# DEPARTMENT OF HOME SCIENCE WAIKHOM MANI GIRLS' COLLEGE THOUBAL

# Courses offered: B. Sc. 1 - SEMESTER

#### **Home Science**

- 3 years
- 6 Semesters

### Programme Outcome

- PO1: Understand the role of interdisciplinary sciences in the development of individual, families and communities.
- PO2: Understand the issues of green technology.
- PO3: Adopted and transfer the scientific innovations from lab to the community.
- PO4: Enhanced the application of science and technologies in quality of life of individuals.

#### Programme Specific Outcome

- PSO1: The curriculum is well conceived for science students and gives them professional edges to develop marketable skills as well as pursue higher education
- PSO2: Produced knowledgeable and skilled human resources which is employable in food industry, hospitals and textile industry.
- PSO3: Apply the acquired conceptual knowledge of food quality and sustainable waste management for holistic living
- PSO4: Use concepts tools and techniques related to chemistry and zoology and its application in family and community science.
- PSO5: Acquire scientific skills in the management of resources and develop basic skills for career choice in the field of dietetics, interior designing textiles and fashion designing and pre-school education.
- PSO6: Understand the principles of growth pattern and human development and role of family in the development.

#### B. A. I - SEMESTER

Home Science, Education, Sociology Home Science, Economics, Political Science. Home Science, Geography, Statistics.

- 3 years

- 6 Semesters

# Programme Outcome

- PO1: Organise and deliver relevant application knowledge to people from diverse background by using effective written, verbal and communication system
- PO2: Understand the various fields of Home Science
- PO3: Management of the crisis of stages of life
- PO4: Enhance people's capacity for social functioning towards better quality of life.

#### Programme Specific Outcome

- PSO1: The curriculum is well conceived for needs of contemporary women.
- PSO2: The curriculum has been structured to prepare the students to achieve skills to move forward with the development of the society/community nation and entrepreneurship.
- PSO3: It is also aims to build future ready professionals who would be socially responsible global citizen contributing to the overall development of the country.
- PSO4: Develop the ability to address the complexities and interface among of self societal and national priorities.
- PSO5: Generate multi-skilled leaders with a holistic perspective that cut across discipline.
- PSO6: Deliver quality tertiary education through while doing.

I - SEMESTER B. A. /B. Sc.

Theory: 75 marks
Practical: 25 marks

After the course is completed, the students must be able to:

# Code: HS (E) 101: FOOD SCIENCE AND NUTRITION CO1: Food groups and Nutrition:

- Understand the function and basic terms of food and nutrition
- Knowledge the relation on food and nutrition to heath, physical development and well-being
- Understand the meaning of balance diet
- Understand the classification, functions, sources deficiency
- Describe the digestive absorption and metabolism of nutrients
- Analyze the functions, requirements, sources and deficiency of vitamins, minerals and water.

# CO2: Food preparation and Study of food groups:

- Knowledge of terminology used in food preparation
- Understand the objectives, methods and effect of cooking
- Apprehend the knowledge for improving nutritional quality of foods
- Enumerate the basic food groups (five and seven)
- Gain knowledge on consumer protection and food legislation in India
- Understand the standards for ensuring quality of products

# CO3: Meal Planning and Nutritional

- Understand the meaning of meal planning
- Enumerate and explain the importance of meal planning for the family
- Enumerate the factors affecting meal planning
- Enumerate the principles of meal planning
- Knowledge for planning and preparing same menu for different age group.

#### CO4: Food habits and Nutrition Education

- Gain knowledge of food habits
- Analyze the factors affecting food habits
- Understand food adulteration and identification of food adulteration and identification of food adulterants in various foods.
- Categorize food allergy, food poising based on their cause and its health hazard.
- Understand the misleading information about food fads and fallacies
- Understand malnutrition, causes, prevalence, its type and measures taken to reduce malnutrition in India

# CO5: Study of Energy

- Understand about the body needs energy by scientific method
- Understand the calorie and the energy, energy value of food by bomb calorimeter
- Describe the physiological fuel value of food boy bomb calorimeter and BMR
- Analyze the factors influencing measurement of BMR and total energy requirement.

#### Home Science Lab

- Finding out deficiency systems of Kwashiorkor, Marasmus, Beri-Beri, Goitre, Rickets
- Simple cooking- preparation, serving and calculation of cost cereals, pulses, vegetables, fruits, milk, egg etc.
- Planning, calculation and preparation of a meal (lunch) for Adult woman/man
- Planning, calculation and preparation of low cost diet for under nourished groups- childhood stage –early and late childhood.
- Record of anthropometric measurement and score the general nutritional conditions by comparison with standards.

II - SEMESTER
B. A. /B. Sc.

Theory: 75 marks
Practical: 25 marks

After the course is completed, the students must be able to:

# Code: HS (E) 2O2: FAMILY RESOURCE AND MANAGEMENT CO1: Meaning and definition of Home Management:

- Understand what home management is
  - Knowledge on function of house
  - Describe the principles of house planning
  - Knowledge about the factors affecting house plan
  - Knowledge about building materials for construction, low cost building materials and economy in constructing a house.
  - Gain efficient knowledge on house wiring, electrical fittings and fixtures.
  - Describe the principles of kitchen planning and types of kitchen
  - Understand the functional designing of work areas and storage space management.

# CO2: Resource in the family:

- Understand the concept of resource and its type
- Knowledge on factors affecting the use of recourses
- Enumerate the satisfaction brought out by use of increase in recourses
- Understand the meaning of management process
- Describe the elements related to management process
- Knowledge of family life cycles
- Analyze the different stages of family life cycle

• Gain knowledge of types of family, life style and qualities to be posses by efficient home makers.

# CO3: Motivation in Management:

- Understand the significance of meaning of formulation of philosophy
- Knowledge the importance and types of value, goals and standards in daily living and exhibit effective management skill
- Knowledge for planning and preparing same menu for different age group.
- Analyze the types and steps in decision making.

#### **CO4**: Interior Decoration:

- Knowledge of elements of Art
- Enumerate the types and principles of design
- Understand the qualities and emotional effect of colour, Prang colour system, colour schemes
- Application of colour in interior decoration
- Apprehend lighting in interior decoration
- Enumerate the type of lighting
- Develop skills in flower arrangement and floor decoration.

#### CO5: Equipment for Home:

- Understand the classification of household equipment
- Analyze the factors affecting the selection and care of household equipment...

#### Home Science Lab

- Drawing of house plans for different income groups
- Planning models of different types of kitchen plans
- Visit to families of rural and urban areas to study the work culture and writing a report
- Preparation of different types of floor decoration and flower arrangement
- Care and use of household equipment.

III - SEMESTER

B. A. /B. Sc.

Theory: 75 marks
Practical: 25 marks

# After the course is completed, the students must be able to:

# Code: HS (E) 303: HUMAN DEVELOPMENT

**CO1**: Introduction of Human Development:

- Understand the meaning and principles of human development
- Comprehend the factors affecting growth and development
- Understanding the role of heredity and environment on development
- Understand the stages of human development

#### CO2: Development during babyhood:

- Apprehend the characteristics, development task of babyhood
- Describe the physical, motor, speech, emotional; social and play developments during babyhood
- Understanding develops and how this influences moral developments and sexrole typing.
- Understand the importance of family relationship to babies developing selfconcepts and to their happiness
- Recognize the common physical hazards of babyhood and explain what is responsible for them.

• Understand why each area of development can be psychologically hazardous and what the common hazards in each area are.

# CO3: Early childhood and education

- Gain knowledge of characteristics, developmental tasks, physical development, and physiological habits and skills development of early childhood.
- Identify in emotional pattern, social and unsocial behavior patterns.
- Understand moral development, essential elements in discipline ad types of discipline.
- Understand meaning of preschool education, its objectives and goals.
- Knowledge on types of preschool.
- Comprehend the fundamentals of programme planning for a nursery school..

# CO4: Late Childhood and Children with special need:

- Apprehend the characteristic, development tasks and common emotional patterns of late childhood
- Understand social grouping and social behavior in late childhood
- Understand role of disciples in moral development
- Knowledge of sex role typing and its effects
- Identify the cause and categorization and educational provision for exceptional children

#### **CO5**: Child Welfare Services:

- Gain knowledge the services for normal children I difficult circumstances
- Analyze the institutional and non-institutional services for economically and educationally handicapped children
- Describe the different agencies working for children

#### Home Science Lab

- Anthropometric measurement and preparation of charts showing the 7 dimension of human development.
- Preparation of soft toys low cost and expensive one- visit to a crèche
- Planning weekly programmes for a Nursery school. Planning a lesson related to any activity
- Visit to institutions dealing with exceptional children. Planning and implementing a simple project.
- Participation in Balwadi/Nursing school- Informal talk, story telling

IV - SEMESTER B. A. /B. Sc.

Theory: 75 marks
Practical: 25 marks

After the course is completed, the students must be able to:

# Code: HS (E) 404: TEXTILE, CLOTHING AND HOME SCIENCE EXTENSION CO1: Introduction to Textiles:

- Understand the classification of textile fibers
- Enumerate Yarns. Meaning and types.
- Knowledge about different fiber, yarns along with their properties
- Apprehend the process of yarn spinning, mechanical and chemical
- Develop understanding regarding fibers and their use in different sectors
- Knowledge to identify different kinds of fabric count, fabric length, fabric width
- Understand the preparation, manufacture of vegetable, animal and synthetic fibers

# CO2: Weaving and stitches:

- Knowledge of loom and its different parts
- Understand meaning, knitting, non-woven and decorative weaves

- Identifying different fabric construction
- Application of basic and embroidery stitches
- Apprehend the selection of fabric

### CO3: Fashion Designing and Garment Technology:

- Development basic knowledge of fashion and fashion cycle
- Understand fashion and design terminology
- Describe the concept of fashion merchandising
- Analyze the sales and fashion marketing strategies from consumer's perspective
- Enumerate the methods of taking body measurement
- Knowledge about pattern making and pattern adaptation technique.
- Identify basic bodice block

#### **CO4**: Extension Education:

- Knowledge on the principles and objectives of extension
- Differentiate between extension education and formal education
- Understand the qualities of home science extension worker
- Understand the meaning and importance of communication
- Knowledge on the models and key elements of communication process.
- Understand the meaning and importance of motivation in extension
- Knowledge on techniques of motivation in extension of work.
- Gain knowledge on the concept of need and its type

# CO5: Extension teaching methods and aids:

- Impart knowledge of extension teaching methods
- Describe the different teaching methods
- Analyze the merits and demerits of different teaching methods
- Categorize the classification of different teaching aids
- Gain knowledge of adult education and its objectives
- Analyze the teaching and evaluation methods of adult education.

#### Home Science Lab

- Identification of different fibers by different methods
- Preparing a scrap book on different basic and embroidery stitches
- Drafting and stiching of jhangia, jabala, saree blouse and nighty
- Visit to adult education centers in Manipur and writing a report

• Demonstration on handling and operation of OHP and writing an assignment on it.

#### **COURSE OUTCOME:**

V - SEMESTER
B. A. /B. Sc.

Theory: 100 marks

After the course is completed, the students must be able to:

# Code: HS (H) 505: FOOD SCIENCE AND NUTRITION

- CO1: Food Microbiology:
  - Understand the principles and underlying food spoilage and food preservation
  - Knowledge of microbes, their classification, types and characteristics
  - Understand the importance of food preservation
  - Application of general principles of food preservation

# CO2: Diet Therapy:

- Understand the concept, purpose, principle of diet therapy
- Modification of normal diet to suit individual needs in specific disease condition
- Understand the etiological factors, symptoms dietary modification

# CO3: Weight management and Diabetes Mellitus:

- Knowledge of the causes, systems and principles of dietary management of obesity and effects of untreated obesity
- Knowledge on the role of exercise in treating obesity and effects of untreated obesity.
- Knowledge about Diabetes mellitus, causes, symptoms and dietary management
- Knowledge about normal blood sugar level and treatment of hypoglycemia drugs and insulin
- Gain knowledge about the food exchange lists and its use in diet plan
- Understand the causes, systems and principles of dietary management of hypertension, coronary heart disease and renal disorders

# **CO4:** Conditions Requiring Nutritional Support:

- Understand the causes, symptoms and principles of dietary management of some of the conditions requiring nutritional support
- Knowledge of fever short and long
- Enumerate the types of anemia
- Knowledge of surgery pre and post-operative care
- Understand the protein energy malnutrition

#### CO5: Human Nutrition:

- Analyze the composition of the human body.
- Understand the role of food service managers and dieticians
- Describe the modification of normal diet for therapeutic purposes
- Understand the mode of feeding on diet therapy
- Analyze the principles of dietary counseling for special health conditions
- Improve the nutritional status for specific condition as industrial worker and sport persons
- Analyze the diet and nutritional status during natural disaster

V - SEMESTER B. A. /B. Sc.

Theory: 100 marks

After the course is completed, the students must be able to:

Code: HS (H) 506: FAMILY RESOURCE MANAGEMENT

CO1: Management of Time:

- Apprehend the importance of time
- Application of time plan
- Application of time plan

CO2: Management of Energy:

- Gain knowledge about energy management and its importance
- Understand energy cost, efforts required in home making activities
- Explain the types of fatigue and method apply the overcome fatigue
- Concept of work simplification, applicant of work simplification principles and techniques in household activities
- Enumerate Mundel is classes change.

# CO3: Management of Money:

- Understand family income types and sources of incomes method of handling money.
- Knowledge of supplementing the family income and family expenditure
- Enumerate the family budget types, objective, items in the budget, steps in making family budget
- Understand financial records of the household saving and investment.

# CO4: Consumer Education-aim and purpose:

- Analyze role of consumer and issues related to consumer problems in rural and urban area
- Describe the rights and responsibilities of consumer
- Describe the Adulterants on food
- Understand about malpractices are adopted by sellers for under weight
- Understand the sources of consumer information from advertisements and printed information
- Describe the consumer protection law and consumer aids
- Analyze factors influencing human wants

# CO5: Application of Management Principles – Experimental House:

- Apply the recognition of theory in action
- Knowledge about the objective and changes in organizing (i) position of manager (ii) Rotation of duties (iii) Group finance (iv) Menu planning and work simplification through menu planning (v) Work plan
- Evaluation in residence course

V - SEMESTER

B. A. /B. Sc.

**Practical: 100 marks** 

After the course is completed, the students must be able to:

# Paper – HS (H) 507 (P) HOME SCIENCE LAB

- Preparation of (a) Jams (b) Sauce (c) Pickles (d) Squash
- Planning, calculation and preparation of a meal for (a) Adolescent girl/boy (b) Pregnant woman (c) Lactating woman

- Preparation and evaluation of therapeutic adaptations of the normal (a) Liquid diet (b) Soft Diet (c) Bland diet
- Planning, preparation and calculation of therapeutic diets
- Planning, calculation for the disorders like gastrointestinal disorders, peptic ulcer, etc
- Problems of consumers adulteration of food detecting, malpractice in weight and measures
- Preparation of model family budget
- Analyzing activities in the house/lab to study pathway chart, record of time study
- Planning of time for college, students
- Residence stay for one week incorporating principles of resource management, housing and equipment and principles of interior decoration

VI - SEMESTER B. A. /B. Sc.

Theory: 100 marks

After the course is completed, the students must be able to:

Code: HS (H) 608: ADOLESCENCE AND DYNAMICS OF MARRIAGE

CO1: Adolescence:

• Knowledge about the characteristics and development tasks of adolescence

- Understand emotionality and social change during adolescence
- Gain knowledge on sex interests, sex behavior, sex role typing and its effect, sex education, etc.
- Understand family relationship.
- Knowledge about body change in size, proportion and development of primary and secondary characteristics

#### CO2: Adulthood:

- Knowledge of characteristics, interests, adjustments and hazards of early education.
- Understand of characteristics, adjustments to changes and hazards of middle adulthood.
- Apprehend the characteristics, adjustments to changes and problems of old age

# CO3: Marriage and Family:

- Understand meaning, definition, types, motives and functions of marriage
- Gain knowledge on readiness for marriage physiological, psychological, social, etc.
- Knowledge about the selection of life partner and marital adjustment
- Coping up divorce and its effects on man and woman
- Knowledge on custom, traditions and marriage ritual in different community.
- Gain knowledge for planning parenthood, main interpersonal relation in the family.

#### CO4: Guidance and Counseling:

- Understand the concept of guidance and counseling
- Gain knowledge of need, types of guidance
- Describe the need of guidance at various level of education
- Explain the history of guidance movement in India
- Application of different techniques of guidance
- Impart knowledge of guidance service at secondary level
- Understand the characteristics of good counselor

#### CO5: Intervention programme for Family and Community:

- Gain knowledge on theoretical planning intervention programme
- Understand the meaning and scope of parent and community intervention
- Analyzing the methods of parent education
- Approaches and techniques to be adopted in parent and community education
- Impart knowledge for family life education

- Comprehend the need and scope for stimulation effect of stimulation in brain growth and development of infants
- Describe factors to be considered in developing implementing and evaluating intervention programme

VI - SEMESTER

B. A. /B. Sc.

Theory: 100 marks

After the course is completed, the students must be able to:

#### Code: HS (H) 609: TEXTILE, CLOTHING AND HOME SCIENCE EXTENSION:

# CO1: Dyeing Printing and Finishing:

- Understand Dyes meaning history and classification
- Enumerate suitability if different dyes to different fabrics
- Understand the dyeing different method and printing
- Knowledge of finishing
- Understand the processing (Chemical and mechanical)

# CO2: Traditional and Embroideries of India:

- Understand the history of Indian textiles and Embroideries Textile Muslims, Dacca Sarus Brocade, chanderi Sarees, Baluchar Buttedar, Paithani and Pitambar, Patoia, Bandhanis, Kalamdar
- Analyse the embroidered fabric Phulkari, Chamba Roomals, Kanthas, Kasheeda, Namdas Chikankari
- Describe some traditional textiles and embroideries of Manipur.

# CO3: Stain removal and Laundry:

- Classify stains and identify methods of removing on different fabric
- Understand the principles of laundering materials and equipments use in laundry
- Describe the properties and effect of laundry agents on cleaning of different fabric
- Analyze the types of laundries and procedure for laundering different types of fabric

# CO4: Leadership in Extension and Extension Program Planning:

- Understand local leaders for extension works
- Analyze concept, objective and essential elements of community development work
- Describe the concept and functions of Panchayati Raj
- Enumerate the structure of Panchayati Raj
- Understand meaning, importance, principles and process of Extension Programme planning
- Knowledge about Developing plan of works
- Understand meaning, purposes and characteristic of evaluation.

# CO5: Social Survey and Social Organization:

- Knowledge of social survey
- Understand tools of data collection

- Analysis of data by calculating percentage
- Apprehend development programme

VI - SEMESTER B. A. /B. Sc.

Practical: 100 marks

# After the course is completed, the students must be able to:

# Paper – HS (H) 610 (P) HOME SCIENCE LAB

- Study of problems of old age, visit to old aged home and writing a report.
- Project work (on any one) (i) Counseling, (ii) Marriage (iii) Family.
- Seminar on adolescent problems
- Classroom discussion with resource persons on marriage, dowry and family laws
- Study of interest, values and extracurricular activities, media activities, media consumption, prejudice/gender stereotype, self-concept of adolescence
- Study of different types of dying and embroideries
- Preparing an album on traditional textiles and embroideries
- Removal of different types of stains on different fabrics.
- Conducting a social survey in a village and writing a record.
- Visit to different Home Science Colleges and writing a report on it.