Department of Home Science Kumaun University, Naintial

Syllabus of Undergraduate pragramme in Home Science- Semester System

Undergraduate programme (Semester System) in Home science department of Kumaun University Nainital comprises 12 theory paper and 6 practical of 50 marks each spread over 6 semester with 3 courses each semester. The distribution of all the papers per semester is as follows-

- 1. The B.A. students opting Home Science as one of the subject must pass six semester in the theory and the practical separately in each semester.
- 2. The papers are organized under 5 broad themes:- (a) Food and Nutrition (b) Clothing and textiles (c) Family resource management (d) Human development and family studies (e) Home science extension education.
- 3. The undergraduate semester programme in Home Science department of Kumaun University Nainital comprises 12 theory papers and 6 practical of 50 marks each spread over six semesters with 3 courses each semester.
- 4. Failed candidates for BA 1st, 2nd,3rd, 4th, 5th & 6th semester examination as have undergone rules, shall not be required to undergo practical training again. They shall submit the old record book or a new one.

ASSESSMENT:-

- 1. Theory:- Early theory paper will carry 50 marks.
- 2. Practical Papers:- H003, H006, H012, H015, H018 consist of 50 marks. The examination for all the practical's will be conducted at the end of the semester.
- 3. Practical work examination shall consist of Record/practical record file, viva-voice, articles etc.
- 4. For all practical papers, the examination would be conducted by one internal and one external examiner (from other university/collges)

Syllabus of Undergraduate programme in Home Science- Semester System

Undergraduate programme (Semester system) in Home Science department of Kumaun University Nainital comprises 12 theory paper and 6 practical of 50 marks each spread over 6 semester with 3 courses each semester. The distribution of all the papers per semester is as follows:

Semester	Name of Course	Course	Marks
		Code	
Semester I	Fundamental Concepts of Family Resource	H001	50
	Management		
	Housing and Interior Decoration	H002	50
	Practical I	H003	50
Semester II	Introduction to Textile Science	H004	50
	Fabric Formation and Finishes	H005	50
	Practical II	H006	50
Semester III	Fundamentals of Food and Nutrition	H007	50
	Food Preservation	H008	50
	Practical III	H009	50
Semester IV	Mother Craft and Child Care	H010	50
	Introduction to Clothing Construction	H011	50
	Practical IV	H012	50
Semester V	Human Development	H013	50
	Family Welfare and Community Education	H014	50
	Practical V	H015	50
Semester VI	Nutritional Management in Health and Disease	H016	50
	Fundamental Concept of Extension Education	H017	50
	Practical VI	H018	50

B.A. Home Science- SEMESTER- I

Course Code: H001

Fundamental concepts of family resource management

Term End Examination Marks:50

Total Marks: 50

Unit – I	Home Management:- Meaning, Scope, Philosophy and role of home management in family living, family life in the changing world family life cycle. Decision making in family living
Unit – II	Motivation for Management- Values, Goals and Standards, Origin, Classification and Role in Management. Steps in Management process: Planning, Controlling & Evaluation.
Unit – III	Family Resources & their management- a- Meaning, Classification and Characteristics. b- Objectives and Principles of use of resources.
Unit – IV	 Money Management a- Income- Sources of income, Planning & methods of handling income & expenditure. b- Budget: Preparation of family budget in view of family income. c- Savings: Purpose of saving, their proper management through investment, different investment scheme, bank, office, insurance, bonds, shares, unit trust, chit fund. How open a bank account. d- Means of improving personal/family's economic condition

- 1. M.A. Varghese, N.N. Ogale and K. Srinivasan, Home Management (1997). New Age, International (p) Publisher, New Dehi.
- 2. खनूँजा रीना, गृह व्यवस्था एवं गृह सज्जा द्वितीय संस्करण, अग्रवाल पब्लिकेशन आगरा।
- 3. पाटनी मंजू, शर्मा ललिता, गृह-प्रबंध, अष्टम, संस्करण, पब्लिकेशन आगरा।

B.A. Home Science- SEMESTER-I

Course Code: H002

Housing and Interior Decoration

Term End Examination Marks: 50

Total Marks: 50

Unit – I	Function of a house, Factors influencing the choice-size, organization, activities of the family and its members and financial position. House site- Selection of house site, public convenience, locality, types of soil physical features of the site (sun, wind, direction, view to neighbor-hood, availability of services)
Unit – II	Principles underlying the planning of a house-aspect, prospect, privacy, grouping, roominess, flexibility, sanitation, circulation, furniture, requirement and practical considerations. House construction- principles of planning a house. Need and desirability of owing of a house. Renting. Building buying.
Unit – III	Application of principles of arts and design in interior decoration. Background areas in the Home and their treatment. House plans for different income groups.
Unit – IV	Furniture selection, care and their arrangement, Selection, use and care of house hold linen (curtains, draperies, upholstery material etc.) and accessories- functional and decorative (flowers, picture arrangements, lamps, clocks and mirrors etc.)

- 1. R. S. Deshpande, Build your own home.
- 2. R. S. Deshpande, Morden ideal homes for India.
- 3. Criag and Rush, Homes with Character.
- 4. Tessie Agan, The House. Its plan and use.
- 5. Manju Patni, Grah Kala avam awas Vyavastha.
- 6. Sharma & Verma, Grah Kala avam Grah Prabandh

B.A. Home Science-SEMESTER-I

Course Code: H003

Practical's Based on H001 and H002

Term End Examination Marks: 50

- > Flower arrangement (Fresh and Dry)
- > Handicraft using inexpensive material.
- > Making House Plans, home planning symbols.
- > Identification of building materials and estimation of cost a house construction.
- ➤ House plan for different income groups (High, middle and low income groups), floor plans for different rooms of the house, Landscape planning.
- > Diagrams of different kind of furniture styles.
- > Colour wheel and colour schemes.

B.A. Home Science-SEMESTER-II

Course Code: H004

Introduction to Textile Science

Term End Examination Marks: 50

Total Marks: 50

Unit – I	Introduction to textile:
	Textile Fibers- Terminology and classification of textile fibers.
	Characteristics and uses of common textile fibers.
	a- Natural fibers: Cotton, Flax, Jute, Hemp, Silk, Wool asbestos.
	b- Manmade fibers: Rayon, Nylon, Polyester, Glass Fiber, acrylic
	o mammade notis. Rayon, region, respector, class riser, acryne
Unit – II	
	Yarn Classification:
	Yarn classification; characteristics and their uses
	Spinning methods- mechanical and chemical spinning,
	Spinning methods mechanical and entimed spinning,
Unit – III	Selection and care of Fabrics
	a- Selection of clothes, factors influencing selection of fabrics, care and
	storage of clothing.
	b- Labels and their classification,
	,
	Traditional textile of India.
	22
Unit – IV	Laundering of textile: General rules followed for washing/laundering and
	ironing. Soaps and detergents, bleaches, whitening agents and blues,
	principles of dry cleaning, stain removal hard & soft water.

- 1. Dantyage Suseela, Fundamentals of Textiles and their care. Orient Longman Limited 1959, New Delhi
- 2. पोस्टर डेविड, एम, बर्नार्ड पी० कोर्बमैन—वस्त्र उद्योग : तन्तु से वस्त्र, हरियाणा साहित्य अकादमी चण्डीगढ़ 1983 (Hindi Vision)
- 3. Deulkar Durga, Household textiles and Laundry work. Atma Ram and Sons Ltd. 1967 Delhi.

B.A. Home Science- SEMESTER- II

Course Code: H005

Fabric Formation and Finishes

Term End Examination Marks: 50

Total Marks: 50

Unit – I	Methods of Fabric Formation: a- Weaving: Its principles and basic weaves. b- Non woven fabric construction; felts & non-woven c- Knitting: Principles and Classification
Unit – II	Introduction to Fabric Finishes: a- Processes of removing impurities from fabrics: Scouring, degumming, Carbonising. b.Basic finishes: bleaching, seizing, tentering, calendaring, mercerizing, sanforizing, beetling shearing, singeing, napping. c. Functional finishes: Water proof and water repellent finish, Crease resistance, fire proof mildew proof, moth proof, antistatic and antibacterial finishes.
Unit – III	Adding colour to textile: Selection of dyes, natural and synthetic dyes, plain dyeing, batik dyeing, tie and dye.
Unit – IV	Design techniques on finished fabrics: Block printing, Roller printing, Duplex printing, Discharge printing, Resist printing, Screen printing warp printing. Factors that influence colour fastness test to determine colour fastness.

- 4. Dantyage Suseela, Fundamentals of Textiles and their care. Orient Longman Limited 1959, New Delhi
- 5. पोस्टर डेविड, एम, बर्नार्ड पी० कोर्बमैन—वस्त्र उद्योग : तन्तु से वस्त्र, हरियाणा साहित्य अकादमी चण्डीगढ़ 1983 (Hindi Vision)
- 6. Deulkar Durga, Household textiles and Laundry work. Atma Ram and Sons Ltd. 1967 Delhi.

B.A. Home Science- SEMESTER- II

Course Code: H006

Practical's based on H004 and H005

H004- Introduction to textile science

H005- Fabric Formation and Finishes

Term End Examination Marks: 50

- ➤ Identification of fibers: Visual inspection, burning, microscopic and solubility test.
- > Identification of different types of yarns.
- > Identification of labels.
- > Stain removal & demonstration of dry cleaning, visit to a commercial dry cleaning unit/Textile mill.
- > Washing finishing and ironing of different garments.
- > Preparation of Basic Weaves.
- > Fabric Finishes: bleaching flame retardant finish.
- > Preparation of samples using tie and die, batik, block, screen printing techniques.

B.A. Home Science- SEMESTER- III

Course Code: H007

Fundamentals of Foods and Nutrition

Term End Examination Marks: 50

Total Marks: 50

Unit – I	Introduction to Foods and Nutrition a- Definitions: Foods, Nutrition, Nutrients. b- Classification and functions of food c- Physiology of nutrition: Digestive system, phases of digestive absorption, metabolism and excretion of waste products
Unit – II	 a- Balanced diet and factors affecting balanced diet. b- Basic food groups. c- Energy- Factors affecting total energy requirements of the body d- Basal Metabolism- definition factors affecting rate of BMR.
Unit – III	Nutrients: Their sources, Functions, Requirements, Absorption Metabolism and related diseases. a- Carbohydrate b- Protein c- Fat d- Water
Unit – IV	 a- Micronutrients: Their sources, functions requirements, absorption and deficiency. - Vitamins and Minerals b- Food poisoning and food adulteration, testing for food adulteration.

- 1. Wilson, E. D.; Fisher, K. H. and Garcia P. A., 1980. Principles of Nutrition. John Wiley and Sons, New York
- 2. Banji, M. S.; Rao P. N. and Reddy, V. 1997 text book of Human Nutrition.
- 3. शाँ पुष्प गीता, शाँ शीला जाँसस— व्यावहारिक आहार विज्ञान एवं आहार चिकित्सा, विनोद पुस्तक मंदिर, चतुर्थ पुनर्मुद्रित संस्करण 2004।

B.A. Home Science-SEMESTER-III

Course Code: H008

Food Preservation

Term End Examination Marks: 50

Total Marks: 50

Unit – I	Cooking- Meaning, objectives, aims and importance.
	Methods of cooking
	Effect of heat on nutrients.
Unit – II	Definition importance and principles of food preservation.
Unit – III	a- Preservation by use of heat: Sterilization, pasteurization blanching and canning.
	b- Preservation by use of cold. Refrigeration and freezing.
	c- Preservation by use of chemical preservatives, Salt sugar.
Unit – IV	Fermentation
	- Meaning and role of microorganism.
	- Benefits from fermentation
	Sprouting and malting

- 1. Srilakshmi, B 2001, Food Science, New Age International Publishers Ltd.
- 2. Manay, Shakuntala and Shadaksharaswamy, M. 2001. Foods facts and principles 2nd edition. New Age International Publishers.
- 3. Kalia, M. and Sood, S 1996. Food Preservation and processing. Kalyani Publishers.
- 4. Desroseir and Desrosier 1987. The technology of food preservation on 4th ed. CBS Publishers and Distributors, Delhi.

B.A. Home Science-SEMESTER-III

Practical III

Course Code: H009

Practical's based on H008

H008- Food Preservation

Term End Examination Marks: 50

- > Preparation of fruit juices and squashes.
- > Preparation of Jam, Jellies and Sauces.
- > Preparation of dehydrated vegetables.
- > Preparation of pickles, papad and bari.
- > Preparing cereal based food products
- > Preparing recipes using locally available food products
- > Introduction and use of modern kitchen appliances and equipments

B.A. Home Science- SEMESTER- IV

Course Code: H010

Mother Craft and Child Care

Term End Examination Marks: 50

Total Marks: 50

Unit – I	Biological and physiological feature of women for motherhood, Physical, Financial, Psychological preparation and planned parenthood.
Unit – II	Pregnancy prenatal care, importance of the mother's health care, pregnancy, nutritive diet, dresses and other requirement.
Unit – III	Prenatal development (Conception to birth) a- Zygotic, embryonic & foetal stages. b- Neonate or the new born (birth to 2 weeks) > Care of the new born. > Importance of first milk and breast feeding > Weaning and supplementary feeding > Child rearing practices- feeding, toilet training, teething, clothing > Immunization of common ailments.
Unit – IV	 Infancy/Babyhood Care and needs of the infant Physical, motor, emotional, language, speech and development in infancy Skills in play Influence of those handling the child and child rearing practice in India Some common problems in infancy/Babyhood: Negating, spoiling, jealousy, unsocial behavior, problems in routine pave care, emotional outbursts, accidents etc.

- 1. Schaimberg, L B (1988) Child and Adolescent Development. Macmillian Publishing Company, New York.
- 2. Papalia, D. E., Olds, S. W. (1978). Human Development. Mc. Graw-Hill, New York
- 3. Gorden, K. J., (1975). Human Development. A Transactional perspective.
- 4. शर्मा, कमलेश, कपूर नीता— मानव विकास, स्टार पब्लिकेशन्स, आगरा।

B.A. Home Science-SEMESTER-IV

Course Code: H011

Introduction to Clothing Construction

Term End Examination Marks: 50

Total Marks: 50

Unit – I	a- Sewing equipment and other tools required for measurement, drafting cutting and stitching.
	b- Sewing machine: Parts of Machine their use and care.
	c- Selection of fabrics for clothing.
	d- General principles of cloth manufacturing
	e- Factors which should be kept in mind while selection cloths
Unit – II	a- Construction processes: Hand stitches, seam and seam finishing, plackets, disposal of fullness.
	b- Preparation of fabric for layout and cutting
	c- Unit construction method and fitting.
	d- Types of sleeves, pockets and yokes.
Unit – III	a- Importance and functions of cloth
	b- Clothing requirements for
	i. Infants
	ii. Toddlers
	iii. Preschool
IIia IV	Clathing as a spinor and for your and
Unit – IV	Clothing requirement for women

- Carson, B. 1969, How you look and dress 4th ed. London, Webstar Division, McGraw-Hill Book Company.
- 2. Mansfield, E. A. and Lucas, E. L. 1974. Clothing Construction, 2nd Ed. London, Houghton Mifflen Company.
- 3. शाँ पुष्प गीता, शाँ शीला जाँसस— व्यावहारिक वस्त्र विज्ञान विनोद पुस्तक मंदिर, तृतीय संस्करण 2007।
- 4. यादव, नीरजा, वस्त्र विज्ञान एवं परिधान, साहित्य प्रकाशन, आगरा।

B.A. Home Science- SEMESTER- IV

Practical IV

Course Code: H012

Practical's based on H011

H011- Introduction to Clothing Constrictions

Term End Examination Marks: 50

- > Demonstration on: Sewing equipment and tools, sewing machine and its care.
- > Preparation of samples of basic hand stitches, machine stitches, fullness, mending and patching.
- > Preparation of samples using atleast five embroidery stitches
- > Taking body measurement.
- > Drafting, Cutting and stitching of different garments.
 - i. Bib
 - ii. Panty
 - iii. Frock
- > Stitching of:
 - i. Apron
 - ii. Laundry Bag

B.A. Home Science- SEMESTER- V

Course Code: H013

Human Development

Term End Examination Marks: 50

Total Marks: 50

Unit – I	Development during different stages of life cycle pre-school period, physical growth and motor skills and development, language, speech and social development, skill n play, influence of nursery school home and 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	 a- Puberty- characteristic of puberty, age of puberty, growth spurt, body changes, effect of puberty changes, hazards of Puberty. b- Adolescence- meaning, stages, physical social emotional cognitive and personality development, social problems, adolescence, Problems of this stage of growth.
Unit – IV	Adulthood- personal and social adjustment, developmental characteristic of adulthood, social mobility and social interests, role adjustment, hazards of early adulthood, vocational and family adjustment, adjustment to parenthood, single-hood, hazards of marital and vocational adjustment. Adjustment to loss of spouse, adjustment to retirement.
Unit – V	Old age- personal and social adjustment, characteristics of old age adjustment to physical change, mental changes, changes in intrest, adjustment to retirement, vocational and family adjustment, adjustment to loss of spouse, vocational and family hazards.

- 1. Schaimbeg, L. B. (1988). Child and Adolescent Development Macmillan, Publishing Company, New York.
- 2. Papalia, D. E. and Olds, S. W. (1978) Human Development. MC GrawHill, New Yark.
- 3. Crordon, K. J., (1975). Human Development: A transactional perspective : Harkes and Row Publishes, New York.
- 4. सिंह बृंदा— मानव विकास एवं पारिवारिक सम्बन्ध पंचशील प्रकाशन जयपुरण संस्करण : सातवां, 2013।

B.A. Home Science- SEMESTER- V

Course Code: H013

Human Development

Term End Examination Marks: 50

Total Marks: 50

Unit – I	Child and Family Welfare: Children's rights and National Policy for Children. Demographic profile of child in India. Children with special needs Deprived Children and abused children, juvenile Delinquency.
Unit – II	Family and child welfare services working at national and international level; C.S.W.B., ICCW, ICDS and others, W.H.O. UNICEF, CARE, ICCW and ILO. Rural extension services and community ICDS, DWCRA, IRDP and CHEB
Unit – III	Family relationship, Child Parent relationship, responsibilities of parts relationship of home, school and community.
Unit – IV	The role of teacher and other specialists in parents and community education programmed. Teacher as motivator, the communities work guidance of child + youth ethical consideration in dealing with parents and community.

- 1. Gangrade, K.D. (1971) Community Organization in India. Popular Prakashan, New Delhi
- 2. Dahama, O. P. and Bhatnagar, O.P. (1980) Extension and Communication for Development, Oxford and IBH.
- 3. State of World Children, UNICEF Annual Publication.
- 4. Hans Nagpaul. (1980) Culture, Education and Social Welfare. Chand and Company, New Delhi.
- 5. Chaudhry, D. Paul, (1980). Child Welfare and Development. NIPCCD, New Delhi.

B.A. Home Science- SEMESTER- V

Practical V

Course Code: H015

Practical's based on H013 and H014

- **H013-** Human Development
- **H014-** Family Welfare and Community Education

Term End Examination Marks: 50

- ➤ Survey of the community and learning general characteristics about community, community need assessment and available child and family welfare and development programmes.
- ➤ Preparation of parent and community education materials, literature posters, slide films, demonstration materials etc.
- ➤ Putting up displays, arranging film shows/slide shows and discussions, demonstration and workshop.
- > Survey of the community and preparation of report.
- > Preparation of educational games for per-school children

B.A. Home Science- SEMESTER- VI

Course Code: H016

Nutritional Management in Health and Disease

Term End Examination Marks: 50

Total Marks: 50

Unit – I	 a- Definition of health and nutiriton b- Food exchange list c- Meal planning d- Nutritional management
Unit – II	Nutritional Management during Pregnancy Lactation Infancy Preschoolers
Unit – III	Nutritional Management during: a- School going children b- Adolescence c- Adulthood d- Old age
Unit – IV	Nutritional Management in Diseased Condition a- Gastrointestinal disorders: Diarrhoea, Constipation and Peptic Ulcer b- Fever c- Diabetes Mellitus

- 1. Gopalam, C., Ramashatri, B. V. and Balasubra Manian, S.C. 1989. Nutritive Value of Indian Foods, NIN, ICMR, Hyderabad.
- 2. Srilankshmi, B. 2000. Dietetics. New Age International (p) Ltd. New Delhi.
- 3. Joshi, S. A. 1992. Nutrition and Dietetics. Tata Mc Graw-Hill Pub. Co. Ltd. New Delhi
- 4. Robinson, C. H. Lawler, M. R. 1982. Normal and Therapeutic Nutrition. Oxford and IBH.

B.A. Home Science- SEMESTER- VI

Course Code: H017

Fundamental Concepts of Extension Education

Term End Examination Marks: 50

Total Marks: 50

Unit – I	 a- Extension Education- Meaning, importance and need b- Aims and objectives of extension education c- Characteristics and principles of extension education
Unit – II	a- Extension teaching methods b- Formal and Informal education
Unit – III	Home Science Extension Education: a- Introduction, importance, origin, need and concept of home science extension education b- Objectives, characteristics and principles c- Role and qualities of home science extension worker d- Role of home science in rural development
Unit – IV	Communication a- Meaning, definition and types of communication b- Process of communication c- Elements of communication. Their significance and characteristics

- 1. Dhama, O.P. and Bhatnagar O.P. (1991). Education and communication for development. Oxford IBH Publishing Co., New Delhi.
- 2. Singh, Ranjit (1987). A textbook of Extension Education, Sahitya Kala Prakashna, Ludhiana.
- 3. Heinrich Robert et.al. (1990) Instructional Media and the new technologies of instruction. Third Edition, Maxwell Mac Millan International editions.
- 4. Venkataiah, N. (1996) Educational Technology, New Delhi, IBH Publishing Corporations.

B.A. Home Science- SEMESTER- VI

Practical VI

Course Code: H018

Practical's based on H016 and H017

- **H016-** Nutritional Management in Health and Disease
- **H017-** Fundamental Concepts of Extension Education

Term End Examination Marks: 50

- > Planning and preparation of diets using exchange list.
- > Planning and preparation of diet for:
 - Infants
 - Preschool Child
 - School Going Child
 - Adolescent Boys and Girls
 - Adult Man and Women
 - Pregnant and Lactating Women
- > Preparation of Diet For
 - Diarrhoea
 - Peptic Ulcer
 - Fever
 - Diabetes Mellitus
- > Preparation of charts, posters, flash and flip charts