbohydrate and Fat metabolism, Mobilization of fat stores during exercise

UNIT-III NUTRITION IN SPORTS

(15 HRS.)

Fuels and nutrients to support physical activity, Diet modification manipulation, Pre and Post game meals, Water and electrolyte balance, Losses and their replenishments during exercise and sports events, Carbohydrate Loading, Effect of dehydration, Ergogenic aids and Sports Drinks

UNIT -IV PHYSICAL FITNESS AND HEALTH - INTER-RELATIONSHIPS

(15HRS.)

Significance of physical fitness and nutrition in the prevention and management of weight, Obesity, Diabetes Mellitus, Cardiovascular Diseases, Disorders of bone health and Cancer, Sports anemia, Female Athlete Triad.

UNIT -V ALTERNATIVE SYSTEMS OF HEAL AND FITNESS

(15 HRS.)

Yoga, Meditation, Vegetarianism, Herbal/Naturopathy Medicines

REFERENCES:

TEXTBOOK:

1. Gupta L. C. & Kusium Gupta (1989). *Foods mid Nutrition, Facts and Figures*, Jayapahothas, New Delhi,

REFERENCE BOOKS:

2. Swaminathan M. (1988) *Advanced textbook of Food and Nutrition*, Vol. I and II, the Bangalore Printing and Publishing Co., Ltd.
3. Gitanjali Chatterjee, ,(1999) *Handbook of Nutrition*, Rajat Publications.
4. Srilakshmi.B.(2007). *Food Science*, New age International Pvt.Ltd.,NewDelhi.

OPEN EDUCATIONAL RESOURCES:

1. <http://www.hanoverhornets.org/pe/wp-content/uploads/2017/01/nutritionnotes-2.pdf>

2. <https://school.eckovation.com/short-notes-nutrition/>
3. <https://ncert.nic.in/textbook/pdf/iehp104.pdf>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 HOLISTIC APPROACH TO FITNESS AND HEALTH				
1.1	Introduction to fitness and health	3	Chalk & Talk	Black Board.
1.2	Classification of physical activity based on energy expenditure	4	Chalk & Talk	LCD
1.3	Assessment of nutritional status-Direct Methods	4	Lecture	Black Board,PPT
1.4	Assessment of nutritional status-Indirect Method	4	Lecture	White board PPT
UNIT -2 ENERGY SYSTEMS				
2.1	Aerobic and anaerobic energy system	4	Lecture	Black Board Charts
2.2	Energy input and output	3	Chalk & Talk	Black Board
2.3	Shifts in Carbohydrate and Fat metabolism	4	Lecture	Black Board
2.4	Mobilization of fat stores during exercise	4	Lecture	PPT
UNIT -3 CASE STUDIES AND DIET MODIFICATIONS				
3.1	Fuels and nutrients to support physical activity	1	PPT	LCD
3.2	Diet manipulation	2	Chalk & Talk	Black

				Board
3.3	Pre and Post game meals	2	Lecture	Black Board
3.4	Water and electrolyte balance	2	Lecture	LCD
3.5	Losses and their replenishments during exercise and sports events	2	Lecture	PPT
3.6	Carbohydrate Loading	3	Lecture	PPT
3.7	Effect of dehydration	1	Lecture	PPT
3.8	Ergogenic aids and Sports Drinks	2	Lecture	PPT
UNIT - 4 PHYSICAL FITNESS AND HEALTH INTER-RELATIONSHIPS				
4.1	Significance of physical fitness and nutrition in the prevention and management of weight Obesity	2	Lecture	Black Board
4.2	Significance of physical fitness and nutrition in the prevention and management of Diabetes Mellitus	2	Chalk & Talk	Green Board
4.3	Significance of physical fitness and nutrition in the prevention and management of Cardio Vascular Diseases	2	Discussion	Black Board
4.4	Significance of physical fitness and nutrition in the prevention and management of Disorders of bone health	3	Lecture	LCD
4.5	Significance of physical fitness and nutrition in the prevention and management	3	Lecture	PPT

	of cancer			
4.6	Sports anemia, Female Athlete Triad	3	Lecture	PPT
UNIT-5 ALTERNATIVE SYSTEMS OF HEAL WAND FITNESS				
5.1	Yoga	3	Lecture	Video
5.2	Meditation	4	Chalk & Talk	PPT.
5.3	Vegetarianism	4	Discussion	Black Board
5.4	Herbal Medicines	4	Lecture	LCD

	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total
Levels	T1	T2	Quiz	Assignment	OBT/PPT			
	10 Mks.	10 Mks.	5 Mks.	5 Mks	5 Mks	35 Mks.	5 Mks.	40Mks.
K1	2	2	-	-	-	4	-	4
K2	2	2	5	-	-	9	-	9
K3	3	3	-	-	5	11	-	11
K4	3	3	-	5	-	11	-	11
Non Scholastic	-	-	-	-	-		5	5
Total	10	10	5	5	5	35	5	40

CIA

Scholastic	35
Non Scholastic	5
	40

✓ **All the course outcomes are to be assessed in the various CIA components.**

✓ **The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are :**

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC				NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ESE	Total
5	10	15	5	5	40	60	100

C1 – Average of Two Session Wise Tests

C2 – Average of Two Monthly Tests

C3 - Mid Sem Test

C4 – Best of Two Weekly Tests

C5 – Non – Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Recall the relationship of food and health.	K1	PSO3
CO 2	Describe terminologies related to fitness.	K1, K2,	PSO3 & PSO4
CO 3	Identify the different macro and micro nutrients.	K1, K3	PSO3 & PSO4
CO 4	Plan the balanced diet for different age groups.	K1, K2, K3 & K4	PSO3 & PSO4
CO 5	Examine the holistic approach to fitness and health.	K2 ,K4	PSO3 & PSO4

Mapping of C0s with PSOs

[illegible]

Mapping of COs with POs

CO/ PO	PO1	PO2	PO3	PO4
CO1	3	1	2	2
CO2	3	1	2	2
CO3	3	1	2	2
CO4	3	1	2	2
CO5	3	1	2	2

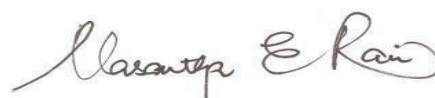
Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2 ♦
Weakly Correlated -1

COURSE DESIGNER:

1.Dr.Vasantha Esther Rani

2.Ms.D.Mouna

Forwarded By



(Dr.Vasantha Esther Rani)

III B.Sc.Home Science with Food Biotechnology

SEMESTER –VI

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N6ME5	Food and Dairy Processing	Lecture	5	5

COURSE DESCRIPTION

This course enlightens the students to understand the various food processing operations in food industries.

COURSE OBJECTIVES

- To impart systemic knowledge of basic and applied aspects of food processing and technology.
- To understand the methods of heat and cold processing.
- To provide in-depth knowledge on production of processed food products.

UNITS

UNIT –I FOOD PROCESSING OPERATION

(15 HRS.)

Characteristics of food raw materials – Geometric, physical, functional properties. Preparative Operations in food industry – Cleaning – objectives, Methods – Dry cleaning – Screening, Abrasion, Aspiration and Magnetic. Wet cleaning – Soaking, Spray washing, Flotation washing. Sorting – Methods – weight, size, shape and photometric.

Grading – grading factors, methods.

Self -study: An overall view of commonly used packaging materials.

UNIT –II PROCESSING BY HEAT AND COLD

(15 HRS.)

Heat – blanching, canning, pasteurization, sterilization.

Cold – Refrigeration, freezing – direct and indirect freezing.

Processing by Dry heat

Drying – Definition, purpose, methods – sun drying, drying by mechanical.

Self-study:freeze drying.

UNIT –III PROCESSING OF PLANT FOODS

(15 HRS.)

Cereals – Processing of wheat - milling.

Pulses – Processing –germination, decortication.

Fruits & Vegetables – Harvesting and storage, canning, drying.

Self-study: vegetable paste and powders.

UNIT –IV PROCESSING OF ANIMAL FOODS

(15 HRS.)

Meat – Post mortem changes in meat – ripening and tenderizing meat, Grades of meat, Changes produced during heat processing.

Poultry – Classification and Processing.

Fish- Classification, Processing – Canning

Self-study :smoking, salting and drying.

UNIT –V DAIRY PROCESSING

(15 HRS.)

Milk-composition, nutritive value, processing-milk collection-transportation and grading of milk-

clarification,standardization,pasteurization,homogenization,packaging.

Fermented milk products-butter, cheese, curd, shrikhand, Non-fermented milk products-milk powder, sweetened condensed milk, skim milk

Self -study: Ice-cream.

REFERENCES:

TEXTBOOK:

1. Manay, S.N, Shadaksharaswamy, M. (2005). *Foods, facts and principles*, New age international publishers, New Delhi.

REFERENCE BOOKS:

1. Sivasankar, B. (2008). *Food Processing and Preservation*, Prentice-Hall of India Pvt Limited, New Delhi.
2. Srilakshmi, B. (2008). *Food science*, New age international publishers, New Delhi.
3. Subbulakshmi, G, Udipi, S.A. (2006). *Food processing and preservation*, New age international publishers, New Delhi.
4. Sudeshjood, Khetarpaul, N. (2002). *Food preservation*, Agrotech publishing academy, Udaipur.

Open Educational Resources:

1. [.https://www.researchgate.net/publication/323167448_1 - Introduction to cereal processing and by-products](https://www.researchgate.net/publication/323167448_1_-_Introduction_to_cereal_processing_and_by-products)
2. [.https://www.unido.org/sites/default/files/2009-04/Small scale cereal milling and bakery products 0.pdf](https://www.unido.org/sites/default/files/2009-04/Small_scale_cereal_milling_and_bakery_products_0.pdf)
3. [.https://ccsuniversity.ac.in/bridge-library/pdf/FST-Paper-II%20Technology%20of%20cereals,%20pulses%20and%20oilseeds-%20II%20Semester.pdf](https://ccsuniversity.ac.in/bridge-library/pdf/FST-Paper-II%20Technology%20of%20cereals,%20pulses%20and%20oilseeds-%20II%20Semester.pdf)
4. [.http://ecoursesonline.iasri.res.in/mod/page/view.php?id=805](http://ecoursesonline.iasri.res.in/mod/page/view.php?id=805)
5. [.http://ecoursesonline.iasri.res.in/mod/page/view.php?id=807](http://ecoursesonline.iasri.res.in/mod/page/view.php?id=807)
6. [.http://www.fao.org/3/V5030E/V5030E03.htm#1.2%20Importance%20of%20fruit%20and%20vegetables%20in%20world%20agriculture](http://www.fao.org/3/V5030E/V5030E03.htm#1.2%20Importance%20of%20fruit%20and%20vegetables%20in%20world%20agriculture)
7. [.https://meridian.allenpress.com/jfp/article/33/2/64/425033/EGG-PROCESSING-TECHNOLOGY-PROGRESS-AND-SANITATION](https://meridian.allenpress.com/jfp/article/33/2/64/425033/EGG-PROCESSING-TECHNOLOGY-PROGRESS-AND-SANITATION)
8. [.https://www.britannica.com/technology/meat-processing](https://www.britannica.com/technology/meat-processing)

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 FOOD PROCESSING OPERATION				
1.1	Characteristics of food raw materials	2	Chalk & Talk	Black Board
1.2	Preparative Operations in food industry	2	Chalk & Talk	Black Board
1.3	Different Cleaning methods	4	Lecture, Group Discussion	PPT , Black Board
1.4	Different Sorting methods	4	Lecture, Discussion	PPT, Black

				Board
1.5	Different Grading methods	3	Lecture	Black Board,PPT
UNIT -2 PROCESSING BY HEAT AND COLD				
2.1	Processing by heat-Canning & Blanching	3	Lecture	PPT & Videos
2.2	Pasteurization and Sterilization	3	Chalk & Talk	Black Board
2.3	Processing by Cold-Refrigeration	2	Lecture	Black Board
2.4	Freezing	3	Lecture	Black Board
2.5	Processing by dry heat-Different drying methods	4	Lecture	PPT & Videos
UNIT -3 PROCESSING OF PLANT FOODS				
3.1	Cereal Processing-Wheat Milling	3	Chalk & Talk	Black Board
3.2	Pulse Processing	4	Chalk & Talk, Discussion	Black Board
3.3	Fruits Processing	4	Lecture	PPT & Videos
3.4	Vegetable Processing	4	Lecture	PPT & Videos
UNIT -4 PROCESSING OF ANIMAL FOODS				
4.1	Meat Processing	3	Chalk & Talk, Discussion	Black Board
4.2	Meat Processing	3	Lecture	PPT & Videos
4.3	Fish Processing	3	Lecture	PPT & Videos
4.4	Fish Processing	3	Lecture	PPT & Videos

4.5	Poultry Processing	3	Lecture	PPT & Videos
UNIT -5 DAIRY PROCESSING				
5.1	Milk Processing	4	Chalk & Talk, Discussion	Black Board
5.2	Milk Packaging	3	Lecture	PPT & Videos
5.3	Fermented Milk Products	4	Lecture	PPT & Videos
5.4	Non-Fermented Milk Products	4	Lecture	PPT & Videos

	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total
Levels	T1	T2	Quiz	Assignment	OBT/PPT			
	10 Mks.	10 Mks.	5 Mks.	5 Mks	5 Mks	35 Mks.	5 Mks.	40Mks.
K1	2	2	-	-	-	4	-	4
K2	2	2	5	-	-	9	-	9
K3	3	3	-	-	5	11	-	11
K4	3	3	-	5	-	11	-	11
Non Scholastic	-	-	-	-	-		5	5
Total	10	10	5	5	5	35	5	40

CIA	
Scholastic	35
Non Scholastic	5
	40

All the course outcomes are to be assessed in the various CIA components.

The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are:

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

C1 – Internal Test-1

C2 – Internal Test-2

C3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non – Scholastic

COURSE OUTCOMES

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

Mapping of COs with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	1	1	1	1
CO2	1	1	1	1
CO3	1	1	2	1
CO4	1	1	2	1
CO5	1	1	2	1

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2 ♦
Weakly Correlated -1

COURSE DESIGNER:
1.Dr.K.Karthiga

Forwarded By



(Dr.Vasantha Esther Rani)

III B.Sc.Home Science with Food Biotechnology

SEMESTER –VI

For those who joined in 2019 onwards

PROGRAM ME CODE	COURSE CODE	COURSE TITLE	CATEGO RY	HRS/ WEEK	CREDITS
UAHS	19N6ME6	Women and Entrepreneurship Development	Lecture	5	5

COURSE DESCRIPTION

This course offers deep insight into the concepts of entrepreneurship and the institution for entrepreneurship development. It also deals with the preparation of project report and appraisal.

COURSE OBJECTIVES

- To enable students to understand the concepts of entrepreneurship
- To motivate them to start business
- To impart knowledge on the financial institution entrepreneurship development.
- To train them to prepare project report.

UNITS

UNIT – I	INTRODUCTION TO ENTREPRENEURSHIP	[15 HRS]
Entrepreneurship- Meaning, Importance, Concept of women Entrepreneurship, Characteristics of Entrepreneur, Function of women Entrepreneurship, Developing women Entrepreneur, Problems of women Entrepreneur.		
UNIT – II	INPUTS TO START BUISNESS	[15 HRS]
How to start Business-Product selection -form of ownership - Sole proprietorship and partnership , Plant location - land , building , water and power - raw materials- machinery - man power - other infrastructural facilities -Licensing registration and bye laws.		
UNIT – III	FINANCIAL INSTITUTION	[15 HRS]
Self-study -InstitutionalArrangement for Entrepreneurship Development D.I.C. S.I.D.C.O, N.S.I.C. S.I.S.I. – Institutional Financeto Entrepreneurs – T.I.I.C. S.I.D, B.I, MSME androle of commercial banks.		
UNIT – IV	REPORT PREPARATION	[15 HRS]

Project Report Meaning and importance-Contents of a project report -Format of a report (as per requirements of financial institutions)
Project Appraisal Meaning, market feasibility, technical feasibility – financial feasibility-break even analysis.

UNIT – V	RECENT TRENDS IN ENTREPRENEURSHIP	[15 HRS]
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Rural Entrepreneurship – Meaning, need, opportunities and problems of women entrepreneur

Agri – entrepreneurship – Meaning, need, opportunities and challenges involved in developing agri-entrepreneurship

REFERENCES:

TEXTBOOK:

Khanka.S.S (2018). *Entrepreneurial Development*, S.Chandhan Company Ltd, New Delhi

REFERENCE BOOKS:

Jose Paul, N, Entrepreneurship Development. India Taxmann Publication, 2000.

2. Khan, M.A, - Entrepreneurship Development Programmes in India, Jaipur, India, Kanishka Publishing House, 1992.

4. Vijayashree. P.T.-Entrepreneurial Development and Small Business Management, India Pearson Publishers. 2005.

OPEN EDUCATIONAL RESOURCES:

1. <https://articles.bplans.com/how-to-get-your-business-funded/>
2. <https://accountlearning.com/important-qualities-entrepreneur/>
3. <https://www.businessmanagementideas.com/entrepreneurship-2/rural-entrepreneurship/21624>
4. <https://www.ukessays.com/essays/economics/opportunities-and-challenges-for-rural-entrepreneurship-in-india-economics-essay.php>
5. <https://www.g-fras.org/en/agripreneurship.html>
6. https://www.researchgate.net/publication/339843368_What_is_AGRI-ENTREPRENEURSHIP_and_why_India_needs_it

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT 1 INTRODUCTION TO ENTREPRENEURSHIP				

1.1	Meaning, objectives, concept of women Entrepreneurship	4	Chalk & Talk	Black Board
1.2	Characteristics of entrepreneurship	2	Chalk & Talk	LCD
1.3	Functions of women entrepreneurship	2	Lecture	PPT & White board
1.4	Developing women entrepreneurship	4	Lecture	Smart Board
1.5	Problems of women entrepreneur	3	Lecture	Black Board
UNIT – 2 TECHNIQUES TO START BUISNESS				
2.1	How to start a business, product selection	3	Lecture	LCD
2.2	Forms of ownership – sole proprietorship and partnership	3	Chalk & Talk	LCD
2.3	Plant location, land building, water and power	2	Lecture	PPT & White board
2.4	Raw materials, machinery, man power, other infrastructural facilities	4	Lecture	PPT
2.5	Licensing and registration and bye laws	3	Chalk and talk	Black board
UNIT -3 FINANCIAL INSTITUTION				
3.1	Self -study-institutional arrangement for entrepreneurship development	2	Lecture	Black board
3.2	D.I.C, S.I.D.C.O.,	2	Lecture	LCD
3.3	N.S.I.C, S.I.S.I	3	Chalk & Talk	LCD

3.4	Institutional finance to entrepreneurs T.I.I.C., S.I.D.B.I.	4	Lecture	PPT & White board
3.5	Role of commercial banks	4	Chalk and talk	PPT & White board
UNIT -4REPORT PREPARATION				
4.1	Project report- meaning and importance	2	Lecture	LCD
4.2	Content of project report, format of report	3	Chalk & Talk	LCD
4.3	Project Appraisal – meaning	1	Lecture	PPT & White board
4.4	Market and technical feasibility	4	Lecture	PPT & White board
4.5	Financial feasibility	2	Chalk & Talk	LCD
4.6	Break even analysis	3	Chalk & Talk	PPT
UNIT -5 RECENT TRENDS IN ENTREPRENEURSHIP				
5.1	Rural entrepreneurship-meaning, need	2	Lecture	LCD
5.2	Opportunities and problems of women entrepreneurship	3	Chalk & Talk	LCD
5.3	Agri-preneurship – meaning, need	2	Lecture	PPT & White board
5.4	Opportunities in agripreneurship	4	Lecture	PPT & White board
5.5	Challenges involved in developing agripreneurship	4	Chalk & Talk	LCD
5.6	Rural entrepreneurship-meaning, need	2	Lecture	PPT

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total
	T1 10 Mks.	T2 10 Mks.	Quiz 5 Mks.	Assignment 5 Mks	OBT/PPT 5 Mks	35 Mks.	5 Mks.	40Mks.
K1	2	2	-	-	-	4	-	4
K2	2	2	5	-	-	9	-	9
K3	3	3	-	-	5	11	-	11
K4	3	3	-	5	-	11	-	11
Non Scholastic	-	-	-	-	-		5	5
Total	10	10	5	5	5	35	5	40

CIA	
Scholastic	35
Non Scholastic	5
	40

All the course outcomes are to be assessed in the various CIA components.

The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are :

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

C1 – Internal Test-1

C2 – Internal Test-2

C3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non – Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Define the concept of entrepreneurship.	K1	PSO21
CO 2	Describe the requisites to establish business.	K1,K2	PSO21
CO 3	List the institutions for entrepreneur development.	K1	PSO21
CO 4	Plan and prepare the project report.	K3,K4	PSO21
CO 5	Recognize the components of project appraisal.	K1	PSO21

Mapping of C0s with PSOs

CO/ PSO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12
CO1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	1	1	1	1	1	1	1	1	1	1	1	1
CO3	1	1	1	1	1	1	1	1	1	1	1	1
CO4	1	1	1	1	1	1	1	1	1	1	1	1
CO5	1	1	1	1	1	1	1	1	1	1	1	1
CO/ PSO	PSO 13	PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO 22	PSO 23	
CO1	1	1	1	1	1	1	1	1	3	1	1	
CO2	1	1	1	1	1	1	1	1	3	1	1	
CO3	1	1	1	1	1	1	1	1	3	1	1	
CO4	1	1	1	1	1	1	1	1	3	1	1	
CO5	1	1	1	1	1	1	1	1	3	1	1	

Mapping of C0s with POs

CO/ PSO	PO1	PO2	PO3	PO4
CO1	1	1	1	1
CO2	1	2	1	1
CO3	1	1	1	1
CO4	1	1	1	2
CO5	1	1	3	1

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2
 ♦ Weakly Correlated -1

COURSE DESIGNER:

1.Dr. C. Priyalatha

Forwarded By



(Dr.Vasantha Esther Rani)

III B.Sc. HOME SCIENCE WITH FOOD BIOTECHNOLOGY

SEMESTER –VI

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N6SB5	Entrepreneurial Skills – Nutrition Counselling	Lecture / Practical	2	2

COURSE DESCRIPTION

This course provides a strong ground in the strategies and techniques of nutrition counseling, nutrition education, nutrition care plan, evaluation, and documentation.

COURSE OBJECTIVES

- To acquire skills needed for effective counseling sessions related to the field of nutrition and dietetics
- To develop skills for group education and counselling

UNITS

UNIT –I DIET COUNSELLING (6 HRS.)

Diet Counselling – Definition, Counselling process and its significance.

Dietitian – Role of dietitian, classification, responsibilities and code of ethics. RD, Membership in IDA, NSI.

UNIT –II ASSESSMENT (6 HRS.)

Assessment - Assessment of needs of patients, Establishing rapport
Communication process, Patient education

UNIT–III CASE STUDIES AND DIET MODIFICATIONS (6HRS.)

Case studies – Understanding Case Study - Clinical, Nutritional and Biochemical Profile, Therapeutic Modification of Diets, Report Writing

UNIT –IV COUNSELLING CENTER (6 HRS.)

Counselling Center - Pre requisites and preparation for setting up a counselling center.

Self- study -Preparation of audio - visual aids for diet counselling.

UNIT -V COUNSELLING CAMPS

(6 HRS.)

Counselling Camps - Organizing counselling camps for specific diseases

REFERENCES:

TEXTBOOK:

1. Srilakshmi. B. (2002) .*Dietetics*, New Age International Publishers,

REFERENCE BOOKS:

1. Skinner Paul (2000), *Development of a Medical Nutrition Therapy Protocol for Female Collegiate Athletes*, JAMA 101.
2. Carroll, A. Lutz. (1997).*Nutrition for Diet Therapy*, Edition – 2, F. A. Davis Company, Philadelphia.

OPEN EDUCATION RESOURCES:

1. <https://www.slideshare.net/jippyjack5/diet-counselling-71525270>
2. <https://www.sciencedirect.com/topics/food-science/diet-counseling>
3. <https://www.slideshare.net/DrSusmitaShah/diet-and-diet-counselling>
4. <https://emedprimarycare.com/diet-counseling-jacksonville/>
5. <https://www.encyclopedia.com/medicine/encyclopedias-almanacs-transcripts-and-maps/dietary-counseling>
6. <https://edepot.wur.nl/121590>
7. <http://seasonswomenscare.com/nutritional-counseling-steps-to-a-healthy-diet/>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT -1 DIET COUNSELLING				
1.1	Diet Counseling – Definition, Counseling process and its significance.	6	Chalk & Talk	Black Board
UNIT -2 ASSESSMENT				
2.1	Assessment - Assessment of needs of patients.	2	Discussion	Case Report
2.2	Establishing rapport Communication process.	2	Chalk & Talk	Black Board
2.3	Patient education.	2	Lecture & Role Play	PPT
UNIT -3 CASE STUDIES AND DIET MODIFICATIONS				
3.1	Case C case Studies- Understanding Case Study - Clinical, Nutritional and Biochemical Profile.	3	Discussion	Case Report
3.2	Therapeutic Modification of Diets and Report Writing.	3	Discussion	Case Report
UNIT -4 COUNSELLING CENTER				
4.1	Counselling Center - Prerequisites and preparation for setting up a counselling center.	6	Chalk & Talk	Black Board
UNIT -5 COUNSELLING CAMPS				
5.1	Counselling Camps - Organizing counselling camps for specific diseases	6	Chalk &Talk& Role Play	Black Board

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks C6	CIA Total
	T1 10 Mks.	T2 10 Mks.	Quiz 5 Mks.	Assignment 5 Mks	OBT/PPT 5 Mks	35 Mks.	5 Mks.	40Mks.
K1	2	2	-	-	-	4	-	4
K2	2	2	5	-	-	9	-	9
K3	3	3	-	-	5	11	-	11
K4	3	3	-	5	-	11	-	11
Non Scholastic	-	-	-	-	-		5	5
Total	10	10	5	5	5	35	5	40

CIA	
Scholastic	35
Non Scholastic	5
	40

All the course outcomes are to be assessed in the various CIA components.

The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are :

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

C1 – Internal Test-1

C2 – Internal Test-2

C3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non – Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Explain the counseling process.	K2	PSO1
CO 2	Identify the appropriate counseling techniques.	K3	PSO1
CO 3	Choose audiovisual aids for diet counseling.	K3	PSO1
CO 4	Organize counseling camps for specific diseases.	K3	PSO1
CO 5	Recall the principles of therapeutic diet.	K1	PSO1

Mapping of COs with PSOs

CO/ PSO	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12
CO1	3	2	2	2	1	1	1	1	1	1	1	1
CO2	3	2	2	2	1	1	1	1	1	1	1	1
CO3	3	2	2	2	1	1	1	1	1	1	1	1
CO4	3	2	2	2	1	1	1	1	1	1	1	1
CO5	3	2	2	2	1	1	1	1	1	1	1	1
CO/ PSO	PSO 13	PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO 22	PSO 23	
CO1	1	1	1	1	1	1	1	1	1	1	1	
CO2	1	1	1	1	1	1	1	1	1	1	1	
CO3	1	1	1	1	1	1	1	1	1	1	1	
CO4	1	1	1	1	1	1	1	1	1	1	1	
CO5	1	1	1	1	1	1	1	1	1	1	1	

Mapping of COs with POs

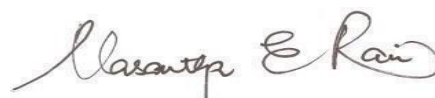
CO/ PSO	P01	P02	P03	P04
CO1	3	1	2	2
CO2	3	1	2	2
CO3	3	1	2	2
CO4	3	1	2	2
CO5	3	1	2	2

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2
 ♦ Weakly Correlated -1

COURSE DESIGNER:

1.Mrs. P. Magdalene Virjini

Forwarded By



(Dr.Vasantha Esther Rani)

III B.Sc. HOMESCIENCE WITH FOOD BIOTECHNOLOGY

SEMESTER –VI

For those who joined in 2019 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	HRS/WEEK	CREDITS
UAHS	19N6SB6	Entrepreneurial Skills – Interior Design and Decoration	Lecture / Practical	2	2

COURSE DESCRIPTION

This course offers deep insight on all the aspects of interior design and decoration.

COURSE OBJECTIVES

- Know the concept of interior design and decoration
- Draw perspective views and House plans, Vastu application

UNITS

UNIT – I	HOUSE PLAN	[10 HRS]
Floor plan- low-income plan-medium income plan-high income plan-double storied plan.		
UNIT – II	INTERIOR DESIGNING	[5 HRS]
Clearance spaces- Living room-dining room-Living cum Dining room- bed room –Kitchen lay out-bath room		
UNIT – III	FLOOR COVERINGS	[5 HRS]
Definition- Selection, Types of floor coverings		
UNIT – IV	WINDOW TREATMENTS	[5 HRS]
Concept- Types of Windows – Types of Window Treatments		
UNIT – V	VASTU IN HOUSE PLANNING	[5 HRS]

Self -study -Floor plan – Basics of Vastu- Feng Shui Application –Feng Shi,Scientific Evidence and Significance of Vastu.

REFERENCE BOOKS:

1. Barrie Evans & James Powell.(1992). *Changing Design*, John Wiley Publication, New York,
2. Drievex Mary & Stevenson Isabelle. (1996). *The Complete Book of Interior Decoration*, Greystone Press, New York,

3. Faulkner ray (1995). *Inside Today's Home*, Kind Port Press, Tenessee,

OPEN EDUCATIONAL RESOURCES :

1. <https://www.homify.in/ideabooks/6229813/basic-vastu-tips-for-interior-design>
2. <https://www.homesandgardens.com/news/7-elements-of-design>
3. <https://www.hatchdesign.ca/principles-of-interior-design-part-1-balance/>
4. <https://hmhub.me/accessories-interior-decoration/>
5. <https://designingidea.com/types-of-flooring-materials-for-interior-design/>
6. <https://homedesignlover.com/interior-design/choosing-flooring-materials/>
7. <https://happho.com/different-materials-used-flooring/>
8. <https://theconstructor.org/environmental-engg/methods-of-solid-waste-disposal/4721/>
9. <https://www.conserve-energy-future.com/sources-effects-methods-of-solid-waste-management.php>

COURSE CONTENTS & LECTURE SCHEDULE:

Module No.	Topic	No. of Lectures	Teaching Pedagogy	Teaching Aids
UNIT 1 – HOUSE PLAN				
1.1	Floor Plan- Meaning Introduction	2	Chalk & Talk	Black Board
1.2	Floor plan- low Income plan	3	Chalk &Talk	LCD
1.3	Medium Income plan	2	Lecture	PPT & White board
1.4	High Income plan	2	Lecture	Smart Board
1.5	Double Storied Plan	1	Discussion	Black Board
UNIT -2 Interior Designing				
2.1	Clearance spaces – Introduction	1	Lecture	Black board

2.2	Living room-dining room	2	Chalk & Talk	PPT
2.3	Dining room- bed room	1	Lecture	PPT & White board
2.4	Kitchen lay out-bath room	2	Discussion	PPT
UNIT -3 Floor coverings				
3.1	Floor coverings –Introduction	1	Lecture	Black board
3.2	Definition- Selection of floor coverings	1	Lecture	Black board
3.3	Types of floor coverings	2	Chalk & Talk	PPT
3.4	Landscaping	1	Chalk &Talk	PPT
UNIT -4 Window Treatments				
4.1	Introduction and meaning	2	Lecture	Black board
4.2	Concept- Types of Windows	2	Chalk & Talk	PPT
4.3	Types of Window Treatments	1	Lecture	PPT & White board
UNIT -5 Vastu in Interiors				
5.1	Self -study -Floor plan	1	Lecture	LCD
5.2	Basics of Vastu	1	Discussion	Black board
5.3	Feng Shui Application	3	Lecture	PPT & White board
5.4	Feng Shui Accessories	1	Discussion	PPT & White board

Levels	C1	C2	C3	C4	C5	Total Scholastic Marks	Non Scholastic Marks	CIA Total
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							C6	
	T1 10 Mks.	T2 10 Mks.	Quiz 5 Mks.	Assignment 5 Mks	OBT/PPT 5 Mks	35 Mks.	5 Mks.	40Mks.
K1	2	2	-	-	-	4	-	4
K2	2	2	5	-	-	9	-	9
K3	3	3	-	-	5	11	-	11
K4	3	3	-	5	-	11	-	11
Non Scholastic	-	-	-	-	-		5	5
Total	10	10	5	5	5	35	5	40

CIA	
Scholastic	35
Non Scholastic	5
	40

All the course outcomes are to be assessed in the various CIA components.

The levels of CIA Assessment based on Revised Bloom's Taxonomy for UG are:

K1- Remember, **K2-**Understand, **K3-**Apply, **K4-**Analyse

EVALUATION PATTERN

SCHOLASTIC					NON – SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

C1 – Internal Test-1

C2 – Internal Test-2

C3 - Quiz

C4 – Assignment

C5 - OBT/PPT

C6 – Non – Scholastic

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Construct floor plan for different income groups.	K3,K4	PSO17
CO 2	Classify the concept of interior design	K2, K4	PSO17
CO 3	Describe the concepts of landscaping.	K2	PSO17
CO 4	Identify the different types of windows treatments	K3	PSO17
CO 5	Explain the application of Vastu in interior	K1,K2	PSO17

Mapping of COs with PSOs

CO/ PSO	PSO	PSO	PSO	PSO	PSO	PSO	PSO	PSO	PSO	PSO	PSO	PSO
PSO	1	2	3	4	5	6	7	8	9	10	11	12
CO1	1	1	1	1	1	1	1	1	1	1	1	1
CO2	1	1	1	1	1	1	1	1	1	1	1	1
CO3	1	1	1	1	1	1	1	1	1	1	1	1
CO4	1	1	1	1	1	1	1	1	1	1	1	1
CO5	1	1	1	1	1	1	1	1	1	1	1	1
CO/ PSO	PSO 13	PSO 14	PSO 15	PSO 16	PSO 17	PSO 18	PSO 19	PSO 20	PSO 21	PSO 22	PSO 23	
CO1	1	1	1	1	3	1	3	3	1	1	1	
CO2	1	1	1	1	3	2	3	3	1	1	1	
CO3	1	1	1	1	3	1	3	3	1	1	1	
CO4	1	1	1	1	3	1	3	3	1	1	1	
CO5	1	1	1	1	3	1	3	3	1	1	1	

Mapping of COs with POs

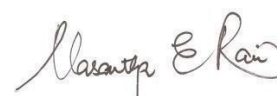
CO/ PSO	PO1	PO2	PO3	PO4
CO1	1	1	1	1
CO2	1	1	1	1
CO3	1	1	1	1
CO4	1	1	1	3
CO5	1	1	1	1

Note: ♦ Strongly Correlated – 3 ♦ Moderately Correlated – 2
 ♦ Weakly Correlated -1

COURSE DESIGNER:

1. Dr. C. Priyalatha

warded By



(Dr.Vasantha Esther Rani)

SEMESTER –VI

For those who joined in 2021 onwards

PROGRAMME CODE	COURSE CODE	COURSE TITLE	HRS/WEEK	CREDITS
UAHS	21UG6SLN	HOSPITAL MANAGEMENT		2

COURSE DESCRIPTION

Self-Learning Course on Hospital Management includes the structure and functions of health care systems. Students can possess in-depth knowledge about services provided in the hospital settings

COURSE OBJECTIVES

To understand the hospital as the agency for the practice of health care.

To equip the learners as professional hospital administrators.

UNIT –I HOSPITALADMINISTRATION

Hospital: Definition, Meaning, Functions, History, Growth and Classification of hospitals in India – Role of Hospital in the Health Care Delivery Systems.

UNIT –II MANAGEMENT CONCEPTS

Management-Definition, Principles of management, Functions of management.

UNIT –III HOSPITALORGANIZATION

Hospital Organization: Meaning – Functions of Governing Board – Role and Functions of Hospital Administrator – Hospital Auxiliary Services.

UNIT –IV HOSPITAL DEPARTMENTS

Hospital Departments: Types and Role of Out-Patient, Dietary Services, Nursing Services, Medical Records, Laboratory Services, Radiological Services, Emergency Services-Human Resource Management Department, Geriatric Care Department.

UNIT –V QUALITY ASSURANCE IN HOSPITAL SETTINGS

Quality Assurance in Hospital Service – Control of Hospital Acquired Infection and Associated Problems – National Accreditation Board for Hospitals and Health Care Providers (NABH).

REFERENCES:

1. Park K Park, “Text book of Preventive and Social Medicine, BanarsidarBhanot Publishers2007
2. Goel S L, “Hospital Administration and Management: TheoryandPractice”,Deep& DeepPublications, NewDelhi(2007).
3. Goyal RC, “Hospital Administration and Human Resource Management”, Prentice Hall oIndia, NewDelhi(2005).

Digital Open Educational Resources (DOER) :

1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5627783/>
2. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1984815/>

CIA

EVALUATION PATTERN

SCHOLASTIC					NON - SCHOLASTIC	MARKS		
C1	C2	C3	C4	C5	C6	CIA	ESE	Total
10	10	5	5	5	5	40	60	100

UG CIA Components

				Nos				
C1	-	Test (CIA 1)		1	-	10 Mks		
C2	-	Test (CIA 2)		1	-	10 Mks		
C3	-	Assignment		1	-	5 Mks		

C4	-	Open Book Test/PPT	2 *	-	5 Mks
C5	-	Quiz	2 *	-	5 Mks
C6	-	Attendance		-	5 Mks

COURSE OUTCOMES

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO 1	Identify the basic concepts of Management	K1	PSO1& PSO2
CO 2	Summarize the significance of hospital administration	K2	PSO2
CO 3	Determine the functions of hospital organization	K3	PSO2
CO 4	Identify the basic needs and functions of various hospital departments	K1	PSO3
CO 5	Determine the significance of quality assurance in hospitals	K3	PSO3

COURSE DESIGNER:

3. Staff Name: P. Jesintha Josephine Julie

4. Staff Name: P. Magdalene Virjini

Forwarded By



(Dr.Vasantha Esther Rani)

HOD'S Signature & Name

SELF LEARNING INTERDISCIPLINARY COURSE

SEMESTER-II

(For those who joined in 2021 onwards)

PROGRAMME CODE	COURSE CODE	COURSE TITLE	CATEGORY	CREDITS
UAHS	21UG2SLNS	BASICS OF PSYCHOLOGY	SELF LEARNING	2

COURSE DESCRIPTION

Introduce students to the basic concepts of the field of psychology with an emphasis on Applications of psychology in everyday life.

COURSE OBJECTIVES

To impart knowledge among learners to analyse their own self and equip them with sense of adjustment.

To help the learners to understand the importance of Socialization

UNITS

UNIT-I INTRODUCTION TO PSYCHOLOGY

(HRS.)

Psychology – Meaning – Definition – Branches of Psychology: Developmental Psychology – Social Psychology – Abnormal Psychology – Behavioural Psychology – Clinical Psychology – Forensic Psychology – Social Psychology.

UNIT-II METHODS OF PSYCHOLOGY

(HRS.)

Observational Method – Experimental Method – Clinical Case Study Method – Interview Method.

UNIT-III FACTORS AFFECTING INTELLIGENCE

(HRS.)

Definition – Effect of Heredity and Environment on Intelligence – Assessment of Intelligence – Individual Verbal Tests – Individual Non-Verbal Tests – Individual Performance Tests – Group Verbal Tests – Group Non-Verbal Tests – Concept of Mental Age and IQ.

UNIT-IV ESSENTIALS OF LEARNING

(HRS.)

Meaning and Nature – Types of Learning – Verbal Learning – Motor Learning – Concept Learning – Problem Solving Learning – Concept of Classical Conditioning – Operant Conditioning – Insightful Learning and Observational Learning.

UNIT-V MOTIVATIONAL ASPECTS OF BEHAVIOUR

(HRS.)

Motivation – Meaning – Needs – Meaning and Types – Drives – Incentives – Motives:

Hunger Motive Thirst Motive–Sex Motive–Maternal Motive–Aggressive Motive and Achievement Motive–Homeostasis.

REFERENCES:

1. Mangal SK (2008) 16th Reprint General Psychology, Sterling Publishers Pvt Ltd, New Delhi India.
2. Morgan T Clifford, King A Richard et al (2005) 28th Reprint, Introduction to Psychology,
3. Tata McGraw–Hill Publishing Company Ltd, New Delhi.
4. Berk, L.E. (1994) (3rd edition). Child Development. New York: Allan Bacon.

CO /P SO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11
CO1	1	1	1	1	1	1	1	1	1	1	2
CO2	1	1	1	1	1	1	1	1	1	1	2
CO3	1	1	1	1	1	1	1	1	1	1	1
CO4	1	1	1	1	1	1	1	1	1	1	1
CO5	1	1	1	1	1	1	1	1	1	1	1
CO /P SO	PSO13	PSO14	PSO15	PSO16	PSO17	PSO18	PSO19	PSO20	PSO21	PSO22	PSO23
CO1	1	1	1	1	1	1	1	1	1	1	1
CO2	1	1	1	1	1	1	1	1	1	2	1
CO3	1	1	1	1	1	1	1	1	1	1	2

CO 4	1	1	1	1	1	1	1	1	1	1	1
CO 5	1	1	1	1	1	1	1	1	1	1	1

5. DigitalOpenEducationalResources(DOER):

<https://www.simplypsychology.org/developmental-psychology.html#:~:text=Developmental%20psychology%20is%20a%20scientific%20approach%20which%20aims,feeling,%20and%20behavior%20change%20throughout%20a%20person%E2%80%99s%20life>

EVALUATION PATTERN

SCHOLASTIC				NO N- SCHOL ASTIC	MARKS		
C1	C2	C3	C4	C5	CIA	ES E	Total
10	10	10	5	5	40	60	100

COURSE OUTCOMES

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

Mapping of COs with PSOs

Mapping of COs with Pos

CO/PSO	P01	P02	P03	P04
CO1	3	1	1	1
CO2	1	1	1	1
CO3	1	1	2	1
CO4	1	1	1	3

CO5	1	1	1	1
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**Note: Strongly Correlated-3 Moderately Correlated-2
Weakly Correlated-1**

COURSE DESIGNER:

- 1. Staff Name-Dr.S.Santhi**
- 2. Staff Name-Dr.P.JesinthaJosephineJulie**

Forwarded By



(Dr.VasanthaEstherRani)

II B.Sc. HOMESCIENCE WITH FOODBIOTECHNOLOGY

*Forthosewhojoinedin2021onwards
(Offered as Interdisciplinary Course with HomeScience)*

PROGRAMM E CODE	COURSE CODE	COURSE TITLE	CATEGOR Y	HRS/WE E K	CREDIT S
UAZO	21UG4SLZ	PUBLIC HEALT H&HY GIENE	Self Learning	-	2

COURSE DESCRIPTION

The course is designed to introduce life threatening medical scenarios and to instruct the student how to recognize and respond appropriately to each given situation.

COURSE OBJECTIVES

- To recognize and avoid hazards with in her or environment.
- To develop skills necessary for immediate and temporary care of victims of
- Various cases.

UNITS

UNIT I- NUTRITION AND HEALTH

Role of international health organization: WHO-UNICEF. Concept of health,

Indicators of health. Importance of Nutrition. Nutritional requirements for the special

Groups (pregnant mother, lactating mother and children). Protein calorie Malnutrition (PCM), National nutrition programme.

UNIT II: ENVIRONMENT AND HEALTH

Waterborne diseases – types, symptoms and treatment. Purification of water – large scale for drinking purpose (slow and rapid sand filtration methods). Chlorination of well water. Sanitation. Excreta - Methods of disposal - types of latrines. National health programmes in India.

UNIT III: COMMUNICABLE AND NON COMMUNICABLE DISEASE

Epidemiology of Communicable disease – prevention and control – Diarrhoeal diseases – Zoonoses – Viral haemorrhagic fevers – Primary infections of the brain – Mycobacterial

Infections-Emerging disease threats- Severe Acute Respiratory Syndrome (SARS) and Avian flu- Dengue, Swine Flu, Chikungunya. Epidemiology, prevention and control Of noncommunicable diseases- Rheumatic heart disease- Infective endocarditic- Ischaemic heart disease-Respiratory diseases
Program related to Communicable and Non Communicable diseases

UNIT IV: FAMILY PLANNING, MATERNAL AND CHILD HEALTH

Family Planning-Objectives and methods-temporary and permanent methods.

Maternal Mortality Rate (MMR)-Causes and prevention. Infant Mortality Rate (IMR)-Causes And prevention. Problems of the aged Geriatrics. Immunization schedule for children.

UNIT V: FIRST AID

Heart attack - Fire accident – Accident – Injuries- Fractures – Stroke- Poison- Electric Shock – Gas leakage- Snake bite and Dog bite

REFERENCE BOOKS

Park J (2017). *Textbook Of Preventive Social Medicine* 24th Edition. Banarsidas Bhanot Publishers.

1. Vidhya R., (2002). *Hand Book of Preventive and Social Medicine*. **Publisher:** JPB; Ninth edition
2. Sudhar R., Wagh P., Vinod B., Kakade, Jiwan P.S., (2015). *Public Health*
3. *And Hygiene* Paperback – 2015. Success Publications; First Edition (2015).
4. Kumaresan, V., Sorna Raj R., *Public Health and Hygiene*. Saras Publication
5. Paho, Padro N.A., (2003). *Zoonoses and Communicable Diseases Common to Man and*
6. *Animals* (PAHO Scientific Publications S.) 2003. World Health Organization; 3rd Revised edition.

Digital Open Educational Resources

1. <https://www.healthline.com/health/food-nutrition>
2. <https://www.who.int/health-topics/nutrition>
3. <https://www.healthline.com/health/first-aid>

EVALUATION

Internal	External
Assignment – 20 Marks	Objective – 20 Marks
Test – 20 Marks	Essay Type Qns. – 40 Marks
Total – 40 Marks	Total – 60 Marks

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

NO.	COURSE OUTCOMES	KNOWLEDGE LEVEL (ACCORDING TO REVISED BLOOM'S TAXONOMY)	PSOs ADDRESSED
CO1	Discuss the importance, requirement Of nutrition for Mother and children	K2	PSO1, PSO4 & PSO11
CO2	Summarizes about types waterborne disease and its remedies	K2	PSO1, PSO4
CO3	Explain the temporary and permanent methods of family Planning	K2	PSO1, PSO4 & PSO8
CO4	Outlines the types of maternity Problems and child health	K2	PSO1 & PSO8
CO5	Explain the first aid for major health Problems	K2	PSO1, PSO3 & PSO4

Mapping COs Consistency with PSOs

CO/ PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
CO1	3			3							1	
CO2	3			3								
CO3	3			3				1				
CO4	1							1				
CO5	2		2	3								

Note: ♦ Strongly Correlated –3
Weakly Correlated –1


♦ Moderately Correlated –2

♦

Forwarded BY

1. Dr.N.Nagarani (Zoology)

2. Mrs.C.Helen (Home Science)


Dr. A. TAMIL SELVI
 Head, Dept. of Zoology
 FATIMA COLLEGE (AUTONOMOUS)
 MADURAI-625 018