M. F. P. Rohilkhand University,
Bareilly.

B. Sc. Home Science
Syllabus.
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of Paper</th>
<th>Paper Code</th>
<th>Full Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>B. Sc. (H.Sc.) I</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Health and Microbiology</td>
<td>701</td>
<td>100</td>
</tr>
<tr>
<td>2.</td>
<td>Sociology</td>
<td>702</td>
<td>100</td>
</tr>
<tr>
<td>3.</td>
<td>Elements of Population Education</td>
<td>703</td>
<td>100</td>
</tr>
<tr>
<td>4.</td>
<td>English Language and Communication Skills</td>
<td>704</td>
<td>100</td>
</tr>
<tr>
<td>5.</td>
<td>Household Chemistry</td>
<td>705</td>
<td>100</td>
</tr>
<tr>
<td>6.</td>
<td>Consumer Economics</td>
<td>706</td>
<td>100</td>
</tr>
<tr>
<td>7.</td>
<td>Fundamentals of Food and Nutrition</td>
<td>707</td>
<td>100</td>
</tr>
<tr>
<td>8.</td>
<td>Computer Basics</td>
<td>708</td>
<td>100</td>
</tr>
<tr>
<td>9.</td>
<td>Ecology and Environment</td>
<td>709</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td><strong>B. Sc. (H.Sc.) II</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Introduction to Human Development</td>
<td>201</td>
<td>100</td>
</tr>
<tr>
<td>11.</td>
<td>Introduction to Resource Management</td>
<td>202</td>
<td>100</td>
</tr>
<tr>
<td>12.</td>
<td>Introduction to Clothing</td>
<td>203</td>
<td>100</td>
</tr>
<tr>
<td>13.</td>
<td>Community Development Perspectives and Approaches</td>
<td>204</td>
<td>100</td>
</tr>
<tr>
<td>14.</td>
<td>Family Dynamics</td>
<td>205</td>
<td>100</td>
</tr>
<tr>
<td>15.</td>
<td>Life Span Development</td>
<td>206</td>
<td>100</td>
</tr>
<tr>
<td>16.</td>
<td>Community Nutrition</td>
<td>207</td>
<td>100</td>
</tr>
<tr>
<td>17.</td>
<td>Introduction to Textiles</td>
<td>208</td>
<td>100</td>
</tr>
<tr>
<td>18.</td>
<td>Personal Empowerment</td>
<td>209</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td><strong>B. Sc. (H.Sc.) III</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Entrepreneurship Management</td>
<td>301</td>
<td>100</td>
</tr>
<tr>
<td>20.</td>
<td>Gender and Development</td>
<td>302</td>
<td>100</td>
</tr>
<tr>
<td>21.</td>
<td>The Child with Special Needs</td>
<td>303</td>
<td>100</td>
</tr>
<tr>
<td>22.</td>
<td>Programmes for Rural and Urban Development</td>
<td>304</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Diet Therapy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------------</td>
<td>-------</td>
<td>----</td>
</tr>
<tr>
<td>23</td>
<td></td>
<td>305</td>
<td>100</td>
</tr>
<tr>
<td>24</td>
<td>Maternal and Child Nutrition</td>
<td>306</td>
<td>100</td>
</tr>
<tr>
<td>25</td>
<td>Household Equipment</td>
<td>307</td>
<td>100</td>
</tr>
<tr>
<td>26</td>
<td>Foundation of Art and Design</td>
<td>308</td>
<td>100</td>
</tr>
<tr>
<td>27</td>
<td>Textile Designing and Printing</td>
<td>309</td>
<td>100</td>
</tr>
<tr>
<td>28</td>
<td>Project work</td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>
M.J.P. Rohilkhand University, Bareilly
B.Sc. Home Science Syllabus

B.Sc. I syllabus Session 2002-2003

Health and Microbiology

Theory 75 marks
S. W. 25 marks

Topics included here are for one Semester Courses and the students are required to know the elementary knowledge of topics listed below:

1. (a) Structure of the Bacterial cell.
   (b) Definition of health and hygiene, Immunisation for a child, Definition of Air Pollution.
2. Sources of water Supply, water-borne diseases (Typhoid, Cholera) Purification of water.
3. Pasteurisation – Definition, Methods of pasteurisation, effect of Pasteurisation, efficiency (Test) of Pasteurisation.
4. Immunity – Types of immunity.
5. Antibiotics – Definition, Route of Administration of Antibiotics combination of antibiotics or Antibiotics with other drugs, spectrum of activity, Testing of sensitivity. Some Common Antibiotics:
   (1) Penicillin
   (2) Streptomycin – their action and uses
6. Food poisoning-causes due to microorganisms
7. Common diseases produced by microorganisms:
   (a) Water-borne infection (diseases) Typhoid, Cholera
   (b) Air borne infection (diseases ) Diphtheria, pulmonary Tuberculosis and small pox.

Sessional Work
1. Term paper on Theory,
2. Allotment of Sessional work assignment to students on the topics listed above.
3. Visit to Social and Preventive Medicine (S. P. M.) Department of Medical College.

Reference Books:
2. William G. Walkar – General Microbiology 1969, 11th ed,
8. Dr. V. N. Bhava and Dr. N. S. Deodhar and Dr. S. N. Bhava
   And your Health. 1978.
M.J.P. Rohilkhand University, Bareilly

B.Sc. Home Science Syllabus

B.Sc. I syllabus Session 2002-2003

Sociology

Theory
75 marks

S. W.
25 marks


3. Caste and Class: Meaning and definition characteristics of caste and class. Merits and demerits of caste system. Distinction between caste and class.


5. Social Groups: Meaning and definition. Characteristics of Social groups. Primary and Secondary groups, their characteristics and importance.


8. Social evils of Indian Society.
   (a) Casteism
   (b) Untouchability
   (c) Dowry System
   (d) Child abuse and Child labour

B.Sc. Home Science Syllabus

B.Sc. I syllabus Session 2002-2003

Elements of Population Education

Theory

S. W.

75 marks

25 marks


3. Population and its rate of growth:
   (a) Population Growth in India
   (b) World Population Growth in India
   (c) Factors influencing Population growth

4. Demographic Features in India—Size and Composition of Population, Rural-Urban Composition, Age Composition, Occupational Distribution, Literacy, Density of Population, Birth Rate, Death Rate, Life-Expectancy etc.


6. Population Education Programme in rural areas.

7. Population Policy in India since Independence. Family Planning Methods and Services in India.

Sessional work:

1. Survey work on family planning practices and other aspects of Population Education in the Community.

2. Visit to family welfare centres at women Hospital, Medical college and Community Health Centre.

Reference Book:


4. Jansankhya Shiksha by Rajaya Shiksha Sansthan Allahabad.


M.J.P. Rohilkhand University, Bareilly

B.Sc. Home Science Syllabus

B.Sc. I syllabus Session 2002-2003

ENGLISH LANGUAGE AND COMMUNICATION SKILLS (CORE)

Focus

The new curriculum is designed to focus on the communicative approach to English Language Teaching. Rather than abandoning the teaching of structures, the emphasis shifts to learning grammar through communicative functions.

This course aims at learning how to learn by assuming responsibility for one's own learning leading towards greater autonomy. The curriculum is skills-based and designed to meet the language needs of students with differential competence in English.

There is a need to expose the students to various sources and formats of reading materials selected on the grounds of their communicative usefulness and social appropriacy.

The course materials need to provide for optimum interaction between learners and text, learner and learner and learner and teacher.

This course is effective in small as well as large classes, where the teacher provides opportunities for independent, and group work. More work is allotted to various classroom learner-centred activities rather than the lecture mode. The teacher must be at ease and allow for noise generated from these activities. Seating arrangements should facilitate teacher accessibility leading to closer contact with learners and for feedback.

The teacher should be trained in the methodology of communicative language teaching to attain the goals of the curriculum which include academic skills, interactional skills and skills for professional growth.

The course aims at preparing learners to communicate effectively in English in a variety of roles, situations, contexts and modes.
To facilitate learners' ability to use English for:
1. academic and professional purposes
   - note taking, note making, bibliography, writing proposals, projects, reports; research articles.
2. reading and comprehending textbooks, reference books and journals from other subject areas of Home Science.
   - participating in discussions, seminars, meeting, making presentations, interacting with learners and teachers.
3. social purposes
   - becoming aware of the social conventions of conversation
   - sensitivity to the emotive aspects of communication
   - differentiating between formal and informal, one to one and one to many interactions.

Theory

Unit I: Collecting Information
   a. Questionnaire, bibliography
   b. Identifying sources
   c. Classifying information under fact/opinion
   d. Eliciting Information
   e. Identifying sexism and gender bias in language

Unit II: Editing/Evaluating Information
   a. Tabulating Information
   b. Identifying topic sentences and summarising a text
   c. Presenting sequence of topics in diagrammatic form

Unit III: Organizing Information
   a. Analyzing relationships between sentences and paragraphs
   b. Identifying strategies for highlighting components
   c. Tracing development of text
   d. Transferring visual to verbal

Unit IV: Presenting Information
   a. Examining formats for presenting information
   b. Evolving strategies for presenting information
   c. Preparing and presenting a report
EDITING/EVALUATING INFORMATION

a. Focussing on emotive content of messages
b. Identifying attitudes and point of view
c. Turn-taking skills – stating
d. Fact/opinion, agreeing/disagreeing
e. Suggesting, requesting etc.
f. Identifying gender bias
g. Sensitising to non-verbal aspects of communication

CLASS ACTIVITIES

Discussion, pair and group work, problem solving, peer teaching, interviews, active listening, games, role play, poster making, slogan writing, visual to verbal transfer, self and peer

The curriculum calls for greater distribution of weightage for evaluation of oral and written. It is suggested that evaluation include learner profiles of communicative ability based on oral in the classroom.

RECOMMENDED/REFERENCE COURSE MATERIALS


c. Identifying attitudes and point of view

d. Turn-taking skills – stating

e. Fact/opinion, agreeing/disagreeing

f. Suggesting, requesting etc.

g. Identifying gender bias

h. Sensitizing to non-verbal aspects of communication

Activities

Student, pair and group work, problem solving, peer teaching, interviews, active listening, games, role play, poster making, slogan writing, visual to verbal transfer, self and peer

The curriculum calls for greater distribution of weightage for evaluation of oral and written exams as suggested that evaluation include learner profiles of communicative ability based on classroom.

Recommended/Reference Course Materials


Kumar and Kalyan Pali: Networking: Strategies for Communication in English, Oxford University Press,
B.Sc. Home Science Syllabus

B.Sc. I syllabus Session 2002-2003

House hold Chemistry

Practical:

1. Analysis of mixture for two or more inorganic chemicals
2. Redox reaction.
   Oxalic Acid = KMnO₄
3. Element detection.

References:
1. Inorganic Chemistry
   By S. R. Gupta
2. Org. Chemistry
   By Dr. S. K. Wadhwa
3. Applied Chemistry
   By Thankamma Jacob
B.Sc. Home Science Syllabus

B.Sc. I syllabus Session 2002-2003

Consumer Economics

Focus

The main focus is on the understanding of market conditions and their impact on consumer behaviour pattern, and to make the consumer aware of their role and responsibilities as consumers in the economy of the nation.

Objectives

This course will enable the student to
1. Understand the role of consumer in the market.
2. Become aware of marketing conditions and rights and responsibilities of consumers.
3. Recognize the problems in buying and know the means of redressal.
4. Know the consumer legislations and their limitations.

Theory

Unit I: Consumption economics
- Meaning and definitions
- Family as a decision making unit of household
- Consumer - definition
- Consumerism, rights and responsibilities of consumers - rights to safety to choose, to be heard, to be informed, to redress, and to healthy environment.

Unit II: Measures of living and consumption
- Place of living
- Level of living
- Standards of living
- Plane of consumption
- Level of consumption
Unit III: Consumer Income
  - Types of income – real, money psychic, relationship of GNP, national income, personal income, disposable income.

Unit IV: Market
  - Definition
  - Types of markets – segmentation and characteristics
  - Functions
  - Channels of distribution

Unit V: Business Cycles
  - Monetary theories of business cycle
  - Non-monetary theories of business cycle
  - Implications for consumption

Unit VI: Consumer in the Market
  - Consumer buying habits: Convenience goods, specialty goods
  - Buying motives: Primary, selective, rational, emotional and patronage
  - Consumer product and promotion practices
    - Types of products
    - Advertisement, sales promotion, packaging
    - Public utilities – names and important types, common problems, solutions

Unit VII: Consumer Buying Problems
  - Adulteration
  - Faulty weights and measures
  - Other malpractices in market
  - Pricing
  - Legal – guarantee and warrantee contracts, installment buying

Unit VIII: Consumer Decision Making
  - Good buymanship
  - Factors affecting consumer decisions

Unit IX: Consumer Protection Services
  - Organisations
Legislation – Important laws for consumer protection

Consumer representation

Types – basic, social, statutory and their implications

References


M.J.P. Rohilkhand University, Bareilly
B.Sc. Home Science Syllabus
B.Sc. I syllabus Session 2002-2003

Paper VII

FUNDAMENTALS OF FOOD AND NUTRITION (CORE)

Objectives

This course will enable the student to
1. Understand the functions of food and the role of various nutrients, their requirements and the effects of deficiency and excess (in brief).
2. Learn about the structure, composition, nutritional contribution and selection of different foodstuffs.
3. Be familiar with the different methods of cooking, their advantages and disadvantages.
4. Develop an ability to improve the nutritional quality of food.

Theory

Unit I: Concept of Nutrition

Unit II: Functions of Food

Unit III: Nutrients: Macro and Micro-nutrients
    Classification, sources, functions
    Recommended Dietary Allowances
    Deficiency and excess (in brief)
    Water
    Carbohydrates
    Fats
    Energy
    Fibre
    Calcium
    Iron
    Magnesium
    Water soluble Vitamins
    Vitamin C, Folic Acid

Zinc
Fluorine
Iodine
Selenium
Copper
Manganese
Vitamins (A, D, E, K)
Solubles
Thiamine, Riboflavin, Niacin
Pyridoxine, Pantothenic
Unit V: Food Production (in brief), Food Composition Structure
nutritional contribution and selection factors for the following
Cereals and Millets
Pulses
Fruits
Vegetables
Milk and milk products
Nuts and oilseeds
Meat, fish and poultry
Eggs
Sugars
Tea, coffee, cocoa, chocolate and other beverages
Condiments and spices
Processed foods

Unit VI: Methods of Cooking, their Advantages and Disadvantages and Effect on Nutritive Value

Unit VIII: Improving Nutritional Quality of Foods
Germination
Fermentation
Supplementation
Substitution
Fortification and enrichment

References:
Objectives

1. To acquire skills in food preparation techniques
2. To use appropriate methods of cooking for preparation of specific food products.

Unit I: Use and Care of Kitchen Equipment

Unit II: Controlling Techniques
   a. Weights and Measures standard and household measures for raw and cooked food.
   b. Recipe and evaluation of a production.

Unit III: Food preparation and classifying recipes as good, moderate or poor sources of specific nutrients. Amount of ingredients to be used in standard recipe vis-à-vis portion size.
   a. Beverages — Tea, Coffee, Cocoa, Fruit juice, milk, milkshakes
   b. Cereal and flour mixtures — basic preparations
      i. Boiled rice and rice pulao
      ii. Chapati, puri, paratha
      iii. Sandwiches
      iv. Pastas
      v. Pancakes, biscuits, cookies, cakes
   c. Pulses and legumes — using whole dehusked and sprouted

Unit IV: Vegetables
   a. Simple salads
   b. Dry vegetables
   c. Curries

Unit IV: Fruits
   Fruit preparations using fresh and dried-stewed fruit, fruit salad

Unit VI: Milk
   a. Porridges
   b. Curds, paneer and their commonly made preparation
c. Milk based simple desserts and puddings - custard, kheer, etc.

Unit VII: Meat - cuts of meat
a. Meat preparations
b. Poultry
c. Fish

Unit VIII: Hard and soft cooked poached, scrambled, fried omelette,

Unit IX: Soups
Basic, clear and cream soups

Unit X: Snacks
Pakoras, cheese toast, upma, pohe

Unit XI: Peanut, chikki, till ladoo

References

M.J.P. Rohilkhand University, Bareilly

B.Sc. Home Science Syllabus

B.Sc. I syllabus Session 2002-2003

Paper VIII

COMPUTER BASICS (CORE)

Focus

This course is designed to give basic inputs to students on Computers and their functioning and hands-on experience.

The awareness of the basic applications of computers as the tool for education, information and research is to be created and emphasized. The teaching learning process should include demonstrations and hands-on experience for all the students.

Objectives

To enable the students to -
1. know the basics of computers;
2. to be able to use computers for education, information and research.

Theory

Unit I: Computer Fundamentals

a. Overview about computers
b. Components of a computer
c. Input/output devices
d. Secondary storage devices
e. Number Systems: Decimal, Binary, Octal, Hexadecimal
f. Representation of Information: BCD, EBCDIC, ASCII
g. Representation of Data: Files, Records, Files
h. File organization and access
i. Security and safety of data
j. Introduction to Operating Systems

Unit II: MS-Windows

a. Introduction
b. Exploring the Desktop
c. Running multiple programmes

d. Accessories

e. Control Panel

f. Managing Documents and Folders

Unit III: MS-WORD

a. Starting MS-WORD

b. Creating and Formatting a document

c. Changing Fonts and Point Size

d. Table Creation and operations

e. Autocorrect, Auto Text, Spell Check, Thesaurus

f. Word Art, Inserting objects

g. Mail merge, letter, label, envelope

h. Page set-up, Page preview

i. Printing a document

Unit IV: MS-Excel

a. Starting Excel

b. Work Sheet, Cell, Inserting Data into Rows/Columns

c. Alignment, Text-wrapping

d. Sorting data, Auto sum

e. Use of functions, referencing formula cells in other formulae

f. Naming cells and ranges, Goal seek

g. Generating graphs

h. Integrating Worksheet data and charts with WORD

i. Creating Hyperlink to a WORD document

j. Page set-up, Print Preview, Printing Worksheets.

Unit V: MS-Power Point

a. Starting MS-Power Point

b. Auto Wizard, Creating a presentation using Autocontent Wizard

c. Blank Presentation, Creating, saving and printing a presentation

d. Adding a slide to a presentation

e. Navigating through a presentation, Slide sorter, Slide show, Editing slides

f. Using Clipart, Wordart Gallery

g. Adding Transitions and Animation Effects, Setting timings for slide show, preparing Note pages, Preparing audience handouts, printing presentation documents.
ECOLOGY AND ENVIRONMENT (CORE)

Focus

The course intends to create awareness, appreciation and understanding of environment. The major environmental issues and problems are to be critically analysed for inculcating environmental consciousness among the learners and to help them take individual/household/community level decisions for making the physical environment conducive for family living. The course content has to be taught at an elementary level.

Objectives

To acquaint the students with -
1. The physical environment and its components and the major issues
2. The impact of human activities on environment
3. The action needed for checking environmental threats

Theory

Unit I: Introduction
Meaning and definition of ecology and environment, scope of the subject, dimensions of environment land, air, water, forest, habitat, population.

Unit II: Land
As a resource, energy and mineral resources, land pollution, sources of smelting and mining, industrial waste, agriculture, domestic waste major health hazards - prevention and control.

Unit III: Water
Utility of water
Problems and issues: water pollution and health, hazards and their control

Signature

[Signature]
Unit IV: Forest

Utility of forest and forest resources, deforestation and its impact, forest conservation

Unit V: Air

Composition and its usefulness to plants and animal kingdom, air pollutants, sources their health hazards, green house effect and ozone layer depletion and its impact, control measures.

Unit VI: Energy

Major sources of energy, Renewable and non-renewable, uncertainties with non-renewable energy sources, alternate energy sources and energy conservation measures.

Unit VII: Habitat and Population

Uncontrolled population, growth and its impact, unplanned growth of cities and towns, migration, problem of housing and essential services. Control measures

Unit VIII: Environmental Education

Uncontrolled population, growth and its impact, unplanned growth of cities and towns

Unit IX: Environmental Protection

Policies, programmes and legislations.

Practicals

1. Visit to air quality monitoring unit of the municipal corporation.
2. Visit to water supply station and sewage plant to study the water supply system and waste water and sewage disposal.
3. Identify the food chain in our daily life.
4. Study the water cycle and water distribution on earth.
5. Study the cooling effect of evaporation
6. Study the usage of solar energy
INTRODUCTION TO HUMAN DEVELOPMENT (CORE)

Focus

This is an attempt to guide undergraduate students in understanding of the field of Human Development in a basic way.

A conscious deviation is taken from the stage-wise approach to the life span, so as to make the course more meaningful and to allow for flexibility in understanding human development as a continuous process. All topics are given a cross-cultural orientation.

The major topics covered are: An overview of the field; factors important for growth and development; different dimensions of development across the life-span namely, physical and motor, cognition, language, socio-emotional and personality and finally relevant issues in human development and social change.

Teachers are encouraged to use the points of emphasis mentioned and culturally relevant examples to stimulate thought and participatory discussion. The use of video-films is also recommended to supplement course content and facilitate discussions.

Objectives

1. To introduce the student to the field of human development: concepts, scope, dimensions and interrelations.
2. To sensitize the student to social and cross-cultural contexts in Human Development.
3. To sensitize the student to interventions in the field of Human Development.

Unit I: An Overview of the Field of HD

a. What is Human Development? Why do we need to study it?
   Definition of development and human development with focus on life span, nature and context of development, i.e. family and society, variations across cultures, and individual differences in human development.

b. Human Development is a multidisciplinary science.
   The need to study human development, the process of normative development and recognizing unusual development.
c) Historical perspective of HD
   - The Western Perspective
     Focus: The child of ancient times, medieval times, renaissance, republic and modern times (focus on influence of scientific developments and socio-political influences).
   - The Ancient Indian Perspective
     Focus: (i) Beliefs of *marga*, *moksha* and *dharma* which lend purpose, a sense of continuity as well as social, moral and spiritual guidance to the Indian life. (ii) "Bringing-up" children versus "letting children grow" (cross-cultural and social perspectives). (iii) Milestones of human development are marked by different ceremonies (naming ceremony, the first taste of solid food, readiness for disciplining, readiness to read and write the four stages of life).
   - The scientific study of children in India
     Focus: 50 years of Child Development (how it began as part of Home Science, its growth over the years, shift to life-span development (HD).

(Note: in teaching emphasize the sources of knowledge in the study of HD
i. Primary sources: Collection of first hand experiences directly from individuals; narrative records on life histories.
ii. Secondary sources: Oral or written reports on various aspects of HD from mothers, elderly members of a community professionals or academicians in the field of Human Development, theories and other related literature.

The above information is useful to- (a) establish and develop theories, (b) apply it in different settings, (c) make decisions about the worth of a programme, (d) develop effective programs, (e) solve specific problems.

d) Scope of the field of HDFS
   - Opportunities for roles and employment
     - researcher: on issues related to HD
     - educationist: ranging from pre-school to University
     - planner of policies or programs related to child and family welfare
     - implementing interventions for different aspects related to HD (include special educators, personnel in agencies catering to all age groups i.e. from crèches to old age homes).
   - Settings available:
     i. Early childhood care and education (a) pre-school centres, (b) day-
* Unit II: Orientation to Growth and Development
  
  a. Understanding growth and development (definitions)
  b. General principles of development.
  c. Constraints and facilitators in growth and development (influences of heredity and environment).
  
  Genetic inheritance: (i) fertilization (ii) number of chromosomes, (iii) the unique third pair determines sex, (iv) genotype and phenotype, (v) sex-linked genetic effects.
  
  Environmental pre-requisites: (i) nutrition, (ii) opportunities.
  
  Interaction between environment and inheritance: (i) genes provide the predisposition, range and direction of development, (ii) environment determines the extent or limit.
  
  d. The beginnings of a new life
  
  Prenatal development and the birth process can be covered by a film OR emphasize major developments during the three stages of intra-uterine development and the stages of the birth process.
  
  Prenatal influences on the child: biological risks, age of mother, physical characteristics, illnesses, diet and nutrition, stress and emotional strains, environmental hazards.
  
  Cultural variations in child birth practices.

* Unit III: Development of Physical and Motor Abilities Across the Life Span
  
  a. An introduction to the dimensions of development over the life span.
  
  - Physical and motor
  - Cognitive
  - Language
  - Socio-emotional
  - Personality

  (Note: Emphasize – inter-relatedness and coordination between the dimensions of development.)
b. What is physical and motor development?

Physical Development

- The new born physical appearance: size, weight, bodily proportions, sensory capacities i.e. hearing, vision, taste, smell, touch, temperature and position.
- Changes in size, shape, muscles and bones and brain as it continues through: infancy, end of infancy, preschool, middle childhood, adolescent growth spurt (include primary and secondary sexual characteristics and psychological impact of adolescence), plateau in adulthood, decreasing physical abilities in old age.
- Linking physical and motor development.
- Motor development: reflexes in infancy; major milestones through end of infancy, preschool years, middle and late childhood, adolescence; plateau in adulthood, declining co-ordination in middle adulthood and old age.
- Physical and motor development can be influenced through: (i) maturation, (ii) nutrition, (iii) monitoring and health care, (iv) stimulation, (v) practice.

Unit IV: Cognitive Development Across the Life Span

a. What is cognitive development?
- The concept of intelligence
- A brief introduction to Piaget's theory (introduce stages without much elaboration: sensorimotor stage in infancy concrete operational stage in childhood (changes in remembering the reasoning in middle childhood, formal operations in adolescence, fluid and crystallized intelligence in adulthood, declining cognitive abilities in late adulthood and old age.)
- Every day cognition: perception, creativity, imagination, productive thinking, reasoning.

(Note: The section on cognition is based Piagetian approach. However, it must be taught with emphasis on changing process across life span without using technical terms of the theory.)

Unit V: The Development of Language Across the Life Span

Language as a form of communication
- Functions of language: expressing wishes, controlling others, interacting with others, expressing individuality, exploring the world, pretending, using language to communicate/share information, understanding our society and culture, reasoning.
Communicating before language development i.e. the stages of vocalization: undifferentiated crying, differentiated crying, babbling, imitation of sound, patterned speech.

Beginning to use language: one or two word utterances; early sentences; telegraphic speech: understanding metaphors, similes, irony, reflecting on superficial and deeper level meanings of sentences.

Uses of language: conversational acts (non-verbal) conversational conventions, learning to listen.

Language is refined through middle, late childhood and puberty; language linked to academic skills, cognition and thought.

Language development can be influenced through: (i) maturation, (ii) stimulation

Deviations in language development: Possible decline of language in the aged, (speech impairment and disorders to be introduced briefly).

(Note. While teaching this topic emphasize variations in language development – for example, by gender and socio-economic strata etc. Also introduce issues of bilingualism and multilingualism.)

Unit VI: Socio-emotional Development Across the Life Span

a. Understanding social and emotional development
b. Social development:
   - Introduce socialization as an important part of the process of becoming human.
   - Social milestones: beginning with the emergence of the social smile; attachment, separation, anxiety, acquiring sex roles in childhood, induction into occupational roles by adulthood, social isolation and consequences in late adulthood and in the elderly.
   - Patterns and role of parent-child interactions, interactions with siblings and peers; social and cultural interactions through infancy to old age.

c. Emotional development:
   - Emotions serve two adaptive functions: (i) motivating and (ii) communication.
   - Basic emotional reactions (joy, fear, jealousy, anger, sadness, aggression)
   - Components of emotion: (i) emotions are elicited by the context, (ii) include bodily activity, (iii) emotional expressions are made through facial expressions, bodily movements, vocalization, (iv) labelling emotions.
   - Emotions may be acquired as a result of / by the influence or – (i) internal and external sources, (ii) cognition, (iii) learning and (iv) social reinforcement.
Milestones of emotional development through infancy and childhood, emotional confusions and adolescence, stability of emotions in adulthood and old age.

Emotional problems: (i) depression, (ii) over-activity, (iii) aggression.

Unit VII: Personality Development Across the Life Span

a. What is personality?


c. Personality may be influenced by: (a) heredity, (b) environment (parenting styles, peer groups, social interactions, early childhood experiences, life events, support available in a community etc.)

d. The role of social norms in personality development. Deviant personalities: (juvenile delinquency in childhood and anti-social personalities in adulthood)

Unit VIII: The Context of Social Change and Human Development

(Summary of Current Status and Future Directions)

a. The changing face of the Indian family; moving from joint to nuclear; single parenting as a consequence of temporary occupation related separation, legal separation, divorce, working women.

b. Influence of national level decisions in human development: (i) child and women’s rights, (ii) new economic policy liberalization, (iii) media boom.

c. Specific needs for intervention in the Indian context: reaching out to lower economic groups through community based interventions.

d. Need for developing a body of knowledge tuned to the Indian context.

References


INTRODUCTION TO RESOURCE MANAGEMENT

Focus

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

Objectives

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

Theory

Unit I: Introduction to Management
a. Basic concepts of Management
b. Similarities and differences in business, farm and family resource management

Unit II: Purpose of Management
a. Management and Change
b. Achievement of Goals

Unit III: Obstacles to the Improvement of Management
a. Lack of Awareness of Management
b. Lack of Awareness of resources
c. Failure to Evaluate Results of Management
d. Seeking ready-made answers to problems
e. Lack of information

Unit IV: Family Characteristics Influencing Management
a. Life style
b. Type of family

c. Family size, stage of family life cycle

Unit V: Factors Motivating Management

a. Goals, definition, types and utility
b. Values - Importance, sources of values, classification, characteristics, changing values
c. Standards - Definition, classification-quantitative, qualitative, conventional and non-conventional
d. Decision - Role of decision making in management, resource availability

Unit VI: Management Process

a. Meaning and elements of process - planning, controlling the plan and evaluating, decision making
b. Planning - Importance, techniques, types of plan
   i. Controlling the plan in action
   ii. Phases energizing checking
       - Factors in success of the control step
       - Suitability
       - Promptness
       - New decisions
       - Flexibility
   iii. Supervisions of delegated plan
       - Types of supervision - direction and guidance
       - Analysis of supervision
   iv. Evaluation - Importance, relationship to goals
       - Types - Informal and formal, overall and detailed
       - Techniques of self-evaluation
       - Evaluation of the whole process of management

Unit VII: Resources in the Family

a. Types of resources
b. Factors affecting the use of resources
c. Classification of the family on the basis of resources/income, vocation, activity/profession, quality of human resources in the family, general characteristics of work

Unit VIII: Management of Specific Resources

a. Space, equipment, energy, community resources
References


INTRODUCTION TO CLOTHING (CORE)

Focus

Clothing is important for protection, comfort, personality and growth in relevant age groups. The course should be dealt with, keeping in view the activities of the concerned age group with consideration for safety, ease of care and comfort.

Objectives

To acquaint with proper notion regarding choice of fabrics.
To develop skills in clothing construction.

Theory

Unit I: Equipment

Equipment and supplies used in clothing construction, their maintenance, problems faced, remedies with specific reference to sewing machine.

Unit II: Selection of Fabrics

Factors influencing selection of fabrics, budget, age, season, occupation, figure, fashion, occasion etc.

Unit III: Principles of Clothing Construction


Practicals

I: Sewing Techniques

Sewing techniques: Basic stitches, seams and seam finishes; fullness, placket,
neckline, finishes, fasteners, simple collars, patch pockets and their application to the garments given below.

Unit II: Garment Construction

Drafting, cutting and stitching of simple garments, such as vest and bib, A-Line Dress and knickers. Bush-shirt and knicker, sun suit/romper, simple frock with yoke.

References

Anna Jacob (1973): Art of Sewing - UBS PD, New Delhi.


COMMUNITY DEVELOPMENT PERSPECTIVES AND APPROACHES

Focus

The focus of the course is on the evaluation of approaches to community development in general and in our country in particular.

Objectives

To enable students to:
1. be aware of the approaches to development.
2. develop faith in the capacity of the people to take responsibility for their own development.
3. understand the existing support structures for development efforts.
4. understand the role of Non-Govt. organizations in community development.

Theory

Unit I: Development

a. Definitions, types – large scale and centrally planned and small scale and locally planned.
b. Goals, the process of development – the input process and social action process.

Unit II: Historical Perspective of Development Approaches

a. The capitalistic approach
b. The welfare approach
c. The Gandhian approach
d. The modernisation approach
e. The institutional and social justice approach
f. The socialist approaches – the conscientization approach – development as liberation – the historical approach of radical social scientists – the Marxist approach.
g. Rethinking and new paradigm of development; sustainable development, human development, sustainable human development, universal human rights.

II: Critical Development Issues
a. Massive poverty
b. Population growth
c. Food security
d. The Environment

IV: Community Development in India
a. Evolution of community development programme in India since Independence.
b. Structure and functions of community development at different levels.

V: Support Structures and their Functions
a. Central Social Welfare Board
b. State Social Welfare Board
c. National Level Voluntary Agencies such as CAPART, KVIC.
d. Elected Panchayats

I: Community Development Programme Approaches
a. Multi-purpose
b. Target group
c. Growth centred
  \[ \Rightarrow \text{Integrated Development Planning (IDP)} \]
d. Area
e. Minimum needs
f. Anityodaya

Women and Development
a. ‘Welfare’ approach – women’s role as wives and mothers emphasized.
b. ‘Anti-poverty approach’ – women’s income generation programs – integrating women in development.
c. ‘Efficiency’ approach – emphasis on women’s key role in production.
d. ‘Equity’ approach – combating patriarchy and exploitation, subordination and oppression of women.
e. ‘Empowerment’ approach – process of women discovering the power within themselves to tackle the problems in their life situations.
f. Critical review of these approaches in practice.
Unit VIII: Home Science and Community Development

Scope of Home Science Extension for meaningful participation in community development in India.

References

FAMILY DYNAMICS (CORE)

Focus

This course purports to create awareness and appreciation for the role and functions of marriage and family as basic institutions. The changing trends, the dynamics of adjustment and contemporary problems and issues are to be critically analysed for developing better understanding of needs, adjustment areas and intervention strategies.

Objectives

The student will:

1. Acquire knowledge and insights about the dynamics of contemporary marriage and family systems in India.
2. Become acquainted with the concept, goals and areas of adjustment in marital relationship and within the family.
3. Become aware of the changing roles and relationships within the family.
4. Understand the dynamics of families in distress and crisis.
5. Become aware of the interventive and preventive family welfare measures.

Theory

Unit I: The Family

a. Definitions, functions, types (with reference to India)

b. Family life cycle – stages and sub-stages (beginning, expanding, contracting).

c. Changing trends in India and factors influencing (social change, family values and ideologies, family structures).

Unit II: Marriage

a. Marriage as an institution: goals, rituals, functions, changes and challenges

b. Mate selection: factors influencing, considerations of exogamy and endogamy, changing trends, arranged and personal choice of mates.
c. Preparation for marriage, social emotional issues, financial concerns and
   exchanges, guidance and counseling.

Unit III: International Relationships within the Family

a. Individual roles, rights and responsibilities within the family
b. Family interaction and communication – importance, types and methods of
   improvement.
c. Areas of adjustment within the family at different stages of family life cycle.

Unit IV: Families with Problems

a. Families with marital disharmony and disruption, dimension, casual factors
b. Families in distress, violence and abuse, dowry victimization, violence against
   women.

Unit V: Interventions for Families in Trouble

a. Scope, needs and assessment
b. Counselling: premarital and marital
c. Welfare and rehabilitation policies and programmes
d. Public awareness and education programmes

References

    Publishing House.
LIFE SPAN DEVELOPMENT

Focus
This course covers the entire life span and traces the various developmental stages. Its encompasses in scope development in utero, infancy up to senescence identifying critical concerns in the socio-cultural perspectives.

Objectives
To become acquainted with developmental stages from birth to old age.
1. To develop awareness of important aspects of development during the whole life span.
2. To understand the issues faced and adjustments required at each stage across the life span.
Note: For each of the following stages of development, the influence and interaction of socio-cultural and environmental factors need to be discussed/explained.

Unit I: Introduction
- The life span development perspective and the need to study development through the life cycle.
- Inter-relationship between the aspects of development.

Unit II: Prenatal Period
- Course of prenatal development, overview of birth process and complications
- Conditions affecting prenatal development.
- Hazards during prenatal development.

Unit III: Infancy (0 – 2 years)
- Definition. Physical growth and development in infancy
  (Reflexes, emotional states, Physical growth and motor development, brain).
- Sensory and perceptual development during Infancy –
  Definition
  Definition of different senses
• Developmental tasks of infancy, milestones and highlights of development
• Factors influencing development

Unit IV: Importance of Social Relationships
• Role of parents, siblings, peers and others during the various stages of the life span.

Unit V: Early Childhood (2 to 6 years)
• Definition
• Overview of early childhood years – Highlights, developmental tasks, milestones
• Preschool – Orientation to preschool education and significance
• Importance of play for all round development

Unit VI: Middle Childhood (6 to 12 years)
• Definition
• Developmental tasks
• School – significance and functions. Effects of success and failure
• Peer group – Importance, functions in the life of children.

Unit VII: Adolescence (13 to 18 years)
• Definition, different views regarding the period
• Physical development – puberty, growth spurt, primary and secondary sex – Characteristics, early and late maturing adolescents
• Identify – Definition, body image, positive and negative outcomes (role confusion, ego-identity)
• Choosing a career – stages, factors affecting selection.
• Peers and heterosexual relationship – Importance, age of occurrence, patterns of friendship (to be discussed).
• Heightened emotionality – meaning, causes, expression, characteristics of emotional maturity. Conflict with authority.

Unit VIII: Young Adulthood (19 to 40 years)
• Definition of an “Adult”, need to study.
• Developmental tasks of a young adult, significance of the period, responsibilities and adjustment: New family, workplace, parenthood, independence, financial matters.
Unit IX: Middle Adulthood (41 to 60 years)

- Sex/role issues and implications for young adults.
- Definition, Physical changes (senses, diseases)
- Menopause, Health issues
- Stresses in middle age, coping with stress at family, workplace
- Occupation and job satisfaction
- Pre-retirement and leisure -- preparation for retirement

Unit X: Late Adulthood and Ageing

- Definition, Physiological changes, health problems and cognitive and memory changes
- Retirement -- effect of retirement on self, family, society, financial problems faced.
- Personality characteristics of old age factors in ageing.
- Social family factors, attitudes towards the aged, old age and friendship.
- Interests -- recreational interest of the aged.
- Issues -- old age homes, loneliness, coping with loneliness, living in joint family, prolonged illness (plan visit to old age homes)
- Death -- Preparation and coping strategies.

References

COMMUNITY NUTRITION

Focus

The course is intended to introduce to students nutritional problems prevailing in the country, their causes, and implications and the Government policies and programmes for control and/or prevention of the same.

Objectives

This course will enable the students to:
1. Understand the factors that determine the availability and consumption of food.
2. Be familiar with the common nutritional problems of the community, their causes, symptoms, treatment and prevention.
3. Get exposed to the schemes, programmes and policies of Government of India to combat malnutrition.
4. Be aware of the health hazards related to food and water.

Theory

Unit I: Concept and scope of community nutrition

Unit II: Food availability and factors affecting food availability and its consumption (10)
- Agricultural production
- Post-harvest handling, marketing and distribution
- Population
- Economic
- Regional
- Socio-cultural
- Industrialization

Unit III: Nutritional problems of the community and implications for public health
- Common problems in India
- Causes (Nutritional and non-nutritional)
- Incidence of nutritional problems, signs and symptoms, treatment
Unit IV: Nutrition through the Life Cycle
(at different activity and Socio-economic levels) requirements, nutritional problems, food selection.

a. Adulthood  
b. Pregnancy  
c. Lactation  
d. Infancy  
e. Preschool  
f. Adolescence  
g. Old age

Unit V: Principles of diet therapy
Modification of normal diet for therapeutic purposes. Full diet, Soft diet, Fluid diet, Full and diet.

Unit VI: Nutritional management in common ailments -
Requirements and diet planning

a. Diarrhoea  
b. Constipation  
c. Fevers - Weight Management

Practicals

Objectives
This course will enable the students to -

1. Plan and prepare nutritionally adequate diet in relation to age, activity levels, physiological state and socio-economic status.
2. Make the therapeutic modifications of normal diet for common disease conditions.

Unit I: Planning and preparation of diets for different age groups at different socio-economic and activity levels in relation to special nutrient requirements.

a. Adult  
b. Pregnancy
1. Lactation
2. Infancy
3. Pre-school Child
4. School Child
5. Adolescence
6. Old age

Unit II: Planning and preparation of therapeutic and modified diets

a. Soft diet
b. Fluid diet
c. Bland diet
d. High protein diet
e. High fibre
f. Low fibre diet
g. Calorie – restricted

References
INTRODUCTION TO TEXTILES (DONE)

Focus

Variety in clothing depends on variety in textiles. Though very few textiles were known to man earlier, presently, he is seeing newer textiles each one superseding the other. Their performance is also varying. It is essential for a student to have some basic knowledge of these textiles to select the right kind of fabric for a specific end-use.

Objectives

To enable students to -
1. Acquaint with the different textiles and their performances.
2. Impart knowledge on different textile finishes.

Theory

Unit I: Classification of Textiles

a. Introduction to and classification of textiles, terminology in textiles

Unit II: Study of Yarns

Methods of spinning, making of spinning, making of sewing thread, simple, novelty, metallic and texturised yarns, stretch, core spun, bi and multi component yarns - characteristics. Yarn numbering systems (Cotton count, Denier, tex-conversion from one to the other).

Unit III: Weaves

a. Physical – Singeing, napping, brushing, shearing, sizing, shrinking, tendering, calendarings, etc.
b. Chemical – bleaching, mercerizing, etc.
Special purpose fibre-Wrinkle resistant, water resistant and repellent, flame resistant, pressure release and resistant, antipilling, dyeing and printing, etc.

Practicals:

Unit I: Identification of Textile fibres-Visual, Microscopic, Burning and Chemical tests.

Unit II: Thread and Yarn Count

Unit III: Sample collection of weaving

Unit IV: Identification of finishes.
The course is designed to create awareness and understanding of the need for empowerment, motivating the student towards higher goals and challenges of self-improvement. The focus is on the adolescent moving towards making choices, developing competencies and skills for the responsibilities of self-growth and interpersonal relationships in personal and professional spheres. The thrust of this course must be in the Indian context, creating pride in respect for cultural heritage and values. The teaching approach should be truly a "facilitator" rather than an "expert". Facilitator must be convinced and committed to the cause of empowerment of youth.

The purpose of inclusion of this course must be viewed as "offering opportunities for orientation, information and skills" for enhancing the total outlook (perspectives) of the young students particularly girls. Hence the thrust is on development, women and the concept of Home Science education as holistic education with interface (and integration) of professionalism and the totality of development of individuals and families.

The teacher (facilitator) for this course must share such an outlook and be oriented towards the same to be really effective. Also the typical examination oriented approach should be replaced by promoting dynamism, visionary zeal and motivational ethos in the classroom.

Objectives

The student will:

1. become aware of the need, competencies and skills to be developed for empowerment and be motivated for self-improvement / self-enhancement;
2. become aware of the role of empowerment of women from the perspectives of personal and national development;
3. become aware of the interdisciplinarity of Home Science education and its potential for personal and professional enhancement;
4. become sensitized to some pertinent contemporary issues that affect the quality of life of individuals, families and community.
Personal Growth and Personality Development
(through exercises, role play, discussions)

a. The challenge: understanding and managing oneself: being aware of one’s strengths and weaknesses.

b. Personality Development: Factors and influences: emotional and motivational aspects; assertion vs. aggression.

c. Peer pressures: issues and management: group conformity and individualism as co-existing aspects.

d. Conflicts and stresses: simple coping strategies.

e. Adjustment and readjustment to changing needs and conditions of contemporary society (technological changes, social changes, changes in values).

Unit II: Empowerment of Women

a. Women and Development: The personal, familial, societal and national perspectives.

b. Capacity building for women: Education, decision-making abilities and opportunities, awareness and information on legal and political issues.

Women’s organizations and collective strength: Women’s action groups, women’s participation in development initiatives.

Study and discussion of life histories, case studies of illustrious Indian women from different walks of life (e.g. Indira Gandhi, Jhansi ki Rani, Medha Patkar, Kiran Bedi, Vijayalaxmi Pandit, Sudha Chandran, Anutai Wagh, Ila Bhat, Bhanvari Devi).

Brief sketches / profiles of women’s organization and collective and activist efforts to improve the quality of life or tackle issues of concern (e.g. SEWA, Women’s cooperatives, WIT).

Note

Students must be sensitized and made aware through assignments to identify and study the contributions of women in their own regional areas as also in the context of national perspectives. Cases of individual and collective / organized women’s strengths must be discussed with examples from local / regional / levels. Each student may prepare profiles of one individual and one collective group.


ENTREPRENEURSHIP MANAGEMENT (ID / HM / CS)

Focus

This course intends to develop entrepreneurship skills in students by understanding the process and procedure of setting up small enterprises and managing them effectively. Since there are not enough job opportunities in the organised sector for all graduates, it is essential to vocationalise the course and develop management skills for entrepreneurship development.

Objectives

To enable students to:
1. Develop entrepreneurship skills
2. Analyze the environment related to small scale industry and business
3. Understand the process and procedures of setting up small enterprises
4. Develop management skills for entrepreneurship development

Theory

Unit I: Entrepreneurship
- Definitions, need, scope and characteristics of entrepreneurship, entrepreneurship development and employment promotion.
- Identification of opportunities.

Unit II: Business environment for the entrepreneur
- Government of India policy towards promotion of entrepreneurship. Exposure to demand based, resource based, service based, import substitute and export promotion industries.

Unit III:
- Need, scope and approaches for project formulation. Market survey techniques, criteria for principles of product selection and development, choice of technology.
• Major steps involved in setting up a small scale unit – project formulation, resources mobilization,
  • Institutions, financing procedure and financial incentives,
  • Financial ratios and their significance. Books of statements, funds flow analysis.

Unit IV: Techno-economic feasibility of the project
Unit V: Critical path method, Project Evaluation, Review Technique as planning tools for establishing SSI.
Unit VI: Plan layout & process planning for the product establishing
Unit VII: Creativity and innovation problem solving, personnel management, salaries, wages and incentives, performance appraisal, Quality control
Unit VIII: Marketing and Sales Management
  • Marketing strategy, packaging, advertising, label intervention, sales services.
Unit IX: Legislations
  • Licensing, registration, Municipal laws, business ethics, in law application, Consumer complaint redressal.

Practicals

1. Developing a proposal for establishing an enterprise and the techno-economic feasibility of the project.

References

Women are often marginalised in developmental tasks. Women need to be brought to the mainstream of development and involved in the developmental process at all levels.

Objectives

- Enable students to understand the role of women as partners in development.
- Get sensitised to gender disparities/imbalance related to developmental issues.

Theory

Init I: Conceptual analysis


Init II: Manifestations of gender imbalances

- Sex ratio, Vital statistics, Human Resource Development Index.
- Adverse effects on women and their participation in the development process.
- Barriers to women's access to inputs and services related to credit, legal rights, employment, equal pay and decision making.

Init III: National efforts

- National Policy on Women.
- Efforts by the different ministers particularly by the Department of Women and Child Development - Impact of international efforts.
- Post Beijing Scenario.
- Legal provisions - Role of the National Commission for Women.
Unit IV: Women at the grassroots

- Need for emphasizing women at the grassroots. Means of Empowerment.
- Changing status and role of women in the Family and Society.
- Factors influencing such changes bridging gender differences to share benefits of development.
- Need for organizational support - efforts towards this.

References


Report of the different ministries and departments.


Journals

Changing Villages, PPS Gussain for Consortium on Rural Technology, D-320, Laxmi Nagar, New Delhi-110009.

CAPART Press Clippings, Documentation and Information Officer, CAPART, C21, Community Centre, New Delhi-110058.


Kendra, Director, Publications Division, Ministry of I&B, Government of India, Patiala House, New Delhi.


Yojana, Director, Publications Division, Patiala House, New Delhi 110001.

Science for Villages, Centre for Science for Villages, Magan Sangrahalaya, Wardha-442001.

Indian Farming, Under Secretary for the Publications and Information Division, Indian Council of Research, New Delhi.

Rural India, Mukesh Printers, Sheikh Bagia, Near Shanti Nagar, Gopal Sadan, Hospital Road, Gwalior.


THE CHILD WITH SPECIAL NEEDS (ECCE/ECSN/FCW)

Focus
In this paper the students are introduced to the nature of childhood disability and its effect on children at different stages in development. The attempt in teaching should be to help students realize that all disabled children are children first and that environmental factors play a major role in causing as well as treating the conditions of disabled children.

Objectives
1. To appreciate the special needs of children with different disabilities and disorders;
2. To gain insights into the causes of disability and disorders in children, and into their prevention and treatment;
3. To be sensitized to the similarities and differences between disabled and non-disabled children; and
4. To perceive the importance of the family and the community in the development of the child with special needs.

Unit I: Introduction
- Definition and terminology, relationship of delayed development and disability
- Incidence and prevalence in India
- The child at risk: poverty and gender issues
- Rights of the disabled child
- Issues in classification and labeling
- Genetic and environmental factors in disability
- Prevention of disability
- Early detection, screening, identification and assessment in the community and at Centre-based programmes
- Need for intervention, education and rehabilitation
Normalization and mainstreaming
Understanding the family with a special child

Unit II: The Child with Mental Retardation
- Definition of intelligence, adaptive behavior, and mental retardation
- Approaches to measurement
- Mental illness as different from retardation
- Current classification and terms: mild, moderate, severe, and profound retardation
- Genetic and environmental causes; prevention
- Characteristics of children with mental retardation from infancy to adolescence
  - Physical-motor, cognitive, language, personal-social, and emotional
  - Effect on the family
- Family and Community: mutual support, role in development, attitudes, acceptance, and integration of child

Unit III: The Child with Sensory Deficits

Auditory impairment:
- Definitions: deaf and hard-of-hearing children
- Classification: mild, moderate, severe, and profound loss
- Conductive and sensorineural loss
- Genetic, prenatal, and perinatal causes of deafness. Approaches to measurement—simple and clinical methods
- Cognitive, language, social, and emotional development of children with hearing loss. Importance of age of onset of loss for language development
- Communication in children with hearing loss
- Prevention, early treatment, and stimulation
- Family—its role in detection and child’s language development. Supports and counselling for family
- Community—effect of attitudes, services for rehabilitation, integration of child and family

Visual impairment:
- Definitions/blindness and partial sight. Legal and educational implications of definition
- Genetic and environmental causes—special reference to
- Prevention and treatment of impairment
- Development of concepts in children from infancy to adolescence – significance of onset, early stimulation and mobility training
- Motor, language and socio-emotional development. Sensitivity of other senses
- Family: role in detection and early stimulation. Support and counselling for family
- Community: role in prevention and awareness
- Services for rehabilitation. Integration of child and family.

Unit IV: The Child with Learning Difficulties and Disability
- Definition of Learning Disability. Difference between difficulty and disability
- Characteristics of children – sensori – motor, perceptual, language difficulties
- Consequences for school achievement. Causes and correlates of learning disability. Learning difficulties as related to academic and psychological problems.
- Profile of the learning disabled child at school and in the family. Parental dilemma in socializing the child.
- Role of culture’s expectations and family norms in seeking solutions.

Unit V: The Child with Cerebral Palsy and Orthopaedic Disability
- Definitions, classification and prevalence.
- Role of family and community. Stress in family and support mechanisms
- Integration of children.

Unit VI: The Child with Communication Disorders
- Significance of speech and language in communication.
- Definition of communication disorders
- Classification of disorders of speech and language. Multiple disorders.
- Causes of organic and functional disorders.
- Psychological and behavioural characteristics of children.
- Family support and community services in treatment and management.

Unit VII: The Child with Behavioural Disorders
- Definitions and characteristics of behaviour disorders. Contextual and cultural differences.
- Ecological and clinical classification.
Behaviour problems associated with autism, schizophrenia, attention deficit hyperactivity disorder, enuresis and enuresis: Biophysical and environmental correlates of disorders.

Role of family in treatment and therapy.

References:
PROGRAMMES FOR RURAL AND URBAN DEVELOPMENT (DPM)

Focus

In order to reduce the problems of the masses, Government of India has put forth a number of intervention programmes from time to time targeted to the rural and urban people. Several approaches have been tried to reach the benefits of science and technology to the people at the grassroots. This course intends to give a complete orientation to the students on the various developmental programmes initiated over a period of time.

Objectives

To enable students to
1. Understand the national efforts towards rural and urban development
2. Examine the cumulative impact of these developmental efforts in quantitative and qualitative dimensions.

Theory

Unit I: Five year plans
   - History of planning in India. Five year plans and their focus.
   - Planning at different levels - National to Grassroots

Unit II: Programmes to enhance food production

Unit III: Poverty alleviation efforts
   - Programmes for poverty alleviation for rural and urban areas; employment generation and social inputs. Concentration of efforts in the 1980's
   - Current programmes for rural and urban poor.
Unit IV: Programmes for women and children
- Women as target groups - specific measures for women and children
  DWCRA, ICDS, IMY; Current programmes for women as implemented by the different Ministries and Departments.
- Shift from ‘welfare’ approach to ‘development’ approach to empower.

Unit V: Role of NGOs
- Need for participation of Non-Governmental Organisations in development efforts. Encouragement given to NGO’s - Role of CAPART.

Unit VI: Appraisal of the efforts
- Examining the impact of the developmental efforts in selected rural and urban areas. Quantitative achievements of a programme and its improvement.
- Study of the evaluation reports of the various departments.

References

Journals
Changing Villages, PPS Gassain for Consortium on Rural Technology, D-320, Laxmi Nagar, New Delhi.

Kunchipetla, Director, Publications Division, Ministry of I&D, Government of India, Patiala House, New Delhi.
Home Science

Secretary, Publications Division, Patlata House, New Delhi-110001.

Information Unit, Centre for Development of Rural Technology, Institute of Engineering and Technology, 25, Chatham Lines, Allahabad-211002, India.

Villages, Centre for Science for Villages, Magan, Sangrathalya, Wardha-442001.

Makoti Printers, Sheikh ki Bagia, Near Shanthi Nagar, Gopal Sadan, Hospital Road, Gwallor-9.

Office of Family Welfare, Family Planning Association of India, Brij Bhavan, Nariman Point, Bombay-400021.

Head of Extension Education, The Indian Society of Extension Education, Division of Agricultural Extension, L-1, New Delhi-110002.
Focus

This course emphasizes the importance of diet in therapeutic management and the dietitian as a part of the medical team engaged in ensuring patient health and well-being.

Objectives

This course will enable the student to:
1. Know the principles of diet therapy.
2. Understand the modifications of normal diet for therapeutic purposes.
3. Understand the role of the dietitian.

Unit 1: Basic concepts of diet therapy
Therapeutic adaptations of normal diet, principles and classification of diets.

Unit 2: Team approach to health care. Assessment of patient's needs.

Unit 3: Routine Hospital Diets
Regular, light, solid, fluid, Parenteral and enteral feeding.

Unit 4: Energy Modifications and nutritional care for weight management
Identifying the overweight and obese, etiological factors contributing to prevention and treatment, low energy diets, balanced energy reduction, behavioural modifications. Underweight - aetiology and assessment, high energy for weight gain, anorexia nervosa and bulimia.

Unit 5: Diets for Febrile conditions, Infections and Surgical conditions

Unit 6: Etiological factors, symptoms, diagnostic tests and management of upper GI tract diseases - Diseases of Oesophagus and dietary management. Diseases of stomach and dietary management. Gastric and duodenal ulcer dietary management.

Unit 7: Etiology, symptoms, diagnostic tests and management of intestinal diseases - Diarrhoea, Steatorrhoea, Diverticular disease, Inflammatory bowel disease.
References


Practicals

Objectives

To enable students to –
1. Know the normal routine diets served in hospitals and for whom these would be served
2. To be able to plan diets for therapeutic purposes.
1. Standardization of common food preparations for portion size.
2. Planning and preparation of Normal diet.
3. Planning and preparation of fluid food preparations.
   Clear fluid preparations, Full fluid preparations, Planning and preparation of
   clear & full fluid.
4. Planning and preparation of Recipes for soft/semi-solid diet,
   mechanical, pureed, Planning and Preparation of soft diet.
5. Planning and preparation of recipes using protein concentrates
6. Planning and preparation of recipes using sugar substitutes
7. Planning and preparation of low fat and low calorie recipes.
8. Planning and preparation of high fibre recipes.
11. Planning and preparation of diets for the following conditions:
    overweight and obesity, underweight, levers, ulcers, diarrhea,
    constipation, malabsorption syndrome, viral hepatitis, liver
    cirrhosis, cholecystitis, nutritional anemias.
FOCUS

This course intends to impart knowledge and understanding of construction of household equipment, the material used, selection criteria, their operations, maintenance and care, and make them aware of new trends and handle minor problems of repair.

OBJECTIVES

To enable students to:

1. Recognize base materials, finishes and insulating materials used in the construction of household equipment.
2. Understand the principles underlying the operation, use, care and storage of household equipment.
3. Understand the criteria for the selection for appropriate equipment for home and suitable material for functionality.
5. Analyze various equipment with respect to design, cost and maintenance.
6. Understand handle minor problems of repairs and maintenance.

THEORY

1. Materials used for household equipment:
   - Base materials: Aluminum, Iron, Steel, Stainless Steel, Wood, Fiberglass, etc.
   - Finishes: Mechanical and decorative: Iron, Nickel, Chrome, Brass, Plastic, etc.

2. Structural designing of the equipment and different joints used in assembling equipment.
I. Motor Driven:
   Food related – Refrigerator, freezer, grinder, mixer, blender.
   Laundry – Washing and drying machine.
   Cleaning – Vacuum cleaner, dish washer, garbage disposer, fans exhaust, A/C.
   Personal Care – Hair dryers, hair remover.
   Recreation – Tape recorder, slide projector, video cassette player.

II. Heat Appliances
   Food Related – Surface heating units, toasters, percolators, cookers, ovens.
   Laundry – Cloth dryers.

References


FOUNDATION OF ART AND DESIGN (ID / HM / CS)

Focus
The course focuses on basic principles of art, elements of design, and appreciation of regional traditional and contemporary art in all aspects of living. It further emphasizes on developing skills in drawing, rendering, and creating designs of art objects.

Objectives
- enable the students to:
  - Understand elements and principles of art and design
  - Learn to appreciate art
  - Develop an understanding to the application of art principles in design composition of traditional and contemporary art, architecture, and textiles and interior design
  - Develop skill in creating designs and making art objects

Theory
- Introduction to Foundation of Art
  - Design, Definition and types: Structural and Decorative
  - Elements of design:
    - Line
    - Size
    - Form
    - Structure
    - Space
    - Pattern
    - Shape
  - Light: characteristics and classification
  - Study of colours: classification, dimensions, colour schemes and effect
Principles of design-definition and their characteristics and types:
- Balance
- Harmony
- Scale
- Proportion
- Rhythm
- Emphasis

Unit II: Indian, regional, traditional and contemporary arts and their use in
- Floor decoration
- Home decoration
- Accessories

Unit III: Appreciation of art
- In terms of principles of art and design
- In terms of composition and aesthetic appeal

Practicals
1. Freehand drawing: memory drawing and sketching.
2. Scale drawing, solid geometry, orthographic.
3. Preparation of colour wheel and colour scheme.
4. Elements of design laws of field, size, proportion, types of shadows.
5. Residential space planning – scale, lines, abbreviations, metric project
   by shades, shadows.
6. Lettering
7. Use of colour for wall/floor decorations and making accessories.
8. Application of design principles in flower arrangement – demonstrat
   from the point of view of principles of design composition.
9. Gift wrapping and preparing decorative articles.

References
- Bhat Pranav and Goenka Shamila (1990); The foundation of art and design, Bombay.

- 0, Consumption
- 0, Consumption
MATERNAL AND CHILD NUTRITION (CN)

Focus

The course focuses on understanding the physiological changes, management needs and associated problems during pregnancy, lactation, infancy and childhood.

Objectives

This course should enable the students to:

1. Understand the physiology of pregnancy and lactation and how these influence requirements.
2. Learn the benefits of breast feeding.
3. Be aware of the problems encountered in pregnancy and during breast feeding and be able to cope with these problems.
4. Understand the process of growth and development from birth until adulthood.
5. Get familiar with the nutritional needs at different stages of growth.
6. Understand the concept of growth promotion.

Unit 1: Nutrition during Pregnancy

Physiology of pregnancy, factors (non-nutritional) affecting pregnancy, importance of adequate weight gain during pregnancy, antenatal diet and schedule, Nutritional requirements during pregnancy and modifications, Nutritional factors affecting breast-feeding, nutrients and impact - energy, iron, folic acid, protein, calcium, problems of pregnancy and their management - nausea, vomiting, aversions, pregnancy induced hypertension, obesity, diabetes in pregnancy.

Unit 2: Nutrition during lactation - physiology of lactation

Nutritional requirements during lactation and dietary modifications, Galactogogues, preparation for lactation, Care of the nipples during breast hygiene.
Practicals

Objectives

This course should enable the students to:

1. Apply the knowledge regarding nutritional requirements of mothers and children in different circumstances.
2. Plan appropriate diets to fulfill nutritional needs in pregnancy, lactation, and for children at different ages.
4. Counsel mothers to take appropriate action to prevent growth faltering and to reestablish malnourished children.
5. Give appropriate counselling for children with special needs.
6. Train health workers for growth monitoring and promotion.

Unit 1: Preparation of high energy, high protein recipes for pregnant and lactating women (home level). Preparation of high energy, iron-rich recipes by pregnant women. Preparation of high-energy, protein-rich and iron-rich recipes to be used in supplementary feeding for pregnant and lactating women. Assessment of existing diets, pregnancy, lactation, improvement of the existing diets.

Unit 2: Visit to antenatal clinic and counsellng mothers at ANC.

Unit 3: Preparation of bottles for feeding - sterilization and preparation of formula milks.

Unit 4: Preparation of nutrient dense, complementary foods for infants.

Unit 5: Planning and preparation of dietary schedule for infants.
Unit 6: Use of Amylase rich foods in diets of infants and toddlers.
Unit 7: Preparation of nutritious snacks for children, rich in energy, protein and important micro-nutrients.
Unit 8: Preparation of packed lunch for primary school age, school age children and adolescent.
Unit 9: Preparation of various recipes for use in diarrhoea.
Unit 10: Planning diets for children with special needs.
Unit 11: Monitoring growth of children - weighing and charting growth.
Unit 12: Counselling mothers for growth promotion.
Unit 3: Nutrition during infancy

Unit 4: Immunisation schedule for infants and children

Unit 5: Growth and development from infancy to adulthood
Somatic, physical, brain and mental development, puberty, menarche, prepubertal and pubertal changes. Importance of nutrition for ensuring adequate growth and development.

Unit 6: Growth monitoring and promotion
Use of growth charts and Standards. Prevention of growth faltering.

Unit 7: Nutritional needs of toddlers, preschool, school going children and adolescents - Dietary management.

Unit 8: Management of preterm and low birth weight children.

Unit 9: Feeding children with special needs.

Unit 10: Dietary management of children during diarrhoea and fever
Use of ORT and prevention of dehydration, home based fluids.

Unit 11: Dietary management of children with inborn errors of metabolism (PKU, Glycogen storage disease, Wilson's disease), Malabsorption (Lactose Intolerance, Colic disease), Food Allergies.

Unit 12: Nutrition and health care programmes for the mother and child
ICDS and role of primary health centres.

References
Indian National Code for Protection and Promotion of Breast Feeding, Govt. of India, Ministry of Social Welfare, New Delhi, 1983.
Indian Council of Medical Research (1989): Recommended Dietary Intakes for Indians.
Unit 1: Methods of printing
- Fundamentals of printing study of dyes and pigments for printing
- Hand printing - painting, stencil, block, spray, hand screen
- Machine printing - Flat Bed and Rotary, Screen spray, flock
- Heat transfer, photo, lacquer, introduction to computer design softwares.

Unit 2: Essentials of Design
- Elements of Design: Colour, systems and schemes, Principles and design layout in design: Repetition/Classification of design: Structural and decorative, realistic, Abstract, stylized
- Elements of design help develop creativity in designing for prints.

Unit 3: Printives
- Enable the students to give variety to the consumer. Simple printing technologies have been designed in the course given below, which require only reasonably low investment as an.
- Marks: 50

Total: 50