

UNIVERSITY OF KERALA

REVISED
SCHEME AND SYLLABUS FOR
FIRST DEGREE PROGRAMME
IN
HOME SCIENCE

UNDER CHOICE BASED CREDIT AND SEMESTER SYSTEM
(TO BE INTRODUCED FROM 2014 ONWARDS)

UNIVERSITY OF KERALA

SCHEME AND SYLLABUS FOR FIRST DEGREE PROGRAMME IN HOME SCIENCE UNDER CHOICE BASED CREDIT AND SEMESTER SYSTEM (TO BE INTRODUCED FROM 2014 ONWARDS)

Aims and Objectives of the Programme

Aims:

Each stage of education is important in the development of wholesome personality. With the changing values in the society, migration to cities, influence of advertisement and other mass media the effects of the physical and mental environment up on the quality of life are far- reaching. Home science education has much to contribute to general education since it helps to prepare the students for a satisfying, personal and community life. Home science education is a field of knowledge and service primarily concerned with strengthening family life through:

- To provide education in physical, biological and social sciences; in arts; and in home science subjects
- Educating the individual for highest quality practical training for life;
- Conducting research to discover the changing needs of the individuals, families and society and the means of satisfying these needs.
- To improve the services and goods used by families;
- Inculcate a sense of social awareness and spirit of service to the society;
- Furthering community, national and world conditions favorable to family and community living.

Objectives

Home science education is a unique blend of scientific knowledge, human values, aesthetic qualities which help in harmonious family and community living. By the end of the course the student;

1. Should develop a balanced personality, possessing good health, happiness, self-reliance, confidence and love so that they can become intelligent, affectionate and dedicated parents and citizens.
2. Should acquire the skills and scientific information necessary for managing human and other non human resources.
3. Should contribute to the economic, social, moral, ethical and spiritual standards of their communities, avoiding wastes of all types.
4. Should acquire knowledge in environmental protection.
5. Should attain sense of responsibility to their homes, community and country.
6. Should be able to appreciate dignity of labour.
7. Express art in daily life
8. Appreciate and preserve the best in Indian culture.

Scope and Job Opportunities of Home science Education

The job opportunities range from;

- Nursery school teachers to Lecturers in colleges

- Scientists in food and agriculture, Textile industry, Home management and interior decoration. Different aspects in Human Life Cycle, etc.
- Food analysts and inspectors in food industry
- Dieticians in hospitals nursing homes and health clubs.
- House keepers in hotel industry.
- Interior designers .
- Fashion designers in garment industry
- Textile designers in textile industry
- ICDS project officers, Block development officers and anganwadi works
- Child psychologists
- Family Counselors
- Geriatric care takers / in hospitals / in old age homes etc.
- Officers in social welfare, women and child welfare, extension departments, & health departments
- Human resource persons
- Self employment.

COURSE STRUCTURE FOR FIRST LEVEL DEGREE PROGRAMME IN HOME SCIENCE

Semester	Course Code	Sl.No	CourseTitle	Theory	Practical	Credit	Uty Exam Hrs	evaluation	
								CE	ESE
I	EN1111	1	English	5	-	4	3	20%	80%
	HN / ML 1111	2	Additional Language	4	-	3	3		
	EN1121	3	Foundation – I	4	-	2	3		
	PY1131.5//ZO1131/(T&P)	4	Complementary – I –	2	2	2	3		
	BO1131//CH1131.5/(T&P)	5	Complementary –II-	2	2	2	3		
	HS1141	6	Core- Methodology and Perspective of Science	4	-	4	3		
			TOTAL CREDITS			17			

II	EN1211	1	English		4	-	3	3	20%	80%
	EN1212	2	English		5	-	4	3		
	HN / ML 1211	3	Additional Language		4	-	3	3		
	HS1221	4	Foundation – II - Informatics (Core)		4	-	3	3		
	PY1231.5//ZO1231/(T&P)	5	Complementary – I		2	2	2	3		
	BO1231/ CH1231.5/(T&P)	6	Complementary –II-		2	2	2	3		
			TOTAL CREDITS			17				
	EN1311	1	English		5	-	4	3		

III	HN / ML 1311	2	Additional Language	5	-	4	3	20%	80%
	PY1132.5//ZO1331/(T&P)	3	Complementary – I	3	2	3	3		
	BO1231/ CH1231.5 /(T&P)	4	Complementary –II	3	2	3	3		
	HS1341	5	Core -Child Development & Welfare	5	-	4	3		
	TOTAL CREDITS						18		
IV	EN1411	1	English	5	-	4	3	20%	80%
	HN / ML 1411	2	Additional Language	5	-	4	3		
	PY1431.5/ ZO1431	3	Complementary – I	3	2	3+4	3		
	CH1431.5/ BO1431	4	Complementary –II	3	2	3+4	3		
	HS1441	5	Core –Resource management	3	-	3	3		
	HS1442	6	Core – Human Physiology	2	-	2	3		
TOTAL CREDITS						27			
V	HS 1644	1	Basic food science and human nutrition and Dietetics (Practical)	-	2	-	-	20%	80%
	HS1541	2	Family Relations and Counseling	4	-	4	3		
	HS1542	3	Housing and Interior Decoration	3	-	3	3		
	HS 1543[P]	4	Housing and Interior Decoration (practical exam 6 th Sem.) Extension Education	-	3	2	3		
	HS 1544	5	Textile Science						
	HS 1545	6	Basic Food Science	3	-	3	3		
	HS 1546	7							
	HS 1551	8	Open Course to Other Streams-	4	-	3	3		
	HS 1551.1		Fashion designing	3	-	3	3		
	HS 1551.2 HS 1551.3		Geriatric care Principles and practiceofcounseling and guidance	-	-	-	-		

	HS 1551.4 HS 1551.5 HS 1551.6 HS 1551.7 HS 1551.8 HS 1551.9		Food science and basic cookery Public Health and nutrition Entrepreneurship management in food processing Catering Management Nutrition for health Personality and soft skill development TOTAL CREDITS							
										20
VI	HS 1641 HS 1642 HS 1643 HS 1644 (P) HS 1645(P) HS 1646 (P) HS1647(P) HS 1661.1	1 2 3 4 5 6 7 8	Human Nutrition and Dietetics Apparel Designing Communication in Extension Education Basic food science and human nutrition and dietetics (Practical) Textile Science & Apparel Designing (Prac) Communication in Extension Education (Prac) Project Elective Course For Core-Microbiology	4 3 3 - - - - -	- - - 2 3 3 4	3 3 3 2 2 2 2	3 3 3 3 3 3 3		20%	80%
			TOTAL CREDITS	3	-	2	3			23
	GRAND TOTAL			117	33	120				

***Complementary Courses are grouped under Two Heads:**

Group - I Includes Physics and Zoology (Complementary I)

Group II- Includes chemistry and Botany (Complementary II)

GENERAL COURSE STRUCTURE OF FIRST LEVEL DEGREE PROGRAMME IN HOME SCIENCE

Course	Semester I			Semester II			Semester III			Semester IV			Semester V			Semester VI			Total			
	L	P	C	L	P	C	L	P	C	L	P	C	L	P	C	L	P	C	L	P	C	
Lang. Course				5	-	4																
English	5	-	4	4	-	3	5	-	4	5	-	4	-	-	-	-	-	-	24	-	19	
Addl.Lang.	4	-	3	4	-	3	5	-	4	5	-	4	-	-	-	-	-	-	18	-	14	
Foundation -I	4	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	2	
Foundation -II																						
HS1221 Core	-	-	-	4	-	3	-	-	-	-	-	-	-	-	-	-	-	-	4	-	3	
Complementary -I PRACTICAL	2	2	2	2	2	2	3	2	3	3	2	<u>3</u> 4	-	-	-	-	-	-	10	8	14	
Complementary -II PRACTICAL	2	2	2	2	2	2	3	2	3	3	2	<u>3</u> 4	-	-	-	-	-	-	10	8	14	
CoreCourses																						
HS1141	4	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	4	
HS1341							5	-	4	-	-	-	-	-	-	-	-	-	5	-	4	
HS1441										3	-	3	-	-	-	-	-	-	3	-	4	
HS1442										2	-	2	-	-	-	-	-	-	2	-	2	
HS1541													4	-	4	-	-	-	4	-	4	
HS1542, HS1543(P)													3	3	3	-	-	-	3	3	4	
HS1544													3	-	3	-	-	-	3	-	4	
HS1545													4	-	3	-	-	-	4	-	4	
HS1546													3	-	3	-	-	-	3	-	4	
HS1641, 1644(p)																4	3	<u>3</u> 2(p)	4	3	4	
HS1642, 1645(p)																3	3	<u>3</u> 2(p)	3	3	4	
HS1643, HS1646(p)																3	3	<u>3</u> 2(p)	3	3	4	
HS1647 (P)																		2(p)				
Project HS1648 VI Sem																	3	4		5	4	
Open course(1)HS1551													3	-	2	-	-	-	3	-	2	

Open /elective course-2(core)																						
HS1661.1														-	-	-	3	-	2	3	-	2
Grand Total	21	4	17	21	4	17	21	4	18	21	4	27	20	5	18	13	12	23	117	33	120	

CORE COURSE STRUCTURE OF THE B. Sc HOME SCIENCE DEGREE PROGRAMME

Sem	Sl. No	Course code	Instructional Hrs		Credits	UtyExam Hrs	Evaluation	
			L	p			internal	external
I	1	HS 1141	4	-	4	3	20%	80%
II	2	Foundation-II - HS 1221	4	-	3	3	20%	80%
III	3	HS 1341-	5	-	4	3	20%	80%
IV	4	HS 1441-	3		3	3	20%	80%
	5	HS 1442-	2		2	3	20%	80%
	6	Project		2	-	-	20%	80%
	7	HS 1541-	4		4	3	20%	80%
V	8	HS1542 -	3		3	3	20%	80%
	9	HS 1543-		3	Exam 6 th sem		20%	80%
	10	HS 1544-	3		3	3	20%	80%
	11	HS 1545-	4		3	3	20%	80%
	12	HS 1546-	3		3	3	20%	80%
	13	HS 1551- open (non major)	3		2	3	20%	80%
	14	HS 1641 –	4		3	3	20%	80%
	15	HS 1642 -	3		3	3	20%	80%
VI	16	HS 1643 -	3		3	3	20%	80%
	17	HS 1644 – (P)		3	2	3	20%	80%
	18	HS 1645- (P)		3	2	3	20%	80%
	19	HS 1646 - (P)		3	2	3	20%	80%
		HS 1647 - (P) EXAM ONLY	-	-	2	3	20%	80%
	20	HS 1661- open / elective (major)	3		2	3	20%	80%

	21	*HS 1648 - project		3	4		20%	80%
Total			51	17	57			

**FIRST DEGREE PROGRAMME IN HOME SCIENCE
(CORE COURSE STRUCTURE)**

Total Lecture Hours - 51 (foundation 4+open 6+core 41)

Practical +Project (12+5) - 17

Total Credits- 57 (FC 3+ Open 4+ Project 4+ Core 46)

Uty. Practical Examinations – VI Semester - For Four Core papers - (3hrs) I.HS-1644, II. HS -1645, III. HS 1646, IV. HS 1647

The record maintained for the above four shall be evaluated by the external examiners.

***The project report** shall be produced for external evaluation during the University Practical Examination for Practical- IV (HS1646- Communication in Extension Education) and **The viva - voce** based on the project shall be conducted individually by the external examiners

SEMESTER – I

SI. No	Course Title	L	p	C
1	English	5	-	4
2	Additional Language	4	-	3
3	Foundation – I	4	-	2
4	Complementary – I	2	2	2
5	Complementary –II	2	2	2
6	Core- HS1141 Methodology and Perspective of Science	4	-	4
Total		21	4	17

SEMESTER – II

SI. No	Course Title	L	p	C
1	English	4	-	3
2	English	5	-	4
3	Additional Language	4	-	3
4	Foundation – II – HS 1221- Informatics (Core)	4	-	3
5	Complementary – I	2	2	2

6	Complementary –II	2	2	2
	Total	21	4	17

SEMESTER – III

Sl. No	Course Title	L	p	C
1	English	5	-	4
2	Additional Language	5	-	4
3	Complementary – I	3	2	3
4	Complementary –II	3	2	3
5	Core –HS1341 Child Development & Welfare	5		4
	Total	21	4	18

SEMESTER – IV

Sl. No	Course Title	L	p	C
1	English	5	-	4
2	Additional Language	5	-	4
3	Complementary – I	3	-	3
4	Practical	-	2	4
5	Complementary –II	3	-	3
6	Practical	-	2	4
7	Core –HS1441- Resource management	3	-	3
8	Core –HS1442 - Physiology	2	-	2
	Total	21	4	27

SEMESTER – V

Sl. No	Course Title	L	p	C
1	Food Science and Nutrition and Dietetics (practical)	-	2	-
2	HS 1541 - Family Relations and Counseling	4	-	4
3	HS 1542 - Housing and Interior Decoration	3	-	3
4	HS 1543 - Housing and Interior Decoration (practical)	-	3	Exam 6 th sem
5	HS 1544 - Extension Education	4	-	3
6	HS 1545 - Textile Science	3	-	3

7	HS 1546 - Basic Food Science	3	-	3
8	HS 1551- Open Course for Other Streams	3	-	2
Total		20	5	18

SEMESTER – VI

SI. No	Course Title	L	p	C
1	HS 1641 - Human Nutrition and Dietetics	4	-	3
2	HS 1642 - Apparel Designing	3	-	3
3	HS 1643 - Communication in Extension Education	3	-	3
4	HS 1644 - Food Science and Nutrition and Dietetics (practical)	-	2	2
5	HS 1645 - Textile Science & Apparel Designing (Practical)	-	3	2
6	HS 1646 - Communication in Extension Education (Practical)	-	3	2
	HS 1647 - Housing and Interior Decoration (practical Exam only)	-	-	2
7	HS 1648 - Project (Continues from semester V)	-	4	2
8	HS 1661.1- Open Course from the Core Course- Microbiology	3	-	4
Total		13	12	23

CORE COURSE

METHODOLOGY AND PERSPECTIVES OF SCIENCE

SEMESTER - I

Course code: 1141

External evaluation:80%

No. of contact Hours – 4/ week (72hrs)

Internal evaluation: 20%

No. of Credits – 4

University exams: 3hrs

Aim of the Course

To introduce the methodology and perspectives of Science in general so as to enable the students to systematically pursue his particular discipline in science in relation to other disciplines that come under the rubric of science.

Objectives of the Course

On completion of the course students:

- Shall have learnt the fundamental characteristics of science as a human enterprise.
- Shall be able to understand how science works.
- Shall be able to apply scientific methods independently
-

Course outline

MODULE I – SCIENCE AND SCIENCE STUDENTS

Type of knowledge: practical, theoretical and scientific knowledge, information. What is science; what is not science; laws of science. Science as human activity. Scientific temper, empiricism, vocabulary of science, science disciplines. Revolutions in Science and Technology. (Hours -10)

MODULE II – HOME SCIENCE EDUCATION

Evolution and scope of Home science education. Professional significance in learning home science. Modern approaches in Home science education. Contribution of Home science education for national development. Integrating Home science education with other courses. (Hours -10)

MODULE III –RESEARCH METHODOLOGY

Identification of the problem, review of related literature, sampling – types-simple, random, purposive, stratified random sampling, cluster sampling, meaning of hypothesis, variables,

primary and secondary data, observation method, interview method, questionnaire, attitude scale (Likert's summated scale), checklist, pilot study, collection of data. (Hours -30)

MODULE IV – DATA HANDLING AND ETHICS IN SCIENCE

Documentation of experiments. Nature and type of data - Treatment of data; Data interpretation, Significance of statistical tools in data interpretation, errors and inaccuracies. Data presentation: GRAPHS, TABLES, HISTOGRAMS AND PI-DIAGRAMS. Danger of preconceived ideas. Report writing, Publications and patents (Details not required) Plagiarism. (Hours -22)

Reference Books

- Gieryn, T.F. Cultural Boundaries of Science, Univ.Chicago Press, 1999.
- Collins H. and T.Pinch. The Golem: What Everyone Should Know About Science, Cambridge Univ Press, 1993.
- Hewitt, Paul G, Suzanne Lyons, John A Suchocki and Jennifer Yeh, Conceptual Integrated Science, Addison – Wesley, 2007
- Newton R.G The Truth of Science: New Delhi, 2nd edition Bass, Joel, E and et.al. Methods for Teaching Science as Inquiry, Allyn & Bacon, 2009.
- Devadas Rajammal.P, Methods of Teaching Home Science, National Council of Educational Research and Training.

Foundation course :2

INFORMATICS

SEMESTER -II

Course code: HS1221

Lecture hrs: 54

External evaluation: 80%

No. of contact hrs: 4/ week (72)

Internal evaluation: 20%

Related experiences: 18

University exams: 3hrs

No. of Credits: 3

Aim of the Course

To update and expand basic informatics skills and attitudes relevant to the emerging knowledge and society and also to equip the students to effectively utilize the digital knowledge resource for their chosen course of study.

Objectives of the Course

- To review the basic concepts and functional knowledge in the field of informatics.
- To review functional knowledge in a standard office package and popular utilities.
- To create awareness about nature of the emerging digital knowledge society.
- To create awareness about social issues and concerns in the use of digital technology.
- To create awareness about major informatics initiatives in India and Kerala.
- To impart skills to enable students to use digital knowledge resource in learning.
- To develop skill in using computer to develop designs.
- To develop skill of detailing for execution /drawing.

Course Outline

Module I-OVERVIEW OF INFORMATION TECHNOLOGY

Features of the modern personal computer and peripherals, computer networks and Internet, wireless technology, cellular wireless networks, introduction to mobile phone technology, introduction to ATM, purchase of technology, license, Guarantee, Warranty, overview of operating Systems & major applications software. (Hours -12)

Module II – KNOWLEDGE SKILLS FOR HIGHER EDUCATION

Data information and knowledge, knowledge management – Internet access methods – Dial – Up ,DSL, Cable, ISDN , Wi-Fi – Internet as a knowledge repository, academic search techniques, creating cyber presence, case study of academic websites, open access initiatives, open access publishing models. Basic concepts of IPR, copyrights and patents, plagiarism, introduction to use of IT in teaching and learning, case study of educational software, academic services - INFLIBNET,NICNET,BRNET. (Hours -15)

Module III – SOCIAL INFORMATICS

IT & Society – issues and concerns – digital divide, IT & development, the free software movement, IT industry: new opportunities and new threats, software piracy, cyber ethics, cyber crime, cyber threats, cyber security, privacy issues. Cyber laws, cyber addictions, information overload, health issues – guide lines for proper usage of computers, internet and mobile phones. E-wastes and green computing, impact of IT on language & culture - localization issues – Unicode- IT and regional languages. (Hours -10)

Module IV – I.T. APPLICATIONS

e- Governance applications at national and state level, IT for national integration, overview of IT application in medicine, healthcare, business, commerce, industry, defense law, crime detection, publishing, communication, resource management, weather forecasting, education, film and media, IT in service of disabled, futuristic IT Artificial Intelligence, Virtual Reality, Bio-Computing. (Hours -15)

Module V - COMPUTER BASED TEACHING TECHNOLOGY

Computer as an instructional tool, Basics for scanning, planning for multimedia. Basic image capturing. Report writing, planning and development. Converting data into graphs. Power point- steps in preparing power point presentations. (Hours -20)

Note on course work

1. The first 4 modules are to be dealt with a very generic manner only (and hence can be taught by non-specialist teachers). The last two modules are to be taught by teachers belonging to the subject.
2. Demonstrations, presentations, hands-on experience etc are to be used wherever possible. Seminars, case studies and discussions are to be encouraged along with traditional lecturer-tutorial method.
3. Practical skills should be evaluated in CA and final exam should be a written exam only.
4. On the choice of OS and application soft wares, each institution is free to decide, though it is recommended that Linux and Open office.org(for Open Office, both windows and Linux versions are available) be preferred. In Lectures, generic features may be covered rather than product- specific features.

Essential Reading

- Alan Evans, Kendal Martin et.al. Technology in Action, Pearson Prentice Hall (Third Ed)
- V. Rajaraman. Introduction to Information Technology, Prentice Hall
- Alexis Leon & Mathews Leon, Computers Today, Leon Vikas.
- Peter Norton, Introduction to Computers, 6e(Indian Adapted Edition).
Additional References
- Greg Perry, SAMS Teach Yourself Open Office Org, SAMS.
- Corel draw by Ramesh Bangia
- Alexis & Mathews leon, Fundamental of information Technology; Leon Vikas
- George Beekman, Eugene Rathswohl, Computer Confluence, Pearson Education,
- Barbara Wilson, Information Technology: The Basics, Thomson Learning
- John Ray, 10 Minute Guide to Linux, PHI, ISBN 81-203-1549-9
- Ramesh Bangia, Learning Computer Fundamentals, Khanna Book Publishers
- Auto cad 2006 - cad centre.

Web Resources

- www.fgcu.edu/support/office_2000
- www.openoffice.org Open Office Official Web site
- www.microsoft.com/office MS office web site
- www.lgta.org office on – line lessons

- www.learnthenet.com Web primer
- www.computer.org/histroy/timeline
- www.computerhistory.org
- [http:// computer.howstuffworks.com](http://computer.howstuffworks.com)
- www.keralaitmission.org
- [www.technopark .org](http://www.technopark.org)
- [http ://ezinearticles . com/? Understanding – The Operation – of- Mobile-Phone – Networks&id = 68259](http://ezinearticles.com/?Understanding+The+Operation+of+Mobile+Phone+Networks&id=68259)
- [http:// www.scribd.com/doc/259538/All - about-mobile-phones](http://www.scribd.com/doc/259538/All-about-mobile-phones)
- <http://www.studentworkzone.com/question.php?ID=96>
- <http://www.ofte.usyd.edu.au/edwed/revolution/history/mobile2html>

CORE COURSE CHILD DEVELOPMENT AND WELFARE

SEMESTER –III

Course code: HS1341

No. of contact hrs: 5/ week

Internal evaluation: 20%

Lecture Hours : 72

External evaluation: 80%

Related experiences: 18

University exams: 3hrs

No. of Credits: 4

Objectives

1. To introduce the student to the excitement and challenges of studying children (from conception to adolescence)
2. To provide scientific knowledge about child-development, behaviour and welfare, and to enable to improve the quality of life of the child family and community.
3. To develop skills in the care and management of children.
4. To help the students to understand childhood problems, the challenged children, their problems, special needs, care and management.

Course Outline

Module I: Child development, significance, scope, methods of child study.

(Hours -3)

Module II: Growth and development- definition, principles, stages of development. The major areas of development, factors influencing, importance of heredity and environment.

(Hours -5)

Module III: Prenatal development – conception, significance, stages, factors influencing - maternal nutrition physical and mental health of pregnant women, teratogenes, Rh incompatibility, hazards IUGR.

(Hours -5)

Module IV: The birth process, stages of labour, normal and caesarean - pre mature, LBW babies, at risk babies, neonatal clinics, baby friendly hospitals.

(Hours -5)

Module V: The neonate- characteristics, abilities, and adjustments, reflexes - agar test, neonatal care. Breast feeding. Advantages, Importance of early stimulation. Immunization.

(Hours -5)

Module VI: Infancy, Babyhood, early childhood and late childhood-physical, motor, social, emotional, intellectual, language moral and religious development during the above stages. Mile stones in development, developmental delay - Factors influencing.

(Hours -18)

Module VII: Adolescence: significance, characteristics, development in different areas, (Physical, social, emotional and intellectual) problems, influence-family, school, media, culture needs, Reproductive child health, importance of guidance and counselling.

(Hours -5)

Module VIII: Play- significance, types, values, selection of toys.

(Hours -3)

Module IX: Discipline and guidance for children. Techniques of discipline, essentials of discipline, Habit formation.

(Hours -8)

Module X: Preschool education objectives, type. Pre - school personnel, pre school records.

(Hours -5)

Module XI: Children with special needs (Challenged children) Definition of exceptional children-physically handicapped, hearing impaired, visually impaired -characteristics-causes, prevention, care and treatment.

Mentally challenged - meaning of IQ, classification, characteristics, causes of mental retardation, prevention and care.

Gifted-definition, characteristics, education of the gifted.

(Hours
-5)

Module XII: Behavioural problems- Thumb sucking, enuresis, temper tantrums, destructiveness, juvenile delinquency, lying, stealing, cruelty to animals, eating problems..

(Hours -5)

Related Practical Experiences (Any five)

(Hours -18)

1. Visit to a baby friendly hospital, observe the functioning and prepare a report. Observation of a new born and the various reflexes.
2. Observation of various developments in a child of any age boy / girl viz physical, motor, emotional, intellectual and language development following any method of child study.
3. Visit to any one substitute child care centre / preschool / children's home / orphanage / specials schools.
4. One day participation in the activities of an anganwadi and report the experience. Socio metric study of children / Adolescence.
5. Discuss common adolescence problems / or any common problems faced by a girl / child / woman – interactive session.
6. Experience in using a growth chart (record the height and weights) Discuss the behaviour problems in early childhood in a school preschool set up (write a case study report)
7. Make a list exhibit or exhibit Toys, gifts, clothes, first aid box, books, stories songs etc suitable for each stage of development.
8. Make a list of toys and vocational activities suitable for children with problems on physically or mentally challenged children. Preparation of indigenous low cost toy.
9. Teaching children a skill / a craft introduce a hobby or any creative work. Only a list for practicals are given from that you can choose for every batch limiting to only 5 practical every year. One day participation in the activities of any one institution for the challenged children.
10. O.H.P. presentation / power point presentation on any topic of your interest (from the syllabus).

References:

1. Hurlock. E.B. Developmental psychology Tata Mc Graw hill publishing company Ltd. New Delhi.
2. Devadas R.P A text book of Child Development and Jaya N. Mac nillan India Ltd. Delhi.
3. Suriyahanth. A Child Development Kavitha Publications, Gandhi Gram Tamilnadu.
4. Hurlock E. B. Child Development Tata HC Grawshill Publishing Company
5. Counselling psychology. S.Narayana Rao, Tata MC Graw Hill, New Delhi
6. Guidance and counselling. Sister Mary Vishala,S. Chand & Company Pvt. Ltd., New Delhi
7. Guidance & Counselling. A.k. Nayak, A.P.H. Publishing Corporation

CORE COURSE

SEMESTER-I

RESOURCE MANAGEMENT

Course code: HS1441

No. of contact hrs: 3/ week (54)

Internal evaluation: 20%

Lecture Hours : 54

External evaluation: 80%

No. of Credits: 3

University exams: 3hrs

Objectives

1. To understand the principles of management and their application in the family context.
2. To acquire scientific skills in the management of family resources.
3. To recognize the significance of family resource management to enhance their quality of life.

Course Outline

Module I : Introduction to home management: Stages of family life cycle .Motivating factors - Values, goals, standards, attitudes - qualities of Good Home Maker - Management Process: a) Steps in Management. Decision Making – Types and significance, steps, conflict resolution in group decision making.

(Hours - 6).

Module II: Family Resources: Meaning and classification (a) Factors influencing resource management.

(Hours -5)

Module III: Management of time and energy (Tools in management)

(A). Time (peak load, work curve, time norm) (a) Significance of time management (b) Time Schedule – preparation and evaluation.

(B) Energy (a) Significance of energy management (b) Fatigue – Physiological, psychological, boredom - Causative factors and alleviating techniques. (c) Body Mechanics and its application (d) Work simplification – Meaning and techniques (e)Mundells classes of changes (f)Basics of Time and Motion study-Pathway chart, process chart, Operation chart, multi man chart.

(Hours -12).

Module IV: Management of Money (a) Family income – Types and sources (b) Family budget-Types of budget, steps in making family budget, Engel's law of consumption. (c) Financial records- Types, purpose advantages (d) Savings and investments- Meaning, saving institutions and the different schemes(post office, bank, UTI,LIC)(e)Home maker as a

consumer - Tips for wise buy-man-ship, consumer problems, Rights and responsibilities, consumer Protection, consumer redressal cell & procedures.

(Hours 12).

Module V : Equipments in the Home- Electrical and non electrical –indigenous equipments.

(a) Classification (b) Selection , use and care of popular household equipment – (micro-wave oven, refrigerator, mixer grinder, wet grinder, washing machine, vacuum cleaner, solar cooker, Janatha refrigerator, smokeless choolah, haybox - cooker, biogas) (c) Simple labour saving gadgets (non-electric peeler, egg beater, scraper etc.) (d) Renewable energy-Meaning and sources - Familiarization with renewable energy devices (Solar cooker and haybox) (d) Devices for conservation of bio-mass fuel (smokeless chulah & thermal cooker)

(Hours -19)

Related experiences : (Any five)

1. Preparation of time schedule
2. Study on work heights based on anthropometric measurements on vertical and horizontal planes
3. Preparation of family budget
4. Study of a saving institution and its scheme
5. Visit to consumer court/ consumer education forum **(Any one visit)**
6. Demonstration of use and care of four popular equipment
7. Observational visit to a new able energy resource centre to understand application it
8. Exposure visit to study waste management techniques
9. Preparation of a utilization object out of waste materials
10. Observational visit to houses to appraise the grouping of rooms.

*** Students shall maintain records of each work, which shall be internally and externally evaluated along with the record for Housing and Interior Decoration.**

Reference books :

1. Anderson, E. (1976). Home appliances servicing . Taraporwala sons&Co.Ltd.Bombay
2. Cascio Wayne, F.(1985).Managing Human Resources, McGraw Hill Book Co, NewYork
3. Decaon , R.E. Fireoough .R.M.(1981) Family Resource Management principles and applications, Ally & Bacon Boston
4. Goel, P.K.& Sarma.K.P.(1996) Environmental Guidelines and standards in India,Jaipur, Techno science.
5. Gross, Candall & Knoll (1972). Management for modern families, 4th ed. Appieton cenfuory crafless,Inc..
6. Nickle. P. Dorsey, J.M.(1970)Management in family living, sterling Publishers, New Delhi.

7. Saiyadin Mirza (1988) Human Resource Management : An Approach and Conceptual approach , Tata Mc Graw Hill, New York
8. Wilson . P. (1981) Household Equipment Selection and Management, Houghton Miflan Co.Inc.NewYork
9. Varghese. M.A. et.al (1985) Household Equipment Manual , S.N.D.T. Women's University.

CORE COURSE

HUMAN PHYSIOLOGY

SEMESTER-IV

Course code: HS1442

No. of contact hrs: 2/ week (36)

Internal evaluation: 20%

Lecture Hours : 36

External evaluation: 80%

No. of Credits: 2

University exams: 3hrs

Objectives:

1. Enable the students to understand Structure and functions of various organs of the body.
2. Obtain a better understanding of the principles of nutrition through the study of physiology.
3. Understand alterations of structure and functions in various organs and systems in disease conditions

Course Outline

Module I: Blood constituents and functions of blood, Types and formation of blood cells, blood coagulation, anticoagulants, Blood transfusion and blood groups.

(Hours -5)

Module II: Heart; Structure of heart and blood vessels and properties of cardiac muscles, junctional tissues; Electro cardio gram, blood pressure, factors influencing blood pressure; Cardiac cycle, pulse, types of circulation, portal, systemic and pulmonary ; Lymph and its functions.

(Hours -8)

Module III: Structure and functions of digestive tract, functions of accessory organs such as salivary glands, liver, pancreas. Digestive enzymes; Digestion and absorption of protein, fat and carbohydrates.

(Hours -5)

Module IV: Structure and functions of pituitary glands, Thyroid and parathyroid glands, adrenal glands, and sex glands: ovaries and testis

(Hours -5)

Module V: Structure and functions of uterus. Functions of ovary, mammary Glands; Lactation; Ovulation; menstrual cycle; fertilization, foetal growth, foetal circulation; pregnancy and parturition.

(Hours -8)

Module VI : Structure and functions of kidney, nephron,formation and composition of urine, osmoregulation, micturition.

(Hours -3)

Module VII : Respiration- exchange of gases -anoxia and hypoxia

(Hours -2)

Reference books:

1. Bell, G.H. Davidson, J.N. and Scarborough.H(1970). Text book of physiology and bio chemistry, ELBS Edition. The English language Book Society.
2. Best. H. and Taylor, B, The physiological Basis of Medical Practices, 8th edition, The William and Wilkinsons company.
3. Chandramouli .R,(2003) Text book of Physiology, Jaypee brothers, medical publishers(p)Ltd.New Delhi110 002.
4. Gutan, A.C. Text book of medical Physiology, 14th Edition,W.B. Saunders Company Philadelphia.
5. Guyton, A.C. and Hall,JB.(1996)Functions of Human Body,4th Edition, W.B. Sanders Company, Philadelphia.
6. Jain,A.K.: Textbook of Physiology. Vol.I and II. Avichal PublishingCo., New Delhi.

CORE SUBJECT FAMILY RELATIONS AND COUNSELLING

SEMESTER –V

Course code: HS1541

No. of contact hrs: 4/ week (72)

Internal evaluation: 20%

Lecture Hours : 54

External evaluation: 80%

Related experiences: 18

University exams: 3hrs

No. of Credits: 4

Objectives

- To equip the students with knowledge and skills in understanding people, families and community as a whole, and to understand human relation and to give necessary guidance and counselling at times of need.
- To enable the students to apply their knowledge and awareness of human relationships in the field of child care and development.
- To orient the students for adjustment in marriage and parenthood and to prepare them to take each role in their family efficiently and effectively.
- To make the student understand the importance of family interaction in the development of children.

Course Outline

Module I: Marriage - meaning, significance, definition, functions, mate selection, preparations for marriage, (health, physical, emotional, social and intellectual maturity & economic independence) Marital adjustment areas needing adjustment- in laws, sex, adjustment to mate, adjustment to parenthood, finance, work participation-sharing, child care, good marital relationship. Marital disharmony- divorce, separation, desertion, infidelity, infertility.

(Hours 14).

Module II: Family definition, types, functions, size, merits and demerits, family as a basic institution, changing roles of family members, causes for the disintegration of joint family system in India. Maternal employment, unemployment, single parent families.

(Hours 10)

Module III: Child rearing practices of parents, parental attitudes family's influence on the personality and behaviour development of children. Responsible parenthood. (acceptance, rejection and over protection).

(Hours 7)

Module IV: Population education: definition, problems of over population, small family norm, family planning, sex education-importance, sex deviations, sexually transmitted diseases.

(Hours 4)

Module V: Sex education- its need and importance, how to impart sex education to children.

(Hours 5)

Module VI: Stress in children and adults, areas creating stress, causes, stress management, Role of Counselling, stress management at home, work and school.

(Hours 5)

Module VII: Old age, characteristics, problems, existing provision in India.

(Hours 5)

Module VIII: Role of family in inculcating civic sense and values, aesthetic appreciation and creativity.

(Hours 4)

Related experiences and Records

(Hours 18)

1. Observation of role of each member in a family and report.
2. Interviewing a youth facing unemployment and report.
3. Problems faced by old members in the family.
4. Interviewing married couples of different age groups on family adjustments and report.
5. Case study of parent of a disabled child/invalid.
6. Study of child rearing practices in 10 families, analyze and report.
7. Conduct a debate to find out college students opinion of values, value based education and the values they possess and want to possess.
8. Preparing booklet on any selected topic like tips to improve personality development/ social behaviour/ values/ coping skills in crisis/ improve self concept or esteem the factors that causes stress in children/ adolescent/ working women/ employees/ with coping tips.

- **Only sample list of practical is given. From that you can choose any '5' practical for the semester. Students shall maintain records of each practical and internally evaluated by concerned teacher.**

References:

1. Hurlock. E.B. Developmental psychology Tata Mc Graw hill publishing company Ltd. New Delhi. Devadas R.P A text book of Child Development and Jaya N. Macnillan India Ltd. Delhi.

2. Suriyahanth. A Child Development Kavitha Publications, Gandhi Gram Tamilnadu
3. Hurlock E. B. Child Development Tata HC Grawshill Publishing Company Ltd.
4. Counselling psychology. S.Narayana Rao, Tata MC Graw Hill, New Delhi
5. Guidance and counselling. Sister Mary Vishala,S. Chand & Company Pvt. Ltd., New Delhi
6. Guidance & Counselling. A.k. Nayak, A.P.H. Publishing Corporation

CORE COURSE

HOUSING AND INTERIOR DECORATION

SEMESTER -V

Course code: HS1542

Internal evaluation: 20%

Lecture Hours : 3/week

External evaluation:80%

No. of Credits: 3

University exams: 3hrs

Objectives:

- To initiate students into basic spatial planning.
- To use and understand the elements and principles of Design
- Develop basics skills for a career option in Interior Design.
- To gain the basic knowledge of furniture arrangement and furnishing the residential space
- To improve and enhance both the visual and communicative presentation skills

Course Outline

Module I: Introduction to Interior Design: Importance and need of Interior & Orientation and purpose of Course - Importance of understanding aesthetics. Design- Definition – classification -Types of Design, requirement of a good structural and decorative design - Elements of Design i. Line and direction, ii.form and shape,iii. Size, iv.Colour, v.texture, vi Space and. vii.Light - Principles of Design - Proportion, balance, rhythm, emphasis and harmony.(Definition and application to interiors.

(Hours 6)

Module II :Colour in interiors; i. Importance, Qualities of colour, ii.Colour systems-Prang colour system, iii. Effects of colour. iii. Colour planning and design. iv. How to build a colour scheme to create a feeling of warmth, coolness, intensity etc. for rooms(Adolescent boy/girl).

(Hours 4)

Module III: Light; i. Physical and Psychological aspects of lighting. ii. Importance of good lighting. iii. Types of lighting - Natural & Artificial (A) Natural Lighting – (a) Importance of

Natural Light for healthy environment. (B)Artificial Lighting; Lighting requirements for different rooms.

(Hours 3)

Module IV: Floor and floor finishes- types of flooring material- suitable flooring materials for different rooms(Drawing room and bathroom.)

(Hours 3)

Module V: Furniture –Importance -Types, selection and arrangement for different rooms – Furniture choices, related to functions .

(Hours 3)

ModuleVI: Furnishings-Types of furnishing – Curtain styles, Rugs and carpets, care and maintenance of rugs and carpets

(Hours 3)

Module VII: Accessories-classification- importance of accessories in space designing – latest trends and use of accessories in ID, Picture mounting - Law of margins, methods of picture mounting. (square, vertical, horizontal).

(Hours 3)

Module VIII: Flower Arrangement Different types & styles in flower arrangements - traditional, oriental, and Japanese – Method of preservation of flowers and foliage.

(Hours 3)

Module IX : Housing: functions of house- selection of site- Principles of planning a house – House plans for different income groups- Basics of Residential space management - factors to be considered in planning and grouping different rooms- storage in the house - layout of different house plans

(Hours 3)

Module X: Kitchen designs - types of kitchen - working areas- work triangle, storage cabinets.

(Hours 3)

Reference Books:

- Havanovich Inc. - Alexander N.J., Mercoust Brace (1972) The Art of Interior Design. Mc Millan & Co. New York
- Ball, Victoria K 1655 (1980) Designing Interior Environment.
- Deshpande R.S. (1974) Modern Ideal Homes for India, United Book Corporation,
- Faulkner R and Faulkner S. (1987) Inside Today's Home, Rinehart Publishing Co. New York

- Wills and Boons Ltd- Graham L (1982) Lighting your home
- Moubray A.D and Black D.(1999) Window Treatments, Van Nosterand Reinhold, New York
- Nielson K.J. (1990) Colour in Interior Design, Mc Graw Hill, New York
- Pile J.F (1975)Art of Interior Design, Indica publishers, Delhi
- Khanna G. Carpets for the home, Rizzoli International Publications
- Architectural Design,Earnest Pickering
- Francis D.K.Ching, Architecture, Form, Space and Order
- Shrish Vasant Bapat,Basic Design & Anthropometry
- Shirish Vasat Bapat,Living Areas – Internal Spaces
- Halse, Use of Colours in Interiors
- Francis D.K.Ching, Interior Design Illustrated
- Agan.T, The House- Its plan and Use

CORE COURSE

HOUSING AND INTERIOR DECORATION- Practical

SEMESTER -V

Course code: HS1543P

Internal evaluation: 20%

Practical Hours : 36

External evaluation: 80%

No. of Credits: 2

University exams: 3hrs

Objectives:

- To initiate students into basic spatial planning.
- To use and understand the elements and principles of Design
- Develop basics skills for a career option in Interior Design.
- To gain the basic knowledge of furniture arrangement and furnishing the residential space
- To improve and enhance both the visual and communicative presentation skills

Course Outline

Module I: Application of:-

- A. Classification and types of design – elements of design – principles of design- (preparation of samples for record)
- B. Prang colour system – colour chart – qualities, colour schemes. (preparation of samples for record)

Module II: Picture mounting – square, vertical, horizontal - (preparation of samples for record)

Module III: Furniture arrangement in any two rooms – (preparation of samples for record)

Module IV: Different curtain styles – rugs, carpets, other soft furnishings, soft and hard floor Coverings.

Module V: Principle of planning House(A brief introduction) – house plans for different income groups. (Preparation of sample house plans for record)

Module VI: Kitchen designs & types of kitchen (Preparation of sample kitchen plans for record)

Module VII: Flower arrangement –Different types and Styles(traditional & and Japanese)- Bouquet making - (preparation of samples designs for record-any three sample designs for bouquet)

Module VII: Residence course – **(for practical experience of both resource management and Interior decoration)** Budget planning, planning of menu, preparation of activity chart for one week with time and energy management plans. Presentation of different types of furniture arrangements in different Rooms, different curtain styles with suitable colour schemes, rugs and carpets and other soft furnishings, flower arrangement, different types of kitchen with optimum work triangle different types of table settings (buffet, western & traditional Kerala style (photos in the record)

*** A record of the entire practical and residence course shall be maintained along with records of Resource management(HS 1441) and submit for internal and external evaluation for the Uty. Practical examination. Practical examination for HS 1441 and HS1542 courses shall be conducted at the end of VI semester.**

CORE COURSE

EXTENSION EDUCATION

SEMESTER -V

Course code: HS1544

No. of contact hrs: 3/ week (54)

Lecture Hours : 54

No. of Credits: 3

Internal evaluation: 20%

External evaluation: 80%

University exams: 3hrs

Objectives

1. To make the students aware of the rural /urban community and the developmental programmes in operation
2. To make them understand the principle of extension
3. To understand the principles and procedure involved in programme Development

Course Outline

Module – I. Extension Education- definition, meaning, need principles, philosophy difference between formal, informal and extension education . Home Science extension education and its contribution towards the development of community.

(8hrs)

Module - II. Community Development-definition, objectives, history of community development and extension programmes in India.

(8hrs)

Module - III. Community Development set up –at the national ,state, district, block and village levels-role of functionaries in the block.

(6hrs)

Module - IV. A review of rural development programmes through five year plans-ongoing rural development programmes and programmes for women and children.

(7hrs)

Module - V. Democratic Decentralization- Panchayathi Raj-meaning,history,set-up and functions.

(7hrs)

Module VI. Programme development –Meaning and scope, principles of programme building,criteria for good programme,programme development cycle and its components.

Plan of work-components of a plan of work, developing a plan of work, factors to be considered.

(7hrs)

Module VII. Motivation- types and techniques of motivation

(3hrs)

Module VIII. Programme implementation- and evaluation- methods and tools for evaluation

(6hrs)

Module IX. Non-Governmental organization in community/rural development in India- CSWB,SSWB,BSS, Nehru Yuvak Kendra, Kasturba Gandhi National Memorial Trust, CAPART,SHG.

(5hrs)

Related Experience (Any one)

1. Visit to a community development centre/ Visit to a block.
2. Prepare a plan of work for any one community development programme..

References

1. ReddyA[1987] Extension Education, Bapatha , Andra Pradesh, India, Sreelekshmi, Press.
2. Dahama.O.P and Bhatnagar .O.P [1988] Education and Communication for
3. Development, New Delhi, Oxford and IBH Publishing Co.Pvt .Ltd.
4. Patnayak, Ram [1990] Rural Development in India, New Delhi, VikasPublishing House.
5. Jain.Gopal lal[1997]Rural Develoment, Jaipur, Mangal Deep Publications.
6. Waghmare, S.K[1980] Teaching Extension Education, PrasantPublication Vallabha, Vidhya Nagar.

Journals

1. Journal of rural development
2. Journal of Social work
3. Kurukshetra.

CORE COURSE

TEXTILE SCIENCE

SEMESTER -V

Course code: HS1545

No. of contact hrs: 4/ week (72)

Lecture Hours : 72

No. of Credits: 3

Internal evaluation: 20%

External evaluation: 80%

University exams: 3hrs

Objectives

- To gain knowledge about Textile fibers and their uses.
- To develop skill in understanding textiles available in the market.
- To impart knowledge about textile dyeing and printing.
- To develop an understanding about the various kinds of fabrics, their structure, their utility.
- To make consumers aware of the right way of purchasing textiles

Course Outline

Module I: Study of fibers- Classification of textile fibers, Production properties and uses of Textile fibers-Cotton, jute, wool, silk, rayon, nylon and polyester. Blends, methods of identification of textile fibers.

(Hours 10)

Module II: Study of yarns-Definition, Process of making fiber in to yarn- Hand, Mechanical, Chemical Classification of yarns- Types, size, Twist, Count and characteristics.

(Hours 10)

Module III: Fabric structure- Weaving-Loom parts and its operations, Preparation of yarn for Weaves -Basic weaves (plain, twill, Satin), Fancy weaves-Pile, Jacquard Dobby, Leno, Clip spot, Swivel, Lappet, Schiffli embroidery.

(Hours 10)

Module IV: Characteristics of woven fabrics- Warp & Weft, Grain, Selvage, and Thread Count Balance, Labeling-Importance of labeling.

(Hours 8)

Module V: Other methods of fabric construction-Knitting, Felting, Lace making, laminating Bonding, Braiding.

(Hours 8)

Module VI: Dyes and dyeing: Classification of Dyes- Natural, Artificial-acid, basic, Disperse, Vat, azoic, pigment, sulphur, mordant. Methods of dyeing-stock, yarn, Piece, cross, Union dyeing

(Hours 8)

Module VII: Finishes-Definition, purpose, classification, and types-singeing, bleaching, cleaning Mercerization, calandring, shrinkage control, sanforizing, Crabbing, Beetling, sizing, weighting, shearing, fulling, decatizing schenerizing, crepe. , Special finishes- water proofing. flame proofing and anti bacterial finish

(Hours 8)

Module VIII: Printing-Hand, block, roller, screen, resist printing, flock, discharge, stencil, spray Painting.

(Hours 5)

Visit to Mills-Weaving / Spinning / dyeing.

References

1. Corbman. B.P (1983)Fiber to Fabric, International student's edition, Singapore Mc Graw hills books co:
2. Gokarneshan. U. (2004) Fabric structure and design, New Age Internationa publishers.
3. Kate Well's Fabric Dyeing abd Printing, Conran Octopus
4. Smith J.L. (2003) Textile Processing, Abhishek Publications, Chandigarh.
5. Pellow.C.W (2000) Dyes and Dyeing, Abhishek Publications, Chandigarh
6. Nancy.Belfer Designing Batik and Tie & Dye.NIFT
7. Marsh.J.T An Introduction to Textile Finishing, B.I, Publications.

CORE COURSE

BASIC FOOD SCIENCE SEMESTER -V

Course code: HS1546

No. of contact hrs: 3/ week

Lecture Hours : 54

No. of Credits: 3

Internal evaluation: 20%

External evaluation: 80%

University exams: 3hrs

Course Outline

Objectives:

- Impart Knowledge regarding the composition of various food stuffs
- Familiarize students with changes occurring during processing and cooking
- Enable students to use the theoretical knowledge in various food processing preparations and technology.
- Orient students to potential use of various by products of food industry.
- Familiarize students the various tests and standards for quality assessment food safety and tests used to find food adulteration.

Module: I. Definition and scope of food science-Definition and classification of foods: Food habits: Factors affecting food consumption: functions of food, food groups a need for food grouping, objectives& methods of cooking, merits and demerits of various methods, Microwave and Solar cooking.

(Hours 8)

Module: II. Cereals and cereal products: cereal grains: nutritive value and composition- Wheat, Rice, Ragi. Structure –Rice, changes in nutritive value during cooking.Processing of rice-Parboling & handpounding-washing and cooking .

Effect of heat on starch –effect of moist and dry heat, Fermented cereal products; fermentation related to south Indian cookery. Cereal products-Break fast cereals-Rice, wheat, corn, Methods of improving nutritive value of cereals.

(Hours 8)

Module: III.Pulses and legumes: Nutritive Value, Changes during cooking and processing, factors affecting pulse cookery, Methods of improving nutritive value. Lathyrism.

(Hours 5)

Module: IV.Nuts and oil seeds, fats and oils: Nutritive value, changes in nutritive value during cooking-smoke point. Functional properties and uses of fat in food preparation, emulsification. Fat deterioration and anti oxidants.

(Hours 5)

Module: V. Vegetables and Fruits: Classification, composition and nutritive value. Changes in nutritive value during cooking .Enzymatic browning. Pigments.

(Hours 5)

Module: VI. Milk and milk products: Nutritive value, Pasteurization, Processed milk Products –yogurt, butter, cheese and milk powder Types of milk- skimmed, toned, homogenized, reconstituted, condensed.

(Hours 5)

Module: VII. Meat, fish, egg and poultry: selection and storage. Factors affecting tenderness of meat, Rigor mortis, cooking of meat, egg and fish.

(Hours 5)

Module: VIII. Beverages-Classification. Functions. And nutritive value.

(Hours 2)

Module: IX. Spices and condiments-uses and role of spices in cooking-cardamom, cinnamon, clove, chillies, fenugreek, mustard, pepper, turmeric, asafoteida, coriander seed, cumin seed, perumjeera.

(Hours 3)

Module: X. Principles and methods of food preservation-Drying, salting, sugar, canning, uses of preservatives.

(Hours 3)

Module: XI Food adulteration:-PFA act1956, HACCP-TQMC-Consumer protection, Nutrition labeling , Additives

(Hours 3)

References:

1. Brow A(2000)Understanding food
2. Belitz H D and Groch W(1999)Food Chemistry. Springer New York
3. Charley H(1982)Food Science. Ed 2.John Willey & Sons New York.
4. Charley H and Weaver C(1998)Foods Scientific Approach.Ed 3.Prentice Hall Inc.New Jersey.
5. Mehas K Y and Rodgers S L(2000)Food Science and you. Mc Millan Mc Graw Company.New York
6. Parker R(2000) Introduction to food science. Delmer, Thompson co.Delma.
7. Potter N and Hotchkiss J H(1998)Food Science Ed5.CBS Publications and distributors.Daryaganjii.new Delhi.
8. Tindall H D(1983)Vegetables in the tropics. Mac Millan Press London.

9. Askar A and Treptow H (Quality assurance in tropical fruit processing. Springer-Verlag, Berlin.
10. Rangana S (1986) Hand Book Analysis and quality control for fruit and vegetable products. Ed 2. Tata Mc Graw Hill Publishing Co Ltd. New Delhi.
11. Gould W A and Gould R W (1998) Total quality Assurance for food industries. CTI Publications. Inc
12. M swaminathan Food chemistry and experimental foods, Bappco Publishers
13. Sri Lakshmi . Food Science. New Age International Publishers.
14. Mudambi S R and Rao S M (1989) Food Science, New Age International Publishers.

Related Journals.

J Journal of Food Science and Technology

CORE- PRACTICAL

BASIC FOOD SCIENCE AND HUMAN NUTRITION AND DIETETICS SEMESTER –V

Course code: HS1644

No. of contact hrs: 2/ week (36)

No. of Credits: 2

Internal evaluation: 20%

External evaluation: 80%

University exams: 3hrs

Objectives

To develop practical knowledge in :

1. To familiarize the students with the changes occurring to the foods as a result of cooking and processing.
2. Enable the students to get practical knowledge in various applications and preparations of foods.
3. Enable the students to get practical knowledge into use various sensory methods for evaluating variety foods.
4. Enable the students to get practical knowledge in the application of diet therapy.
5. Enable the students to understand the role of dietitian

Course Outline:

1. Weight and measures-commonly used foods.
 2. Preparation of selected recipes of cereals, pulses, vegetables, milk, meat, fish, egg and poultry .
 3. Stages of sugar cookery-preparation of different products.
 4. Preparation of Jams and jellies ,squashes
 5. Effect of heat, acid and alkali on vegetables and pigments ,browning.
- (6hrs)

Biochemical analysis

1. Qualitative analysis of : proteins and carbohydrates (mono, di, and poly sacharides) in the food.
(6 hrs)
2. Estimation of: Calcium, vitamin C and Lactose.
(6hrs)

Visit: Visit to Food Research Institutes .

CORE COURSE**HUMAN NUTRITION AND DIETETICS
SEMESTER -VI**

Course code: HS1641

No. of contact hrs: 4/ week (72)

Lecture Hours : 72

No. of Credits: 3

Internal evaluation: 20%

External evaluation: 80%

University exams: 3hrs

Objectives:

1. Understand the components of health and fitness and the role of nutrition in these.
2. Make nutritional, dietary and physical activity recommendations to achieve Fitness and well-being.
3. To provide training for students in nutrition and dietetics.
4. Understand the requirements for energy and other nutrients through life cycle.
5. To gain knowledge on the meaning and methods of nutrition education.
6. To gain knowledge about the principles of Epidemiology, Nutritional Epidemiology and its importance in community and public health.

Course Outline:

A. BASIC NUTRITION

Module: I Definitions: Nutrition, malnutrition, balanced diet. Basic Five FOOD Groups, RDA and factors affecting RDA.

(3hrs)

Module:II Carbohydrates: Classification, Functions, Sources, Digestion, Absorption and Metabolism. Recommended Allowances. Deficiency.

(8hrs)

Module: III Proteins: Functions, Classification, essential and non-essential amino acids Sources, Digestion and Absorption, RDA , assessment of protein quality (BV, PER, NPU), Metabolism (Transamination, deamination, decarboxylation) Bioavailability and anti nutritional factors, Deficiency.

(8hrs)

Module: IV. Lipids:Classification, Functions, types of fatty acids-their role and significance (SFA, MUFA, PUFA, omega 3 and omega 6 fatty acids) Sources, Digestion and Absorption, RDA Metabolism, Deficiency conditions.

(6hrs)

Module:V. Vitamins and minerals: Classification, Physiological role, sources, RDA deficiency and management of deficiency and Excess – water soluble and fat soluble vitamins (A, D, E, K.C, BComplex) of calcium, phosphorous and magnesium, sodium, potassium, iron, iodine,

(7hrs)

Module: VI. Water: Functions, Requirements, water-balance, role of electrolytes.

Antioxidants : Role of antioxidants in health and nutrition

(3hrs)

Module:VII. Dietary fibre: Classification, and nutritional significance.

(2hrs)

Module: VIII.Study of energy: Definitions, units,SDA, physiological fuel value. BMR , Factors influencing BMR. Total energy requirement and factors influencing, estimation of energy requirements Indian reference man & woman. Energy deficiency, Regulation of Energy balance.

(6hrs)

B. NORMAL NUTRITION

Module : IX

(12hrs)

1. Assessment of nutritional status: Anthropometric assessment: Clinical examination.
2. Meal planning: factors affecting and principles of meal planning. Planning meals according to activity and income & planning diets for various stages of the life

cycle, infancy, pre-school and school going children, adolescent, old age, pregnancy and lactation.

C. THERAPEUTIC NUTRITION

Module: X - Role & responsibilities of dietician, Principles of diet therapy. Therapeutic modifications of normal diet-routine hospital. Diets-regular, soft, fluid,

Etiology, symptoms and dietary management of peptic ulcer, constipation, hypertension, diabetes, obesity, underweight, anemia, liver disease-hepatitis and cirrhosis- . Diet in fevers-tuberculosis, typhoid.

(10hrs)

Module:XI - Role of Important national and international agencies. FAO, WHO, UNICEF, ICMR, CFTRI, Nutrition society of India, Food and Nutrition board, NIN

(2hrs)

References

1. David S. Sir Stanley Passmore, P and Brock, J F(1993)Human Nutrition and Dietetics.Ed 9 R&SUnivinston Ltd.Edinburgh and London
2. National Institute of Nutrition(2003)Dietary guidelines for Indians ICMR, Hyderabad
3. Krause M V and Hunseher M A(2004)Food Nutrition and diet therapy.Ed11 W B Saunder's Company, Philadelphia London.
4. American dietetic association(1996) Manual of clinical dietetics.
5. Mc Ardle, W Katch, F and Katch V (1996)Exercise Physiology-energy, Nutrition and human performance.Ed.4.Williams and Wilkins .Philadelphia
6. Robinson, C H(1994)Normal and therapeutic Nutrition.Ed 8.Mc Millan Publishing co.
7. Shanti Ghosh(1997)Nutrition and child care.Jaypee publishers.
8. Shills, M E., Olson, J A ., Shikke , N and Rose , A C (Ed)(1999)Modern nutrition in health and disease.Ed Williams and Wilkins.
9. SriLakshmi B(2002) Dietetics Ed \$.New Age InternationalPvt Ltd New Delhi
10. Whitney, E N and Rolfes S R(1999)understanding Nutrition.Ed 8.International Thompson Publishing Co.
11. Gopalan C, Rama Sastry B V and Bala subramaniam(2004)Nutritive Value of Indian Foods.NIN, Hyderabad.

Journals

1. Journal of Home Science, Sri Avinashilingam Deemed University, Coimbatore
2. Indian Journal of Nutrition and dietetics. Sri Avinashilingam Deemed University, Coimbatore
3. Indian Journal of Medical Research, ICMR, New Delhi

4. Indian journal of Paediatrics, Valley Nicro, Mussoria,

CORE COURSE

APPAREL DESIGNING

SEMESTER -VI

Course code: HS1642

No.ofcontact:54hrs:

No. of Credits: 3

University exams: 3hrs

Internal evaluation: 20%

External evaluation80%

Objectives

- To enable the students to develop skills in apparel designing and constructing Garments.
- To gain knowledge in fundamentals of fashion.
- To impart knowledge in style reading, pattern making and garment construction techniques.
- To develop and understand the principles of pattern making through flat pattern and draping.
- To recognize the terms and theories related to fashion.
- To gain practical experience in illustrating on Croquie and illustrate details on Croquie

Course Outline:

Module: I Fashion Interpretation- Terminology, concept, characteristics, and fashion cycle influence, elements of fashion, dictionary of fashion terms, role of a fashion Designer

(6hrs)

Module:II Tools, equipments and terms used for pattern making and garment construction. Sewing machine types, basic models- parts and functions, care and maintenance, common problems and reason.

(8hrs)

Module III: Psycho aspects of clothing-Clothing and wearers, Personality factors and clothing Choices. Selection of fabrics, factors affecting choice of clothing, household linen.

(5hrs)

Module IV: Importance of taking measurements: Methods of taking measurements:

(7hrs)

Module:VI Pattern Making: principles and techniques involved in pattern making-Drafting, Draping, Flat Pattern- Lengthening and shortening, increase and decrease of waist line and bust line. Patterns for people with special needs- problems figurers-Broad and narrow shoulder. Pattern Grading-Importance.

(9hrs)

Module:VII Steps in preparing fabrics for construction-Calculation of fabrics for different garments. (5 hrs)

Module VIII: Modern trends in textiles . (4 hrs)

References

1. Armstrong, Helen Joseph , Pattern making for Fashion Design, Harper & Row, Publications
2. E.Rolfo Kopp& Zelin , How to Draft Basic Pattern, Fair child Publication Inc.
3. Gerry Cooklin, Garment Technology for Fashion Designers, Book Link
4. Elizabetta Durdi, Figure drawing for fashion Design, The Pepin Tiziana Paci Press.
5. Claire B.Shaeffer, High Fashion Sewing Secrets from the World's Rodale Best Designer's
6. Mary Mathew's , Practical Clothing Construction, Part II, Bhattaram's Reprographics (P) Ltd, Chennai
7. Black Well (1988) The Technology of Clothing Manufacture, Scientific Publications
8. Hill house, M.S and Dress Design-Draping and Flat Pattern, London. Mansfield, E.A.
9. Riter.J.(1998) Hand Book For Fashion Designing, Best Drafting Techniques, Mital Publications.

CORE COURSE

COMMUNICATION IN EXTENSION EDUCATION

SEMESTER -VI

Course code: HS1643

Internal evaluation: 20%

No. of contact hrs: 72

External evaluation: 80%

Credit: 3

University exams: 3hrs

Objectives

To enable the students to

1. Understand the process of communication in Home Science Education
2. Develop skills in preparing and using audio – visual aids in extension work.
3. Familiarize with the latest technologies in communication.
4. Organise programmes for women and children.

Course Outline:

Module: I Communication- definition, functions, elements and problems. Importance of communication in Home science education.

(6hrs)

Module: II Teaching and learning-Elements of teaching-learning situation, steps.

(6hrs)

Module: III Communication Methods- classification according to form and use. Factors guiding the selection and use of methods., advantages and limitations of each method.

(10hrs)

Module: IV Audio-visual aids- place and role of audio-visual aids in Home Science teaching . Classification of audio-visual aids-cone of experience-merits and demerits. Factors guiding the selection and use of audio- visual aids

(14hrs)

Module: V A detailed study of some of the visual aids-leaflet, pamphlet, posters, different types of charts, flannel graph, flip chart and flash cards.

(14hrs)

Module: VI Leadership-leaders, definitions, types, role of leaders in community development , qualities of a good leader.

(9 hrs)

Module: VII Extension training-objectives, need and types of training-training institutes- NIRD, SIRD, ETC.

(5hrs)

Module: VIII Recent trends in communication- ICT tools – print and electronic media, email, internet. Use of multimedia, mobile phony, video and tele conferencing, computer assisted instructions, touch screens, micro computers, web technologies, tech talks and information kiosks.

(9 hrs)

References

1. Dubey, V.K and Bishnoi I (2009) "Extension Education and Communication", New Age International Pvt Ltd Publishers, New Delhi.
2. Andal N and Rangarajan, C (2005) "Communication theories and models", Himalaya Publishing House, New Delhi.
3. Rayudu, C,S (2010) " Communication", Himalaya Publishing House, New Delhi.
4. Aggarwal, R (2008) "Communication- today and tomorrow", Sublime Publications, New Delhi.
5. Kumar, K,J (2008) "Mass Communiucation in India", Jaico Publishing House, New Delhi.
6. Aggarwal, R (2008) "Effective Communication Skills", Sublime Publications, New Delhi.
7. Shinde, P.S (1997) "Communication patterns in Extension Education", Rawat Publications, Jaipur.

Journals

- Social Welfare, Central Social Welfare Board, Samaj Kalyan Bhavan, B-12 Tana
- Crescent, Institutional Area, South of IIT, New delhi-110016
- Indian Journal of extension, The Indian Extension Education, Division of Agricultural extension IARI, New Delhi-110012.

CORE COURSE

PROJECT

SEMESTER -VI

Course code: HS1647

No. of contact hrs: 4 hours/ week

Objectives:

- To enable the students to understand Basic principles of Research Design
- To enable the students develop interest in Home science research and to develop project plan.
- To enable the students to identify the problem of the community

- To enable the students adopt the procedure for the project
- To enable the students to analyze the collected data.

The projects are to be identified during the 5th semester with the help of the supervising teacher. The report of the project in duplicate shall be submitted to the department by the end of the sixth semester well before the commencement of the examination. The report shall be produced before the external examiners appointed by the University for evaluation. The work may be chosen from any branch of Home science - collection of primary data and or secondary data involving application of home science theories they have learned in the curriculum. **The credits will be awarded only in the 6TH sem.**

The project report shall be produced for external evaluation during the university practical examination for HS 1646 -Communication in Extension Education. The viva – voce based on the project shall be conducted individually by the external examiner.

Evaluation of Project

There shall be **no CE** for project work. The report of project shall be submitted for external evaluation in duplicate to the Department. Total Weight age for project shall be -10

The project report shall be evaluated according to the:

- Significance of the topic.
- Procedure adopted for the project,
- Clarity and simplicity of the language,
- Accuracy of the data,
- Overall presentation of the project.

(**The viva - voce** based on the project shall be conducted individually.)

CORE- PRACTICAL

BASIC FOOD SCIENCE AND HUMAN NUTRITION AND DIETETICS SEMESTER -VI

Course code: HS1644
Practical: 2 hrs / week
No. of Credits: 2

Internal evaluation: 20%
External evaluation: 80%
University exams: 3hrs

Objectives

To develop practical knowledge in :-

1. To familiarize the students with the changes occurring to the foods as a result of cooking and processing.
2. Enable the students to get practical knowledge in various applications and preparations of foods.
3. Enable the students to get practical knowledge into use various sensory methods for evaluating variety foods.
4. Enable the students to get practical knowledge in the application of diet therapy.
5. Enable the students to understand the role of dietitian

Course Outline:

DIETETICS

1. **Normal diets:** Planning preparing and serving diets for - Pre - school child, School going child, adolescent, sedentary adult man, /woman, labourer, pregnant woman, lactating mother, moderately active old man/woman. (12hrs)
2. **Therapeutic diets :** Planning, preparing and serving diets for peptic ulcer, typhoid. Constipation, cirrhosis hypertension, diabetes, obesity, iron deficiency anemia. (12hrs)
3. **Assessment of nutritional status**-height, weight, BMI (6hrs)
4. Recording height and weight of individual students and scoring general nutritional condition by comparison with standards. (6hrs)

Visits: (Any one)

1. Visit to a dietary department in a hospital
2. Visit to a feeding programme centre
3. Visit to a Nutrition research lab

***A record of the entire practical and a report on visits should be maintained and submit for external evaluation for University practical examination at the end of 6th semester.**

CORE- PRACTICAL

TEXTILE SCIENCE AND APPAREL DESIGNING

SEMESTER -VI

Course code: HS 1645

Practical: 54 hrs

No. of Credits: 2

Internal evaluation: 20%

External evaluation: 80%

University exams: 3hrs

Objectives

- To enable the students to understand and learn the methods of developing fabrics using different
- yarns and fabric making technique
- To help develop the skills in pattern making and construction
- To recognize the theories related to fashion
- To gain practical knowledge in illustrating on croquis and illustrate details on croquis
- To enable the students to develop skills in apparel designing and construction
- To create awareness of quality assurance norms and evaluating of quality in apparel

Module: I

1. Identification of different fibers- (cotton, silk, polyester, nylon, wool, rayon)
2. Identification of fabric structure- Basic weaves-prepare point paper samples for all the basic weaves- plain/twill/satin (one sample from each). Fancy weaves- pile, dobby, jacquard, Leno, clip spot, lappet, swivel, schiffli embroidery. Collect samples of the same for record
3. Prepare samples for - Block, Tie & Dye, Batik, Fabric painting, Flock (any five)
4. Collection of different types of labels (Any three)

Module: II

- a. Identification of machine parts..
- b. Tools for pattern making and garment construction
- c. Standard construction process-basic stitches(*four numbers*), decorative stitches(*ten numbers*), seams (three numbers)and seam Finishes(*two numbers*)
- d. Fullness (darts-3, pleats-3, tucks-2, shirring and gathers), plackets-3, hems 3, bias-3, fasteners-3, neckline finishes-4, collars-2, sleeves-2
- e. Pattern alteration - Preparation of samples for lengthening, shortening, increasing and decreasing of waistline, bust line and narrow and broad shoulder.
- f. Garment construction- Sari petticoat, Churidar top & bottom (full size) Choly (Sari blouse)

Visits

1. Visit to a textile mill

* The garments constructed for the practical HS 1645 – shall be externally evaluated.

* A record of the entire practical and a report on visits should be maintained and submit for external evaluation for the Uty. practical examination of VI semester.

CORE- PRACTICAL

COMMUNICATION IN EXTENSION EDUCATION

Course code: HS 1646

Internal evaluation: 20%

Practical: 3 hrs/week

External evaluation: 80%

No. of Credits: 2

University exams: 3hrs

Objectives

- To develop a sense of readiness and responsibility to be a part of the development process
- To develop skill in communication with the people in the community.
- To familiarize the students with extension teaching methods
- To prepare and use audio visual aids
- To prepare lesson plan and use for extension programmes

Course Outline:

Module: I Study of different extension teaching methods (Brief notes)

Module: II Power point presentation of different extension teaching methods.

Module: III Designing visual aids; leaflets / pamphlets / posters and charts (different types of charts)

(Standard size for all the aids should be followed: leaflet =10*5”(on each fold); pamphlet =12*7”; flashcards =30*20 cms; poster and ordinary chart in record sheet size; no specific size for flip chart and other types of charts.)

Module: IV Evaluation of any one teaching method (eg. Demonstration / Evaluation of radio talk/TV program/Lecture- any one report)

Visits (any one)

- Observe a self help group (SHG) in action and Identify a leader from a group
 - Visit to any extension training centre. ***A record of the entire practical and a report on visits should be maintained and submit for external evaluation for the Uty.**
- Practical examination of VI semester.**

OPEN COURSE-

For Core: HS 1651.1

MICROBIOLOGY

Course code:

No. of contact hrs: 3/ week (54)

Lecture Hours : 2/week (36)

Practical: 1/week (18)

No. of Credits: 2

Internal evaluation: 20%

External evaluation: 80%

University exams: 3hrs

Objectives

To enable students to gain elementary knowledge about micro - organisms and their role in health and nutrition.

Module:I Development of microbiology, definition and classification of micro organisms

Module:II Bacteria – morphology, physiology, cell groupings, spore formation, factors affecting growth, growth curve.

Module:III Moulds and Yeast – morphology, types of moulds, economic importance of yeast and moulds.

Module:IV Algae – morphology, culturing, economic importance.

Module: V Viruses – morphology, reproduction bacteriophages.

Module: VI Control and destruction of micro organisms sterilization - heat, light, electricity, desiccation, filtration.

Module:VII Disinfection – acids, alkalies, salts, halogens, dyes, oxidizing agents and detergents.

Module:VIII Infections, Resistance and Immunity – Natural defences of the body – primary and secondary defense of the body. Natural and acquired immunity – active and passive, Immunization schedule, hyper sensitivity.

Module:IX Food microbiology –food spoilage.

Microbiology of milk – sources of contamination, pathogens in milk,

Module: X. Food poisoning and food infections: causes and symptoms of cholera, dysentery, botulism, salmonellosis.

Module: XI Microbiology of water and air – sources and kinds of organisms in air and water. Air borne and water borne infections.

Module:XII Microbiology of sewage – definition, methods of sewage disposal composting, vermiculture.

Module:XIII Diseases caused by micro – organisms :

- (a) Bacterial - pneumonia, meningitis, cholera, diphtheria,
- (b) Virus -AIDS, rabies, German measles, measles, mumps, poliomyelitis, dengue.
- (c) Protozoa – amoebic dysentery, malaria.

References :

1. Anna.K.Joshua, Microbiology, Popular Book Depot, Madras – 15.
2. Barnes and Noble, Bacteriology – Principles and practices.
3. Sharma, P.D.Microbiology, Rastogi pub. Meerut.
4. Sullia and Shantaram, General Microbiology, Oxford and IBH Publishing Co. Pvt.Ltd.
5. Kumar, H.D. and Kumar, S., Modern concepts of Microbiology, Vikas publishing house Pvt. Ltd.

OPEN COURSE-For Others: HS 1551.1

FASHION DESIGNING

Course code:

No. of contact hrs: 3/ week (54)

Internal evaluation: 20%

Lecture Hours : 54

External evaluation: 80%

No. of Credits: 2

University exams: 3hrs

Objectives

1. To gain knowledge in fundamentals of fashion
2. To recognize the theories related to fashion
3. To gain practical knowledge in illustrating on croquis and illustrate details on croquis
4. To enable the students to develop skills in apparel designing and construction

Module: I. Fashion interpretation – Fashion origin, customer from medieval to modern world. Factors favoring and retarding fashion. Fashion characteristics, terms, cycle, and role of fashion in garment industry.

(3hrs)

Module: II. Introduction to Textiles- Fibers, types of fibers, properties of fibers. Yarns- Types of yarns and their properties. Types of fabrics and their suitability.

(3hrs)

Module: III. Tools and equipments for measuring, marking, cutting, pressing, and finishing. Sewing machine-different types, problems and remedies.

(3hrs)

Module: IV. Elements and principles of design.

(3hrs)

Module: V. Psycho aspects of clothing-Clothing and wears, Personality factors and clothing Choices.

(3hrs)

Module: VI. Pattern making- Knowledge of basic process of garment construction-Taking Body measurements, Standard measurement chart, drafting of basic pattern set (Basic bodice front, back, basic skirt back, front, and sleeve)

(3hrs)

Module: VII. Pattern alteration-Principles and techniques used for manufacturing basic pattern Set.

(3hrs)

Module: VIII. Fashion illustration-Definition, importance and role of Fashion illustration and Specification drawing.

(3hrs)

Module: IX. Calculation of fabric for different garments according to size, style and design. Computer operation knowledge of related soft wares.

(3hrs)

Module: X. Fashion Merchandising-definition, fashion marketing concepts, fashion Consumer behaviour, Fashion life cycle. Five principles of fashion. Marketing of Products – advertising, exhibition.

(3hrs)

RELATED EXPERIANCES

(24hrs)

- Stages in sketching – free hand drawing, Object drawing –out lines and
- Proportion, perspective, light and shade.
- Development of croquis – Drawing 8 head croquis, frontal, 3/4 and back portion
- Dressing up croquis in various silhouettes. Study of facial features & hair styles
- Specification drawing-studying the basic styles of necklines, collars, sleeves, cuffs, Pockets, skirts, jackets, etc; Learning about design features for utility and decorative purposes.
- How to take body measurements
- Basic construction processes – basic stitches, decorative stitches, seams and seam finishes, hems, plackets, fullness, fasteners, bias and its applications, neck line finishes, collars and sleeves. Dart manipulation-slash and spread, pivotal transfer technique
- Drafting and garment construction: Basic skirt, sari petticoat, A-line frock (5yrs)Skirt (5yrs), Kameez and salwar (full size), Cholly (full size).Variation of any one of the basic garment.
- Skill training (soft toys, paper bags, cloth bags, leather bags, ornamentation any three)
- Familiar with Adobe photo shop/ Coral draw, Adobe Illustrator.

Visit:

Visit to a garment industry and submit a report containing the steps involved in

1. The production of a garment in an industry.
2. Survey on different types of fibers, yarns and fabric (any 7)
3. Survey on types of machines (industrial and domestic)
4. State wise assignment .The students in groups should conduct a detailed study on
5. life styles, cultural heritage, food and living habits of the various states in India.
6. they should present this project by setting up ambience of the state and dress in the

7. regional attire. A record of the entire above practical must be maintained.

***A record of the entire related experiences and a report on visits should be maintained and submit for internal evaluation.**

REFERANCES

- Armstrong, Helen Joseph , Pattern making for Fashion Design, Harper & Row, Publications
- E.Rolfo Kopp& Zelin , How to Draft Basic Pattern, Fair child Publication Inc.
- Gerry Cooklin, Garment Technology for Fashion Designers, Book Link
- Elizabetta Durdi, Figure drawing for fashion Design, The Pepin Tiziana Paci Press.
- Claire B.Shaeffer, High Fashion Sewing Secrets from the World's Rodale Best Designer's
- Mary Mathew's , Practical Clothing Construction, Part II, Bhattaram's Reprographics (P) Ltd, Chennai
- Black Well (1988) The Technology of Clothing Manufacture, Scientific Publications
- Hill house, M.S and Dress Design-Draping and Flat Pattern, London. Mansfield, E.A.
- Riter.J.(1998) Hand Book For Fashion Designing, Best Drafting Techniques, Mital publications.

OPEN COURSE:

For Others: HS 1551.2

GERIATRIC CARE

Course code:

No. of contact hrs: 3/ week (54)

Internal evaluation: 20%

*Lecture Hours : 2/week (36)
1/week (18)*

*External evaluation:80% Practical:
University exams: 3hrs*

No. of Credits: 2

Objectives:

- To develop knowledge on basic problems in geriatric care.
- To develop knowledge in providing quality service in hospitals, old age homes & home nursing.

- To develop knowledge in nutritional, physical and mental care for aged.

Module:I: Basics of geriatric care: Social dimensions of geriatric care, Emergence and scope of gerontology and elderly care. Historical perspective, demographic trends in India

Module:II: Aging process: biological and physiological aspects; Physiological aspects; Social aspects; Social status, retired status, single status, economic status, security, guide and teacher, social adjustment and recognition.

Module:III: Adjustment patterns and changing life styles in old age: Family patterns in later life, Changing roles and the aging family, ; conjugal; Husband wife relations in old age; Sexual adjustment; Retirement years and adjustment; integral family relations; Grand parenthood; widowhood /singlehood; Alternative lifestyle; Second marriage in the later life.

Module:IV: Health care for Elderly; Physical, mental, emotional, & and spiritual. Mental ability and behavior of elderly, dementia and caring techniques, Nutritional care diet management.

Module:V: Skills in geriatric management; role of care givers. Problems of care givers, conflict, management within the family. Identifying potentialities and productive engagement of the elderly. Techniques of effective communication with elderly, Role of counseling in geriatric care.

Module:VI: Service and programmes for Aged; Categories of services: health, leisure time activities, : institution for aged, Day care centers; Economic programmes; Reengagement after retirement, retiremen pension, death cum retirement gratuity, provident fund, health measures, Insurance schemes, investments and property.

Module:VII: Role of the state and voluntary organizations. Norms and procedures in the organizations of the oldage homes and day care centers for aged.

Related experiences;

- Visit and report of old age centers / homes.
- Organizing recreational activities in homes for the aged.
- Prepare case studies on any two inmates.
- Arranging special services / counseling, if necessary, yoga and meditation classes, lectures and talks on self care, on perspectives related to different aspects of senior citizen' life etc.

References :

- Alken, L.R.(1978).The psychology of later life, Philadelphia: WB Saunders Company
- Bergman, Klaus (1972). Aged: their understanding and care, London: Wolfe Pub

- Bose, AB and K.D. Gangrade (1988) Aging in India: Problems and Potentialities. New Delhi: Abhinav Pub.
- Kennady Carroll(1988), Human Development, New York; Macmillan.
- Pnkston, PH. And N.K. Linsk (1984)Care of the elderly: A family approach. NewYork; Pergamon press.
- Sister Mary Vishala, S. Guidance and counseling. Tata MC Graw Hill, New Delhi
- Hurlock. E.B. Developmental psychology Tata Mc Graw hill publishing company Ltd. New Delhi
- Shills, M E., Olson, J A ., Shikke , N and Rose , A C (Ed)(1999)Modern nutrition in health and disease.Ed Williams and Wilkins.
- Srilakshmi B(2002) Dietetics Ed \$.New Age InternationalPvt Ltd New Delhi
- Whitney, E N and Rolfes S R(1999)understanding Nutrition.Ed 8.International Thompson Publishing Co.

OPEN COURSE: For Others: HS 1551.3

PRINCIPLES AND PRACTICE OF COUNSELING AND GUIDANCE

Course code:

No. of contact hrs: 3/ week (54)

Internal evaluation: 20%

Lecture Hours : 2/week (36)

External evaluation: 80%

Practical: 1/week (18)

University exams: 3hrs

No. of Credits: 2

Module 1: Introduction to counseling and guidance-definition, objectives, scope, principles and philosophy.Difference between counseling and guidance.

Module 11:Counselling in the present scenario-familial and social pressures-divorce, substance misuse, advertisement, peer pressure, high expectations of parents, juvenile delinquency and financial insecurity.Vocational pressures- job insecurity, high demand for performance, technology, work place culture, design of tasks, interpersonal relationships, working conditions, increased responsibility, ineffective management and bullying.

Module III : Stress and stress management-definition, types, causes and symptoms .Tips for alleviating stress.

Module IV: Characteristics of counseling, types of counseling-directive and non directive counseling, skills needed in counseling process, qualities of a counselor.

Module V: Counselling process-elements and stages in counseling process.

Module- VI:Areas of counseling-personal and group counseling, marriage and family counseling, child , academic and school counseling, career counseling, crisis intervention counseling and rehabilitation counseling.

OPEN COURSE: For Others: HS 1551.4

FOOD SCIENCE AND BASIC COOKERY

Course code:

No. of contact hrs: 3/ week (54)

Internal evaluation: 20%

Lecture Hours : 2/week (36)

External evaluation: 80%

Practical: 1/week (18)

University exams: 3hrs

No. of Credits: 2

Objectives:

To enable students to :

- Understand the nutritive composition, methods of cooking and preservation of foods.
- Use this knowledge to prepare acceptable food products to meet body's needs.

Module – I : Introduction to Food science – Functions of foods, basic food groups, objectives of cooking, different methods of cooking – advantages and disadvantages.

Module – II : Cereals – composition, effect of heat on starch, role of ingredients in bread making and cake making.

Module – III : Pulses – Nutritive value, importance of germination, role of pulses in cookery.

Module – IV : Vegetables – Classification and nutritive value, pigments, effect of

Module – V : Fruits – Composition and nutritive value, browning reactions, methods of preventing browning reactions.

Module – VI : Milk and milk products – composition, pasteurization, fermented and non – fermented milk products, role of milk in cookery.

Module – VII : Eggs – Nutritive value, characteristics of fresh eggs, role of egg in cookery, salad dressing, stages of foam formation, factors affecting foam formation.

Module – VIII : Meat – Nutrient composition and effect of cooking.

Module – IX : Fish – Nutritional composition, selection and storage of fish, fish cookery.

Module – X : Fats and Oils – composition, rancidity, types of rancidity, uses of fats and oils.

Module XI : Beverages–classification, nutritional importance.

Module – XII : Sugar cookery – stages of sugar cookery, crystallization.

Module – XIII : Food preservation – principles and methods.

Practicals :

- Record the weight of 1 cup/ 1 tbsp/ 1 tsp of different types of food stuffs.
- Sugar cookery – carrot halwa, coconut burfi, peanut brittle.
- Salad dressing – mayonnaise.
- Baking – Cake, bread, pizza, cookies (demonstration).
- Food preservation – Jam, Jelly, pickles and squash.

References :

- Norman, N. Potter and Hotchkiss, J.H. (1996). Food Science, CBSE publishers and distributors, New Delhi, .

- Mudambi, S.R. and Rao, S.M. (1989). Food Science, New Age International (P) Ltd., Bangalore.
- Begum, M.P, (2001). A Text book of Food, Nutrition and Dietetics, Sterling publishers Pvt. Ltd, Bangalore.
- Srilekshmi, B. Food Science, New Age International Pvt. Ltd., New Delhi.
- Mudambi, S.R. and Rajagopal, M.V. (1990). Fundamentals of Food and Nutrition, New Age International (P) Ltd., New Delhi.
- Swaminathan, M., (2003). Hand book of Food and Nutrition, The Bangalore Printing and Publishing Co. Ltd, Bangalore.

OPEN COURSE: For Others: HS 1551.5

PUBLIC HEALTH AND NUTRITION

Course code:

No. of contact hrs: 3/ week (54)

Internal evaluation: 20%

Lecture Hours : 2/week (36)

External evaluation: 80%

Practical: 1/week (18)

University exams: 3hrs

No. of Credits: 2

Objectives:

To enable students to

1. Gain insight to National nutritional problems and their implications.
2. Gain nutritional knowledge and measures to overcome malnutrition.

Module – I : Definition of health, public health and community health – Nutrition, nutritional status – vital statistics.

Module – II : Factors influencing nutritional status – nutrition infection nexus – relation of nutrition to national development.

Module – III : Prevalence of malnutrition in India – common nutritional problems prevalence of morbidity and mortality rates.

Module – IV : Strategies to overcome malnutrition – preventive, promotive and therapeutic measures to overcome malnutrition in India.

Module – V :Nutrition education – methods – aides for nutrition education.

Module – VI : Assessment of nutritional status – anthropometry -food weighment – 24hr.recall method – biochemical and clinical methods.

Module – VII : Nutrition intervention programmes – Direct and indirect nutrition intervention programmes organized by governmental and Non – governmental agencies.

Module – VIII : Role of Non – governmental agencies in combating malnutrition in India – Mithranikethan, CARD, M.S.Swaminathan Foundation – Aga Khan Foundation.

Module – IX : Role of national and international agencies engaged in nutrition projects in India and their projects in India – FAO, WHO, UNICEF, World Bank, ADB, UNDP, UNAID, CARE, ICMR, ICAR, NIN, CFTRI.

Module – X : Important community nutrition related websites.

Practical:

- Nutritional assessment of any age group.
- Visiting a feeding centre and evaluating and conduct of the programmes using a check list.
- Visit to NGO's engaged in nutrition projects.

References:

- Brow A(2000)Understanding food
- Belitz H D and Groch W(1999)Food Chemistry. Springer New York
- Charley H(1982)Food Science. Ed 2.John Willey &Sons New York.
- Charley H and Weaver C(1998)Foods Scientific Approach.Ed 3.Prentice Hall Inc.New Jersey.
- Mehas K Y and Rodgers S L(2000)Food Science and you. Mc Millan Mc Graw Company.New York
- Parker R(2000) Introduction to food science. Delmer, Thompson co.Delma.
- Potter N and Hotchkiss J H(1998)Food Science Ed5.CBS Publications and distributers.Daryaganjii.new Delhi.

- Tindall H D(1983)Vegetables in the tropics. Mac Millan Press London.
- Askar A and TreptowH(Quality assurance in tropical fruit processing. Springer-Verlag.Berlin.
- Rangana S(1986)Hand Book Analysis and quality control for fruit and vegetable products.Ed2.Tata Mc graw Hill Publishing co Ltd.New Delhi.
- Gould W A and Gould R W(1998)Total quality Assurance for food industries.CTI Publications.Inc
- M swaminathan Food chemistry and experimental foods, Bappco Publishers
- SriLakshmi .FooD Science.New Age International Publishers.
- Mudambi S R and Rao S M (1989) Food Science, New Age International Publishers.

Related Journals.

- Journal of Food Science and Technology

OPEN COURSE:

For Others: HS 1551.6

ENTREPRENEURSHIP MANAGEMENT IN FOOD PROCESSING

Course code:

No. of contact hrs: 3/ week (54)

Internal evaluation: 20%

Lecture Hours : 2/week (36)

External evaluation: 80%

Practical: 1/week (18)

University exams: 3hrs

No. of Credits: 2

Objectives:

- To understand the nature of entrepreneurial activities.
- To make aware about self employment.
- To know the present Food industries status and its relation with entrepreneurial activities.

Module – I: An introduction to food processing – Need for food processing, types of food processing – Primary, secondary, tertiary.

Module – II: Food industries – Trends in food production in India, industrial status in India. Strategies and measures for new food industries.

Module – III: Entrepreneurship – Definition, Scope, Characteristics, factors affecting entrepreneur development, Entrepreneur Vs Intrapreneur, classification of entrepreneur, role of entrepreneur in economic development.

Module – IV: Women entrepreneurs – Definition, status in India, steps taken for the promotion of entrepreneurs, problems faced by women entrepreneurs.

Module –V: EDP–Definition, steps, agencies conducting EDP, agencies for entrepreneurial support – KITCO, SIDCO, KVIC, DIG, STED, SIDO, NSIC, TCO, SISI, SIDBI, WDC (Women Development Corporation).

Module – VI: Food laws – Laws governing food industries production, problems faced by food industries in production, processing and marketing, FPO licensing, food standards.

Module – VII: Small Scale Industries (SSI) – definition, types, steps for starting SSI, problems faced by SSI.

Module – VIII :Project – definition, types, steps, project life cycle, project appraisal, project report preparation, break even analysis.

Module – IX: Food Packaging and Marketing, Procurement of raw materials, purchasing, processing, packaging and labeling, Marketing – Techniques, pricing and cost control, labour saving devices, personal hygiene measures adopted in food processing industries, Total quality management (TQM).

References :

- Prescott, A and Proctor, B.B. (1987), Food Technology, Mc Graw Hill Book Co. , New York.
- Potter, N.W. and Hotchkiss, J.H (1996), Food science 5th edition, C.B.S. Publishers and Distributors, New Delhi.
- Desai, N. (1996).Entrepreneurial development – Principles, Programmes, Policies (Vol I), Formulation Appraisal and Financing (Vol II) and Programmes and Performance (Vol III), Himalaya Publishing House, Bombay.
- Winze, M.D. (1987). Women Entrepreneurs in India, Mital publications, New Delhi, .
- Jayan, Entrepreneurship Development.

Practicals : (Total – 15 hrs.)

1. Development of processed food products for marketing.
2. Visit to any entrepreneurial unit.
3. SWOT (Strength, Weakness, Opportunity, Threats) Analysis.
4. Interaction with any of the women entrepreneur.
5. Market survey.

OPEN COURSE: For Others: HS 1551.7

CATERING MANAGEMENT

Course code:

No. of contact hrs: 3/ week (54)

Internal evaluation: 20%

Lecture Hours : 2/week (36)

External evaluation: 80%

Practical: 1/week (18)

University exams: 3hrs

No. of Credits: 2

Objectives:

To enable students to :

Understand the objectives of different types of food service institutions.

Gain knowledge in menu planning, preparation of recipes in large scale and serving and in food costing.

Module – I : Food service industry – Scope of hospitality industry, different categories of hotels and their objectives.

Module – II : Menu Planning –The primary control of food service -Types of menu -A la' carte, Table d' hotel and cyclic factors affecting menu planning, menu presentation, pricing and evaluation.

Module – III : Purchasing – Procurement, Qualities of an institutional buyer, product selection, specification, methods of purchasing and purchasing process.

Module – IV : Receiving and Storage – Receiving – Delivery methods, delivery procedure and receiving procedure. – Storage – Types of storage (dry storage and cold storage)
Module – V : Standardization of Recipes – Standardization and portion control

Module – VI : Quantity food production and quality control – Objectives of food production, methods of production, product standards and product control – HACCP. Unit

Module VII : Distribution and Service of food – Types of food service – waiter service, self service and vending.

Module – VIII : Budget – Steps in budget planning, budgeting concept, break even analysis of food budget, food costing and food cost control.

Module – IX : Food sanitation and Hygiene – Hygiene systems – personal hygiene, equipmental hygiene, work area hygiene and commodity hygiene, cleaning and disinfection.

Practicals :

- Standardization of ten selected recipes used in food service institutions and quantity food production of any two items.

References :

- Mohini sethi and Surjeet.M.Malhar, (1996). “ Catering Management – an integrated approach “, Wiley Eastern ltd. , Mumbai, 2nd edition reprinted.
- Marian.C.Spears, (1995). Food service organization, 3rd edition, Prentice Hall Inc. , USA.
- West and Woods, (1994). Introduction to food service, Mac Millan Publishing Company, New York, 7th edition, .
- Odder Cesarani and David Fosket, (2003). Theory of Catering, Odder and Stoughton, London, 10th edition.
- Odder Cesarani and David Fosket, (2003). Food and Beverage service, London, 10th edition.

OPEN COURSE: For Others: HS 1551.8

NUTRITION FOR HEALTH

Course code:

No. of contact hrs: 3/ week (54)

Internal evaluation: 20%

Lecture Hours : 2/week (36)

External evaluation: 80%

University exams: 3hrs

No. of Credits: 2

Objectives:

To enable students to :- Understand the role of nutrition in health.

Module – I : Concept of health, its dimensions-physical wellbeing, mental and emotional wellbeing, social wellbeing, spiritual wellbeing and positive health

Module-II : Food-What is food, Functions of food-physiological function, psychological function, socio cultural functions, Functional classification of food-Body building, energy giving, protective and regulatory.

Module-III : Introduction to nutrition, what is nutrition, signs of good nutritional status, signs of poor nutritional status.

Module-IV: what are nutrients: Proteins-classifications, complete and incomplete proteins, functions, sources, RDA, deficiencies

Module-V: Carbohydrates-Classifications, Functions, Sources, RDA

Module- VI: Lipids: Classification, functions, sources, RDA

Module VII: Vitamins, Fat soluble vitamins-Vitamin A, D, E&K- Functions, sources, RDA, Deficiency, Hypervitaminosis

Module VIII: Water soluble vitamins-Thiamine, Riboflavin, Niacin, Vitamin B12, Folic acid, Vitamin C-Function, sources, RDA, deficiency

Module IX : Minerals, Calcium, Iron, Sodium, Potassium, Iodine-Functions, Sources, RDA, deficiency.

Module X: Water , functions of water, Role of fiber in the diet

Module XI:What is balanced diet, Basic five food groups, Meal planning, principles of meal planning

Module XII: ICMR, NIN, Reference man , Reference woman, RDA, factors affecting RDA

References :

- Dietary guidelines for Indian (2003). National Institute of Nutrition (NIN), Indian council of Medical Research, Hyderabad.
- Krause, M.V. , Humeher, M.A. , (2004). Food, Nutrition and Diet therapy, 11th edition. W.B. Saunders Company, Philadelphia, London.
- Srilekshmi, B..(2002). Dietetics 4th ed. , New Age International Pvt. Ltd., New Delhi.

- Gopalan, C. , Rama Shastri, B.V., and Balasubramanian. (2004).Nutritive value of Indian Foods, National Institute of Nutrition (NIN), Hyderabad.
- Swaminathan, M., (2003). Hand book of Food and Nutrition, The Bangalore Printing and Publishing Co. Ltd, Bangalore

OPEN COURSE: For Others: HS 1551.9

PERSONALITY AND SOFT SKILL DEVELOPMENT

Course code:

No. of contact hrs: 3/ week (54)

Internal evaluation: 20%

Lecture Hours : 2/week (36)

External evaluation: 80%

Practical: 1/week (18)

University exams: 3hrs

No. of Credits: 2

Objectives:

- To develop all round personalities with a mature outlook to function effectively in different circumstances.
- To develop effective communication (Spoken and written) and presentation skills.
- To develop self effectiveness by mastering interpersonal skills and leadership skills.
- To get acquainted with the need, competencies, skills and motivation of self empowerment and enhancement.

Module I Personality – Meaning of Personality, The personality pattern, individuality, persistence in personality, change in personality, some important personality determinants, level of adjustment, Hazards in personality development.

Module II Soft Skills : Meaning, IQ, EQ, different soft skills, soft skills suitable for various social roles.

Module III : Development of Soft skills : How to identify self skills, Development of new skills, Motivation and desire, modifying/ improving your skills.

Module IV : Social skills : Co-operation, group participation, team skills, leadership, interpersonal skills.

Module V : Emotional Skills: motivational skills & conflict management

Module VI : Personal Skills : Meaning and explanation, courtesy, honesty, reliability, adaptability, dependability, healthy habits, personal energy, analytical ability, personal integrity, motivational skills, personal chemistry, common sense, grooming, self confidence, self effectiveness, honesty, ability to measure, self assessment / rating, motivation for improvement, methods of improvement.

Module VII : Management Skills : Management of resources, time, money & energy, decision making , assertiveness, negotiation, endurances.

Module VIII Communication : Verbal Communication, rate of speech, pitch, tone, clarity of voice, language and vocabulary, eye contact, E-learning, computer skills, safety on internet, writing skills, presentation skills, public speaking, barriers for effective communication, telephone etiquetee, cross cultural communication, effective presentation – clarity, brief, relevant, power point, OHP.

Related Experience

- Preparing C.V.
- Prepared for self introduction, group discussion, interactive session, facing and interview, power point presentation.
- OHP presentation
- Wiring letter – formal and informal
- Practice face to face dialogues, conversation, presentation, telephone etiquette, nock interviews.

References

- Personality Development. Hurlock, E.B. Tata Mc GrawHill, New Delhi.
- Fundamentals of modern psychology. Banerjee J.C., Allied Publishers Pvt.Ltd., Calcutta
- Motivation and Personality. Maslow, A.H. Pearson Education India.

Audit courses : Hs Audit 001

Zero credit courses

EMBROIDERY

Focus

Though garment making is popular, embellishing certain part of garments enhances the beauty and appeal to the items prepared. Embroidery can play a vital role in upgrading the appearance and value of the products both in textile and clothing forms.

Objectives:

- To develop taste in embroidering
- To impart skill in simple and machine embroidery

Theory

Module: I Fundamentals of embroidery –techniques, design, colour combination, use of different threads.

Module: II embroidery stitches – types, suitability etc.

Module: III Study of the types of various contemporary embroideries like, shadow work, cutwork, drawn thread work, smoking, appliqué work---- etc

Practical

Preparation of three Consumer items using contemporary embroidery techniques.

Machine embroidery samples

Audit courses : Hs Audit 2**DYEING AND PRINTING****Objectives**

To enable the students to

- Impart knowledge pertaining to basic principles of design.
- Help to develop creativity in designing through the principles of design.
- Create awareness in use of different techniques of colouring techniques of clothing textiles through the use of different dyes.

Module: I Difference between dyeing and printing

Module: II A brief study of different types of dyes and their capability to different fibres.

Module: III Styles of dyeing –Direct, Resist and Discharge styles involving varying dyed effects.

Module: IV Fibre, yarn and fabric dyeing.

Practicals

- Simple yarn dyeing
- Identification of dyeing
- Tie and dye techniques
- Batik
- Block printing

Audit courses: Hs Audit 3

Zero credit courses INTERIOR AND EXTERIOR DECORATION

- A. Design – elements of design- colour qualities – colour schemes-
- B. Accessories – Picture mounting – Glass painting – ceramic painting-
- C. Flower arrangement (different styles) –Bouquet making – gardening and land scaping

Audit courses Hs Audit 4

Zero credit courses CRAFT WORK

- A. Soft toy making
- B. Knitting
- C. Crocheting
- D. Tatting

Audit courses: Hs Audit 5

Zero credit courses BAKING

- A. Cakes
- B. Cookies
- C. Bread
- D. Piza
- E. Puffs
- F. Puddings

Audit courses:Hs Audit 6

Zero credit courses CRAFT WORK

- Fabric painting –
- Embossing-
- Ornament Making –
- Different methods of surface enrichment

Any additional courses can be planned, related to core and open courses by parent department according to the demand.