

DRAFT

National Education Policy-2020

Common Minimum Syllabus for Uttarakhand State Universities and Colleges

Four Year Undergraduate Programme- FYUP/Honours Programme/master's in arts

PROPOSED STRUCTURE FOR FYUP/MASTER'S IN HOME SCIENCE SYLLABUS

DEPARTMENT OF HOME SCIENCE

(HSC 4th and 5th year)

List of Experts in drafting NEP (2020) syllabus (Home Science)

S.no	Name and Designation of Expert	
1	Professor Lata Pande Convenor and Head, Department of Home Science D.S.B Campus, Kumaun University, Nainital, Uttarakhand	Convenor
2	Dr Chhavi Arya Associate Professor Department of Home Science, D.S.B Campus, Kumaun University, Nainital, Uttarakhand	Co-Convenor
3	Dr Meena Batham Associate Professor Department of Fabric and Apparel Science, Institute of Home Economics, Delhi	Expert
4	Dr Parth Banerjee Consultant, Asian Development Bank	Expert
5	Professor Mukta Singh Head Department of Home Science, M.M.V. , B.H.U, Uttar Pradesh	Expert
6	Professor Manisha Ghalot Head Department of Apparel and Textile Science, College of Community Science, G.B. Pant University of Agriculture and Technology, Pantnagar, Uttarakhand	Expert
7	Professor Rekha Naithaini Department of Home Science, BGR Campus, Pauri, C.U Gharwal	Expert
8	Professor Jyoti Tiwari Convenor and Head, Department of Home Science Srinagar Campus, Srinagar, C.U Gharwal	Expert
9	Professor Anju Bisht Head Department of Home Science, M.B.P.G College, Haldwani	Committee member
10	Prof Preeti (Home Science) Principal Govt P.G College Joshi math Uttarakhand	Committee member
11	Dr Prabha Bisht Associate Professor Department of Home Science, Govt PG Degree college Doiwala Dehradun	Committee member

		DISSERTATION	Dissertation on Major OR Dissertation on Minor OR Academic Project/Entrepreneurship	Theory	6
FOURTH YEAR		DSE 1a	Research methods and statistics	Theory	4
		DSE 2a	Theories of human development	Theory	4
		DSE 3a	Advance food science	Theory	4 (Compulsory)
		DSE 4a	PRACTICAL 1- Clothing Construction and Food preparations	Practical	4 (Compulsory)
		GE	Rural Sociology	Theory	4
		DISSERTATION	Dissertation on Major OR Dissertation on Minor OR Academic Project/Entrepreneurship	Theory	6
	VIII	DSC 02	Food safety and preservation	Theory	4
		DSE 1b	Life span development	Theory	4
		DSE 2b	Advance home management	Theory	4
		DSE 3b	Extension in home science	Theory	4 (Compulsory)
		DSE 4b	PRACTICAL 2- Practical Aspects of Extension Education	Practical	4 (Compulsory)
		GE	Marriage and Family Dynamics	Theory	4
		DISSERTATION	Dissertation on Major OR Dissertation on Minor OR Academic Project/Entrepreneurship	Theory	6
Bachelors with Honors in Home Science					
FIFTH YEAR	IX	DSC 03	Community nutrition	Theory	4
		DSE 1c	Indian embroideries and dying and printing techniques	Theory	4 (Compulsory)
		DSE 2c	Child welfare in India	Theory	4
		DSE 3c	Human physiology	Theory	4
		DSE 4c	PRACTICAL 3- Nutritional Assessment and Surface ornamentation of fabrics	Practical	4 (Compulsory)
		GE	Psychological testing and Measurement	Theory	4

X	DSC 04	Housing needs and space planning in interior decoration	Theory	4
	DSE 1d	Human nutrition and diet therapy	Theory	4 (Compulsory)
	DSE 2d	Children with special needs	Theory	4
	DSE 3d	Fashion Design and Development	Theory	4
	DSE 4d	PRACTICAL 04- Interior Decoration and Therapeutic Nutrition	Practical	4 (Compulsory)
	GE	Gender in Extension	Theory	4
	DISSERTATION	Dissertation on Major OR Dissertation on Minor OR Academic Project/Entrepreneurship	Theory	6

Masters of Home Science

Semester VII

HSC/ DSC/PG 101: ADVANCED FABRIC AND CLOTHING CONSTRUCTION CREDIT: 04

Course Outcomes:

Students will be able to

- Understand about Yarn construction, mechanical and chemical spinning
- Understand about Weaving technology
- know about Equipment used in clothing construction

UNIT I:

Yarn construction– mechanical and chemical spinning; Different stages of yarn construction; Types of yarn– simple, textured and spun; simple– simple, ply, cord; novelty; ply, cable, double and novelty; yarn numbering and yarn twist

Blends–meaning, types, process and reasons for blending, difference between blends and mixed.

Unit II:

Weaving technology: Definition, main operations; Characteristics of woven fabrics;

Selvedge–types; Types of weaves.

Loom–Parts of loom; Classification and types of looms; Motions of the loom

Non-woven fabrics–meaning, types, methods and uses (Felting, Bonded and non-woven fabrics etc.)

Knitting technology: Definition, classification, material and equipments; Methods of knitting–Weft knitting and warp knitting; Uses and disadvantages of knitted fabrics

Unit III

Equipment used in clothing construction

Sewing machine: Parts and attachments; common defects and remedial measures, care and maintenance

Anthropometric Measurements: Need; taking measurements for different garments; precautions and method; tools and materials.

Unit IV

Techniques of clothing construction:

Drafting: Meaning and importance; tools, method and precautions; drafting on paper and cloth;

Pattern making: Meaning and importance; parts of pattern; tools required; symbols used and general rules.

General principles of clothing construction; Steps in clothing construction: Preparation of fabric for clothing construction; preparing layout; marking of cloth; principles of cutting; principles of stitching; finishing

Unit V:

Use of construction features in design- seams, darts, tucks, pleats, gathers, placket opening, Shirring. Different types of–necklines, collars, yokes and sleeves.

References:

- 1.Vastra evam Paridhan, Shashi Prabha Jain and Archana Jain, Shiva Prakashan, Indore
- 2.Parivarik Paridhan Vyavastha, Manju Patni and Sapna Henry, Star Publications
- 3.Vastra Vigyan ke Mool Sidhanth, G.P. Sherry, Vinod Pustak Mandir
- 4.Griha Vigyan Vishwa kosh, Rama Sharma and M.K Mishra, Arjun Publishing House

HSC/ DSE/PG 102: RESEARCH METHODS AND STATISTICS

CREDIT: 04

Course Outcomes:

Student will be able to –

- Demonstrate knowledge of the scientific method, purpose and approaches to research
- Understand Sampling and Editing of statistical data
- Prepare key elements of a research proposal

Unit I Research in Home Science- concept need and approaches, Research approaches-problem oriented and interdisciplinary. Type of research Historical survey, experimental and case study

Unit II Definition and identification of research problem selection Hypothesis, basis assumption and limitation of research problems

Unit II Sampling: Types of samples and selection of samples, data collection techniques: cross-selection and longitudinal, studies: questionnaire, interview schedule, observation, lab-techniques.

Unit IV Editing of statistical data, classification and tabulation, role of statistics in research, elementary statistics: classification, tabulation and frequency distribution of data.

Unit V Measures of central tendency- Mean Median and Mode

Measures of dispersion– standard deviation. Probability, normal distribution and use of normal distribution, probability tables, t-test for small sample, use of computer for analysis of data, Report writing.

References:

- 1.Gupta, S.P., Statistical Methods, Sultan Chand and Sons, New Delhi, 1994
- 2.Jain, Gopal Lal, Research Methodology, Methods, Tools and Techniques, Mangal Deep Publications, Jaipur, 1998
- 3.Kothari, C.R.: An Introduction to Operational Research, Vikas Publishing House Pvt. Ltd, NewDelhi,1994
- 4.Wright, Susan E., Social Science Statistics Allyn and Bacon Inc., London,1986
- 5.Wisniekwski, Mik, Quantitative Methods for Decision Makers, McMillan India Ltd., New Delhi,1986

HSC/DSE/PG 103: THEORIES OF HUMAN DEVELOPMENT

CREDIT: 04

Course outcomes:

After completing this course, the learner will be able to:

- Students will gain an insight into the importance and role of theories in Human Development.
- Students will develop an understanding of selected theories in Human Development.
- Students will become aware of the concepts and perspectives related to human development.

Unit I:

Maslow's self-actualization theory

Freud's psychosexual or psychoanalytic theory

Erikson's psychosocial theory

Unit II:

Skinner's theory of Operant or instrumental conditioning

Pavlov's theory of classical conditioning

Thorndike's Trial and Error Learning

Unit III:

Kohlberg's six stages of moral reasoning

Unit IV:

Piaget's cognitive development theory

References:

- 1.Morgan, Kingetal(1999):“Introduction to Psychology”, Tata McGraw-Hill Edition, Delhi, India
- 2.HurlockE (2000): “Child Development”, Tata McGraw-Hill Edition, Delhi,India
- 3.Bal Vikas evam Bal Manovigyan, Brinda Singh, PanchseelPrakashan, Jaipur

HSC/DSE/PG/104 ADVANCED FOOD SCIENCE

CREDIT: 04

Course outcomes:

- Understanding Food Science
- Understand about Food Composition and Nutritive Value of different food groups:
- Understand about Food Processing and Preservation:

Unit-1

Unit-1: Food in relation to health - Introduction to food science as a discipline and modern developments

Functional properties of foods - Definition, structure and properties of food hydrocolloids. Hydrocolloids as gelling, emulsifying, thickening, stabilizing and coating agents.

Important roles of proteins (denaturation and browning), carbohydrates (caramelization and crystallization) and fats (emulsification) in altering the functional properties of food.

Unit-2 Different food groups and their nutritive values

Cereals: Breakfast cereals– Uncooked and ready to eat products; Cereal-based products– processed, fermented and baked

Pulses and legumes: Composition and processing; Toxic constituents of Pulses and elimination of toxic factors.

Nuts and oilseeds: Use and processing

Fats and oils: Functions of oils and fats in food; Processing of fats

Fruits: Composition and nutritive value

Vegetables: Classification, composition, nutritive value and methods of cooking

Unit-3

Meat: Composition, cooking of meat; Changes produced during meat cooking; Meat substitutes

Fish: Type, composition and cookery, preservation and processing

Egg: Nutritive value and structure; Storage and processing; Effect of heat on egg protein;

Egg products; Egg cookery; use of egg as a thickening agent and an emulsifying agent.

Milk: Composition and importance; Milk processing; Milk products; Milk substitute.

Unit-4

Sugar: Different types of sugars; Indian confectionary

Spices and condiments: Role of major and minor spices and their use; active principles in

Some spices, Adulteration of spices.

References

1. Amerine MA, Pengborn RM, RoceasierEB(1965). Principles of Sensory Evaluation and Academic Press, NewYork.
2. Srilakshmi, B. Food Science,4th Edition, New Age Publishers, New Delhi.

PRACTICAL 01- Clothing Construction and Food Preparations (HSE/ DSE/ PG 105) Compulsory

CREDIT: 04

Practical:

1. Drafting and lifting plan of different weaves on graph paper and glaze paper
2. Visit to a cloth weaving unit and report writing
3. Hand knitting samples/article

4. Construction of darts, pleats, tucks, gathers; basic seams; collars and sleeves.
 5. Drafting of adult basic bodice and sleeve block and stitching of blouse and kurta
 6. Understanding and handling of sewing machine: various parts; accessories; care, common defects and remedial measures
 7. Preparation of research proposal in home Science and its report writing.
- Important National and International food preparations

HSC/GE/PG 106 Rural Sociology (Credit 04)

Course outcomes

- It will enable students with the conceptual knowledge of rural sociology
- It familiarizes them with different processes and institutions of rural Indian society.

UNIT I: Rural Sociology: Meaning, definition, need to study, scope and importance, difference between rural and urban society.

Structural differentiation, the traditional/modern dichotomy, the rural urban continuum and socio-cultural obstacles or pre-requisites to development

Unit II Planned social change

(a) Approaches to rural planning: Improvement and transformation

(b) Indian rural development Programmes- critical analysis of development

(c) Programme, particularly Integrated Rural Development Programme and their consequences

UNIT III: Indian Rural social stratification

Castes -Basic notions, regional variations, changes and its role in economy and polity

UNIT IV: Indian Rural Institutions

a- Social: Family-Nature, Forms and changes

b- Economic- Objectives and techniques of production: land relations

c- (Ownership, tenancy and labour)

Rural poverty – its manifestations and causes

Physical structure of rural society social organization of rural society

UNIT V: Rural leadership – meaning, principles of leadership, types of leaders, qualities of leader,

selection of rural leaders. Status of women in Rural India, Role of women in Rural and Agricultural Development.

References: 1 nsikbZ , vkjHkkjrh; xzkeh.klekt'kkL= , University book house Jaipur

2. Doshi S . L. rural sociology, university book house Jaipur

3. Ahuja Ram Social Problems in India, University book house Jaipur

4. Aggrwal G. K xzkeh.k lekt'kkL= % vkxjk % lkfgR; Hkou

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HSC/VAC/PG107: Dissertation (CREDIT: 06)

**Dissertation on major (4+2) or Dissertation on minor or academic projects /
entrepreneursh**

Semester VIII

HSC/DSC/PG 108: FOOD SAFETY AND PRESERVATION

CREDIT: 04.

Learning outcomes

Students

- Will be able to know about Food sanitation and hygiene
- Will be able to understand about food adulteration
- Will be able to understand methods of Evaluation of foods, and methods of food preservation

Unit 1

Food sanitation and hygiene- – Introduction, Definition, Basic aspects of Personal Hygiene, Disease transmission

Food handling -preventing food borne illnesses, Education of food handler in handling and serving food, Importance of personal hygiene of the food handler, pest control

Food borne diseases

Causes of food spoilage,

Unit2

Definition of Adulteration, Adulterants, Types of adulterants, Food laws – PFA Act,

Essential Commodities Act,

FPO Act, MFPO, Milk and Milk products order, Food Standardisation and Regulation Agencies in India- Agencies at state level, Central food Laboratories, HACCP, powers of food inspectors.

Enzymes in food processing

Unit-3

Evaluation of foods: Visual examination and sensory evaluation (Colour, texture, flavour and taste),

Unit4

Introduction to food preservation- Methods of preservation, General principles and applications of Food preservation.

Preservation by use of temperature -- Preservation by use of high and low temperature.

Preservation by drying- Preservation by drying and use of salt and sugar

Preservation by use of chemicals

Preservation by food irradiation

Unit 5 ENHANCEMENT OF FOODS – Food Fortification, Enrichment, Supplementation, Fermentation, Germination, Pre- and Probiotics and Organic Foods

REFERENCES

1:- Sunetra Roday, Food Safety and Sanitation, Tata McGraw-Hill Education, 2017

2:- Norman G. Marriott and Robert B. Gravani, Principles of Food Sanitation, Springer, 2018

3:- Dr. Anju Singh & Dr. Gouri Goyal, Bhojan posan awam swachhta, Sahitya Bhawan Publication, 2022

4:- krishna Sinha, Bhojan posan awam swachhta, Rakhi Prakashan, 2021

HSC/DSE/PG 109: LIFE SPAN DEVELOPMENT (CREDIT: 04)

Course outcomes

- The student will develop an understanding about the discipline of Lifespan development
- The student will understand the concept of stages and domains in lifespan development
- Students will be able to identify key developmental milestones in different life stages

Unit I:

Development during different stages of life cycle.

Prenatal period, conception and pregnancy, stages of prenatal development, factors affecting prenatal development, complications of pregnancy and birth process, Pre-school period- physical growth and motor skills development, language, speech and social development, skill in play, influence of nursery school and home environment on habits and development. Problems of this stage of growth

Unit II:

Elementary school years- physical growth and health, motor personality, social, emotional, cognitive, language, interests and personality development, effect of peers, school and media, role of parent and teacher, problems of this stage of growth.

Unit III: Adolescence

Puberty and Adolescence—definition and characteristics

Physical changes during puberty and adolescence

Developmental tasks of adolescence Social and emotional development during adolescence.

Factors affecting social and emotional Development. Role of parents, teachers, peers and society.

Problems of adolescence—

drop out from education system, juvenile delinquency— causes and prevention, addiction and alcoholism. Problems of adjustment, identity crisis.

Unit IV: Early Adulthood

Characteristics; Sub-stages; Developmental Tasks Problems: Adjustments, Interests, Vocational, Marital life and adjustments, Divorce, Re- marriage, Unmarried life/singlehood

Middle age;- Characteristic; Subdivision; Developmental tasks, problems, some common problems unique to this stage, Physical changes, Health, Changes in interest, Vocational, Changing family pattern.

Unit IV: Old Age

Characteristics; Subdivisions; Developmental Tasks Types of Changes during ageing: Physical, Sensory, Sexual, Health, Changes in motor abilities, Changes in mental abilities and cognitive capacities, Changes in interests, Retirement, Loss of spouse; Vocational and Family life hazards of old age; Consequences of ageing.

REFERENCES

1. Vikasatmak Manovigyan, Rajendra Prasad Singh, Jitendra Kumar Upadhyay, Rajendra Singh; Motilal Banarsidas, New Delhi.
2. Baal Vikas evam Baal Manovigyan, Vrinda Singh, Panchsheel Prakashan, Jaipur
3. Hurlock B Elizabeth (1981), Developmental Psychology— A Life Span Approach, Tata Mc Graw Hill

- 4.Hurlock B Elizabeth (1978), Child Growth and Development, Tata McGraw Hill
- 5.Hurlock B Elizabeth (1997), Child Development, Tata McGraw Hill
- 6.Papalia E Diane & Olds Wendkos Sally (1975), A Child's World–Infancy through Adolescence, McGraw-Hill Book Company
- 7.Berk E Laura (2000), Child Development, Allyn and Bacon

HSC/DSE/PG 110: ADVANCED HOME MANAGEMENT

CREDIT: 04

learning outcomes:

To acquire knowledge about the concept of management.

To acquire knowledge about the concept of values, goals and standards.

To understand the basic concept of Management process

To learn the basic concept of decision making

To understand the meaning and classification of family resources.

Students gain knowledge and skills related to effective time management and resource allocation.

Unit1

Management in family living, characteristics of management in home, role of home management, misconceptions regarding home management

Roles and responsibilities, characteristics and functions of a home manager

Unit2

Values–Concept, characteristics, classification and factors influencing values

Goals–Concept, types, factors influencing goals

Standards–Concept, classification of standards

Interrelatedness of values, goals and standards

Unit3

Management process: Planning, organizing, leading, controlling and evaluating

Decision making: Concept, steps, factors affecting, kind

Resources: Meaning and definition, role, characteristics, classification

Unit4

Time Management: Tools–peak-loads, work-curves, rest periods and work simplification

Energy Management: Classification of efforts used in homemaking, fatigue– types and

Causes, Work simplification: Techniques– pathway chart, operation chart, micro- motion film analysis and path process chart

Unit5

Money Management: Budgeting– Definition, importance and steps in planning

a budget. Account keeping–importance, types of account systems, methods of handling money, family financial records.

References:

1. An Introduction to Family Resource Management, Premavathy Seetharaman, Sonia Batra and Preeti Mehra, CBS Publishers and Distributors
2. Economics of the household, B A Drew, Mc Millan company, New York.
3. Consumer Economics, Dr. Richard, Irwin, Illinois (1983)

HSC/DSE/PG 111: EXTENSION IN HOME SCIENCE

CREDIT: 04

learning outcomes:

To acquire knowledge about the concept of Home Science extension education

To acquire knowledge about Role and Qualities of Home science extension worker

Understand role of Home science in rural development

CREDIT: 04

Unit1: Home Science: Concept, objectives, areas and relationship with extension

Extension: concept, goals and history

Origin and need of Home Science Extension Education

Unit 2 Home science extension worker: Role and Qualities, Extension education methods.

Communication skills: verbal and non-verbal communication. Relationship between, communication, extension and development.

Role of Home science in rural development, Role of women in rural development

Unit 3 Methods and media of community outreach; Audio Visual aids in Home Science

extension education Agencies (national and international) associated with extension education for rural development. Diffusion of innovation and adoption through extension.

Unit 4 Community development: Understanding communities and their characteristics.

Organization, principles, characteristics and functions

Role of home scientists in community development

Welfare program for rural women and children. (DWARKA, ICDS and other social welfare program (TRYSEM, JRY)

Growth and Development of Panchayati Raj.

Rural Institutions of India. Village school, Mahila mandal, Youth clubs

References:

1. Griha Vigyan Prasara Shiksha, Manju Patney and U.S Thakur, Shiva Prakashan Indore
2. Communication for Development in the Third World Theory and Practices (1991). SagePublication, New Delhi.
3. Chabey BK (1990) A Handbook of Education Extension, Jyoti Publication, Allahabad
4. Singh, R. (1987) Textbook of Extension Sahitya Kala Prakashan, Ludhiana
5. Extension Education in Community (1961) Ministry of Food and Agriculture, Government of India, New Delhi
1. Extension Programme Planning, Oxford and IBH Publishing Company Pvt. Ltd. New Delhi

PRACTICAL 2 (HSE/DSE/PG 112): Practical Aspects of Extension Education
CREDIT: 04

1. Preparation of recipes from different Indian states
2. Preparation of low cost high nutritive value recipes
3. Visit and Report Writing to Gram Panchayat.
4. Visit and report Writing to household industry.
5. Visit and report writing on family court / Legal aid centres.
6. Collection of paper cutting / pamphlets related to any specific topic.
7. Plan and prepare slides / C.D. on any concerned topic
8. Preparation and use of slides use and handling of instructional aids
8. Demonstration as an instructional technology-method and result demonstration.
9. Group discussion, lesson planning.
10. Making family budget for different income groups while taking into consideration savings and Taxes

HSC/GE/PG 113: Marriage and Family Dynamics

Credit: 04

Learning outcomes for a course on marriage and family dynamics and understand the significance of marriage and family

- Students will also learn about family life cycles
- To learn about Marital adjustment and Marriage guidance and counselling

Unit I

Marriage – Meaning, marriage as an institution, goals of marriage, selection of life partner, changes in marriage and their causes. Family life cycle.

Readiness of marriage-physiological, social, psychological and others.

Preparation for marriage

Family – Definition, functions, and types (with reference to family life cycle), characteristics of family, Family structure in India

Unit II

Patterns of changes in family relationships

Unit III

Marital adjustment – factors contributing to difficulties in marital adjustment, adjustment to life partners, sexual adjustment, adjustment to in-laws, adjustment to partner hood.

Contemporary issues in Family life

Break-up of extended family, migration, dual career families, Non-traditional families, influence of extra familiar factors, films, TV, peer groups, neighbourhood and school

Breakup of family: Divorce, separation, desertion, death of partner, single parenthood

Unit IV

Marriage guidance and counselling – meaning of counselling, factors causing tension in married life, importance of marriage guidance and counselling, areas in marriage requiring guidance.

Legal aspects: laws regarding marriage, adoption, divorce, inheritance

References:

Manav vikas – Shashi Prabha jain, Shiva Prakashan , Indore

HSC/VAC/PG 114: Dissertation

CREDIT: 06

Dissertation on major (4+2) or Dissertation on minor or academic projects / entrepreneurship.

Semester IX

HSC/DSC/PG115: COMMUNITY NUTRITION (Compulsory DSE)

CREDIT: 04

Course Outcomes

This course will make student aware regarding various basic concept and knowledge about community nutrition

After the successful completion of the practical course, the student will be able to

Apply their skills to assess the health status of individuals by using methods of nutritional assessment .

Unit1:

UNIT I: INTRODUCTION TO COMMUNITY NUTRITION Community nutrition as a field:

public health nutrition, goals of nutrition programme,

dietary guidelines,

present trends and focus on community nutrition

UNIT II: DIRECT NUTRITIONAL STATUS 2.1 Direct nutritional assessment of human groups:

Diet survey methods,

nutritional anthropometry,

clinical signs.

UNIT III: INDIRECT NUTRITIONAL STATUS

Vital statistics, indicators and their use;

health policy indicators,

social and economic indicators;

coverage by primary health care;

basic health status indicators

UnitIV:

NUTRITIONAL PROBLEM IN INDIA

Magnitude of nutritional problems in India:

Protein energy malnutrition,
anaemia,
vitamin A deficiency,
Iodine deficiency disorder;
over nutrition and chronic degenerative diseases.
Strategies for the control of
malnutrition.

UNIT V: FOOD CONSUMPTION PATTERN AND PDS

Food consumption pattern in different parts of India and food availability; Food balance sheets; Public distribution system; Food Corporation of India; Food security

UNIT VI: ASSESSMENT OF NUTRITIONAL KNOWLEDGE

Assessment of nutritional knowledge by informal discussion and by simple questionnaire and rapid rural appraisal (RRA).

Nutrition education- Definition, concept and role of nutritional education,
rationale, planning, execution and evaluation

References:

1. Bamji, M.S Rao, NP and Reddy V. 1996. Text book of Human Nutrition
2. Bagchi, K. 1990. Guidelines for the management of nutrition programmes- a manual for nutrition officers. WHO EMRO Technical Publication no. 15, WHO, Geneva
3. Bendich, A and Deckelbaum, RJ, 1997. Preventive Nutrition. The Comprehensive guide for health professional.

HSC/DSE/PG/116: INDIAN EMBROIDERIES, DYEING AND PRINTING TECHNIQUES CREDIT: 04

Learning outcomes

- Student will be able to understand about different type of dyes and dyeing methods
- Recognise and identify embroidered fabrics of different states in terms of stitches and designs
- Discuss sustenance of traditional textile crafts and Analyze the textile arts in their historical perspective
- Student will be able to understand the application of different embroidery techniques
- Students will be able to develop utility articles with the help of basic embroidery stitches

Unit I:

Dyes—Definition and classification of dyes

Different types of dyes: Natural dyes— Vegetable, animal and mineral; Synthetic dyes—direct, acid, basic, reactive, vat, sulphur, mordant, disperse, pigments. Suitability of various dyes to different fibres.

Unit II:

Dyeing methods at different stages of processing— fibre, yarn, piece, union and cross

Colour fastness characteristics— washing, sunlight, crocking and perspiration

Domestic methods of dyeing

Unit III:

Printing—Significance, methods—block, stencil, screen, roller, Faults in printing, Advantages

and disadvantages of different printing methods. Preparation of printing paste, use of various ingredients and thickeners. Preparation of cloth for printing. After-treatment of printed goods.

Unit IV

Historical background of traditional Indian embroidery
General embroidery techniques; Hand embroidery –
Knowledge of basic hand embroidery stitches
Study of traditional embroideries of India: Texture, design and colour,
Chikankari of Uttar Pradesh, Kantha of Bengal, Kasuti of Karnataka, Kutch Kathiawar of Gujarat, Phulkari of Punjab, Sindhi embroidery

Unit V

Traditional Textiles of India: Texture, design and colour
Woven (in design)–Patola, brocade, chanderi, paithani, pochampalli, ikat, maheshwari
Printed woven fabric– dacca muslin, tassari, kotadris
Printed–Sanganeri, kharhi print of Gujarat
Painted–kalamkari, madhubani
Resist dyed–bandhej of Gujarat and Rajasthan
Khadi: Significance–National and economic; Revolution in Khadi
Handloom: Definition, role in national economy and some chief handloom clothes of India

References:

- Agarwal, O.P., 1977, Care and Presentation of Museum projects – II, NRL
•Barnard, N., Gillow, J., 1993, Indian Textiles, Thames and Hudson, USA
• Chattopadhyaya, K.D., 1995, Handicrafts of India, Wiley Eastern Limited, N Delhi
• Crill, R., 2015, The Fabric of India, Victoria and Albert Museum, UK
• Das, Shukla, 1992, Fabric Art- Heritage of India, Abhinav Publications, N Delhi.
• Grundy & Northedge, (1998) Standards in the Museum Care of Costume and Textile EC (1267) – 25.08.2023 4 Collections, Museums & Galleries Collection, Spin Offset Limited, Chapter 7-14, pg 35- 54
• Mausumi Kar, (2015), The Indian Textile and Clothing Industry An Economic Analysis, Springer New Delhi Heidelberg New York Dordrecht London, Chapter 1& 2, pg 12-33.
• Pandit Savitri, 1951, Indian Embroidery- Its Variegated Charm, Pandit Publisher, Baroda Embroidery tutorials,
video links of woven textiles and slide share
Vastra Rachna evam Chappai Takneek, Jain and Gupta, Shiva Prakashan, Indore

HSC/DSE/PG 117: CHILD WELFARE IN INDIA

CREDIT: 04

Course outcomes

The student will be able to develop an understanding of the welfare issues related to children in India.
To create awareness among students about the Government programmes, policies and legal provisions as well as the Non- governmental efforts made to improve the status of the child.

Unit I: Child Welfare in India Concept and historical perspective, Need and relevance Historical evolution of Child welfare Rights of children; Protection of Child rights; Convention on the rights of the child in the
Constitution of India

Unit II: Profile of child in India Demographic: Total population, Child population, Sex ratio, Infant

Mortality Rate (IMR), Literacy, School enrolment rate

Unit III: Children at Risk Children in especially difficult circumstances, Children in emergency situation, Disabled child, Destitute child, Street child, Delinquent child, Working child Social problems related to children – female foeticide (pre-birth and preconception elimination), juvenile delinquency, child labour, child abuse and child marriage, discrimination against girl child

Unit IV: Policies and Legislations for Child Welfare National Children's Board, The National Policy for the Child, The National Children's Fund, Child Labor Cell Child Labour Act; PC-PNDT Act; Child Marriage Act, The Children's Act, Juvenile Justice Act, Right to Education Act

Unit V: Child Welfare agencies and programmes in India International, national and local agencies – governmental and non-governmental (UNICEF, ICCW, NIPCCD, NCERT, ICSW Mobile Creches, Bal Bhawan) Welfare programs –

ICDS, Mid-day Meal Programme, Universal Immunization Programme, etc

References:

1. Baig, T.A. (1979): Our Children. New Delhi: Ministry of Information and Broadcasting, Govt. of India
2. Chowdhry, D.P. (1980): Child Welfare and Development. Delhi: Atma Ram
An analysis of the situation of children in India, United Nations Children's fund Regional Office for South Central Asia. New Delhi (1984).
3. CSWB – Juvenile delinquency in India, Children's aid Society
4. Encyclopedia of Social work in India. Volumes, Director, Publication Division, Ministry of Information and Broadcasting, India Planning Commission, Delhi 6.
5. Guilford R. :(1971)Special Educational Needs, Routledg and Kangan Press, London 6. Joan Laird and Ann Hartmam. – Editor's handbook of Child welfare.The free Press, A division of Macmillan Inc. New York. Collier Macmillan Publishers London
7. Kadushin Alfred. : (1967).Child Welfare Services. Macmillan Co. New York,
8. Kirk Samuel A. : (1970). Educating exceptional Children. Oxford and IBH Publishing Company, India Ed.
9. Mehta D.S. –(1983)Handbook of disabled in India. Delhi Allied Publishers, National Children's Policy, Social welfare ministry Government of India.
10. Profile of Indian child Ministry of social welfare Govt. of India.
11. Sen A. (1971)Introducing voluntary Agencies in India. Indian Art Press, New Delhi,. 12. Sheth Hansa. : Deliquent child, Popular Book Depot. Bombay.

HSC/DSE/PG 118: HUMAN PHYSIOLOGY

CREDIT: 04

Course outcomes

The students will be able to understanding how the human body functions, including the structure and function of major organ systems, their interactions, and how they maintain homeostasis.

Students will also develop the ability to apply this knowledge to understand normal physiological processes and disease states

Unit I Cell Physiology: Cell structure, types function and organelles ; Cell membranes and transport mechanisms.

Unit II

Cardiovascular system- Structure and function of the heart, cardiac cycle, cardiac output, heart sounds, regulation of heart rate, blood pressure: Factors affecting it and hypertension.

Composition and functions of blood and lymph, heart and course of blood circulation, blood pressure, pulse and heart sounds

Unit III Physiology of digestion, digestive enzymes and their function, function of liver, absorption from the intestine

Unit IV Respiratory apparatus, mechanism of respiration, respiratory rates, volume and transport of gases

Musculo-skeletal system- Structure and function of bone, cartilage and connective tissue. Disorders of the skeletal system, types of muscles, structure and function.

Unit V Excretory System- Structure and function of nephron, mechanism of urine formation and the role of the kidneys in water and electrolyte balance, diuretics, renal stone, albuminuria, haematuria, oedema, uremia.; the skin and its functions

Unit VI The location, secretion and functions of various endocrine glands, Physiology of male reproduction: hormonal control of spermatogenesis; Physiology of female reproduction: hormonal control of menstrual cycle, pregnancy parturition and, milk secretion

REFERENCES

1. Arthur J. Banders; Human Physiology- The mechanisms of body function, Tata Mc Graw-Hill Publishing
2. C. Guyton; Text book of Medical Physiology Vth edition, W.B. Sanders company- Philadelphia, London.

PRACTICAL 3 (HSE/DSE/PG 119): Nutritional Assessment and Surface Ornamentation of fabrics CREDIT: 04

1. Familiarize students with methods of assessment of nutritional status and conduct single person case study to assess and evaluate nutritional status or carry out a survey using anthropometric measurements.
2. Construction of articles using different types of printing and dyeing techniques
3. Sample preparation of traditional Indian embroideries and machine embroideries
Preparation of two articles using different hand embroideries Preparation of two articles using machine embroideries (patch work, applique, braiding, smocking, beading and sequins), Documentation of Indian textile and costumes.

HSC/GE/PG 120: Psychological Testing and Measurement (Credits: 4)

Course outcomes

Students will gain knowledge about different types of psychological tests and their applications

Students will develop the ability to interpret test results, understand the meaning of scores, and draw meaningful conclusions

Unit I:

Introduction to psychological testing: Need, Meaning, objectives, uses and design Difference between testing and measurement Criteria of a good physiological test; reliability, validity and standardization

Unit II:

Measurement of intelligence and creativity intelligence: Meaning, types of intelligence tests; some standardized intelligence tests

Unit III:

Measurement of aptitude and attitude aptitude: Meaning, Types of Aptitude test attitude Meaning, attitude scales

Unit IV:

Assessment of personality Behavioural methods of personality assessment personality inventories projective techniques

References:

1. Adhunik Manovaigyanik Prikshan evam Maapan , Mahesh Bhargava, H. P. Bhargava Book House , Agra
2. Phychological Testing, Urbina Anastasi

HSC/VAC/PG 121: Dissertation

CREDIT: 06

Dissertation on major (4+2) or Dissertation on minor or academic projects / entrepreneurship.

Semester X

HSC/DSC/PG 122: HOUSING NEEDS AND SPACE PLANNING IN INTERIOR DECORATION

CREDIT: 04

Course outcomes

Student will be able to understand housing demand in India

Understanding and applying principles of design (balance, rhythm, proportion, etc.) and elements of design (line, shape, color, texture, etc.) to create visually appealing and harmonious spaces.

Unit I Factors affecting housing needs and demand in India population, income, occupation, family mobility and technological development. Solving India's housing problems, needs obstacles setting goals, standards, role of central and state Government and local housing agencies, rent control policies housing schemes.

Units II Introduction to interior decoration, importance of interior planning and decoration, planning principles for specific areas.

Unit III Element and principles of design and their application in interiors, principles of Harmony, proportion, balance and rhythm, application of elements and principles of design in interior planning and decoration.

UNIT IV Developing House plans for different income groups

Characteristics of different rooms.

Planning for background areas and their treatment, floors walls ceilings and their structural characteristics, finishes and techniques of preparation and decoration.

Units IV(a) kitchen- Definition, need, important arrangement of kitchen work area and types of kitchens.

(b) Building material- Cement, Sand, POP etc

Different types of flooring

False ceiling, wall lining and partition

Paint, vanishes, Distemper.

Concept of air-conditioning

Units V Furniture arrangement, types of furniture and selection criteria, window treatment, types of windows and its parts, functional and decorative treatment, Light sources and colour scheme, Developing light plans for different areas, Functional and decorative accessories for interiors.

References

1. Drothy Stepat- Devan and Others- Introduction to interior Design, N.Y. Macmillan 1980.
2. Mike Lawrence: The Complete interior Decorator U.K. Macdanald, 1986.
3. Faulker and Faulker, inside today's home, N.Y. Holt Rinehart and Winston, 1975

HSC/DSE/PG123: HUMAN NUTRITION AND DIET THERAPY (CREDIT: 04)

Course outcomes

Students will be able to understand nutrient functions, dietary planning for various needs, and the role of nutrition in disease management and prevention

Students will learn to assess nutritional status through various methods

Unit I Nutrients in foods: their functions, requirements and sources digestion absorption and utilization of nutrients. Effect of low and excess intake of nutrients on human body

Energy requirement, BMR, Water, its functions, sources and routes of excretion, recommended dietary allowances

Unit II Methods of assessment of nutritional status

Unit III BMR, Diet therapy: History of dietetics, effect of illness on food acceptance and utilization, role of dietician, taking patient's history, education of patient and dietetic counseling.

Unit IV Therapeutic modifications of normal diet, food exchange lists, feeding methods, principles of dietetic management of chronically ill patients

Unit V Causes, symptoms and principles of diet management of

- Fevers (Long and short duration)
- Peptic ulcer, gastritis
- Jaundice, hepatitis cirrhosis and infantile cirrhosis
- Diarrhea, constipation
- Cardiovascular diseases, hyperlipidemia, hypertension, congestive heart failure
- Nephritis (acute and chronic) renal stone, gout, arthritis
- Diabetes mellitus, obesity and underweight (PCM)
- Diet in surgery, fractures, burns injury, allergy and AID

References:

1. A Text book of food and nutrition by M. Swami Nathan, Ganesh Publishers, Bo1 I & II.
2. Clinical Dietetics and Nutrition by F.P. Antia, Oxford University Press. New Delhi, London & New York
3. Human Nutrition and Diets by S. Devedoon, R. Pasamore, J.F. Brock and A.S. Truwell, Churchill and Livingstone.
4. Modern Nutrition in Health & Disease, Yong & Shails Normel & Therapeutic Nutrition by F.T. Proud fit & C.H. Robinson.

HSC/DSE/PG 124 CHILDREN WITH SPECIAL NEEDS

CREDIT: 04

Course outcomes

Students will be informed about the characteristics of children with special needs Will be aware of the role of parents and teachers in educating children with special needs

Unit I

Children with special needs: Definition, characteristics, classification according to

types of impairment

Special education for children with special needs

Unit II:

Mental retardation: definition and levels, causes, identification, educational provisions

Gifted and creative children: definition, characteristics, special needs, identification and

Educational provisions

Unit III:

Visually handicapped children: Classification, identification and educational provisions

Hearing impaired: Classification, identification, causes and educational provisions

Unit IV:

Children with orthopaedic impairments: Definition, classification, causes, educational provisions
And rehabilitation

Children with behaviour disorders: autism and aggressive behaviour

References:

1. Bhargava M. (1994)–Introduction to Exceptional Children, Sterling Publishers, New Delhi.
3. Kar Chintamani (1996)– Exceptional Children: Their Psychology and Education, Sterling Publishers, New Delhi.
4. Sahu B.K. (1993)–Education of the Exceptional Children, Kalyani Publishers, New Delhi.
5. Vishisht Avashyakta wale bacchon ki shiksha tatha nirdeshan evam paramarsh, Vinay Rishivar, Agarwal Publications
6. Vishisht Balak, Abha Rani Bisht and Swati Saxena, Agarwal Publications
7. Vishesh Avakshyataonwaale Bacche Part I and II, DECE-3, Bacchonke liye sewaye nevam karyakram, IGNOU
8. Vishisht Baalak– Shiksha evam Punarwaas, Mahesh Bhargava, H.P. Bhargava BookHouse, Agra

HSC/DSE/ PG 125 FASHION: DESIGN AND DEVELOPMENT (CREDIT: 04)

Course outcomes

Outcomes include understanding fashion trends and fashion business

Students will be able to Understand the Fashion Industry

Unit I: Nature and Business of Fashion

- Fashion terminology
- Importance of Fashion
- Principles of Fashion; Fashion cycle

Business of Fashion

- - Designer's role, Manufacturer's role, Retailer's role

Unit II: Fashion Forecasting

- Market research
- Forecasting services and resources; Process of Forecasting

Unit III: Product and Line Development

- Process of Product and Design Development

- Line Development
- Organising the Line

Unit IV: Apparel Categories

- Fabrics for apparel
- Clothing categories
- Size ranges and price points

References

Fringes, G.S. (1999), Fashion from Concept to Consumer, 6th edition, NJ, Prentice Hall.

Keiser, S.J., and Garner, M.B., (2008), The Synergy of Apparel Product Development, II Edition, Fairchild Publications, USA.

Stone, E., (2008), The Dynamics of Fashion, III Edition, Fairchild Books, China.

Kim, E., Fiore, A.M., Kim, H., 2011, Fashion trend analysis and forecasting, published by Berg, 49-51 Bedford

PRACTICAL 4 (HSE/DSE/PG 126):- Interior Decoration and Therapeutic Nutrition CREDIT: 04

Unit 1

Assessment of dietary and nutritional status of some families. ; Planning and preparation of diet during normal and diseased conditions

Unit 2

Drawing house plans with standard specifications

Furniture layout of living room, dining room, kitchen and bedroom.

Interior design of residential spaces

Planning color schemes of different rooms for different activities.

Development of design and construction of curtains, cushions, carpet, table mats.

Flower arrangement; Wall painting, picture frame.

Preparing drawings for different interior spaces.

- Arrangement of walls
- Arrangement of floors
- Ceiling arrangements

Unit 3

Study of aetiology, characteristics, diagnosis of children with different disabilities and recording information.

Visit of centres and institutions for special children and recording information and observation.

Writing report.

HSC/GE/PG 127 Gender in Extension CREDIT: 04

Course outcomes

The students will learn about an overview of the concept of gender and gender balance on development and develop skills of identifying gender roles, rights, responsibilities and relationships on development.

Unit I: Social Construction of Gender

- Concept of gender, difference between sex and gender
- Cultural construction of gender- socialization and gender roles-historical and contemporary perspectives
- Patriarchy and gender relations, • Changing status of women- influencing factors, role of women's movements.
- Feminism, Feminist theories and gender perspectives • Demographic analysis

Unit II: Gender and Development Perspectives

- Concept and importance of women's development
- Role and participation of women in development.
- Theoretical frameworks and approaches towards women and development.
- Policies and initiatives for women's development- international and national perspectives.
- Globalization and its impact on Gender and development

Unit III: Gender Issues and Empowerment

- Problems, vulnerabilities and marginalization of women– lifecycle approach
- Issues and impact of marriage and kinship systems, socio cultural practices, health, education, livelihood, poverty– access and control of resources on women's lives.
- Violence in women's lives- concept, nature, impact
- Women and work- invisibility, opportunities and participation in workforce
- Political participation of women and leadership
- Women's empowerment problems and limitations.
- International and national initiatives in gender sensitization and supporting women empowerment.

Unit IV: Gender and Advocacy

- Human Rights and women- women's right to development.
- Gender and Law- Laws governing gender empowerment-social, legal and political perspectives. Issues of enforcement of laws and women's protection.
- Women's Development Programmes and policies: National policy for empowerment of women, schemes and programmes.
- Women's empowerment and Media- images and representation of women in different media, women's voice in media, participation in production.

RECOMMENDED READINGS

- Dube, L. (2001) Anthropological Explorations in Gender-Intersecting Fields New Delhi: Sage Publications.
- Goel, A. (2004) Education & Socio-Economic Perspectives of Women Development and Empowerment. New Delhi: Deep & Deep.
- Kishwar, M. (1994) Off the Beaten Track – Rethinking Gender Justice for Indian Women. Mumbai: Oxford University Press.
- Goel, A. (2004) Violence and Protective Measures for Women Development and Empowerment. New Delhi: Deep & Deep.
- Goel, A. (2004) Organisation & Structure of Women Development and Empowerment. New Delhi: Deep & Deep.
- Krishna, S. (Ed) (2003) Livelihood and Gender Equality in Community Resource Management. New Delhi: Sage Publications.

- Powell, G. (1999) Handbook of Gender & Work. London: Sage Publications.

HSC/VAC/PG128: Dissertation

Credit- 6

Dissertation on major (4+2) or Dissertation on minor or academic projects / entrepreneurship.