# **GUJARAT UNIVERSITY**

# HOME SCIENCE UNDERGRADUATE AND POSTGRADUATE PROGRAMMES FOR GENERAL HOME SCIENCE (COMPOSITE)

# (FAMILY AND COMMUNITY SCIENCES)

# CURRICULUM AS PER THE CHOICE BASED CREDIT SYSTEM

(Implemented from June 2018)

Choice in Yours
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HOME SCIENCE GENERAL							
С	В	С		S			
FOOD &	CLOTHING &	HUMAN	HUMAN	EXTENSION &			
NUTRITION	TEXTILE	RESOURCE MANAGEMENT	DEVELOPMENT	COMMUNICATION			

#### **PREFACE:**

Home Science (Family and Community Science) is an interdisciplinary field of studies comprising of Food and Nutrition Science, Clothing and Textile Science, Human Resource Management, Human Development and Extension and Communication. Each of this area is multi-disciplinary in nature dealing with the 'Art and Science of Living'. The individual, the family and the community are the foci of Home Science. The security and development of the family is so much part of the social fabric of individuals and communities which are reflected in the curriculum of Home Science, with due focus on gender neutral, career perspectives and region specific – urban as well as rural areas.

Home Science is a unique field of knowledge and its inter-disciplinary approach in synthesizing knowledge drawn from Physical, Biological, Social Science, Arts and Humanities, Technology and Management has enriched its educational programme which prepare an individual in improving the standard of living, quality of life of individuals and communities, which contributes significantly to the economic and over all development of the individual, family and nation to meet the challenges in the global context. This is achieved through a blend of academics, research training and extension as well as industrial applications. The programme has considerable emphasis on integrated approach of combining theory and practical's and fieldwork. Competency based courses have sound market value and would lead to social and economic empowerment. Field placement would be incorporated to allow for the Integration of skills in the learning processes with transfer of knowledge from laboratory to classroom and from classroom to field.

The programme allows flexibility in the choice of thrust areas, which student are select, based on their career goals. It is envisaged that the current scenario at the regional and national level require trained professionals in areas such as clinical and therapeutic Nutrition, Extension Management, Natural Design and Construction, Child and Human Rights, Nutrition for health and Fitness, Fashion Design, Interior Decoration etc.

The curriculum integrating several elective courses, besides the core, has been formulated to provide professionally competent manpower for Academic and Research activities.

**Goals:** To develop an integrated programme for life and career for students and enable them to develop entrepreneurial skills.

#### **Objectives:**

- 1. To enable the students to acquire the knowledge and skills required for holistic understanding of the field of Home Science discipline.
- To enable the students to acquire the knowledge and competence to practice Home Science in relevant setting.

PROGRAMME DURATION:	Six Semesters (Undergraduate Level)
	Four Semester (Post graduate Level)
PROGRAMME STRUCTURE :	(Tentative)

## **B. A. HOME SCIENCE PROGRAMME**

# COURSE STRUCTURE FOR C.B.C.S. (REVISED)

# **IMPLIMENTED FROM JUNE-2018**

# SEM-I

Sr.	Course	Name of Course		Cr	edits / Wee	ek	Contact
No.	Туре		Theory		Practical	Total	Hours
			L	0	-		
1	Core 101	Introduction to Foods and Nutrition	3	1	-	4	4
2	Core 102	Introduction to Clothing Construction	3	1	-	4	4
3	Elective (EC-1) 101	Practical Food Preparation	-	-	4	4	1 ½ / 1 Cr (6 Hrs)
4.	Elective (EC-1) 102	Practical-Clothing Construction	-	-	4	4	1 ½ / 1 Cr (6 Hrs)
5.	Elective (EC-2) 101	Introduction to Resource Management	1	1	-	2	2
6.	Foundation	As per University guideline	1	1	-	2	2
7.	Soft Skill (SS-1)	As per University guideline	1	-	-	1	1
8.	Comp-101	English	2	-	-	2	2
9.	Comp-101	Sanskrit	2	-	-	2	2
			13	6	6	25	29

#### **Core-101 theory**

#### **INTRODUCTION TO FOODS & NUTRITION**

Lectu	Lectures per Week		Total	Marks per Paper				Duration of		
	Credits		Credits				Exam Hour			
				Internal		External				
Theory	Practical	Other		Theory Practical		Theory	Practical	Theory	Practical	
3	-	1	4					3.00 hours	3.00 hours	

#### FOCUS:

This course builds upon the Fundamentals of Foods & Nutrition and provides further information regarding the role of macro and micro nutrients in human nutrition as well as basic information regarding food preparation.

## **OBJECTIVES:**

This course will enable the students to:

- (1) Understand basic concept of food, Nutrition, Nutrients, Health, Nutrition status and role of Nutrition maintaining health.
- (2) Gain knowledge regarding food groups, food guide pyramid, balanced diet and nutritive value of various food groups.

- (3) Gain knowledge regarding RDA, functions, sources, deficiency and excess of energy, various Macro Nutrients and Micro Nutrients.
- (4) Get familiar with various cooking methods, the process improving the quality of food and retentions of nutrients.
- (5) Get familiar with basic concept of serving the food items.

#### UNIT-I

#### **Basic concept of Food and Nutrition:**

- Definition of food and Nutrition, Health, Nutrients, Nutritional status, RDA and Balance Diet.
- (2) Functions of Food, Food Guide Pyramid, Basic Five Food Groups & its nutritive value and their contribution to balanced diet.
- (3) Principles, need and methods of cooking
  - Water, Dry Heat and Oil as a medium
  - Improving Nutritional quality of food Germination, Fermentation,
    Supplementation, Fortification and Enrichment, Substitution.

#### UNIT-II

#### Macro Nutrients

- (1) Classification of Nutrients according to need and functions.
- Macro Nutrients- Protein, Fat, Carbohydrate.

functions, sources RDA, Need Deficiency Sand Excess.

#### UNIT-III

#### Micro Nutrients

- (1) Micro Nutrients –
- Water soluble vitamins B-Complex, B1, B2, Niacin, B12 Folic Acid, and Vitamin-C
- Fat soluble vitamins A, D, E, K

functions, sources, Need, Deficiency Disease (name only) and Excess (name only)

#### UNIT-IV

 Minerals – functions sources, Need, Deficiency Disease (name only) and Excess (name only).

Macro – Calcium, Iron, Magnesium, Zinc, Fluorine, Iodine

(2) Water - its function in body

- need

- sources

#### **OTHER – USES OF**

- 1. Use Of Audio-Visual aid and Internet
- 2. Assignment
- 3. Demonstration
- 4. Group Discussion

#### **REFERENCES:**

- 1. R. Rajalakshmi, "Applied Nutrition", Oxford, B.H.Publishing Co. Delhi
- 2. Swaminathan M., "Human Nutrition and Diet", Banglore Printing & Publishing Co.

- 3. Dr. L. C. Gupta, "Food & Nutrition."
- 4. Swaminathan M., "Handbook of Food & Nutrition."
- 5. Mudambi and Rajagopal, "Fundamentals of Food and Nutrition", Wiley Eastern Limited.
- 6. M. Swaminathan, "Food and Nutrition Vol.I & II", Banglore Printing & Publishing Co.
- 7. Gopalan, "Nutritive Value of Indian Food", Indian Council of Medical Research.
- 8. G.P.Shairry, "Aahar Vignan" (Hindi)

#### **SEMESTER-I**

#### <u>THEORY</u>

#### **CORE-102**

## INTRODUCTION TO CLOTHING AND LAUNDRY SCIENCE

Lectu	Lectures per Week Total		Marks per Paper				Duration of		
			Credits					Exan	n Hour
				Internal		External			
Theory	Practical	Other		Theory Practical		Theory	Practical	Theory	Practical
3	-	1	4					3.00	3.00
								hours	hours

#### FOCUS:

This course builds upon the core course fundamentals of Clothing and Textiles and it provide further information regarding the role of clothing and laundry science in human health care, with special focus on clothing constructions for children.

#### **OBJECTIVES:**

This course will enable the students to:

- (1) Understand basic concept of clothing and textile, use of sewing machine and various sewing equipment.
- (2) Get knowledge regarding children clothing.
- (3) Recognize basic skills required for clothing construction.
- (4) Acquaint with materials, equipment and process involved in laundering.

## UNIT-I

## INTRODUCTION TO CLOTHING

- (1) Concept, Importance and scope of clothing and textiles
- (2) Different Types of Tools
  - Measuring Tools
  - Marking Tools
  - Cutting Tools
  - Sewing Tools
  - Miscellaneous Tools

## UNIT-II

- (1) Fabrics for Garment Making.
  - Handling of different types of Fabrics.
  - Selection of fabrics for different garments.
- (2) Factors to be considered while selection and making children's garments.
- (3) Children clothing Management according to seasons, special needs, occasions and storage and care of children cloths.

#### UNIT-III

- (1) Essentials of Children's Clothing
  - Importance of clothing
  - Effect of cloths and child's growth.
  - Sociological and Psychological aspects of children's clothing.
- (2) Garments Making for children
  - Garments for Infant Garment.
  - The Creeping Age.
  - Garments for the Preschooler
  - Garments for school-going child.

#### UNIT-IV

#### LAUNDRY SCIENCE

- (1) Introduction
  - Concept and importance of Laundry
  - Principles of Laundry
  - \* Hand Washing
  - \* Washing Machines
- (2) Equipments and Materials used in Laundry.
- (3) Stain Removal
  - Classification of Stains.
  - Principles and Techniques of Removal
  - Types of Stain removers.

## Others –

- 1. Market Survey
- 2. Demonstration
- 3. Assignment

## **References:**

- 1. "Fundamentals of Textile and it's care." Durga Deakar
- 2. "Vastra Vignan Evam Paridhan" Premila Varma (Hindi)
- 3. "Vastra Vignan Ke Mulsidhhant" (Hindi)
- 4. "Mkeðý {køkoËŠþfk" rLk{o¤k r{†e
- 5. "çkurlíf õ÷ku®Äøk yuLz xuûkxkE÷" yr{íkk Ãkxu÷
- 6. "Mkeðý {køkoËŠþfk" çkkçkw¼kE Ãke. Ãkxu÷
- 7. "Laundry Science" Shushila Dantyagi
- 8. "Manual of Children's clothing" S.Pandit
- 9. "Personal Grooming, selecting and care of cloths." Pandit and Tapdey.
- 10. "Text books of clothing and Textile." Dr. Shushma Gupta, Nim, Gard.

#### **SEMESTER-I**

#### PRACTICAL

#### ELECTIVE-101

#### FOOD PREPARATION

Lectu	ures per W	/eek	Total	Marks per Paper				Duration of		
			Credits					Exam Hour		
				Internal		External				
Theory	Practical	Other		Theory Practical		Theory	Practical	Theory	Practical	
-	3	1	4					3.00 hours	3.00 hours	

#### FOCUS:

This course is designed to provide the skills in preparing various food items. It will provide practical based on core Theory Paper No.101 – Introduction to Food & Nutrition.

#### **OBJECTIVES:**

This course will enable the students to:

- (1) Develop skills in preparing various food items according to five food groups.
- (2) Develop skills in preparing recipes rich in various nutrients.
- (3) Develop skills in preparing recipes according to cooking methods.
- (4) Apply the knowledge in maintenance of good health for individual and the family.

#### **Total - 11 Practicals**

## **UNIT-I (4 PRACTICAL)**

- (1) Preparation and evaluation of recipe rich in-
  - (a) Energy
  - (b) Protein (Animal vegetable, increasing biological value of protein)
  - (c) Carbohydrate
- (2) Preparation and evaluation of recipe using different cooking methods.
  - (a) Germination.
  - (b) Fermentation.
  - (c) Supplementation.
  - (d) Substitution and Enrichment.

## UNIT-II (2 PRACTICAL)

- (3) Classification of Beverages and preparation of one recipe from each classification.(Preparation tips)
- (4) Cereal Cookery -

Tips for cooking and preparation of different recipes from Rice and Wheat (Preparation tips)

#### UNIT-III (2 PRACTICAL)

(5) Classification of Vegetables -

Cooking tips and preparation of recipes using different methods. (preparation tips)

(6) Salad -

Preparation of Salads, classification and garnishes and preparation tips.

## UNIT-IV (3 PRACTICAL)

## (7) Desserts -

- \* Preparation of Desserts, Ice-Cream, Cake
- \* Roll of different ingredients in Ice-Cream. (Preparation tips)
- (8) Preparation of recipes in vogue. (latest recipes, Chinese, maxican)

#### **SEMESTER-I**

#### PRACTICAL

#### ELECTIVE-102

## **CLOTHING CONSTRUCTION**

Lectu	ires per W	/eek	Total		Marks p	Duration of			
	Credits							Exan	n Hour
				Internal		External			
Theory	Practical	Other		Theory Practical		Theory	Practical	Theory	Practical
-	3	1	4					3.00	3.00
								hours	hours

#### FOCUS:

This course is designed to provide the skills in using sewing machine, sewing equipments, basic sewing techniques with special focus on construction skills in children cloths, based on core. Theory Course-102, Introduction to Clothing & Laundry Science.

#### **OBJECTIVES:**

This course will enable the students to:

- (1) Get skills in taking body measurements.
- (2) Get skills in using sewing machine, sewing equipments and machine sewing techniques.
- (3) Develop basic skills in children clothing construction and their garment making.

## **Total 11 Practicals**

## **UNIT-I (2 PRACTICAL)**

- (1) (A) Understanding the use of sewing machine
  - Figure
  - Parts
  - Functions
  - Problems and their remedies.
  - (B) Understanding the use of sewing equipments
    - Figure
    - Their Usage

#### UNIT-II (4 PRACTICAL)

- (1) Preparation child's basic blocks, paper pattern drafting of sleeve and collars suitable for children.
- (2) Five Basic Machine Sewing Techniques.
  - Plain Seam
  - French Seam
  - Run & Fell Seam
  - Gathers
  - Knief Pleats
  - Box Pleats
- (3) Five Basic Machine Sewing Techniques
  - Tracking Stitch
  - Hemming Stitch
  - Running Stitch
  - Hook & Eye
  - Snap button & Buttone Hole

## UNIT-III (4 PRACTICAL)

- (1) Drawing Diagram, Brown paper cutting and stitching following garments:
  - (a) Apron
  - (b) Infant Garment
    - \* Nappies
  - (c) Garments for the Creeping Age
    - \* Baby Frock
- (2) General Principles of clothing construction.
- (3) Drafting and Paper Pattern techniques.
- (4) Methods of taking Body measurements for different garments.

- Importance and Types

## UNIT-IV (1 PRACTICAL)

- (1) Sample collection of Laundry material and understanding its usage.
- (2) Use of stain Removal Techniques.

## **SEMESTER-I**

#### <u>THEORY</u>

#### ELECTIVE- (EC-2) - 101

## INTRODUCTION TO FAMILY RESOURCE MANAGEMENT

Lectu	Lectures per Week Total			Marks per Paper				Duration of		
			Credits					Exam Hour		
				Internal		External				
Theory	Practical	Other		Theory Practical		Theory Practical		Theory	Practical	
-	3	1	4					3.00	3.00	
								hours	hours	

#### FOCUS:

This course deals with the management of resources in the family with particular reference to mobilizing all the resources for achieving the family goals. It also deals with the factors motivating management and management applied to specific resources.

#### **OBJECTIVES:**

- To help students in learning various concepts of resource management.
- To help students learn the basic process of management.
- To recognize the importance of wise use of resources in order to achieve goals.

#### UNIT-I

- (1) Meaning and scope of Resource Management.
  - Definition of resource management.
  - Purpose of resource management.
  - Obstacles in resource management and ways to overcome them.
- (2) Management Process
  - Definition and it's importance
  - Steps-

(a)	Planning:	Definition, Importance of planning and						
		steps	in	successful	planning,	types	of	plans
		charac	teris	tics of planni	ng.			

- (b) Controlling: Definition and important steps involved in controlling phase: Energizing, checking and adjusting.
- (c) Evaluation: (Feedback) Definition and it's importance,

Types of Evaluation.

## UNIT-II

(1)	Facto	rs motivating re	esource	management
	(a)	Values:	- Defii	nition and it's importance in human life
			- Туре	es of Values
				* Extrinsic
				* Intrinsic
	(b)	Goals:	Defini	tion and it's importance In human life
			- Туре	es of Goals
				* Means and Goal
				* Intermediate Goal
				* Ultimate or long term goal
	(c)	Standard :	Defini	tion and it's importance
			- Class	sification of Standard
				* Conventional / Nonconventional
				* Qualitative / Quantitative
	(d)	Decision Mak	king :	Definition and it's importance
			-	Steps involved in decision making
			-	Types of decision
				* Individual decision
				* Group decision

#### UNIT-III

- (1) Resources:
  - Definition and its importance of resources in effective management
  - Characteristics of resources
  - Types of resources
    - \* Human resources
    - \* Non-human resources
- (2) Time Management
  - Meaning and need of time management.
  - Management applied to time
    - \* Planning
    - \* Controlling
    - \* Evaluating

#### UNIT-IV

- (1) Energy Management
  - Meaning and need of energy management.
  - Fatigue : Definition, types, methods to avoid fatigue
  - Management applied to energy
    - \* Planning
    - \* Controlling Principles of body mechanics
    - \* Evaluating
  - Work Simplification : Definition, Techniques of work simplificant.

#### **Reference Book:**

- (1) Varghese and Ogale, 'Home Management', New Age International (P) Ltd., 1985
- (2) Gandotra & Majmudar, "Grahvayvasthapan" (Gujarati), Anada Book Depot, Ahmedabad.
- (3) Gandotra & Shukul, 'Home Management & Family Finance", Dominant Publisher& Distributer, New Delhi
- (4) Thakkar & Pujara, "Introduction to Home Management" (Gujarati), Praveen Pustak Bhandar, Rajkot
- Nickell & Dorsey, "Management In Family Living", CBS Publishers & Distributors
  Pvt. Ltd., 2002.