

**ST. TERESA'S COLLEGE, ERNAKULAM**  
**(AUTONOMOUS)**



**CURRICULUM DESIGN 2015**

**(Choice Based Credit Semester System)**

**For**

**UG PROGRAMME IN HOME SCIENCE**  
**(2016 Admission onwards)**

## **CURRICULUM**

### **GRADUATE ATTRIBUTES**

- Expose students to have pragmatic skills that reinforces life skill concepts and integrates them with activities to enhance learning
- Assist to develop personal and professional skills
- Orient students to enhance entrepreneurial competencies
- Equip the students to comprehend the everyday life scientifically.
- Facilitate students to apply the acquired knowledge base in improving the standards of life
- Enable the learners to employ acquired knowledge from “lab to land”

### **Preamble**

Home science is a multi-disciplinary course that gives students exposure to life lessons and skills which give them confidence to face the world as informed citizens. Home Science course is intended to prepare students to adapt adequately to the changing world and meet these challenges with confidence. It promotes individual personality development, professional skills and gives insight into home and family living. The course also opens up a wide range of opportunities for today's career women.

### **Curriculum Design**

HOME SCIENCE comprises of five branches as follows:

1. Food Science, Nutrition and Dietetics
2. Child Development/ Human Development and Family Studies
3. Home management /Family resource management and Interior Designing
4. Textile Science, Clothing and Fashion Designing
5. Home Science and Extension Education

**Home Science** offers a wide range of subjects at the under graduate level, hence it forms a basis for a variety of courses after graduation

### **Eligibility**

Candidates shall be required to have passed the plus two or equivalent examination with Biology and Chemistry subjects.

Those who have studied Home Science at plus two level will also be considered.

## **Context of the UG programme in Home Science**

The UG programme in Home Science includes

(a) *Common Courses*, (b) *Core Courses*, (c) *Complementary Courses*, (d) *Open Courses* and (e) *Project*.

No course shall carry more than 4 credits. The student shall select any Choice Based Course offered by the Department which offers the core courses, depending on the availability of teachers and infrastructure facilities, in the institution. Open course will be offered in any subject and the student shall have the option to do courses offered by other Departments in the fifth semester.

**Programme Structure and Credit**

TOTAL CREDITS-120

**Semester I****Total Credits 20**

No	Course Title	Hrs/ Week	Credits
1	Common Course -English - 1	5	4
2	Common Course -English - 2	4	3
3	Common Course 3-Second Language – 1	4	4
4	<b>Core Theory - I Microbiology and Physiology</b>	2	2
5	<b>Core Practical - I Microbiology and Physiology</b>	2	1
6	1st Complementary Course- Chemistry I	2	2
7	1 <sup>st</sup> Complementary Course -1 Chemistry Practical I	2	1
8	2 <sup>nd</sup> Complementary Course -Zoology I	2	2
9	2 <sup>nd</sup> Complementary Course Practical- Zoology I	2	1
	Total	25 hrs	20

**semester 2****Total Credits 20**

No	Course Title	Hrs/ Week	Credits
1	Common Course 4- English 3	5	4
2	Common Course 5- English 4	4	3
3	Common Course 6- Second Language -2	4	4
4	<b>Core Theory Food Science</b>	2	2
5	<b>Core Practical - 2- Food Science</b>	2	1
6	1 <sup>st</sup> Complementary Course Chemistry II	2	2
7	1 <sup>st</sup> Complementary Course Chemistry Practical II	2	1
8	2 <sup>nd</sup> Complementary Course -Zoology II	2	2
9	2 <sup>nd</sup> Complementary Course Practical –Zoology II	2	1

**Semester 3****Total Credits 20**

<b>No</b>	<b>Course Title</b>	<b>Hrs/ Week</b>	<b>Credits</b>
1	Common Course 7- English 5	5	4
2	Common Course 8- Second Language 3	5	4
3	<b>Core Theory - 3 Child development and Family Interactions</b>	3	3
4	<b>Core Practical -3 – Child development and Family Interactions</b>	2	1
5	1 <sup>st</sup> Complementary Course - Chemistry III	3	3
6	1 <sup>st</sup> Complementary Course Practical -Chemistry III	2	1
7	2 <sup>nd</sup> Complementary Course -Zoology III	3	3
8	2 <sup>nd</sup> Complementary Course Practical -Zoology III	2	1
	<b>Total</b>	<b>25 hrs</b>	<b>20</b>

**Semester 4****Total Credits 20**

<b>No</b>	<b>Course Title</b>	<b>Hrs/ Week</b>	<b>Credits</b>
1	Common Course -9 English -6	5	4
2	Common Course -10 Second language 4	5	4
3	<b>Core Theory - 4-Interior decoration</b>	3	3
4	<b>Core Practical - 4 Interior decoration</b>	2	1
5	1 <sup>st</sup> Complementary Course – Chemistry 4	3	3
6	1 <sup>st</sup> Complementary Course - Chem. Practical-4.	2	1
7	2 <sup>nd</sup> Complementary Course - Zoology -4	3	3
8	2 <sup>nd</sup> Complementary Course- Practical.-Zoology -4	2	1
	<b>Total</b>	<b>25 hrs</b>	<b>20</b>

## Semester 5

Total Credits 20

No	Course Title	Hrs/ Week	Credit
1	Core Theory-5 Resource Management Practical -5	3 3	3 1
2	Core Theory 6- Human Nutrition and Biochemistry Practical -6	3 2	3 1
3	Core Theory- 7 Textile Science Practical -7	3 2	3 1
4	Dynamics of Core Theory Extension Practical -8	3 2	3 1
5	Open Course (For other streams) Life Skill Strategies and Techniques.	4	4
Total		25 hrs	20

Total Credits 20

## Semester 6

No	Course Title	Hrs/ Week	Credits
1	Core Course -9- Human Psychology Practical 9	3 2	3 1
2	Core Course – 10 Clinical Nutrition and Dietetics Practical-10	3 3	3 1
3	Core Course- 11 Fashion Designing and Apparel Production Practical-11	3 3	3 1
4	Core Course -12 Mass Communication and Journalism Practical-12	3 2	3 1
6	Core Course Choice based Women Entrepreneurship	3	3
7	Project	nil	1
Total		25 hrs	20

#### **4. Assessment**

The evaluation of each course shall contain two parts such as Internal or In-Semester Assessment (IA) and External or End-Semester Assessment (EA). The internal grade awarded to the students in each course in a semester shall be published on the notice board at least one week before the commencement of end semester examination. The evaluation of all components is to be published and is to be acknowledged by the candidate.

There will be Examinations at the end of each semester for both theory and Practical with duration of 3 hrs. Project evaluation and Viva-voce will be conducted at the end of the programme only.

##### **(i) Evaluation and Mark distribution**

###### **(a) External: Internal Ratio**

60:40 - For courses with practical

###### **(b) Distribution of internal marks:**

###### **For courses without practical (for Odd and Even Semesters)**

- Attendance - 5 marks
- Assignment - 5 marks
- Test paper - 10 marks
- Total - 20 marks**

###### **For courses with practical**

###### **Odd semesters**

- Attendance - 3 marks
- Assignment - 2marks
- Test paper - 5marks
- Total - 10 marks**

###### **Even semesters**

###### **For Theory Paper**

- Attendance - 3 marks
- Assignment - 2marks
- Test paper - 5marks
- Total - 10 marks**

## **For Practical**

- Attendance - 4 marks
- Record - 10 marks
- Lab involvement - 6 marks
- Total - 20 marks**

## **Attendance Evaluation**

### **Distribution of marks for attendance- as per University rules**

- Minimum attendance -75%
- Maximum leave that can be availed -22 days out of 90
- Union members/ sports students –attendance can be given on official letter of request from deans to the concerned teacher
- NCC/ NSS/ participants in youth festival –attendance– letter of request from teacher in charge/ dean after consultation with the principal
- 50% attendance for the days of absence up to a maximum of 10 days per semester may be granted on medical grounds. Proper medical certificate should be submitted for the same.
- Attendance may be given for exceptional cases on remittance of a fine of Rs. 10,000/- (Rupees ten thousand only) and on recommendation of the Academic Council.

### **Assignment/seminar/viva**

- 1<sup>st</sup> to 4<sup>th</sup> semesters - Assignments only
- 5<sup>th</sup> semester - Assignment/ seminar/ viva
- 6<sup>th</sup> semester – Seminar only

### **Test paper**

- Average mark of two internal examinations. No retests will be conducted.
- In exceptional cases with valid reasons, retests will be allowed with a penalty of Rs.1000/-(Rupees one thousand only) per paper.

### **Project**

- All students have to start the project in the **FIFTH** semester and submit during the **SIXTH** semester.
- The project work shall be completed working outside the teaching hours.
- It shall be carried out under the supervision of a teacher in the concerned department.



- The project certified by the supervising teacher should be submitted during the external practical examination at the end of sixth semester followed by viva voce.

### Open course

- All students are expected to do the open course. Each department offer a choice based core course and students have the freedom to select the course of their choice.

### Grace marks

- As per university norms and regulation
- **COURSE DESIGN – CORE COURSES**

SEMESTER	TITLE OF PAPER	THEORY/PRACTICAL
I	Microbiology and Physiology	Theory
II	Food Science	Theory and Practical
III	Child Development and Family Interactions	Theory and Practical
IV	Interior Decoration	Theory and Practical
V	Resource Management	Theory and Practical
	Human Nutrition and Biochemistry	Theory and Practical
	Textile Science	Theory and Practical
	Dynamics of Extension	Theory and Practical
	Life skill Strategies and Techniques (Open Course)	Theory
VI	Human Psychology	Theory and Practical
	Clinical Nutrition and Dietetics	Theory and Practical
	Fashion Designing and Apparel Production	Theory and Practical
	Mass Communication and Journalism	Theory and Practical
	Women Entrepreneurship	Theory

## Semester I

**Name of the Course: HUMAN PHYSIOLOGY AND MICROBIOLOGY**

**Duration: One semester 4:0**

**Total Lecture Hours: 72 hrs**

**Aim of the course:** To enable the students to obtain a better understanding of the principles of nutrition through the study of physiology, comprehend the structure and functions of various organs of the human body. Identify the economic importance of microorganisms. Understand the principles of various methods used in the prevention and control of micro – organisms

**Course Overview:** Seeks to give a clear understanding about the basic concepts of human physiology and the essentials of microbiology

### **Syllabus Content**

#### **Module 1: Basic aspects of Physiology and Blood**

Cell as a unit of the body, Cell organelles and their functions, Cell theory, Cell division- mitosis and meiosis, Tissues- types structure and functions, Composition and functions of Blood, Coagulation, thrombosis, Red Blood Corpuscles, White blood Corpuscles, Platelets- Structure, function and development .Blood volume, haemolysis, anaemia, blood transfusion and blood groups. (12 hours)

#### **Module 2: Cardiovascular and Respiratory System**

Structure of heart and Blood vessels, Special functional tissues of the heart, Systemic and Pulmonary circulation, Properties of cardiac muscles, Cardiac cycle, Cardiac output, Blood pressure and hypertension

Structure of the respiratory system, Functions of the organs of respiratory system, Physiology of transport and exchange of oxygen and carbon dioxide, regulation of respiration (12 hours)

#### **Module 3: Digestive and Excretory System**

Major organs of the digestive system, Functions of the organs of digestive system, digestion and absorption of food

Structure and functions of Kidney and Nephron, formation of urine, composition of urine, Role of kidneys in homeostasis, Structure and function of skin (12 hours)

## **MICROBIOLOGY**

### **Module4: Basic concepts of microbiology, factors affecting growth of microbes and culture techniques**

Classification of microorganisms, important microorganisms- Structure and economic importance of microorganism-bacteria, moulds (Rhizopusnigricans, Yeast, virus(any animal virus))

Definition and methods: Sterilization- heat, light, radiation, desiccation, filtration. Disinfection- acids and alkalies, salts, halogens, phenols, dyes, oxidising agents, alcohols, sulphonamides, antibiotics.

Factors affecting the growth of micro-organisms, growth characteristics, spore formation  
( 12 hours)

### **Module 5: Infection, Resistance and Immunity**

Sources of microorganisms, Transmission of infection, bacterial infections in man- typhoid, Pneumonia, Viral infections – Hepatitis, Aids

Natural defences of the body—primary and secondary defence mechanisms. Immunity types, immunization followed for various diseases. (12 hours)

### **Module 6: Food Microbiology, Food Safety and regulations**

Contamination of food, Factors affecting food spoilage, food poisoning-bacterial- Salmonella food poisoning, Staphylococcal food poisoning, Botulism

Basic concepts of food safety, Food Standards, (PFA, FPO, BIS, Agmark, Consumer Protection Act), HACCP-Food Quality Assurance System  
(12 hours)

### **Related Experiences:**

1. Estimating haemoglobin content of blood (Using Haemocytometer)
2. Determination of Blood Group and Rh factor
3. Economic importance of microorganisms in traditional foods.

## **Learning Resources:**

1. Best CH and Taylor (1989). The Human Body. Published by Asia, New Delhi, National Book depot, Mumbai, India.
2. Bijlani R.L.(1995). Understanding Medical Physiology. Published by Jaypee Brothers Medical (P) Ltd, New Delhi, India
3. Winwood (1988). Sear's Anatomy and Physiology for nurses. Published by Edward Arnold, London
4. Wilson (1989). Anatomy and Physiology in Health and Illness. Published by Churchill Livingstone, Edinburgh
5. Chatterjee C.C. (1988). Text book of Medical physiology. Published by W.B, London
6. Pearce Evelyn (1992). Anatomy and Physiology for Nurse. Published by Faber & Faber Ltd, London
7. Vidya Ratan, (2004), Hand book of Human Physiology, 7thEdition, Jaypee Brothers Medical Publishers (P) Ltd, New Delhi.
8. Joshua A.K., (1994), Microbiology, Popular book Depot Publishers.
9. Anathanarayan, R and Panicker C.K.J, Text book of Microbiology, 8<sup>th</sup> edition 2009, Universities Press (India) pvt. Ltd., New Delhi.
10. James M. Jay (1986) Modern Food Microbiology, 3<sup>rd</sup> Edition, VanNostrand, New York.
11. Frazier W.C and Westhoff D.C (2008), Food Microbiology, 1st edition, CBS Pub.

## Semester II

**Name of the course: FOOD SCIENCE**

**Total lecture hours: 2 hrs/week (36 Hrs./Sem. )**

**Credit: 4**

**Aim of the course:** Enable the student to

- Obtain knowledge of different food groups, nutritive value and importance in diet.
- Study the different methods of cooking foods
- To understand the composition, chemistry of foods and their applications in food preparations

### **Course overview and context:**

This course emphasizes on understanding the composition of foods, nutrient content, impact of cooking on them, cooking and preservation techniques, principles and the recent advances in the field of food science to enable the students to plan diet for healthy life style, form basis for higher studies in the field of food science and nutrition and equip them for jobs in food industries and dietary departments of various institutions.

### **Syllabus Content**

#### **Module 1: Food groups and Food preparation(10 hrs)**

**Food groups:** Functions of foods, food groups (Basic food group system – (ICMR) (2hrs)

**Food preparation:** Objectives, Methods of cooking- moist heat, dry heat and fat as media of cooking, merits and demerits of various methods(4hrs)

**Food Preservation:** Principles and methods of food preservation (3hrs)

**Developments in the field of food science;** Genetically modified foods, organic foods, functional foods (1hr)

## **Module 2: Study of macronutrients (15 hrs)**

### **Carbohydrates (5 hrs)**

Definition, composition, classification, starch – structure, effect of cooking, Stages of sugar cookery and its applications. Role of carbohydrates in food preparation

### **Proteins (5 hrs)**

Structure, classification- chemical and nutritional (complete, partially complete, incomplete), structure and classification (essential and nonessential), denaturation, food sources of proteins- plant, animal and non-traditional proteins- single cell(yeast), leaf proteins, whey protein, textured vegetable protein, functional properties of proteins in food applications.

### **Lipids (5 hrs)**

Definition, composition, classification. Lipids in foods(visible and invisible), fatty acids(saturated, unsaturated, essential, trans, cis), rancidity- types, factors leading to rancidity, prevention, hydrogenation, applications of lipids in food preparations.

## **Module 3: Study of Foods (21 hrs)**

### **Cereals (3 hrs)**

Basic structure of a cereal grain, nutritive value, common cereals and millets in India, gluten formation, factors affecting , parboiling its merits and demerits, role of cereals in cookery.

### **Pulses (3 hrs)**

Nutritive value and health benefits , germination and fermentation, advantages, anti nutritional factors(trypsin inhibitors, lathyrism). Common pulses used in India.

### **Milk and milk products (3 hrs)**

Composition and nutritive value, pasteurisation, and homogenisation, advantages; Types of milk and milk products

### **Egg (2 hrs)**

Structure, composition and nutritive value, deterioration in egg quality, evaluation, egg white foaming, stages, factors affecting, culinary role of eggs, designer eggs, speciality eggs

**Meat (2 hrs)**

Structure, composition and nutritive value, rigor mortis, effect of cooking on meat, types of meat and products.

**Fish (2 hrs)**

Classification, nutritive value, fish spoilage and preservation

**Vegetables (2 hrs)**

Classification, nutritive value, vegetable pigments, effects of acid and alkali, enzymatic browning, methods of prevention, vegetable cookery- purpose, conservation of nutrients, selection and storage

**Fruits (2 hrs)**

Classification, nutritive value, pigments, effects of acid and alkali, flavour components, organic acids and enzymes, changes in fruits during ripening, enzymatic browning, methods of prevention, antioxidant role.

**Spices (2 hrs) Major spices of India****FOOD SCIENCE PRACTICALS**

**Teaching hours/sem: 36 Hrs./Sem.**

**Credit: 1**

1. Grouping of foods (2 hrs)
2. Gelatinization temperatures of various types of starches (6 hrs)
3. Stages of sugar cookery (3 hrs)
4. Evaluation of gluten content in a flour (2 hrs)
5. Components of an egg (2 hrs)
6. Stages of egg white foam formation (3 hrs)
7. Changes of meat during cooking (2 hrs)
8. Effect of cooking on vegetable pigments (2 hrs)
9. Enzymatic browning, Methods to prevent browning in fruits (6 hrs)
10. Non enzymatic browning (2 hrs)
11. Food preservation techniques (5 hrs)

## **Core Readings**

1. Benion M (1995) Introductory Foods, 10th Ed, Prentice Hall, USA
2. Gopalan. C. , Ramasastry, S.V. And Balasubramanium. S.C. Nutritive Value Of Indian Foods, National Institute Of Nutrition, Hyderabad, 2008
3. Shakuntala Manay, N. Shadaksharaswamy M, Food Facts and Principles, 2nd Edition, New Age International, 2001.
4. Srilakshmi, B, 2002, Food Science, New Age International p) Ltd, New Delhi
5. Swaminathan .M. Advanced Textbook on Food and Nutrition, The Bangalore Printing and Publishing Co., Ltd., 2ndEd, 2003
6. Usha Chandrasekhar (2002), Food Science and its Applications in Indian Cookery, Phoenix Publishing House, New Delhi



## Semester III

**Name of the Course: CHILD DEVELOPMENT AND FAMILY INTERACTIONS (Theory )**

Duration: One Semester

**Total Lecture Hours/sem:54**

**Aim of the course:** To help students understand ways to apply content about Child development to the real world and improve people's lives and to motivate students to think deeply about their own personal journey through life and better understand who they were, are, and will be.

**Course Overview and Context:** Three broad goals guide the study of Child Development: the description, explanation and optimization of development. Child development is an interdisciplinary field devoted to the study of human constancy and change from conception through adolescence to adulthood and old age.

### **Syllabus Content:**

#### **Module 1: The Nature of Child Development**

- Child development - yesterday and today, historical views of childhood, modern study of child development
- Caring for children : Five areas in which children's lives need to be improved, resilience, social policy and children's development
- Developmental processes, periods and issues : Biological, cognitive, socio emotional processes, domains of development and issues in development
- Science of child development : Importance of research, an overview of theories related to child development (Psychoanalytic - Freud, psychosocial - Erikson, cognitive – Piaget, Vygotsky, Gardner, behaviouristic – Pavlov, Skinner and Bandura, Ethological – Lorenz, Ecological – Bronfenbrenner )
- Research methods for collecting data: longitudinal and cross sectional research. observation, survey, interview, standardized tests, case study, physiological measures – anthropometry, questionnaire, projective techniques, sociometry, experimental methods.

## **Module 2: Biological Beginnings**

- Genetic foundations of development : Genes and chromosomes, genetic principles, abnormal and gene linked abnormalities, heredity and environment interaction and correlation
- Prenatal development and birth : Course of prenatal development, hazards to prenatal development, complications, prenatal care, birth process – types and methods, assessing the new born, preterm and low birth weight babies, SIDS
- Reproductive challenges and choices : Prenatal diagnostic tests, infertility and reproductive technology, adoption
- Neonate – Characteristics and abilities, adjustments, care, immunization, baby friendly hospital initiative, basic survival reflexes of the new born, bonding

## **Module 3: Development during the life span (Infancy, childhood, adolescence)**

- Bodily growth and change : Pattern of development, principles of growth and development, developmental tasks
- Physical development and health: Development in each stage, illness, nutrition and exercise (childhood obesity). Physical impairments – orthopaedic handicaps  
Brain physiology – Structure and function, neurons, malfunctioning (autism, ADHD). Sleep – sleep/wake cycle, REM, sound sleeping. Play – Importance, types and functions.
- Motor, sensory and perceptual development: Stage wise development, reflexes, gross motor and fine motor development. Sensory and perceptual development – visual, hearing, touch and pain, intermodal perception. Sensory processing disorders
- Cognition : Stages of cognitive development – Sensori motor, preoperational, concrete operational, formal operational. Vygotsky – zone of proximal thought, scaffolding, language and thought. Memory and attention, metacognition. Extremes of intelligence and creativity – gifted, mental retardation and creative children.
- Language : Definition, rule system, how language develops, factors influencing language – biological and environmental. Preschool education/early literacy – objectives, types. Communication disorders and learning disability
- Socio emotional – emotional development over the life span, emotional competence, temperament – goodness of fit, attachment. Social development – functions of friendship, gender and friendship. Social maladjustment and emotional disorders
- Moral and religious development: Stages, prosocial and antisocial behaviour, behaviour disorders in children – types.

- Adulthood (roles and responsibilities, achievement motivation, social cognition, continuing education).

#### **Module 4: Family and society**

- Parenting, methods of handling behaviour problems, habit formation in children. Adapting parenting to development changes in children. Parenting styles and discipline, co-parenting, child maltreatment/abuse. Maintaining relations in family – sibling relationship, parent adolescent relationship.
- Changing family – working parents, children in divorced families, step families, reconstituted families
- Peers – peer statuses, peer rejection and aggression, bullying, mid stage friendship, peer pressure and conformity, clique and crowd, dating and romantic relationship
- Crisis and its effect on family and children – Death, divorce, alcoholism, suicide, financial crisis, infidelity, single/lone parenthood
- Other influences on family and its effect – technology, media:- computers and internet, television, urbanization and globalization
- Need for guidance and counselling.

#### **Module 5: Population education**

- Definition, problems of overpopulation, responsible parenthood, methods of family planning, sex education

#### **Competencies of the course:**

- Develop an understanding of major theories highlighting the facets of child development
- Appreciation of research strategies for investigating child development
- Knowledge of both the sequence of child development and the processes that underlie it
- Develop an understanding of the joint contributions of biology and environment to development
- Understand the interdependency of all aspects of development – physical, cognitive, emotional and social
- Explore the interactions in the family system and portray the changing family and its implication to children's and adolescents' development
- Discuss and characterize children with special needs and their education

## **Learning Resources**

### **Textbook**

- Santrock, J. W. (2013). Child Development. New York: McGraw Hill Publications.
- Berk. L. (2006). Child Development. New York: Allyn and Bacon.
- Bee, H. (1995). The Developing Child. Harper Collins College Publisher.
- Berger, J. M. (2010). Personality , Belmont, CA. Thomson/Wadsworth.
- Sigleman C.K and Rider E.A (2006) Life Span .Thomson Wadsworth.corporation
- Mangal, S. K. (2007). Educating Exceptional Children: An Introduction to Special Education. New Delhi: Prentice Hall of India.
- Heward, W. L. (2000).Exceptional Children: An introduction to special education. New Delhi: Prentice –Hall of India
- Sharma, D. (2003). Infancy and Childhood in India. New Delhi: Oxford Press.

### **References**

- Barnes, C., Mercer, G. Shakespeare. T (2005). Exploring Disability: A Sociological Introduction. Cambridge: UK: Polity Press.
- Grewal, J. S. Early childhood Education Foundation and Practice.
- Journal of Child Development, Wiley publications
- Journal of Early Childhood Education

## **Name of the Course: Child Development - Practical**

No. of hrs/sem:36

Content:

1. Observe and report various developments in a preschool child – Physical, motor, intellectual, emotional and social developments. Plan and prepare activities to facilitate development during early years.
2. Prepare a poster displaying (i) the importance of early childhood education (ii) issues faced by adolescents and carry out an extension activity for parents/teachers.
3. Design a prototype of an educational/indigenous toy for preschoolers and evaluate it.
4. Visit to any one of the following places: (i) Home for the aged (ii) SOS village (iii) Orphanage (iv) institutions for children with special needs
5. Market survey to identify teaching aids to impart readiness skills (reading, writing, arithmetic) for children with learning disability, autism spectrum disorders, visual impairment, hearing impairment).

## **Semester : IV**

**Duration: One semester 4:0**

**Total Lecture hours: 3hrs/week (Per semester : 90 (54 + 36))**

**Credit: 3**

### **Aim of the Course :**

To enable the students to use and understand the elements and principles of design, to develop basic skills for a career option in Interior Designing, to gain the basic knowledge of furniture arrangement and furnishing the residential interior and exterior space.

### **Course Overview and Context :**

The course seeks to cover the basics of art and design, use of colour and its impact in interior, principles of design, home lighting, arrangement of furniture, furnishings and accessories in residential interior and interior and exterior space organization.

### **Syllabus Content**

#### **Module 1 : Art and Design**

**(12 hours)**

Introduction to Interior Designing, Importance of good taste, Concept and objectives of interior decoration. Definition, Types of design, Characteristics and sources of design ; Elements of design-line, shape, texture, colour, pattern, light and space ; Principles of design- proportion, balance, rhythm, emphasis, harmony.

#### **Module 2 : Colour**

**(9 hours)**

Qualities of colour, Prang colour system, Colour harmonies and schemes; Use and effects of various colours, Colour psychology. Application of colour in various rooms

#### **Module 3 : Home Lighting**

**(6 hours)**

Importance of home lighting, types of lighting- natural and artificial - Importance of Natural Lighting for healthy environment ; types of lamps and lighting fixtures for artificial lighting ; Physical and Psychological aspects of lighting, illusion.

#### **Module 4 : Furniture, Furnishing and Accessories**

**(15 hours)**

Furniture requirement for various rooms, guidelines for selection and arrangement of furniture, Classification and selection of soft furnishings, Types of windows, window treatments - curtain styles and top dressing, selection and care of rugs and carpets. Accessories - Classification and their role in interiors, flower arrangement - principles, different styles, and basic shapes, drying techniques and dry flower arrangement, indoor gardening and bonsai

#### **Module 5 : Interior and Exterior Space Organisation**

**(12 hours)**

Space requirement for various activities in various rooms; Size, layout, finishes, storage for living, dining and bed rooms, Principles of space planning; space saving techniques ; Kitchen- types of kitchen, modular kitchen, working areas and work triangle. Objectives and principles of landscape gardening, Types-formal, informal; Styles, Garden components and routine duties in gardening

#### **Learning Resources:**

1. Craig H.T and Rush C.D (1974), Homes with Character, DC Health and Company, Boston
2. Goldstein H and Goldstein V (1982), Art In Every Day Life, Macmillan Company New York
3. Kasu, A (2005) Interior design, Ashis Book Centre, Mumbai
4. Khanna G,(2007) Art of Interior Design, Indica Publishers, Delhi
5. Mike Lawrence and Janeaton (1998), Great Home Decorating Ideas, Anness Publishing Limited, London.
6. PratapRao M. , (2001) Interior Design –Principles and Practice, Standard Publishers and Distributors, N. Delhi
7. Faulkner. R. &Faulkner.S- Inside Today's Home.
8. Swarup, V. (1997), Ornamental Horticulture, Macmilan India Ltd., Chennai

## **INTERIOR DECORATION (PRACTICAL)**

**Total hours/sem : 36**

### **Aim of the Course :**

To develop skill in students to use and understand the elements and principles of design, to develop basic skills flower arrangement, bouquet making and creative arts, to gain the practical knowledge of furniture arrangement and furnishing the residential interior and exterior space.

### **Syllabus Content:**

#### **Module 1. Design and colour (12 hours)**

Application of various types of design, elements of design and principles of designs;  
Application of motif in a design suitable for furnishing / accessories

Preparation of colour charts and application of colour schemes in a design/ room

#### **Module 2. Flower Arrangement and Bouquet making (8 hours)**

Demonstration of basic shapes in flower arrangement, Dry flower arrangement, Ikebana, Artificial flower making and arrangement, Bouquet making .

#### **Module 3. Furnishings (6 hours)**

Curtain Styles : Illustration of various curtain styles, Table setting, Napkin folding.

#### **Module 4. Evaluation of Interiors (2 hours)**

Living room, dining room, bed room, bath room, kitchen etc. (Any 2 rooms)

#### **Module 5. Creative arts (8 hours)**

Creative arts – decorative and functional art, creation of art objects and making wealth out of waste

**A record of the entire practical should be maintained**

### **Learning Resources:**



1. Craig H.T and Rush C.D (1974), Homes with Character, DC Health and Company, Boston
2. Goldstein H and Goldstein V (1982), Art In Every Day Life, Macmillan Company New York
3. Kasu, A (2005) Interior design, Ashis Book Centre, Mumbai
4. Khanna G,(2007) Art of Interior Design, Indica Publishers, Delhi
5. Mike Lawrence and Janeaton (1998), Great Home Decorating Ideas, Anness Publishing Limited, London.
6. Pratap Rao M. , (2001) Interior Design –Principles and Practice, Standard Publishers and Distributors, N. Delhi Faulkner. R. &Faulkner.S- Inside Today's Home.
7. Swarup, V. (1997), Ornamental Horticulture, Macmilan India Ltd., Chennai

## Semester V

**Name of the Course: FAMILY RESOURCE MANAGEMENT**

**Total Lecture Hours/semester: 54 hours**

### **GRADUATE ATTRIBUTES**

- Expose students to have pragmatic skills that reinforces life skill concepts and integrates them with activities to enhance learning
- Assist to develop personal and professional skills
- Orient students to enhance entrepreneurial competencies
- Equip the students to comprehend the everyday life scientifically.
- Facilitate students to apply the acquired knowledge base in improving the standards of life
- Enable the learners to employ acquired knowledge from “lab to land”

### **Aim of the course:**

- Inculcating an understanding in the students about the principles of management and its application in the individual and family context
- Creating awareness among students about management in the family and relationship between other systems in the society
- Assisting students to acquire scientific skills in the management of personal, familial and community resources for successful living
- Convince them of the significance of resource management, decision making and conflict resolving to enhance the quality of life of family and society.
- Motivate in actions needed for protection and preservation of resources

### **Course Overview and Context:**

The course focuses on impart knowledge to the students on resources available to them and train them on its creative and effective use along with motivating them to evolve ingenious uses of the same.

### **Syllabus Content:**

#### **Module 1: Introduction to Management (10 Hours)**

Management Basics – Theory of Management, Steps Involved in the Process of Management – Planning, Organising, Controlling and Coordinating the Plan in Action

and Evaluating, Qualities of a Good Manager

Decision Making –Role of Decision Making in Management, Steps in Decision Making and Methods of Resolving Conflicts in Group Interactions

### **Module 2: Concepts and factors influencing Management (8 hours)**

Factors Motivating Management / Concepts of Management – Values, Goals and Standards, Family Characteristics Influencing Management, Stages of Life Cycle, Types and Composition of Family

Family Resources: Meaning and Classification, Characteristics of Resources, Factors Influencing Resource Management, Means to Optimize Satisfaction in Resource Management.

### **Module 3: Management of Human Resources (14 Hours)**

Management of Time: Time as Resource, Significance of Time Management, Tools and Aids in Time Management such as time norm, time cost, peak load, work curve, Time Schedule – Preparation and Evaluation, Leisure time and its utilisation

Management of Energy: Energy as Resource, Significance of Energy Management, Energy Requirements for Various Household Activities, Work Curve or production curve, Fatigue – Classification, Causative Factors and Alleviating Techniques, Work Simplification – Meaning and Techniques, Mundell's Classes Of Changes

Study of Labour Saving Equipments - Principle, Use and Care of the Equipments Such as Cookers, Mixers and Grinders, Refrigerator, Microwave Oven, Washing Machine and Dish Washers.

### **Module 4: Management of Material Resources (14 Hours)**

Management of Money: Family Income as a Resource – Types of Income, Income Profiles; Methods of handling income, Family Expenditure –Family Budget – Types of Budget, Steps in Making Family Budget, Engel's Laws of Consumption ; Financial Records – Types, Purpose and Advantages ; Savings and Investments – Meaning, Saving Institutions And Schemes, Supplementing Family Income, Family Credit – Types, Sources, Use and Misuse.

Household Fuels: Classification – Solid, Liquid, Gas, Electricity and Solar Energy, Energy Conservation – Importance and significance, Devices/ Techniques for Conservation of Energy, Familiarisation with Renewable Energy Devices (Solar Devices and Biogas)

Waste Management : Types of Domestic Waste, Principles of Waste Management, 5 R's of Waste Management, Waste Minimization, Disposal of Waste, Recycling of

Wastes and Reuse of Waste

### **Module 5: Consumer Education ( 8 Hours)**

Consumer Education – Meaning, Consumer Problems, Rights and Responsibilities of a Consumer, Consumer Aids, Consumer Protection, Consumer Redressal Procedure and Better Buying Practices

### **FAMILY RESOURCE MANAGEMENT –PRACTICAL**

**Teaching hours/sem: 36 hrs**

#### **Course Outline**

#### **1: Management of Time and Energy (8 hours)**

Time schedule: Preparation of time plan for college girl / homemaker and its evaluation, Work study: Determination of working height in vertical and horizontal planes, study of anthropometry and furniture sizes for various activities

#### **2: Management of money and material resources (10 hours)**

**Budget Preparation** - Study of expenditure pattern of your family and preparation of a model family budget / budget suitable for various categories

**Energy Conservation** - Visits to organizations involved with Alternate energy programmes, Study of Devices/ Techniques for Conservation of Energy / Renewable Energy Devices (Solar Devices and Biogas)

**Waste Management** - Study of waste management practices in your house/locality, Visit / Report on Integrated Waste Management Projects and organizations providing assistance

#### **3: Consumer Education (6 hours)**

Development and evaluation of Labels and Advertisements for consumer products, Visit / Reports on Organizations / NGO working for consumer education, Preparation of a consumer complaint for any consumer product

#### **4 : Event Management (12 hours)**

Planning, organizing, implementing and evaluating a group activity (Party / Exhibition / tour) Or Residence stay for a week incorporating principles of management

**(A record of the entire practical should be maintained)**

## **Learning Resources and References**

### **Textbook**

Deacon R.E. and Firebaugh F.M.( 1998) Family Resource Management- Principles and application, Roy Houghton Mifflin Company, N. Delhi

Gross, I.H. and Crandall, E.H. (1967) Management for Modern Families, Sterling Publishers Ltd., N. Delhi

Moorthy G. (Ed.), (1985) Home Management, Arya Publishers, N. Delhi

Mullick, P. Text book of Home science, Kalyani Publishers, Ludhiana

Nambiar, R. K. Text book of Environmental Studies. SCITECH Publication, New Delhi.

Nickell, P and Dorsey, J. M. (1997) Management in Family Living. Wiley Eastern Ltd., Bangalore

Swanson S.S. (1981) Introduction to Home Management, McMillan Publishing Company, N. York

Varghese, M. A, Ogale, N. N and Srinivasan, K. (2001), Home Management, New Age International (P) Ltd. New Delhi.

Varghese, M.A. Household Equipment Manual, S.N.D.T Women's University.

**Name of the Course: HUMAN NUTRITION AND BIOCHEMISTRY**

**Total Lecture Hours/sem:54 hrs**

**Aim of the course:**

To enable the students to

- To obtain an insight into the metabolism and functions of macro and micronutrients in the human body
- To understand the role of nutrition in different stages of the life cycle
- To enable the students to plan menus in accordance with basic concepts for nutrition

**Course Overview and Context:**

To understand the physiological role of nutrients in the human body, role of nutrition in different stages of life cycle and plan menus following the principles of nutrition

**Module I Introduction to Human Nutrition (5hrs)**

The Indian Nutrition Scenario, Food Security Issues, Future challenges for nutrition research, Recommended Dietary Allowances -Definition, Factors affecting RDA, RDA for different nutrients, Indian reference man and woman. Basic five food groups, Balanced diet, food guide pyramid, dietary guidelines for Indians

**Module II Nutritional Biochemistry****Energy(5 hrs)**

Definition of energy requirements, components of energy expenditure. BMR-definition, Measurement of BMR, factors affecting BMR and measurement, thermic effect of food and energy expended in physical activity. Methods of estimating energy expenditure, direct, indirect calorimetry, factorial method, DLW technique, RDA.

**Module III Macronutrients and their metabolism(15 hrs)**

**Carbohydrates-** classification, functions, digestion, absorption and transport, metabolism, types of dietary fibre, physiological and metabolic effects of dietary fibre

and potential health benefits (6 hrs)

**Proteins** –Classification of proteins and amino acids, functions, digestion, absorption and transport, metabolism of protein, methods of evaluating protein quality, improvement of quality of protein in the diet. Requirements ( 4 hrs)

**Lipids** –Composition, structure, function, classification, essential fatty acids, trans fatty acids, digestion, absorption and transport, fat metabolism, requirements, choice of cooking medium in the context of n-3, n-6 fatty acid ratio in Indian diets. (3 hrs)

**Water** -Functions, distributions and compartments of body water. Water balance, Requirements of water (2 hrs)

#### **Module IV Micronutrients (15 hrs)**

**Vitamins-** Fat soluble vitamins- A, D, E and K- functions, deficiency, food sources, and requirements

Water soluble vitamins - B complex and C - functions, deficiency, food sources, and requirements (12hrs)

#### **Minerals**

Macrominerals –Functions, food sources, deficiency and requirements of calcium, phosphorus, sodium, potassium.

Microminerals – An introduction, functions, food sources, deficiency and requirements of iron, iodine, fluorine and zinc.(3 hrs)

Factors affecting bioavailability of minerals.

#### **Module V Nutrition through Lifecycle(14 hrs)**

Principles of Meal Planning

#### **Nutrition in Infancy**

Growth and development, Nutritional requirement, advantages of breast feeding, weaning and supplementary foods

**Nutrition in Preschool Age** - Physiological development and food intake, development of food habits, nutritional requirement, diet plan.

**Nutrition in School Going Age**-Growth pattern, nutritional requirements, packed lunch.

**Nutrition in Adolescence**-Growth and development, nutritional requirement, factors influencing dietary pattern of the adolescent, Eating disorders.

**Nutrition in Adults** –Nutritional requirements and dietary guidelines.

**Nutrition in Pregnancy** -Physiological changes during pregnancy, importance of nutrition in pregnancy, nutritional requirements, diet, complications in pregnancy- gestational diabetes, toxemia, effect of maternal malnutrition on foetus.

**Nutrition in Lactation**- Nutritional requirements, human milk composition and importance, lactogogues.

**Nutrition in Old Age**-Changes during old age, nutritional requirements, dietary modifications.

## **HUMAN NUTRITION AND BIOCHEMISTRY PRACTICALS**

Total lecture hours/semester : 36 hrs

### **Aim of the course:**

For quantitative and qualitative estimation of selected macro and micronutrients.

To be famailiar with preparation of general recipes.

To be familiar with menu planningof normal diets for different stages in the lifecycle and preparation and service of the diets

### **Syllabus content**

#### **I. Food Analysis (10 hrs)**

1. Qualitative tests for carbohydrates, protein, calcium, phosphorus and iron
2. Quantitative tests for
  - a. Lactose in milk
  - b. Vitamin C in food stuffs
  - c. Calcium in foods

#### **II. Basics of Food Preparation(9 hrs)**

1. Record the weight of 1 cup/1 tbsp/1 tsp of different types of food stuffs
2. Record the ratio of raw to cooked volume of cereals, pulses, vegetables
3. Basic Preparations –main dish, side dish, snacks, desserts

#### **III. Normal Nutrition(17 hrs)**

**Planning, preparing and serving diets for:**



1. Preschool child
3. School going child
4. Adolescents
5. Adults (Sedentary man and woman, labourer)
6. Pregnant woman
7. Lactating woman
8. Old age( moderately active man/woman)

### **Learning Resources**

#### **Textbooks**

Srilakshmi B (2008), Nutrition Science, 3rd Ed, New Age International (P) Ltd. Publishers, New Delhi.

•Bamji M.S., Krishnaswamy, K., and Brahmam (2009), G.N.V., Textbook of Human Nutrition, 3 rd Ed., Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi

•Park, K. Park's Textbook of Preventive and Social Medicine (2005), 18th Ed M/s Banarsidas Bhanot Publishers, Jabalpur, India.

•Swaminathan, M, Principles of Nutrition and Dietetics, (2001), The Bangalore Printing and Pub.Co. Ltd. Bangalore.

•C. Gopalan, B.V. Ramasastri and S.C. Balasubramanian (2007) Nutritive value of Indian Foods. NIN, ICMR Hyderabad 500007, Nutrient Requirements and Recommended Dietary Allowances for Indians – ICMR Publications

### **Semester V**

**Name of the course: TEXTILE SCIENCE**

**Total Lecture Hours/sem: 54 hrs**

**Aim of the course:** To gain knowledge about Textile fibres and their uses; To develop an understanding about various kinds of traditional and modern fabrics, their structure and the utility. To impart knowledge about Textile dyeing and printing; To develop skill in understanding textiles available in the market

**Course Overview:** Provides knowledge regarding textile fibres, selection and use of textile fabrics

## **Syllabus Content**

### **Module1: Study of Fibres**

Definition, classification of textile fibres, properties and uses of Textile Fibres: - Cotton, Linen, Wool, Silk, Rayon, Nylon, and Polyester; Methods of identification of textile fibres.

### **Module:2 Study of Yarns**

Definition, Processes of making Fibre in to yarn (cotton and woollen systems): - Mechanical (Ring and Open End spinning) and chemical. Classification of yarn: - type, count, twist, number of parts, novelty yarns, textured yarn and bi-component yarn.

### **Module:3 Fabric Structure**

Weaving: - Preparation of yarns for weaving, loom- parts and its operations, Modern shuttle less looms- air jet and projectile loom.

Weaves:- Basic weaves- plain, twill, satin and its variations. Fancy weaves- pile, dobby, jacquard, leno, clip spot, lappet, double cloth, and crepe.

Characteristics of woven fabrics: Yarns-warp and weft, grain, thread count, balance and selvages.

Other methods of making fabrics:-knitting, felting, braiding, netting, lace making and bonding.

### **Module:4 Dyeing ,Printing and Finishes**

Dyes and dyeing:- classification of dyes- natural, artificial-acid, basic, direct, sulphur, vat naphthol, disperse and mordents.

Stages of dyeing - stock, yarn, piece, cross, and union

Printing:-Direct-block, roller and screen, discharge, resist- tie and dyeing and batik.

Finishes-definition, purpose, classification and types-singeing, scouring, bleaching, sanforizing, calendaring, tenderising, sizing, weighting, brushing, napping, crepe and crinkled effect, crease resistance, functional finishes-Stain resistant& antimicrobial .

### **Module:5 Modern Textiles**

New trends in Textiles:-a brief introduction to spandex, geo-textiles, Nano fabrics, medicinal fabrics and eco- friendly textiles-organic cotton, jute, bamboo fibre.

### **Learning Resources:**

- Corbman, B.P (2005). Fibre to Fabric, International student's edition, Singapore Mc. Graw Hills book co:
- Kadolf, S.J. (2008). Textiles, Anne Langford, Prentice Hall.
- Gokarneshan,U. (2005). Fabric Structure and Design, New Age International Publishers.
- Wells. K (2002). Fabric Dyeing and Printing, Conran Octopus.
- Smith J.L. (2006). Textile Processing, Abhishek Publications, Chandigarh.
- Wingate (1978). Textile Science and their selection, Prentice Hall.
- Dantiyagi, S. (2008). Fundamentals of Textiles and Their care, Orient Longman.

### **TEXTILE SCIENCE -PRACTICAL**

**Teaching hour/sem: 36**

#### **Course Outline**

1. Collection of different fibres (Cotton, Silk, Polyester, Nylon, wool and rayon). Testing of fibers: - Visual Inspection, Burning and Microscopic ( 10hrs )
2. Fabric structure: Basic weaves- Collect samples for all the Basic weaves and their variations. Fancy weaves-Collect samples for (Pile, Dobby, Jacquard, Leno, Clip spot, Lappet and Double cloth) (10 hrs)
3. Thread count: - Collect samples for low medium and high count fabric. (4 hrs)
4. Prepare samples for Block, Batik and Tie & Dye (any two variations) (6 hrs)
5. Visit to Mills / Textile Shops. (6 hrs)

A record of the entire practical should be maintained.

### **Semester V**

**Name of the course: DYNAMICS OF EXTENSION**

**Total Lecture Hours/sem:54 hrs**

**Aim of the course:**

To enable the students to

- Understand the widening concept of extension
- Appreciate the role of extension, especially home science extension in community Development.
- Orient students to the socio cultural and economic environment of rural, urban and Tribal communities.
- Develop skill in planning, implementing and evaluating an extension programme

**Course Overview and Context:**

The course focuses on educating the students on extension education and the methods to extend Home Science to the community and to the family which is the basic unit of community.

**Syllabus Content:**

**Module1: Extension and Community Development (15hours)**

Meaning and objectives. Special features of rural, urban and tribal communities in India. Role of extension in community development with special emphasis to home science extension. Role of community organizations (panchayats, cooperatives and schools) in community development. Community development programmes for women and children in rural areas.-DWCRA, ICDS and Indira Mahilayojana

**Module2: Leadership (15hours)**

Concept and definitions, types of community leaders-Professional leader and lay leaders autocratic,

Democratic and laissez-faire leaders, Methods of identifying community leaders, Leadership for community development.

**Module 3 : Learning and teaching in extension (12hours)**

Criteria for effective extension teaching. Steps in extension teaching.

Extension teaching methods (methods of community contact)-Individual, group and mass methods

- Individual method-personal visits, letters, discussions.
- Group method-meetings, discussions, demonstrations, folk songs, drama, role play, seminar, field trips, and exhibitions.
- Mass method-Print and electronic media.
- Modern methods-Tele conferencing, tele text, networking, satellite communication.

#### **Module 4:Audio-visual aids (8hours)**

Meaning. Classification-audio, visual and audio-visual aids. Cone of experience. Selection and use.

#### **Module 5; Programme planning in extension (4hours)**

Objectives, principles, steps involved in extension programme planning.

### **DYNAMICS OF EXTENSION -PRACTICAL**

**Teaching hours: 2hrs/week (Per sem: 36)**

**Credit: 1**

#### **Course Outline**

##### **1 Extension (8hours)**

Interview an extension worker to find out his/her role.

##### **2. Community Development (8 hours)**

Conduct a survey to find out the role of any one community organization (panchayats, cooperatives and schools) on in community development.

##### **3. Project writing skills(4 hrs)**

Based on the survey done prepare a report on the role of any one community organization

##### **4. Learning and Teaching in Extension (10hours)**

1. Collection and evaluation of audio visual aids
2. Preparation and use of visual aids (leaflet, pamphlet, chart and poster)

##### **5.Programme planning in Extension (6 hours)**

Planning, implementing and evaluating an extension programme. Related to home science (All the topics should be related to Family and Community Science. A record

of the entire practical should be maintained.)

## **Learning Resources**

### **Textbook**

- Reddy, A. (1987).Extension Education, Sree Lakshmi press, Andra Pradesh.
- Dahama, O.P. and Bhatnagar, O.P.(1988), Education and Communication for Development, Oxford and IBH Publishing Co. Pvt. Ltd, New Delhi.
- Supe, A.N. (1983).An Introduction to Extension Education. Oxford IBH Publishing Company
- Devadas, Rajammal, P. (1980): Text book of Home Science, NCERT, New Delhi.

### **References**

The Indian Journal of Extension Education, The Indian Society of Extension Education, Division of Agricultural Extension, IARI., New Delhi-110 012

## **Semester V**

### **OPEN COURSE: LIFE SKILLSTRATEGIES AND TECHNIQUES**

**Total Lecture Hours: 54 hrs /sem**

**Aim of the course:** To empower young people to effectively meet the challenges of everyday life, enable them to acquire knowledge and to develop attitudes and skills which lead to healthy behaviour patterns and to lay the foundation for a responsible lifestyle, sound relationships and safe habits

**Course Overview:** Provides required skills and strategies required for successful living.

### **Syllabus Content**

#### **Module 1: Health and Nutrition Strategies**

Importance of Food groups

Balanced diet,

Food Guide pyramid,

Dietary Guidelines

(12 hours)

#### **Module2: Resource Management**

Time Management - Significance and techniques  
Work simplification for Energy management  
Income management through supplementation and savings (10 hours)

### **Module 3: Enhancing Personality through Clothing and Grooming**

Essentials in good grooming  
Design elements of good costume  
Selection of suitable costume for different figure types, for various occasions and wardrobe planning (10 hours)

### **Module 4: Communication and Interpersonal Relationships**

Intra personal communication, Identifying one's strength and weakness, Importance and enhancement of self-esteem  
Inter personal Communication and Relationships -Improving Communication Skills, Non-verbal communication,-Body language, postures and gestures. Barriers to communication  
Conflict resolution and stress management techniques (12 hours)

### **Module 5: Career Enhancement**

Goal setting  
Job Application process  
Interview and Group discussion  
Presentation skills  
Leadership Skills, advocacy and team building (10 hours)

### **Competencies of the course:**

1. Enable students to make healthy choices regarding food and healthy living
2. Make students efficient in managing their time, energy, finance and clothing needs
3. Prepare students to evolve mental models for intra-personal and inter-personal transactions
4. Enhance career prospects of students

### **Learning Resources:**

1. Varghese, M. A, Ogale, N. N and Srinivasan, K. Home Management (2001). New Age International (P) Ltd. New Delhi.
2. Nickel, P and Dorsey, J. M. 1997. Management in family living. Wiley Eastern Ltd.
3. Nambiar, R. K. Text book of Environmental Studies. SCITECH Publication, New Delhi.
4. Newman, H and Newman, R. Development through life, US. Wadsworth Publishing company.

5. Sigelman, C. K and Rider, E. A. Life Span Human Development, US. Thomas Wadsworth Publishing Company.
6. Krause, M. V and Mahan. (2005). Food Nutrition and Diet Therapy. WS Saunders Co., Philadelphia.
7. Srilakshmi, B. (2010) Dietetics. New Age International (P) Ltd, Chennai
8. Mile, D.J (2004). Power of positive thinking. Delhi: Rohan Book Company.

## SEMESTER VI

**Name of the Course: ADOLESCENCE: DEVELOPMENT AND CHALLENGES**  
**Total Lecture Hours/sem:72**

**Aim of the course:** To gain knowledge regarding the different domains of development during adolescence. To make the students aware of the current issues confronting adolescents and measures to be taken to remedy and prevent the issues.

**Course Overview and Context:** Explains the different domains of development like physical, psychological, cognitive and moral development in adolescence and to create an awareness on the issues faced by today's adolescents with emphasis on prevention and remediation.

### Syllabus Content:

**Course Code: HSCD1CT03**

**Teaching hours:5hrs/week**

**Credit:4**

**CORE**

#### **Course Outline**

**Module 1:** Adolescent Development and the Biology of Puberty

Physical changes; Primary and secondary characteristics; Psychological response to puberty

**Module 2: Social and Emotional Development**

Parent-adolescent relationship, Changing social networks: Peers (cliques and crowds), Electronic media; Emotional Competence, Sexual relationships:

**Module 3: Cognitive and Moral Development**

Reasoning, Moral reasoning and judgement; Piaget's Formal operational period, Changes in moral concepts, religious beliefs and attitudes.

**Module 4 : Issues and concerns in Adolescence**

Health Issues: Obesity, Underweight, Anaemia in girls, Sexually Transmitted Diseases;



Reproductive health issues; Mental Health Issues: Anxiety, Depression, Suicide, Eating disorders (Anorexia Nervosa, Bulimia), Substance abuse; Social Issues: Peer Pressure, Bullying, Sexual abuse, Delinquency; Anti-social Behaviour.

### **Module 5: Development of Self, Career choice, Education**

Identity Crisis, self-esteem. Self-regulation Motivation: Maslow's Hierarchy of Needs. Academic pressure, career choice, Government programmes for education of adolescents in India

#### **Related Experiences**

1. Discussion in class about the problems confronting adolescents today.
2. Discuss on issues relating to parent-adolescent relationship.
3. Make a study on the health problems, stress experienced by adolescents.
4. Plan an education programme on any issues relating to adolescents in an urban/rural set up.
5. Group discussion on the use/misuse of electronic media by adolescents.

#### **References**

- Berk, L E (2000) Child Development (8th edition) PHI learning Pvt ltd, New Delhi.
- Hetherington and Parke (1999). Child Psychology: A Contemporary View point (5th edition): Tata McGraw Hill New York
- <http://www.educationforallinindia.com/Education-of-Youth-and-Adolescents-in-India.pdf>
- Novak G, Peláez M, B. (2004) Child and Adolescent Development: A Behavioural Systems Approach Sage Publications, New Delhi
- Patterson, C.J. (2009). Infancy and Childhood.( International Ed): McGraw Hill, New York.
- Santrock, J.W. (2010). Child Development: An Introduction (12th edition International Edition). New York: McGraw Hill
- Shaffer, D.R, and Kipp, K (2007). Developmental Psychology: Childhood and Adolescence (7th edition). Australia: Thomson Wadsworth.
- Sigelman , C.K. and Rider, E.A. (2003). Human Development, New Delhi: Cengage Learning Pvt Ltd.

### **Semester VI**

**Name of the course: CLINICAL NUTRITION AND DIETETICS**

Total lecture hours /sem :54

**Aim of the course:**

- To impart knowledge regarding pathophysiology of selected diseases
- Be able to make appropriate dietary modifications for disease conditions
- Develop capacity and aptitude for taking up dietetics as a profession
- Build awareness on Public Health nutrition problems

**Course overview and context:**

The course seeks to cover major diseases, their pathophysiology, clinical symptoms and signs and equip the student to formulate diet for these conditions and enable them to be competent to pursue higher studies in the field of dietetics.

**Syllabus content:**

**Module 1 : Introduction to Dietetics**

- Meaning and scope of dietetics
- Role of dietitian
- Diet therapy: a) Routine hospital diet, soft diet, liquid diet  
b) Mode of feeding-oral, enteral and parenteral feeding

**Module 2: Fevers, GI disorders and Weight management**

- 1) Fevers -Classification and etiology of acute and chronic fevers  
Medical Nutrition therapy in Typhoid, Tuberculosis, HIV/AIDS
- 2) Gastro intestinal disorders-Diarrhoea, Constipation, Peptic Ulcer
- 3) Weight imbalance: Classification, Etiology, Clinical manifestations, Consequences—Dietary Management of Obesity, Underweight

**Module 3: Non Communicable Diseases**

- 1) Diabetes Mellitus- Prevalence, classification and etiology of diabetes mellitus, symptoms, diagnosis and complications.  
Dietary Management of Diabetes.
- 2) Coronary Heart Diseases- Atherosclerosis-  
phases, Etiology, Symptoms, Complications, Nutritional Management  
Hypertension- Classification of BP, Hypertension -  
stages, etiology, dietary management, DASH diet
- 3) Cancer - Stages in the development of cancer, Risk factors,

Nutritional requirements for Cancer patients  
Dietary management in cancer

**Module 4: Kidney and Liver disorders**

1) Etiology, Clinical symptoms and Dietary Management of :  
Nephritis and Nephrotic Syndrome

2) Etiology, Clinical symptoms and Dietary Management of:  
Hepatitis, Cirrhosis, Hepatic Coma

**Module 5: Public Health Problems**

Prevalence, causes, consequences, prevention and control -

- 1) Protein Energy Malnutrition (PEM)
- 2) Anemia
- 3) Vitamin A deficiency
- 4) Iodine Deficiency Disorders

References:

1. L. Kathleen Mahan and Sylvia Escott-Stump, Krause's Food Nutrition and Diet therapy, 11th Edition, 2005, Saunders, USA.
2. Whitney, E.N, Cataldo, C.B., and Rolfes, S.R. (2002), Understanding Normal and Clinical Nutrition, Sixth Edn. Thomson Learning Inc. USA.
3. Srilakshmi (2009) Dietetics IVth Edition, New age International (P) Ltd, Publishers, New Delhi
4. Bamji, M.S., Krishnaswamy, K and Brahmam (Eds.) (2009), Text book of Human Nutrition Third Edition Oxford & IBH publishing Co. Pvt. Ltd., New Delhi.
5. Subhangini. A. Joshy (2010), Nutrition and dietetics, Third edition. Tata Mc. Graw. Hill Education Pvt. Ltd, New Delhi
6. Paul Insel, Elaine Turner, Don Ross (2004) Nutrition second edition American Dietetic Association, Jones and Barlett publishers, London

## **CLINICAL NUTRITION AND DIETETICS -PRACTICAL**

Total lecture hours/sem:36

### **Aim of the course:**

To gain practical experience in menu planning and preparation of diets for various disease conditions

### **Syllabus content**

1. Calculation of BMI using height-weight measurements (2 hrs)
2. Preparation of Therapeutic Recipes (2 hrs)

Types of Therapeutic Diet

Normal,Soft,Fluid – Full Fluid and Clear Fluid Diets

3. Diet plan for (30 Hours)
  1. Diabetes Mellitus
  2. Atherosclerosis
  3. Cancer
  4. Fevers-Typhoid or Tuberculosis
  5. Peptic Ulcer
  6. Constipation
  7. Hepatitis
  8. Cirrhosis
  9. Nephritis
  10. Obesity
  11. Under weight
  12. PEM
  13. Iron Deficiency Anaemia

4. Visit to a feeding programme / Diet clinic (2hrs)

## **Semester VI**

### **Name of the course:**

### **FASHION DESIGNING AND APPAREL PRODUCTION (THEORY)**

**Total Lecture Hours/sem: 54 hrs**

**Aim of the course:** To gain knowledge in fundamentals of fashion designing.

To get practical experience in apparel illustration. To impart knowledge in apparel production, marketing and merchandising. To enable the students to develop skills in pattern making and garment construction.

**Course Overview:** Seeks to give a clear understanding of the methods of fashion designing and apparel production

### **Syllabus Content**

#### **Module 1 : Fashion Introduction and interpretation**

Fashion:-Definition, terminologies- style, fad, classic, fashion trend, haute couture, fashion life cycle, fashion forecasting and present day fashion.

Principles and factors influencing Fashion. Elements and principles of design as applied to apparel designing.

Garment designing: - factors considered, basic shapes, the proportion of figures- Basic 8-head theory, unusual figures (problems and remedies) - for tall figure, short figure, stout figure, thin figure. ( 14 hours)

#### **Module 2: Introduction to Body measurements and pattern making**

Body measurements:-Importance and methods of taking body measurements.

Pattern making: - Methods of pattern making-Drafting

Pattern Alteration- lengthening and shortening bodice block and skirt, sleeve variations- puff and  $\frac{3}{4}$  sleeve. ( 14 hours)

#### **Module 3: Garment Construction**

Tools and equipments used for garment construction.

Sewing machine-parts, functions, care, maintenance common problems, reasons and remedies, Steps in preparing fabric for construction, layouts, marking, cutting, stitching and finishing of garments. ( 14 hours)

## **Module 4:Apparel marketing and merchandising.**

Marketing- definition, marketing mix- 4 P's (product, promotion, prices and place)

Merchandising- definition, role and responsibilities of merchandiser—brief outline of various departments in an apparel industry, retail outlet and visual merchandising.

**(12 hours)**

### **Learning Resources:**

- Armstrong, H. J (1997). Pattern making for Fashion Design, Harper & Row publication
- Mary Mathews (1998). Practical Clothing Construction, Part II, Bhattaram's Reprographics (p) Ltd, Chennai.
- Riter. J. (1998). Hand book for Fashion Designing, Best Drafting Techniques, Mital publication.
- Cooklin .G.(1988). Introduction to Clothing Manufacture, Blackwell Science, New Delhi
- Ireland P.J. (2007). New fashion Figure Templates, Anova Books Co. Ltd, London
- Mullick .P.(2002). Garment Construction Skills, Kalyani Publishers, New Delhi.
- Sumathy, G.H (2002). Elements of fashion and Apparel Design New Age International (p) Ltd, New Delhi
- Narang. M(2007). Fashion Technology Hand Book, Asia Pacific Business Press, New Delhi
- Ireland P.J.(2004). Fashion Design Drawing and Presentation Kyodo printing co. Ltd., Singapore.
- Zarapkar K.R.(2008). Zarapkar System of Cutting, Navaneet Publications India Ltd., Gujarat.
- Dickerson. K.G ((2009). Inside the fashion Business.

## **FASHION DESIGNING AND APPAREL PRODUCTION -PRACTICAL**

**Teaching hours /sem: 36 hours**

### **1. Fashion Illustration and Sketching**

Development of 8-head croquis. Sketching of child frock and salwar kameez or churidar kurtha using croquis or figure templates (two styles) **(8 hours)**

## 2. Basic Construction Processes.

Hand Stitches – Basting-, overcasting, hemming.

Embroideries- Decorative stitches (min. 5 no)

Seams and seam finishes: Plain seam- French seam, flat fell seam, topstitched seam, and piped seam, seam finishes – doublestitched seam finish .

Fullness: gathers- gathering by hand, gathering by machine, gathering by elastic,

Pleats-knife, box, and inverted -pin tuck,darts-standard dart and double pointed dart.

Plackets: one piece placket and two piece placket.

Bias and its applications- joining of bias pieces – bias facing, bias binding, shaped facing.

Hems- narrow machine stitched hem, stitched and turned hem,

Fasteners- button and button hole, press button, hooks and eye

Preparation of Paper pattern: Prepare paper pattern for child's frock,huridhar/salwar and kameez. ( 12 hours)

Construction of garments: child's frock with any collar and any type of sleeve.(16 hours)

A record of the entire practical should be maintained

## Semester VI

**Name of the course:**

**MASS COMMUNICATION AND JOURNALISM (THEORY )**

**Total Lecture Hours:54 hrs**

**Aim of the course:**

To enable the students to

- Understand the concept, scope and significance of mass communication and its techniques.
- Sensitize students towards identifying materials and methods for effective communication.

- Familiarize undergraduate students with media studies by affording them an Exposure to contemporary media and to provide an opportunity for them to pursue their areas of interest.

### **Course Overview and Context:**

The course focuses on developing competencies in Mass communication and Journalism which is a fast growing need of Development communication

### **Syllabus Content:**

#### **Module1: Communication (10hours)**

Definition,Functions,elements and process of communication

Four levels of communication-Intrapersonal,inter personal level, Group level and communication with mass audiences.

Functions of mass communication and its relevance to society.

#### **Module2: Modes of mass communication (18 hours)**

A. Print media-newspaper,books,magazines,leaflets and pamphlets.

Characteristics and use.

B.Electronic media-Radio,television,video,films,computer based technologies-email,internet,blogs,message boards(Basic or electronic ), pod casts, video sharing,mobiles. - Characteristics and use

Role of information technology in communication (internet, video conferencing,e-mailetc.)

C.Out door mass media-exhibitions,fairs,street drama

Characteristics and use.

D.Folk media (Traditional)-puppet show, folk songs, folk dances, drama etc.

Characteristics and use

E.Advertising and public relations-concepts and its role in modern society.

#### **Module3: Writing for the media. (12 hours)**

Fundamentals of good writing.

Principles of writing news article for a newspaper and other print media.



Script writing for TV and radio programme and its presentation.

Techniques for preparation of effective advertisements.

**Module4: Public speech 5 hours**

Understanding the audience

Planning and preparation of public speech

Presentation of public speech

**Module5: Journalism 9 hours**

Definitions, functions, principles and importance.

Kinds of journalism-print (newspaper and periodicals)

Electronic (radio and television)

Online (web journalism)

Film journalism

Photo journalism

Characteristics and use.

**MASS COMMUNICATION AND JOURNALISM -PRACTICAL**

**Teaching hours /sem :36 hrs**

**Course Outline:**

**1. Modes of Mass Communication (20 hours)**

(All topics should be related to Family and Community Science)

1. Create an e-mail id and send a message through e-mail.
2. Create a message board. (Basic or electronic)
3. Write a report of an exhibition /fairs/street drama you observed.
4. Select a theme based on the content of home science and write a folk song.
5. Prepare an advertisement to be published in a news paper.

**11 .Writing for The Media (10hours)**

1. Write a news article for a news paper

2. Write a script for a Radio programme.

3. Write a script for a TV programme.

### 111. Public Speech (6hours)

Select a topic, prepare and present a speech.

A record of the entire practical should be maintained.

## Learning Resources

### Textbooks

- Mody,Bella(1991):Designing messages for development Communication, New Delhi,SagePublications.Kuppuswamy,B(1989):Communication and Social Development inIndia,Bombay,Media Promoters and publishers Private Ltd.
- Dahama ,O.P.andBhatnagar,O.P(1988):Education and Communication for Development, New Delhi,Oxford and IBH Publishing Co.Pvt.Ltd.
- Pamar,Sryam(1976):Traditional folk media in India, New Delhi,Geka books.56
- Mehta,D.S.(1992)Mass Communication and Journalism in India, New Delhi, Allied Publishers.
- Rayulu,C.S(1993):Mediaand Communication Management,Bombay,Himalaya Publishing.
- Ahuja.B.N,The Theory and Practice of Journalism.
- Duglas Parker, Basic public speaking,2nd edition. The roadmap to confident communication.
- MahavirMohnot,Art of speaking in public.

### References

- Journal of Educational Research and Extension,Sri Ramakrishna Mission Vidyalyaya College of Education,Coimbatore,Tamil Nadu,India

## Semester VI

**Name of the course: WOMEN ENTREPRENEURSHIP**

**Total Lecture Hours/sem: 54 hrs**

**Aim of the course:** To enhance the development of entrepreneurial spirit in students and enable them to understand the skills and the intricacies involved in starting an entrepreneurial venture.

**Course Overview:** The course focuses on equipping the students to be an entrepreneur after graduation.

### Syllabus Content

**Module 1: Entrepreneurship** - Definition, concept and characteristics.

Role of entrepreneur, Personal Effectiveness - factors affecting entrepreneur's role, effective communication skill, interpersonal skills, factors affecting entrepreneur skill, Achievement motivation, goal orientation, , creativity, assertiveness and quick response, psychological barriers to self-employment.(10 hours)

**Module2:Procedures to be an entrepreneur** -product identification, generation of new product ideas, sources of ideas. Product formulation, feasibility analysis,Project planning Project proposal for fund from bank/other funding agencies, significance, cost analysis. List of documents to be submitted for registration and license(12 hours)

**Module 3** :MarketingPrinciples of marketing, marketing mix, functions, types, advertising and Salesmanship, Public relations, personal selling. (10 hours)

**Module 4: Basic accounting** –Cash book ,ledger,journal,recording and book keeping. (6 hrs)

**Module 4:Agencies for development of entrepreneurship.** Role of SSI,KITCO,KIED, KSWDC .Banks and other voluntary organizations, Institutions assisting entrepreneurs- for finance, training packaging and labelling products(14 hours)

#### (1) Related Experience :-

Visit to small scale industry.  
Visit Agencies that finance SSI.

#### 2) Preparation of Articles based on following-

Bakery /confectionary/bouquet making/flower arrangement/Dyeing/  
printing/embroidery/Garment manufacturing.  
Minimum two articles from the above are to be prepared and organize exhibition-  
cum-sale of the prepared products.

## **Course competencies**

- Entrepreneurship skills
- Project proposal preparation
- Basic accounting
- Knowledge of procedures in starting an enterprise

## **Learning Resources**

1. Akhauri, M.M.P. (1990), Entrepreneurship for Women in India, NIESBUD, New Delhi.
2. Patel, V.C. (1987), Women Entrepreneurship - Developing New Entrepreneurs, Ahmedabad EB 11. Hisrich, R.D. and Peters M.P. (1995), Entrepreneurship - Starting, developing and managing a new enterprise, INC USA.
3. Entrepreneurship Development in India by Dr. C. B. Gupta &Dr. N. P. Srinivasan, Sultan Chand, 2004,New Delhi,
4. Entrepreneurship Theory and Practice: J. S. Saini, B.S. Rathore by New Delhi, Wheeler, 2001.
5. Entrepreneurial Development by S.S. Khanka, S. Chand Ltd. Co., New Delhi.
6. Projects:Prasanna Chandra, McGraw Hill Co. Ltd., New Delhi.