

MAHATMA GANDHI UNIVERSITY
Ph.D. COURSE WORK IN HOME SCIENCE
COURSE II – ADVANCES IN HOME SCIENCE

Unit I- Food Science, Nutrition & Dietetics

Food groups: basic five food groups and recent food guide pyramid

Balanced diet. Recommended Dietary Allowances for Indians.

Nutrition: definition, constituents and its function. Importance of special nutrients, role of fibre, antioxidants & Phytochemical in promotion of health status.

Diet therapy: Therapeutic adaptation of normal diets, Dietary management of underweight, overweight, fevers, infections, Nutrition education and developing nutrition educational program, dietary counselling.

Planning meals for the family: meaning and important of meal planning, principles and factors affecting meal planning, planning meals for the family; keeping in mind the needs of individual members, including children, pregnant women, lactating mother, and elders. Types of diets-fluid, semi-fluid, solid, hospital& diet for special needs-obesity, cancer & HIV

Food adulteration: definition and meaning of food adulteration as given by PFA; common adulterants present in cereals, pulses, milk and milk products, fats and oils, sugar, jiggery, honey, spices and condiments.

Unit II – Textile Science& Apparel manufacturing

Fiber to fabric: newer developments in stages and technological processes in textile manufacture; New trends in Textiles:-a brief introduction to spandex, lycra, geo-textiles, techno textiles, nano fabrics, medicinal fabrics and eco-friendly textiles-organic cotton, jute, bamboo fibre, banana and lyocell Identification of textile fibers, mixtures and blends.

Recent trends in Textile finishes-organic, need and importance

Physiology of clothing; importance of the study

Apparel manufacturing: Fashion:-Definition, terminologies-style, fad, classic, fashion trend, haute couture, fashion life cycle, fashion fore-casting and present day fashion. Principles and factors influencing Fashion Elements and principles of design as applied to apparel designing.

Retailing and merchandising; concepts and principles; marketing trends, sale promotion techniques; export and import procedures.

Unit- III- Human lifespan study

Child Development: Heredity, environment and other factors influencing child development; prenatal and postnatal care of mother and child. Infant stimulation, development and growth promotion.

Early childhood care and education: objectives and maintenance of ECCE centres. Values of play for young children. Physical, motor, cognitive and language development.

Youth Development: Late childhood and adolescent development. Pubertal growth and related developmental changes. Problems of adolescents, guidance and counselling for adolescents. Sex education; self concept and personality development.

Adulthood & Ageing: Changing needs and challenges of senior citizens in India, midlife changes, Mental health and well-being.

Counseling-need&importance

Unit –IV - Family Resource Management

Concepts and principles of management: Money, time and energy management, work simplification. Decision making processes. Household equipment, uses, care and safety aspects.

Interior Design: Principles of art and design, application for interior designing, interior space planning, Selection and arrangement of furniture, fixtures and furnishing – flooring and floor coverings; flowers and their importance in interiors – fresh artificial; kitchen layout (a brief study)

Unit-V- Extension Education

Communication: functions, channels, skills, models and barriers. Preparation and use of Audio visual aids in communication, use of information technology in communication.

Leadership: concept, qualities, significance of leadership development. Role of extension agencies for planning and implementing community programmes/ Impact of information technology on quality of life of family and community. Role of women entrepreneur in social and economic development.

Reference Books

1. Karnik Sangeets (2006): Nutrition and diet therapy; Chennai: Biotech pharma publications. ISBN 97893 8068 2006
2. Raheena Begum.M(2008): Foods, Nutrition&Dietetics: New delhi: Sterling Publishers Private limited, ISBN 9788120737143

3. Srilakshmi,B.(2003). Dietetics. New Age International Pvt.Ltd, Publishers. New Delhi.
4. Srilakshmi.B(2006). Nutritional Science. New Age International Private Limited, New Delhi.P-313-315
5. Swaminathan,M.,(1999) Principles of nutrition and dietetics. Bapco publishers.
6. Swaminathan.M(1996) Food and Nutrition, Bangalore. Published by The Bangalor Printing & Publishing co., LTD.
7. Corbman.B.P.(2005). Fibre to Fabric, International student's edition, Singapore.
8. Wingate IB (2000)Textile Science and their selection, Prentice Hall.
9. Cookling Gerry 1997. Garment Technology for Fashion Designers. Blackwell Science.
10. Hurlock EB (2007) Child Growth and Development. White fish,MT: Kesinger publishing
11. Devadas RP & Jaya N; (1984) A text book of Child Development Delhi: Macmilian India Limited
12. Berger KS(2008) The developing person:Through the life span New York: worth publication
13. Mody,Bella(1991): Designing messages for development Communication, New Delhi, Sage Publications.
14. Supe A.N. (1983). An introduction to Extension Education. Oxford IBH Publishing Company.
15. Kuppuswamy,B(1989): Communication and Social Development in India. Bombay, Media Oromoters and Publishers Private Ltd.
16. Devadas, Rajammal,P.(1980): Text book of Home Science,NCERT,New Delhi.
17. Chandrasekar, U and Bhooma,S(1999),Nutrition profie of the elderly, Indian Institute of Nutrition.
18. Dhama O P and Bhatnagar,O.P(1988): Education and Communication for Development, New Delhi, Oxford and IBH Publishing Co.Pvt.Ltd.