

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT
HOME SCIENCE SEMESTER SYSTEM
F.Y.B.A.SEMESTER-I
2011-2012

		NO. OF PAPER	CREDIT
FOUNDATION COMPULSORY	COMP.LANG. ENG./GUJ./HINDI	01	03
CORE ALLIED	GROUP-I SANS/STATS/ HOME SCIENCE EDUCATION-1	01	03
FOUNDATION ELECTIVE	GROUP-II 1.ENVIRONMENT 2.HUMAN RIGHTS	01	03
CORE COURSE	1.FUNDAMENTALS OF FOODS AND NUTRITION-I 2.HOME MANAGEMENT-I	02	08
SUBJECT ELECTIVE	1. BASIC SCIENCE-I 2. INTRODUCTION TO CLOTHING –I	02	08
EXTENSION ACTIVITY	NCC NSS PTI	02	03

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FOUNDATION COMPULSORY	COMP.LANG. ENG/GUJ./HINDI	01	03
CORE ALLIED	GROUP-I SANS/STATS/ HOME SCIENCE EXTENSION EDUCATION-II	01	03
FOUNDATION ELECTIVE	GROUP-II 1.ENVIRONMENT 2.HUMAN RIGHTS	01	03
CORE COURSE	1.FUNDAMENTALS OF FOODS AND NUTRITION-II 2.HOME MANAGEMENT-II	02	08
SUBJECT ELECTIVE	1.BASIC SCIENCE-II 2.TRADITIONAL TEXTILES , INDIAN EMBROIDERY & HOUSE HOLD TEXTILES - II	02	08
EXTENSION ACTIVITY	NCC NSS PTI	02	03

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT
F.Y.B.A.
SEMESTER-I
HOME SCIENCE EDUCATION
Effect from 2011-2012

Theory-3 Periods/week

Theory-External-70 Marks

Internal-30 Marks

Core Allied (3 CREDITS)

OBJECTIVES:

- 1 To enable students to understand the concept and importance of Home science.
- 2 To familiarize students with various types of teaching aids.
- 3 To make students aware of vocational opportunities.

Course content:-

- 1 Introduction to Home Science Education
 - 1.1 Definition of Home Science.
 - 1.2 Meaning of Home Science.
 - 1.3 Aims of teaching Home Science.
 - 1.4 Objectives of Home Science.
 - 1.5 New avenues of Home Science.
- 2 Scope and components of Home Science
- 3 Importance and value of Home Science
 - 3.1 Vocational value.
 - 3.2 Foundation of good citizenship.
 - 3.3 Universality.
 - 3.4 Self- reliance.
 - 3.5 Solution of Household problems.
 - 3.6 Preparation for the change to come.
 - 3.7 As general education.
 - 3.8 Preservation and Transmission of culture.
 - 3.9 Economic importance.
 - 3.10 Ability to live a richer and purposeful life.
- 4 History of Home Science in India.

- 5 Need and significance of Vocationalization of Home Science.
 - 5.1 Reasons for vocationalization of Home Science.
 - 5.2 Job opportunities for Home Scientists.
 - 5.3 Self employment in the field of Home Science.
- 6 Place of teaching aids in Home Science
 - 6.1 The role of teaching aids in teaching learning experience.
 - 6.2 Classification of audio-visual aids
 - 6.3 “The Cone of Experience” by Edgar Dale

References:-

- 1 Dahama, O.P., Bhatnagar,O.P.- Education for Communication, Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.
- 2 Dale Edgar- Audio visual methods in teaching, The Dryolen Press, New York 1953
- 3 Das, R.R., Roy Binita- Teaching of Home science, Sterling Publishers Ltd, 1973
- 4 Dash, Nivedita-Teaching of Home science, Dominant Publishers and Distributors, New Delhi.
- 5 Devdas Rajamal.P- Methods of teaching Home science, NCERT, New Delhi.
- 6 Dr. Chandra- Introduction to Home science, Sterling Publication, New Delhi.
- 7 Dr. Parlikar Kalpana- What is Home science, Diamond Publication, Baroda
- 8 Mehta Neepa, Mehta Avani- Designing Graphic aids, Dept. of Home sc. Extension and Communications, M.S.University, Baroda.

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT
F.Y.B.A.
SEMESTER-I
HOME SCIENCE-I
FUNDAMENTALS OF FOODS AND NUTRITION-I
Effect from 2011-2012

Theory-3 Periods/week

Theory-External-45 Marks

Internal-20 Marks

Practical-2Periods/week

Practical-External-25-Marks

Internal-10 Marks

Core Course-1 (4-Credit)

OBJECTIVES:

1. The course enables the students to understand the functions of food and the role of various nutrients and the effect of deficiency and excess.
2. To learn about the composition and nutritional contribution and selection of different food stuffs.
3. To be familiar with different methods of cooking, their advantages and disadvantages.
4. To develop the ability to improve the nutritional value of food.

CONTENT:

THEORY:

UNIT-I

1. Concept of nutrition
2. Definition of food ,Diet, nutritional status and malnutrition
3. Signs of good and poor nutrition.

UNIT-II

Functions of food, Basic Food Groups, Balance Diet

UNIT-III

Macro nutrients: Classification, digestion, absorption, metabolism, sources, functions, RDA, deficiency and excess (in brief)

1. Carbohydrates
2. Protein
3. Fat

UNIT-IV

Energy-Fuel and energy, energy yielding food factors, the energy value of food, energy units, determination of energy value using Bomb Calorimeter, recommended allowances for calories.

PRACTICALS:

UNIT-I Use and care of kitchen equipments

UNIT-II Controlling techniques: Weight and measures-Standard and household measures for raw foods.

UNIT-III Preparation and calculation of following nutrients

1. Carbohydrates
2. Protein
3. Energy

REFERENCES:

1. F.P. Antia-Diet Therapy
2. Mudambi and Rajgopal-Fundamentals of Foods and Nutrition
3. M. Swaminathan-Food Science, Chemistry and Experimental Foods
4. Neelam Buddhdev, Bhavna Vaid-Human Nutrition
5. R.Rajalaxmi-Prayukta poshan
6. Thangam Philip-Modern Cookery

VEER NARMAD SOUTH GUJARAT UNIVERSITY , SURAT

F.Y.B.A.

SEMESTER-I

HOME SCIENCE-II

HOME MANAGEMENT-I

Effect from 2011-2012

Theory-3 Periods/week

Theory-External-45 Marks

Internal-20 Marks

Practical-2Periods/week

Practical-External-25-Marks

Internal-10 Marks

Core Course -2 (4-Credits)

A. INTRODUCTION TO RESOURCE MANAGEMENT

Focus :

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

OBJECTIVES :

- To create awareness among the students about management in the family as well as the other systems.
- To recognize the importance of wise uses of resources in order to achieve goals.

UNIT-1 Introduction to Management

Ch-1 Variety of Meaning
Supervision / Supervisor, Leadership / Leader, Execute / Executive,
organization / Organizer, Administration/ Administrator,
Direction/Director, Control/Controller, Boss, Governor

Ch-2 Definitions of Management and Home Management From Dictionary point of view , By Henri Fayol (Father of Modern Management),Mc Farland, Henri Sisk, A Simple preferred Definition, Nickell and Dorsey, R.P.Kotzin, National Conference of family life sub-committee Report, Gross and Crandall, Traditional and Modern Concept of Definitions.

UNIT-2 Motivation in Management

Ch-1 Values

- Definitions- Mid Marget, Dr.Radha Kamal Mukherjee, Nickell and Dorsey Etc,
- Characteristics, Origin and Motivating Values,
- Types of Values-By Parker, By Super, By Lindsey,
- Factors affecting Values

Ch-2 Goals

Definitions, origin and Types of Goals, Long Term, Short Term, Means End, Related to Personal, Family, real, Group etc.

Ch-3 Standards

Meaning, Classification-As to context, fixedness and Quality.

UNIT-3 Resources and their Management in the Family

Ch-1 Resources

Definitions, Meaning and Classification

Ch-2 Family characteristics influencing management

A. Family

Introduction, Meaning, Definitions-Elliot and Merrill, Besong and Besong, Burges and Loke, Types of Family in India -On the basis of residence, Authority, Lineage Marriage, Succession, Number and structure, Advantages and Disadvantages of Joint and Nuclear Family

B . Family Life Cycle

C. Life Styles

UNIT-4 Decision making in Management

Ch-1 Meaning and Definitions- By Peter Drucker, By Geroge R. Terry, By R.S. Davar, From Webster Dictionary

Ch-2 Steps in Decision Making

A. Problem analysis

- Perception of the problem
- Identification of the problem
- Analysis

B. Search for alternatives

C. Evaluation of alternatives

D. Selection of the best solution

- Risk involved, Economy, Timing, Limitation, Implementation of decision
- Feed back of Decision

Ch-3 Types of Decision

- Major and Minor
- Programmed and Non-Programmed
- Routine and Basic
- Personal and Group
- Methods of taking Group Decisions

REFERENCES:

1. Atkinson, Jacqueline: Better Time Management, Indus, New Delhi
2. Bharathi and Jacintha: Family Resource Management, Discovery Publishing House, Delhi.
3. Dr.Saksena S.C: Business Administration and Management, Sahitya Bhawan, Agra.
4. Fontana D:Managing time, Excel Books, New Delhi.
5. Gross, Crandall: Management for Modern Families, Appletion Century Crofts Inc.
6. Nickel and Dorsey: Management in Family Living, Wiley Eastern Ltd. New Delhi
7. Singh P.N.: Developing and Managing Human Resources, Suchandra Publication, Bombay.
8. Swanson V.: Introduction to Home Management, Collier, Mac Millan Publisher, London.

B.HOUSE HOLD EQUIPMENTS

Focus :

This Course intend to impart knowledge and understanding of construction of Household equipment, material used, selection criteria, maintenance and care.

OBJECTIVES

To enable students to :

1. Recognize base materials, finishes in the construction of household equipment
2. Understand the principles underlying the operation use, care and storage

UNIT-1 Materials used for household equipment

Ch-1 Base Materials, Iron, Aluminum, Steel, Copper, Brass, Glass, Borosilicate, Soda lime Silica, Plastic, etc.

Ch-2 Finished- Mechanical and Applied Finishes

B.HOUSE HOLD EQUIPMENTS

PRACTICAL

Focus : The course on household equipments designed to learn the operation and care of electrical and non-electrical equipments.

OBJECTIVES :To make the Students aware of-

1. Understanding operation and care of various household equipments of new trends in equipments in the market.

UNIT-1 Learning the use and care of different

Ch-1 Kitchen equipments

- a. Refrigerator
- b. Mixer, Grinder, Juicer, Slicer, Grater, Whipper, Kneader
- c. Tea Kettle, Coffee Percolator / Tea-Coffee Maker
- d. Tandoor-Electric and Non Electrical
- e. Oven-Electric and Microwave

VEER NARMAD SOUTH GUJARAT UNIVERSITY , SURAT

F.Y.B.A.

SEMESTER-I

HOME SCIENCE-III

BASIC SCIENCE-I

Effect from 2011-2012

Theory-3 Periods/week

Theory-External-45 Marks

Internal-20 Marks

Practical-2Periods/week

Practical-External-25-Marks

Internal-10 Marks

Subject Elective -1 (4-Credit)

Objectives:

- This course is designed to serve as a sound basis for the study of nutrition, food science, biochemistry etc.

-The students will be able to understand about particles, elements, acid, Base and household chemical substances.

-Understand cell and its structure.

-Understand medicinal value of useful plants.

UNIT-I

1. Elementary knowledge about Atom, Molecule, Symbol, Formula, Valiancy, Radicals
2. Elements (Metallic and Non-metallic), Compounds and Mixtures –Definition and characteristics.
3. Acid and Base: Definition, Properties, Types (strong and weak) and uses.
4. Types of glasses and their uses.
5. Main properties and uses of the following
 - Sodium Hydroxide
 - Sodium Carbonate
 - Sodium Bicarbonate
 - Sodium Chloride
 - Alum
 - Plaster Of Paris
 - Potassium Permanganate
 - Potassium Meta bisulphate
 - Citric Acid
 - Acetic Acid

UNIT-II

- 1 Introduction to cell, Types of cell-Akaryotic, Prokaryotic and Eukaryotic
- 2 Difference between Plant cell and Animal cell with diagram.
- 3 Cell organelles-their structure and functions
- 4 Introduction of non living cell contents and detail information about starch grains.
- 5 Medicinally important ant plants: Useful parts and their medicinal value.
E.g. Licarice, Vitex, Cinnamon, Cissus guardian gularius, Clove, Eucalyptus, Adhatoda Vasica, Sacred basil, Nimb, Aloe vera.

PRACTICALS:

- 1 Study of compound microscope and its parts.
- 2 Observation of plant cells – Mounting
 - Onion peel
 - Tomato cells
 - Spirogyra
 - Bacteria
- 3 Observation of Non living cell contents-Mounting
 - Starch grains (e.g. Potato, Euphorbia)
 - Mineral crystals of Calcium Oxalate (From leaf of pathos, Amorphophalus, phylloclade of opuntics, etc.)
- 4 Study of Animal cells from permanent slides – Amoeba, Euglena, Paramecium)
- 5 Study of medicinally important plants: Useful parts and their medicinal value as theory syllabus.
- 6 Study of types of glasses and their uses.
- 7 Study and uses of following substances;
 - Sodium Chloride.
 - Alum.
 - Potassium Permanganate.
 - Plaster Of Paris
 - Citric Acid

Practical

Section -I(Rotation)

(04 minutes for each specimen)

(09 marks)

- 1 Identify and describe uses. (Parts of microscope)
- 2 Identify and describe cell structure. (Animal Cell)
- 3 & 4 Identify and describe. (Useful parts of and medicinal value)
- 5 Identify and describe type and uses of glass.
- 6 Identify and describe uses of the substance.

Section -II

- 1 Mounting-Onion Peel/ Tomato Cells/Spirogyra/Bacteria-with Viva (06 marks)
- 2 Mounting- Starch grains/ Mineral crystals-with viva(06 marks)
- 3 Journal (04 marks)

References:

- 1 A.C.Datta - A Text Book of Botany
- 2 D.A. Apsungikar- Manual of Botany Practicals
- 3 De Roberties- Cell Biology
- 4 Loeny A. and Sarkerly (1995)-Cell structure and functions
- 5 Luchinger-Biochemistry
- 6 Rustogy- Cytology
- 7 A Text Book of Botany for F.Y.B.Sc.-Popular Publishing Co., Surat.
- 8 A Text Book of Zoology For F.Y.B.Sc.-Popular Publishing Co., Surat.
- ૯ જીવશાસ્ત્ર, યુનિ. ગ્રંથ નિર્માણ બોર્ડ, ગુજરાત રાજ્ય.
- ૧૦ વનસ્પતિશાસ્ત્ર પરિચય, ડૉ. સોલંકી, પ્રો. મોરે
- ૧૧ પ પ્રાયોગિક વનસ્પતિશાસ્ત્ર, ડૉ. જૈવિન જોષી, ડૉ. હંસાબેન પટેલ, પોપ્યુલર પ્રકાશન, સુરત.
- ૧૨ કૉલેજ રસાયણશાસ્ત્ર, ભૌતિક, કાર્બનિક, અકાર્બનિક, રસાયણશાસ્ત્ર, પોપ્યુલર પ્રકાશન, સુરત.

VEER NARMAD SOUTH GUJARAT UNIVERSITY , SURAT

F.Y.B.A.

SEMESTER-I

HOME SCIENCE-IV

INTRODUCTION TO CLOTHING

Effect from 2011-2012

Theory-3 Periods/week

Theory-External-45 Marks

Internal-20 Marks

Practical-2Periods/week

Practical-External-25-Marks

Internal-10 Marks

Subject Elective -II (4 Credits)

Objectives:-

- (1) To develop students interest in sewing.and give practice of sewing machine.
- (2) To gain knowledge and skill in the basic sewing techniques of clothing construction.
- (3) To acquire skill in buying techniques of family clothing and household linen.
- (4) To become aware of selecting proper fabric according to their use.
- (5) To become familiar working with working of sewing machine and learning basic clothing construction skills.

Course content:-

Ch.-1 Introduction

- (a) Scope and importance of clothing
- (b) Reasons for wearing clothes- importance during ancient time and present period.
- (c) Attitudes towards modesty, religious beliefs.
- (d) Psychological importance of clothing- on children, adolescents and adults
- (e) Effect of clothes on human behaviour :-Clothes and self- expression, physical expression and social expression

Ch.- 2 Tools used for clothing construction – their construction, use, cleaning and care.

- (a) Tools for marking.
- (b) Tools for cutting.
- (c) Tools for drafting.
- (d) Tools for sewing.
- (e) Tools for finishing.

Ch.-3 (A) Factors affecting selection of fabric:-

- (a) Family budget (b) season (c) materials for style (d) cost and amount of material (e) Easy to care materials (f) colour fastness (g) materials for specific use (h) occasion (i) figure and complexion of the person (j) fashion.
- (B) Buying readymade garments, advantages and disadvantages of readymade, tailor made and home made garments.

Ch-4 Principles of clothing construction:-

- (a) General principles of clothing construction.
- (b) Importance of drafting and making paper patterns.
- (c) Knowledge of standard measuring points and taking body measurements for all types of garments.
- (d) Preparation of fabric for clothing construction.
- (e) Planning and cutting of paper patterns in relation to texture and design of fabric..
- (f) Laying out of patterns, cutting and marking.

Practicals:-

- (1) Study of sewing machine with reference to its construction, use, cleaning and care.
- (2) Machine faults and ways to rectify them.
- (3) Basic construction techniques:- (Make samples)
 - (a) Basting (even and uneven), Back stitch, hemming, slip stitch, lock stitch.
 - (b) Seams- Plain, French, flat fell, run and fell, lapped, edge machining, rolled, Faggoting,
 - (c) Darts:- French and fish.
 - (d) Gathers and Pleats:-Knife, combination (side), box, inverted, controlled
 - (e) Tucks:- Pin, scallop, blind, Diamond, cross, corded, graduated.
 - (f) Smocking and Honeycomb

References:-

- (1) Reena Bhatia & Charu Arora- Introduction to Clothing and Textiles,
- (2) Bhanu Patel & Madhu Sharan, Sociological & Psychological aspects of clothing
- (3) Pramila Varma- Vastra vigyaan evam paridhan
- (4) Raul Jewel- Encyclopaedia of dress making
- (5) Jacob Anna Thomas, The Art of Sewing, UBS Publishers and Distributors Ltd., New Delhi, 1993.

Marking scheme:-

Journal	5 marks
1 st Q (a or b or c (two samples)	6 marks
2 nd Q (d or e) (two samples)	8 marks
3 rd Q (f) (one sample)	6 marks

Total	25 marks