

MINIMUM COMMON CURRICULUM

FOR

BACHELOR OF ARTS (B.A.)

(THREE YEAR DEGREE COURSE)

Proposed Syllabus

FOR

SUBJECT

HOME SCIENCE



DR. BHIM RAO AMBEDKAR UNIVERSITY, AGRA

B.A. (HOME SCIENCE)

COURSE STRUCTURE

PAPER NUMBER	PAPER NAME	EXTERNAL MARKS	INTERNAL MARKS	TOTAL MARKS	GRAND TOTAL
FIRST YEAR					250
Paper – 101	Food and Nutrition	80	20	100	
Paper – 102	Human Development	80	20	100	
Paper – 103	Practical	30	20	50	
SECOND YEAR					250
Paper – 201	Family Resource Management	80	20	100	
Paper – 202	Dietetics and Therapeutic Nutrition	80	20	100	
Paper – 203	Practical	30	20	50	
THIRD YEAR					250
Paper – 301	Extension and Communication	80	20	100	
Paper – 302	Textiles and Clothing	80	20	100	
Paper – 203	Practical	30	20	50	
GRAND TOTAL		570	180	750	750

B.A. (HOME SCIENCE)

FIRST YEAR DETAILED SYLLABUS

PAPER – 101: FOOD AND NUTRITION

MM:100

External:80

Internal:20

Learning Objectives:

This course will enable the students to understand-

1. The relationship between food, nutrition and health.
2. Functions of food.
3. Learn about various food groups.
4. Process of digestion, absorption and function of various nutrients and their sources.
5. Various methods of preparing food.

SYLLABUS

Unit I: Concept of Nutrition:

- (a) Definition – Food, Nutrition, Nutrients and Balanced Diet
- (b) Types of Nutrition – Optimum Nutrition, Under Nutrition, Over Nutrition
- (c) Classification and Functions of Food.

Unit II: Nutrients: Macro & Micro Nutrients Classification, Sources, Functions

- Recommended Dietary Allowances
- Deficiency and Excess (in brief)
- Digestion & Absorption of:

- a) Carbohydrates
- b) Fats
- c) Proteins
- d) Minerals

<u>Major</u>	<u>Trace</u>
Calcium	Iron
Phosphorus	Iodine
Sodium	Fluorine
Potassium	Manganese
Chloride	Zinc
Sulphur	Cobalt
Magnesium	Copper

- e) Vitamins
 - Fat soluble: A, D, E and K
 - Water soluble: Vitamin C, Thiamine, Riboflavin, Niacin, Folic acid, Pyridoxine, pantothenic acid, Vitamin B12

- f) Dietary fibre
- g) Water

Unit III: a) Basic Terminology Used in Food Preparation.

b) Basic Food Groups

Food Composition, Nutritional Contribution & Selection Factors for the following:

Cereals & Millets	Pulses
Fruits	Vegetables
Milk & Milk Products	Nuts & Oilseeds
Meat, Fish & Poultry	Eggs
Sugars	Condiments & Spices

c) Role of Beverages and appetizers in diet:

(i) Stimulating (ii) Refreshing (iii) Nutritious

Unit IV: Methods of Cooking, Their Advantages & Disadvantages and Effect on Nutritive value.

a) Retention of Nutritive value of foods during preparation.

b) Food Adulteration – meaning & common adulterants in Food.

c) Food poisoning

d) Improving Nutritional Quality of Foods: Germination, Fermentation, Supplementation, Substitution, Fortification and Enrichment.

e) Role of Convenience Foods: Ready to use foods and Protein Supplements

Internal Assessment:

- Seminar on any one topic from the above syllabus
- Test with Multiple Choice Questions / short and long answer questions.
- Preparation of an Audio-visual aid
- Attendance

Reference Books:

1. Aahaar Vigyan, Devina Sahai, New Age International Publishers, New Delhi, 2018.
2. Aahaar Vigyan, Suraksha avam Poshan, Punita Sethi & Poonam Lakda, Elite Publishing House, New Delhi, 2015.
3. Nutrition Science- B.Srilakshmi, New Age International Publishers, New Delhi, 2017.
4. Textbook of Nutrition- Ankita Gupta, Medico Refresher Publishers, Agra, 2018.
5. Food Science- B.Srilakshmi, New Age International Publishers, New Delhi, 2018.
6. Fundamentals of Food, Nutrition and Diet Therapy- Sumati R Mudambi, New Age International Private Limited; New Delhi, 6 th edition (2018)

B.A. (HOME SCIENCE)

FIRST YEAR DETAILED SYALLBUS

PAPER – 102:

HUMAN DEVELOPMENT

MM:100

External:80

Internal:20

Learning Objectives:

- To understand the field of Human Development and significance of Human Development.
- To familiarize students with prenatal development, care of the mother and new born
- To understand physical, emotional, social and mental development from birth to childhood
- To develop an understanding of the concept of play and personality development.
- To develop an understanding of common behavioural problems among children and their remedies.

SYLLABUS

Unit I: Introduction to Human Development

- a) Definition, need & scope of human development
- b) Understanding growth & development
- c) General principles of development
- d) Stages of development & Developmental tasks of each stage [Prenatal period, Infancy (0-2 yrs.), Early childhood (2-6 yrs.), Middle childhood (6-12 yrs.), Adolescence (13-18 yrs.), Young adulthood (19-40 yrs.), Middle adulthood (41-60 yrs.), Late adulthood & Ageing (61 yrs. till death)].
- e) Factors affecting development

Unit II: Prenatal and Postnatal Period

- a) Female reproductive organs (internal)
- b) Define terms: Puberty, Menarche, Ovulation, Menstruation cycle, Ova, Sperm, Fertilization, Conception, Implantation & Menopause
- c) Stages of prenatal development (i) Zygotic (ii) Embryonic (iii) Foetal Stage.
- d) Signs of pregnancy
- e) Complications of pregnancy (i) Hyperemesis Gravid arum (ii) Abortions (iii)Toxaemia of Pregnancy (iv) Rh Factor (v) Anaemia
- f) Care of the pregnant mother
- g) Post-natal care of mother
- h) Care of the New born
- i) Immunization

Unit III: Growth & Development with characteristics from birth to 12 years

- a) Physical Development
- b) Emotional Development
- c) Social Development
- d) Mental Development

Unit IV: Play and Personality Development

- a) Definitions and characteristics of play
- b) Types of play, importance of play
- c) Personality – Meaning & factors affecting personality development
- d) Common behavioural problems among children and their remedies.

Internal Assessment:

- Seminar on any topic from the above syllabus
- Test with Multiple Choice Questions / short and long answer questions.
- Preparation of an Audio-visual aid
- Attendance

Reference Books:

1. Berk, L. E. (2017). Child Development, IX edition, Pearson Education.
2. Gordon, I.J. (1970). Human development: From birth through adolescence. Joanna Cotler Books.
3. Hurlock, E.B. (2017). Child Development. VI edition. Indian edition, Tata McGraw Hill, Delhi.
4. Mussen, P. H., Conger, J. J., Kagan J. & Huston A. C. (1996). Child Development and Personality. New York: Harper & Row.
5. Papalia, D. E., Olds, S.W. & Feldman, R. D. (2017). Human Development. IX edition, Indian edition. N.Y.: Mc Graw Hills Book.
6. Santrock, J.W. (2007). Life Span Development. Tata Mc Graw Hill, New Delhi.
7. Srivastava, D. N. & Verma, P. (2014). Child Psychology: Child Development. Shri vinod pustak mandir.

B.A. (HOME SCIENCE)

FIRST YEAR DETAILED SYALLBUS

PAPER – 103:

Practical

MM:50

External:30

Internal:20

1. Food Preparation.

- a) Beverages – Fruit Punch, Milk shake and Soup
- b) Any 5 nutritious recipes using a combination of cereal and pulses.
- c) Vegetables- Dry vegetable (any one) and Curries of different types (any two)
- d) Fruits – Preparation of fruits and salads using different kinds of dressing and garnishing.
- e) Milk – Milk based simple dessert and puddings – one hot and one cold
- f) Baking- any two recipes

2. Fortification and Enrichment of Local recipes.

3. Preparation of teaching aid for various kinds of development stages of nursery school Children.

4. Story telling/ poem reciting and writing.

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B.A. (HOME SCIENCE)

SECOND YEAR DETAILED SYALLBUS

PAPER – 201:

FAMILY RESOURCE MANAGEMENT

MM:100

External:80

Internal:20

Learning Objectives:

- To develop ability to evaluate management efficiency in the family.
- To understand the significance of management process.
- To understand the process of financial management.
- To become familiar with the techniques of work simplification.
- To develop good taste in decoration.

SYLLABUS

Unit I: Management and motivating factors

- i) Basic Concepts of Management
- ii) Importance of Management
- iii) Obstacles of Management
- iv) Values – importance, classification, characteristics & changing values
- v) Goals – definition & types
- vi) Standards – Definition and Classification
 - Individual & Group
 - Conventional & Modern

Unit II: a) Money Management:

- (i) Income – sources of income & expenditure
- (ii) Budget – preparation of family budgets in view of family income.
- (iii) Saving – purpose of saving and different investment schemes (of L.I.C. & Bank), banking instruments (cheques & drafts) and services (loans, investments, fixed deposits)
- (iv) Guidelines of money management.

b) Time and Energy Management

- i) Definition
- ii) Time and Energy demand during various stages of family life cycle.
- iii) Tools of time management and fatigue.
- iv) Guidelines of time and energy management.
- v) Process and Techniques of work simplification

Unit III: a) Family Resources and Decision Making Process:

- i) Type of Resources
- ii) Factor affecting the use of resources.
- iii) Steps and role of decision making in management.

iv) Stages of family life cycle.

b) Housing

- i) Selection of House site
- ii) Factors to be considered while designing a house-
 - Orientation
 - Privacy
 - Grouping of User's Area
 - Roominess
 - Circulation
 - Sanitation
 - Light & Ventilation
 - Aesthetics
 - Flexibility
 - Cost

Unit IV: a) Introduction to Fundamentals of Art

- i) Elements of Art- Line, Form, Colour, Texture, Pattern, Light, Space
- ii) Principle of Art- Balance, Proportion, Rhythm, Emphasis, Harmony
- iii) Design – definition characteristics & types: structural & decorative
- iv) Study of Colours
 - Classification & Dimensions
 - Colour Schemes
 - Psychological effects of colours

Internal Assessment:

- Seminar on any topic from the above syllabus
- Test with Multiple Choice Questions / short and long answer questions.
- Preparation of an Audio-visual aid
- Attendance

Reference Books:

- 1) Agan, T. (1970). The House, its Plan and Use. Pennsylvania, U.S.A., J.P. Lippincott Publishing Co.
- 2) Craig, H. and Rusha, O.(1969). Homes with Character. New Delhi. Universal Book Store.
- 3) Goldstein, H. and Goldstein, V. (1960). Art in Everyday Life. New York. The MacMillan Company.
- 4) Gross Irma H., and Elizabeth W. Crandall, Management for Modern Families, Second Edition, New York: Appleton-Century-Crofts, 1963, Chapter 8
- 5) Mann, M.K. (1980). Home Management for Indian Families. New Delhi. Kalyani Publishers.
- 6) Nadler, Gerald. (1957). Work Simplification. New York. Mc-Graw Hill Book Company, Inc.
- 7) Nickell, Paulena and Jean Muir Dorsey, Management in Family Living, Third Edition, New York: Wiley 1959

B.A. (HOME SCIENCE)

SECOND YEAR DETAILED SYALLBUS

PAPER – 202: DIETETICS AND THERAPEUTIC NUTRITION

MM:100

External:80

Internal:20

Learning Objectives:

This course will enable the students to understand:

1. The principles of planning of nutritionally adequate meal
2. Principles of diet therapy
3. Modifications of normal diet for Therapeutic purposes.
4. Dietary management of common diseases.

SYLLABUS

Unit I: a) Definition of Health, Dietetics & Therapeutic Nutrition

- b) Facts about fast foods/Junk foods.
- c) Recommended Dietary allowances for all age group (ICMR)
- d) Factors affecting energy requirements- BMR, Activity, Age, Climate, Diet, Physiological Conditions

Unit II: Concept of Nutritionally adequate diet & meal planning.

- a) Importance of Meal Planning
- b) Factors affecting meal planning: Nutritional, Socio cultural, Religious, Geographic, Economic, Availability of time & material resources
- c) Meal Planning for special occasions, like Festival and Birthday party
- d) Use of Exchange list for meal planning

Unit III: Nutrition through the life cycle at different activity & socio- economic levels, requirements, nutritional problems, food selection.

- a) Infancy
- b) Preschool
- c) School Age
- d) Adolescence
- e) Adulthood
- f) Special Conditions – Pregnancy and Lactation
- g) Old Age

Unit IV: Principles of diet therapy.

- a) Importance of diet therapy
- b) Modification of normal diets for therapeutic purposes.
- c) Different type of diets
 - Normal Diet
 - Soft Diet
 - Fluid Diet
 - Bland Diet
- d) Different feeding methods
 - Oral feeding
 - Tube feeding

➤ Intravenous feeding

- e) Nutritional Management in common ailments: Requirements and diet planning.
 - i) Diarrhoea
 - ii) Constipation
 - iii) Fevers
 - iv) Weight Management- Overweight and Underweight
- f) Therapeutic Diets
 - i) Diabetes
 - ii) Hypertension

Internal Assessment:

- Seminar on any topic from the above syllabus
- Test with Multiple Choice Questions / short and long answer questions.
- Preparation of an Audio-visual aid
- Attendance

Reference Books:

1. Nutrition and Dietetics- Shubhangini A Joshi, Mc Graw Hill Education Private Limited, New Delhi. 2013.
2. Textbook of Nutrition and Dietetics- Kumud Khanna, Elite Publishing House Pvt Ltd, New Delhi. 7th Edition. 2013.
3. Nutrition and Diet Therapy- Sheel Sharma, Peepee Publishers, New Delhi. 2014.
4. Textbook of Nutrition- Ankita Gupta, Medico Refresher Publisher. Agra. 2018.
5. Fundamentals of Food, Nutrition and Diet Therapy- Sumati R Mudambi, New Age International Private Limited; New Delhi, 6th edition (2018)
6. Dietetics- B.Srilakshmi, New Age International Publishers, New Delhi, 201

B.A. (HOME SCIENCE)

SECOND YEAR DETAILED SYALLBUS

PAPER – 203: Practical

MM:50

External:30

Internal:20

1. Planning and preparation of Therapeutic & modified diets for the following conditions:
 - a) Diarrhoea
 - b) constipation
 - c) Fever
 - d) Overweight & Under weight
 - e) Diabetes
 - f) Hypertension
 2. Project work- How to open various bank accounts-Filling of slips/ forms of bank, making a draft, filling cheques and with drawl slips.
 3. Making Alpana / Rangoli using Principles of art.
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B.A. (HOME SCIENCE)

THIRD YEAR DETAILED SYALLBUS

PAPER – 301: EXTENSION AND COMMUNICATION

MM:100

External:80

Internal:20

Learning Objectives

- To enable the student to become a good extension worker.
- To help the student to plan the Extension programme, to work in the community and to use the audio - visual aids.
- To provide the opportunities for entrepreneurship development among women entrepreneurs.

SYLLABUS

Unit I: Concept of Extension

- a) Meaning and philosophy of extension
- b) Principles, scope, limitations
- c) Extension worker
 - i)Role of Extension worker
 - ii)Qualities
 - iii)Training

Unit II: Extension education process

- (a) Teaching and learning, role of the educator, role of the people in the Learning and development
- (b) Communication - concept, nature, key elements and models.
- (c) Extension techniques and methods – Individual, Group and Mass methods.
- (d) Audio Visual Aids in Extension
 - Classification and importance
 - Selection, preparation and effective use of A.V. Aids in extension work.

Unit III: a) Programme planning Programme, planning cycle and its components

- i) Designing the project – defining objectives, identifying resources, methods/ approach, feasibility and work plan
- ii) Implementing
- iii) Monitoring and evaluation
- b) Recent Community Development Programs for: Women, Children and Family.

Unit IV: Women and Development

- a) Capacity building for women: education, decision making abilities and opportunities, awareness and information on legal and political issues
- b) Women's organizations and collective strength: Women's action groups, women's participation in development initiative.
- c) Entrepreneurship development for women empowerment

Internal Assessment:

- Seminar on any topic from the above syllabus
- Test with Multiple Choice Questions / short and long answer questions.
- Preparation of an Audio-visual aid
- Attendance

Reference Books:

1. Directorate of Extension Education,
2. G. L. Ray, "Extension and Management Communication" Naya Prakash.
3. Jaipal Singh, "Extension Education and Rural Development" SR Scientific publications. 8 gandhi nagar near paliwal park Agra.
4. O. P. Dhama & O.P. Bhatnagar, "Education & Communication for Development" Oxford IBH Publishing Co. Pvt. Ltd, New Delhi.
5. Anoop Singh Sandhu, "Extension program planning"
6. P. N. Kalla & Achla Gakkhar, "New dimension of Extension Education" Hindi Granth Academy, jaipur.
7. Achla Gakkhar & P. N. Kalla, "New dimension of Extension and Communication" University Book house Jpr.
8. Jitendra Chauhan, "Prashar Shiksha Evam Suchna Tantra" Bio- Green publication.

B.A. (HOME SCIENCE)

THIRD YEAR DETAILED SYALLBUS

PAPER – 302:

TEXTILES AND CLOTHING

MM:100

External:80

Internal:20

Learning Objectives:

This course will enable the students to understand-

1. Sources and types of fabrics available and their uses.
2. How finishing a fabric can enhance its appearance, properties and uses.
3. Selection of fabrics and garments according to their end use and in the available budget.
4. Rights and duties of consumers.

SYLLABUS

Unit I: Classification of Textiles

- a) Introduction and classification of textiles.
- b) Terminology in textiles
- c) General Properties of fibre
- d) Composition, Types, Properties and uses of:

Cotton	Silk
Wool	Nylon
Rayon	Polyester

Unit II: Study of Yarns & Fabrics

- a) Twist and yarn number- their effect on fabric properties
- b) Simple yarns
- c) Weaving – Basic Weaves
- d) Knitting-properties of knitted fabrics

Unit III: Fabric Finishing

- a) Definition, aims and classification of finishes
- b) Bleaching, Tentering, Calendering, Mercerizing, Sanforizing, Sizing, Glazing, Embossing, Singeing, Schreinerizing, Napping.
- c) Crease Resistant Water Proofing, Flame Proofing, Moth and Mildew Proof
- d) Dyeing and Printing:
 - i) Resist Dyeing Techniques- Tie & Dye, Batik
 - ii) Hand Printing Techniques – Block Printing, Screen Printing, Stencil Printing
 - iii) Machine Printing Technique- Roller Printing, Discharge Printing, Duplex Printing

Unit IV: Consumer Awareness and Education

- a) Selection of fabric for household linen and Apparel for various end uses
- b) Selection of Readymade Garments for different age groups, seasons, occupation and occasion- based on their cost and quality assessment.
- c) Storage and care of fabrics
- d) Problems faced by consumers while buying fabric and readymade garments.
- e) Knowledge of Standardization Marks, Advertisement, Packing and Labels.
- f) Consumer Rights and Duties

Internal Assessment:

- Seminar on any topic from the above syllabus
- Test with Multiple Choice Questions / short and long answer questions.
- Preparation of an Audio-visual aid
- Attendance

Reference Books:

1. Manju Patni 'Family Clothing' star Publication, Agra, 3rd edition 1993.
2. Susheela Dantyagi. 'Fundamentals of Textiles and their care'. Orient Longman Limited, New Delhi.
3. Manju Patni and Pratibha Rastogi. 'Fiber Science and Clothing'. Star Publications, Agra.
4. Alka Agarwal and Manju Patni. 'Fiber science and Clothing'. Star Publications, Agra.
5. Neerja Yadav. 'Textiles and Clothing'. Sahitya Publications, Agra.
6. Pramila Verma. 'Vastra Vigyan avum Paridhan' Madhya Pradesh Hindi Granth Academy, Bhopal
7. Marjory L. Joseph 'Introductory Textile Science' Holt, Rinehart and Winston, NY.
8. Isabel B. Wingate and June F. Mohler. 'Textile Fabrics and Their Selection'

B.A. (HOME SCIENCE)

THIRD YEAR DETAILED SYALLBUS

PAPER – 303: PRACTICAL

MM:50
External:30
Internal:20

SECTION-A

1.
 - a) Dyeing - Tie & Dye / Batik
 - b) Printing – Block / Stencil
2. Drafting cutting & Stitching-
 - i) Girl's frock (3-5 yrs.) with variations
 - ii) Petticoat
 - iii) Ladies Kurta
3. One embroidery article with at least 3 stitches.

SECTION – B

- 1.Planning of program for a selected community-
 - a) Survey for Need Identification
 - b) Formulating Need Based Objectives
 - c) Designing Methods and Materials for implementation of program.
 - d) Evaluation and Reconsideration.
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