

NATIONAL EDUCATION POLICY-2020
Common Minimum Syllabus for all
Uttarakhand State Universities and
Colleges



Syllabus Proposed
2023-24

Sri Dev Suman Uttarakhand University
Badshahithol, Tehri (Garhwal)

पाठ्यक्रम निर्माण समिति, उत्तराखण्ड
Curriculum Design Committee, Uttarakhand

क्र० सं०	नाम एवं पद	
1	प्रो० एन० के० जोशी कुलपति, श्रीदेव सुमन उत्तराखण्ड विश्वविद्यालय, टिहरी	अध्यक्ष
2	कुलपति, कुमाऊँ विश्वविद्यालय, नैनीताल	सदस्य
3	प्रो० जगत सिंह बिष्ट कुलपति, सोबन सिंह जीना विश्वविद्यालय, अल्मोड़ा	सदस्य
4	प्रो० सुरेखा डंगवाल कुलपति, दून विश्वविद्यालय, देहरादून	सदस्य
5	प्रो० ओ० पी० एस० नेगी कुलपति, उत्तराखण्ड मुक्त विश्वविद्यालय, हल्द्वानी	सदस्य
6	प्रो. एम० एस० एम० रावत सलाहकार—रूसा, रूसा निदेशालय, देहरादून	सदस्य
7	प्रो० के० डी० पुरोहित सलाहकार—रूसा, रूसा निदेशालय, देहरादून	सदस्य

Proposed Syllabus for UG PROFESSIONAL COURSE HOME SCIENCE UNDER NATIONAL EDUCATION POLICY- 2020

Tentative Structure		Subject I	Subject II	Subject III	Subject IV	Practical	Subject V	Co-curricular course (Qualifying)	Industrial training/survey	Minimum credits (for the yr)	Cumulative Minimum credits (required for award of certificate/diploma/degree)
		Major	Major	Major	Major	Major	Minor Elective	Minor	Major		
		4 Credits	4 Credits	4 Credits	4Credits	4 Credits	4Credits	(Qualifying)	4 credits		
Yr	Sem.										
1	I	Principles of Nutrition	Introduction to Clothing Construction	Household Dynamics and Management	Introduction to extension education	Practical Introduction to Clothing Construction	Fundamental of Human Development	1		44	Certificate in Home Science
	II	Food Processing and Storage	Introductory Textile Science	Family Financial Management and Consumer Economics	Communication and Instructional Technology	Practical Food Processing and Storage & Communication and Instructional Technology		1			
2	III	Community Nutrition	Indian embroidery and traditional textile	Household Equipment and Appropriate Technology	Life Span Development & Human Physiology	Practical Indian Embroidery and Traditional Textile Costumes+ training methods for Rural Women	Marriage and Family Dynamics	1	-	44	Diploma in Home Science
	IV	Therapeutic Nutrition and Diet Counseling	Fabric Formation and Finishes	Family Welfare and Community Education	Population and Family Life Education	Practical Fabric Formation and Finishes+ Therapeutic Nutrition and Diet Counseling		1			
3	V	Food Safety and Quality Control	Apparel Designing	Housing and Interior Planning and Decoration	Early Childhood Education	Practical Housing and Interior Planning and Decoration	Entrepreneurship Development	1	1 (qualifying)	44	Bachelor in Home Science
	VI	Food Service Management	Textile Designing & Use of CAD	Management of Childcare Centers and Nursery	Training Methods for Rural Women	Practical Food Service Management + Textile Designing & Use of CAD		1	1 (qualifying)		

LIST OF COURSES B. Sc. HOME SCIENCE

FIRST SEMESTER

S. No	Course No.	Name of Course	L-T-P	Credits
1.	BHS-101	Principles of Nutrition	4-0-0	4
2.	BHS-102	Introduction to Clothing Construction	4-0-0	4
3.	BHS-103	Household Dynamics and Resources Management	4-0-0	4
4.	BHS-104	Introduction to Extension Education	4-0-0	4
5.	BHS-105	Practical (Introduction to Clothing Construction)	0-0-4	4
6.	BHS-106	Minor Elective (Fundamental of Human Development)	4-0-0	4
		Co-Curricular Course (Qualifying Course)		1*`
		TOTAL	20-0-4	24

SECOND SEMESTER

S. No.	Course No.	Name of Course	L-T-P	Credits
1.	BHS-201	Food Processing and Storage	4-0-0	4
2.	BHS-202	Introductory Textile Science	4-0-0	4
3.	BHS-203	Family Financial Management and Consumer Economics	4-0-0	4
4.	BHS-204	Communication and Instructional Technology	4-0-0	4
5.	BHS-205	Practical (Food Processing and Storage+ Communication and Instructional Technology)	0-0-4	4
		Co-Curricular Course (Qualifying Course)		1*
		TOTAL	16-0-4	20

THIRD SEMESTER

S. No	Course No.	Name of Course	L-T-P	Credits
1.	BHS-301	Community Nutrition	4-0-0	4
2.	BHS-302	Indian Embroidery and Traditional Textile Costumes	4-0-0	4
3.	BHS-303	Household Equipment and Appropriate Technology	4-0-0	4
4.	BHS-304	Life Span Development	4-0-0	4
5.	BHS-305	Practical (Indian Embroidery and Traditional Textile + Training Methods for Rural Women)	0-0-4	4
6.	BHS-306	Marriage and Family Dynamics (Minor Elective)	4-0-0	4
		Co-Curricular Course (Qualifying)		1*
		TOTAL	18-0-6	24

FOURTH SEMESTER

S. No	CourseNo.	Name of Course	L-T-P	Credits
1.	BHS-401	Therapeutic Nutrition and Diet Counseling	4-0-0	4
2.	BHS-402	Fabric Formation and Finishes	4-0-0	4
3.	BHS-403	Family Welfare and Community Education	4-0-0	4
4.	BHS-404	Population and Family Life Education	4-0-0	4
5.	BHS-405	Practical (Fabric Formation and Finishes + Therapeutic Nutrition and Diet Counseling)	0-0-4	4
		Co-Curricular Course (Qualifying)		1*
		Total credits	16-0-4	20

FIFTH SEMESTER

S. No	Course No.	Name of Course	L-T-P	Credits
1.	BHS-501	Food Safety and Quality Control	4-0-0	4
2.	BHS-502	Apparel Designing	4-0-0	4
3.	BHS-503	Housing and Interior Planning and Decoration	4-0-0	4
4.	BHS-504	Early Childhood Education	4-0-0	4
5.	BHS-505	Practical (Housing and Interior Planning and Decoration)	0-0-4	4
6.	BHS-506	Entrepreneurship Development (Minor Elective)	4-0-0	4
		Co-Curricular Course (Qualifying)		1*
		Industrial Training/Survey (Qualifying)		1*
		Total credits	20-0-4	24

SIXTH SEMESTER

S. No	Course No.	Name of Course	L-T-P	Credits
1.	BHS-601	Food Service Management	4-0-0	4
2.	BHS-602	Textile Designing & Use of CAD	4-0-0	4
3.	BHS-603	Management of Childcare Centers and Nursery School	4-0-0	4
4.	BHS-604	Training Methods for Rural Women	4-0-0	4
5.	BHS-605	Practical (Food Service Management + Textile Designing & Use of CAD)	0-0-4	4
		Co-Curricular Course (Qualifying)		1*
		Industrial Training/Survey (Qualifying)		1*
		Total credits	16-0-4	20

**** Co-Curricular Courses will be offered as per university list.**

I SEMESTER

Programme/Class: Certificate in Home Science		Year: First	Semester: First
Course Code: BHS-101		Course Title: Principles of Nutrition	
Course outcomes: The Student at the completion of the course will be able to: ➤ To understand the principles and basic knowledge about nutrients. ➤ To understand the role of essential nutrients (macro and micro) in human.			
Credits: 4		M AJOR	
Max. Marks: 100		Min. Passing marks:	
Total No. of lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0			
Unit	Topics		No. of Lectures
I	Food – Definition of food, nutrition, Nutraceuticals and nutrigenomics. Dimensions of food and functions of food – Physical, social and mental. Food groups. Meal planning, balanced diet, nutritional value of food		10
II	Composition and importance of following foods:-Cereals, legumes, fats and oilseeds, Fruits and vegetables, Milk and milk products, Eggs, meat, fish and poultry, Sugar.		10
III	Macronutrients – Protein and amino acids – Classification, sources, functions and requirements, nitrogen balance, deficiency of protein. Carbohydrates – Classification, sources, functions and requirements Fat and lipids- Classification, sources, functions and requirements		15
IV	Water and electrolytes- Functions requirements, sources , water balance, Electrolytes – sodium, chloride, potassium – sources, RDA, functions		15
V	Energy requirements -Factor affecting energy requirements. BMR – activity, age, climate, die induced thermogenesis (SDA) , Physiological conditions		10
	Total		60
Suggested Readings: 1. Bhatia & Bhatia (1995). Theory and principles of Education, Doaba House, Delhi. 2. Brewae, J.A. 1998 Introduction to early childhood Education 3rd Ed. Boton : Ahyn & Bacaon. 3. Murlidharan, R. [1996]. Guide to nursery school teacher. New Delhi NCERT. 4. Pankajam, G. [1994] Preschool Education. Ambala : India Pub.			
Suggested Digital Platform: http://ecoursesonline.iasri.res.in/course/view.php?id=196			
Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus• Test with multiple choice questions/ short and long answer questions• Attendance			

Programme/Class: Certificate in Home Science		Year: First	Semester: First
Course Code: BHS -102		Course Title: Introduction to Clothing Construction	
Course outcomes: The Student at the completion of the course will be able to: ➤ To develop knowledge about sewing machine, parts of sewing machine, analyze constructional processes.			
Credits: 4		Major	
Max. Marks:100		Min. Passing marks:	
Total No. of lectures-Tutorials-Practical L-T-P: 4-0-0			
Unit	Topics		No. of Lectures
I	Sewing equipment and other tools required for measuring, drafting, cutting and stitching, Sewing machine: Parts of machine, their use and care		8
II	Clothing Construction Terminology		5
III	Constructional processes: Hand stitches, seam and seam finishes, disposal and finishes, plackets and edge finishing, suitability for different fabrics and clothing articles.		13
IV	Preparation of fabric for layout and cutting; stay stitching		8
V	Anthropometric measurements: Importance and techniques		4
VI	Unit construction method and fitting		8
VII	Importance and function of clothes		5
VIII	Clothing requirements of infants, toddler, pre-school and elementary school children		5
	Total		60
	Suggested Readings: Bane A. 1996. Creative Clothing Construction. McGraw-Hill.		

Programme/Class: Certificate in Home Science		Year: First	Semester: First
Course Code: BHS-103		Course Title: Household Dynamics and Resources Management	
Course Outcomes: The Student at the completion of the course will be able to: <ul style="list-style-type: none">• To give insight about management principle and ability to apply the knowledge for problem solving.• To become good managers and understand the importance of managing resources to achieve goals.• Comprehend the fundamentals of resource management in changing scenario.• Familiarize the students with the available resources, their uses and conservation			
Credits: 4		Major	
Max. Marks: 100		Min. Passing marks: -	
Total No. of lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0			
Description of theory			
Unit	Topics		No. of Lectures
I	Management concepts: Meaning of management, purpose of home management, major home and family responsibilities, Homemaker as manager, qualities of efficient home manager		6
II	Family: Meaning, definition, characteristics, types and functions of family, and family life cycle, family management system in changing worlds		6
III	System approach to management: System concepts applied to households, Management process: Meaning, importance, and steps of management process		6
IV	Role of motivation in management: Values, Goals and Standards; Theories of motivation- Maslow’s hierarchy of needs & Herzberg’s theory		8
V	Decision making: Decision making process, Role and scope of decision making, Classification of decision, methods of resolving conflicts.		8
VI	Understanding resources: <ul style="list-style-type: none">• Meaning, classification and characteristics of resources• Factors affecting utilization of resources• Maximizing use of resources• Resource conservation• Family life cycle in context to the use of resources: Time, energy and money		8
VII	Management of Time and Energy Time Management: Concept, tools and steps Energy Management: Concept, body mechanics, fatigue, work Simplification, Mundel’classes of change, Inter linking time and energy resources.		12

VIII	Communication resources: Intra-household communication and group communication, communication tools and technology	6
	Total	60
Suggested Readings: <ol style="list-style-type: none"> 1. Mann, M.K. (2004). Home Management for Indian Families, Kalyani Publisher Ludhiana 2. Nickell, P. and Dorsey, J.M. (1970). Management of Family Living. Wiley Eastern, New Delhi 3. Vargeese, M.N. Ogale, N.N. and Srinivasan, K. (1992). Home Management, Wiley Eastern, New Delhi. 4. Krishna Oberoi (2006). Resource Management for Better Homes. R.K. Offset, Delhi. 5. Bhargava, Bela. (2005). Family Resource Management and Interior Decoration. Apple Printer and V. R. Printers, Jaipur. 6. Goel, S. (2016). <i>Management of resources for sustainable development</i>. New Delhi: Orient Blackswan Pvt. Ltd. Chapter 3, pg 48-76 		
Suggested Digital Platform: <ul style="list-style-type: none"> • https://nios.ac.in/media/documents/srsec321newE/321-E-Lesson-1.pdf • https://www.businessmanagementideas.com/management/decision-making-management/decision-making-definitions-types-techniques-methods-process-and- 		
Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus • Test with multiple choice questions/ short and long answer questions • Attendance		

Programme/Class: Certificate in Home Science		Year: First	Semester: First
Course Code: BHS-104		Course title: Introduction to Extension Education	
Course Outcomes: The student at the completion of the course will be able to: ➤ To learn and understand about the pre and post-Independence extension and rural development programme			
Credits: 4		Major	
Max. Marks: 100		Min. Passing Marks:	
Total no. of Lectures-Tutorials-Practicals: L-T-P: 4-0-0			
Unit	Topics		No. of lectures
I	History and concept of extension education, objectives, functions and philosophy of extension education, Principles of extension education		10
II	Pre-Independence Extension and Rural Development Programmes		10
III	Post-Independence Extension and Rural Development Programmes		10
IV	First-line extension system of ICAR, Extension learning process: Elements of learning situation		10
V	Teaching process in extension, Extension teaching methods: classification of extension teaching methods, selection of extension teaching methods		10
VI	Groups and leadership: groups and types, leaders and leadership		10
	Total		60
Suggested Readings: 1. Adivi Reddy.A, Extension Education, seventh edition, Sri lakshmi Press, Bapatla 2. Agarwal J.C. 2007 Textbook on Essentials of Educational Technology Innovations in Teaching –Learning, second edition, Vikas Publishing House Pvt Ltd. 3. Sumita Roy, Tej Verma and Pushpa Gupta 2006 textbook on family approach in extension programme management, first edition, Indian Council of Agricultural Research, New Delhi. 4. Dahama O.P. and Bhatnagar O.P, Education and Communication Development, second edition, oxford and IBH publishing pvt. Ltd,calcutta. 5. Ray GL (1996) Extension Communication and Management, Naya Prakash Publications, Calcutta.			
Suggested Continuous Evaluation Methods: Seminar/ presentation on any topic of the above syllabus □ test with multiple choice questions/ short and long answer questions □ attendance			

Programme/Class: Certificate in Home Science		Year: First	Semester: First
Course Code: BHS -105		Course Title: Practical- Introduction to Clothing Construction	
Course outcomes: The Student at the completion of the course will be able to: ➤ To develop knowledge about sewing machine, parts of sewing machine, analyze constructional processes.			
Credits: 4		Major	
Total No. of lectures-Tutorials-Practical L-T-P: 0-0-4			
Unit	Topics		No. of Practical
I	Demonstration on sewing equipment and tools, sewing machine and its care		8
II	Preparation of samples of basic hand stitches, machine stitches, edge finishing, fullness, finishing of necklines, placket opening, fastners, mending and patching		16
III	Introduction to anthropometric measurement		8
IV	Demonstration on the preparation and layout of the different fabrics of plain, print, plaid, check and lines.		8
V	Drafting, cutting and stitching of different children’s garments (bib, panty,		20
	Bloomer, jhabla, frock) Apron, petticoat and hand bag		
	Total		60
Suggested Readings: ➤ Bane A. 1996. Creative Clothing Construction. McGraw-Hill.			

Programme/Class: Certificate in Home Science		Year: First	Semester: First
Course Code: BHS-106		Course Title: Fundamental of Human Development	
Course outcomes: The Student at the completion of the course will be able to: <ul style="list-style-type: none">• Define human development• Summarize several theories of development• Apply developmental theories to personal development• Identify the major concepts, principles, controversies and research findings in developmental psychology.• Describe and understand the major research methods used to study developmental processes, including the advantages and disadvantages of each approach.			
Credits: 4		Minor	
Max. Marks:100		Min. Passing marks:	
Total No. of lectures-Tutorials-Practical: L-T-P: 4-0-0			
Unit	Topics		No. of Lectures
I	Introduction to Human Development <ul style="list-style-type: none">• Importance of human development from a life span perspective,• Issues in human development, stages of human development,• Determinants of development: biological and environmental;• principles of human development		15
II	Methods of studying human development, steps of studying behaviour scientifically, non experimental and experimental studies, naturalistic studies; clinical studies; cross-sectional and longitudinal designs		15
III	Ethical considerations in studying human subjects		15
IV	The psychology of behaviours: Definition of Psychology; meaning of sensation; perception; concept formation; imagination and creativity; attention and memory; remembering and forgetting; intelligence-reasoning and thinking; motivation and learning		15
	Total		60
Suggested Readings: <ol style="list-style-type: none">1. Singh, A. (2015). Foundations of Human Development: A life span approach. ND:Orient Black Swan.2. Walsh, B.A., Deflorio, L., Burnham, M.M., & Weiser, D.A. (2017). Introduction to Human Development and Family Studies. NY: Routledge3. Baradha.G ‘Basics of Human Development’ Saradalaya Press, Sri Avinashilingam Education Trust Institutions, Coimbatore 2008.4. Hurlock.B.Elizabeth ‘Developmental Psychology – A Life Span Approach’ Tata McGraw Hill Publications, New Delhi Latest Edition. 3. 14. Suriakanthi. A. (2015) ‘Child Development’ Kavitha Publications, Gandhigram, Tamil Nadu. Date Course Co-ordinator Subject Committ.			
Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus• Test with multiple choice questions/ short and long answer questions• Attendance			

II SEMESTER

Programme/Class: Certificate in Home Science		Year: First	Semester: Second
Course Code: BHS-201		Course Title: FOOD PROCESSING AND STORAGE	
Course outcomes: The Student at the completion of the course will be able to: ➤ Apply the principles and methods involved in the processing of different foods. ➤ Discuss the processing of cereals and pulses. ➤ Learn various millet processing techniques.			
Credits: 4		MAJOR	
Max. Marks: 100		Min. Passing marks:	
Total No. of lectures-Tutorials-Practical : L-T-P: 4-0-0			
Unit	Topics		No. of Lectures
I	Processing- Introduction, role, importance and principles. Storage- Introduction, role, importance and principles. Primary, secondary and tertiary processing.		10
II	Recent methods of processing of cereals, millets and legumes. Changes in nutritional quality as affected by pounding, milling, puffing, cooking, parboiling, fermentation, sprouting, malting.		10
III	Processing and packaging of milk products and their effect on nutritional quality characteristics. .		10
IV	Processing of oil seeds for extraction of oil and use of oil seed cakes in human nutrition.		5
V	Different methods of cooking and preservation of meat, fish and poultry: effects on nutritional quality and merits and demerits of various methods.		5
VI	Domestic food preservation- principles and methods. Choice of preserving methods: bottling and canning, dehydration, and drying: pickling, bringing and salting: preserving in syrup, freezing,sterilization, pasteurization, blanching, irradiation, use of chemical preservatives.		10
VII	Traditional methods for storage of food grains viz. cereals, millets, legumes and oilseeds, limitations. Losses in nutritional quality as influenced by insect and fungal infestation.		5
VIII	Current strategies for storage of food grains.		5
	Total		60
Suggested Readings: 1. Sivasankar, B. (2014). Food processing and preservation: Hall of India Pvt., New Delhi. 2. Fellows, P. J. (2009). Food processing Technology: Principles and Practice: Woodhead Publishing. 3. Brennan, J. G. (2006). Food Processing Handbook: Weinheim: Wiley-VCH. 4. Zeuthen, P. &Bogh- Sprensen, L. (2003). Food Preservation Techniques: CRC Press, Boca raton.			

5. Vonloesecka, H. W. (1998). Drying and Dehydration of Foods: Allied, Bikaner.
6. B. Srilakshmi, Food science, New Age Publishers, 2002
7. Meyer, Food Chemistry, New Age, 2004

Suggested Digital Platform:

https://onlinecourses.nptel.ac.in/noc22_ag03/preview

Suggested Continuous Evaluation Methods:

Seminar/ Presentation on any topic of the above syllabus • Test with multiple choice questions/ short and long answer questions • Attendance

Programme/Class: Certificate in Home Science		Year: First	Semester: Second
Course Code: BHS -202		Course Title: Introductory Textile Science	
Course outcomes:			
The Student at the completion of the course will be able to:			
➤ To develop knowledge about fibers, different looms, types of weaves			
➤ To analyze different weave patterns and learn principles of creating design through weaving.			
Credits: 4		Major	
Total No. of lectures-Tutorials-Practical : L-T-P: 3-0-1			
Unit	Topics		No. of Lectures
I	Introduction, terminology and classification of textile fibers		10
	a) Natural fibers: Cotton, flax, jute, hemp, ramie, silk, wool, specialty hair fibers and asbestos		
	b) Manmade fibers: Rayon, acetate, nylon, polyester, acrylic		10
II	Yarn classification; characteristics and their use		5
III	Introduction to methods of fabric construction:		5
	a) Weaving, knitting, lace making, felts and nonwoven		
	b) Blends and Mixtures		
IV	Labels and tags used in textiles and consumer education		
V	Laundry equipment; their use and care, principles and methods of washing and finishing		15
	a) Cleansing agents: water, detergents, soaps and other laundry reagents- acidic, alkaline reagents and bleaching agents		
	b) Additives used in laundry: stiffening and blueing agents		
	c) Stain removal: classification, general rules and methods of removing stains. Care, storage and disinfectants of clothes		
	Total		45
I	Identification of fibers: visual inspection, burning, microscopic and solubility tests		5
II	Removal of common stains from fabrics		5
III	Washing, ironing and finishing of textile articles: cotton, silk, wool, synthetic/blend, zari embroidery and lace articles		5
	Total		15
	Suggested Readings:		
	➤ Grosicik 1975. Watson’s Textile Design & Colour.Butterworths.		
	➤ Grosick ZJ. 1989. Watson’s Advanced Textile Design - Compound Woven Structures. Universal Publ.		
	➤ Marjory Joseph 1972. Illustrated Guide for Textiles. Rine Hort & Winsoten, NewYork.		
	➤ Talukdar MK. Weaving Machines, Mechanism and Management. Mahajan Publ.		
	➤ Deshpande, R. S. (1975). <i>Modern ideal homes for India</i> . Pune: United book corporation		
	➤ Lawrence M (1987). <i>Interior decoration</i> . New Jersey: Chartwell Books		
	➤ Riley & Bayern (2003). <i>The elements of design</i> . Mitchell Beazley		
	➤ Goldstein& Goldstein. (2013). <i>Art in everyday life</i> . New York: The Macmillan Company Rutt. A. H. (1991). <i>Home furnishing</i> . Wiley Eastern Private Ltd		

Programme/Class: Certificate in Home Science		Year: First	Semester: Second
Course Code: BHS-203		Course Title: Family Financial Management and Consumer Education	
Course outcomes: The Student at the completion of the course will be able to: <ul style="list-style-type: none">• To learn the basic of financial management which have an impact on family consumption patterns.• To familiarize the students with the changing socio-economic environment and consumer behaviour• To strengthen the financial management practices of the students for wise consumer behaviour• To have an overview of the consumer problems, consumer movement and consumer protection			
Credits: 4		MAJOR	
Max. Marks: 100		Min. Passing marks:	
Total No. of lectures-Tutorials-Practical: L-T-P: 4-0-0			
Description of theory			
Unit	Topics		No. of Lectures
I	Family Finance: Meaning, Definition and importance of family finance, guidelines for family financial management. Standard of Living: Meaning, Definition, types and factor determining, Causes of low standard of living and remedial measures		6
II	Family income: Income concepts: productive income, hidden income, money income, real income, psychic income, Analyzing income: income profile, methods of handling income, account keeping		6
III	Family budget and saving: steps of budget making, factors influence on budget making, advantages of budget making, and Engel’s law of consumption, controlling and evaluation of budget. Savings and Investment- types of savings / investment, saving institution and its importance, criteria for judging family investments		10
IV	Credit- needs types, use and source, planning for financial security of families, credit institution Taxation- objectives, characteristics and classification.		8
V	Meaning of consumer, Basic concepts of consumer economics: Goods, wealth, economic and non-economic activities, utility, Value and price, Consumer problems in rural and urban areas: unfair trade practices, adulteration, faulty weights and measures, Meaning, Definition, Objectives and need of consumer education in India. Consumer rights and responsibilities in today’s world.		10
VI	Consumer and the environment, Consumer decision making and determinants of consumer choices, Market and merchandising – types of market, definition and Structure and functioning of consumer retail markets and pricing process		10
VII	Consumerism and consumer protection a) History of consumer movement in the developed and developing countries b) Consumer protection and Govt. legislation-Act and orders		10

	c) Govt. and NGO for consumer protection and welfare d) Standard, standardization and legislative measures for regulating quality.	
	Total	60
Suggested Readings: <ol style="list-style-type: none"> 1. Maneesha Shukul and Veena Gandotra. (2006). Home Management and Family Finance. Dominant Publishers and Distributors, New Delhi. 2. Mann, M.K. (2004) Home Management for Indian Families. Kalyani Publishers, New Delhi. 3. Rice, Nickel and Tucker. (1976). Management in Family Finance. John Wiley and Sons., New York 4. Seetharaman P. Sethi M. (2002). Consumerism Strategies and Tactics. CBS Publishers and Distributors. New Delhi. 		
Suggested Digital Platform: http://ecoursesonline.iasri.res.in/mod/page/view.php?id=25858 http://ecoursesonline.iasri.res.in/mod/page/view.php?id=25855 https://www.nios.ac.in/media/documents/SecHmscicour/english/Home%20Science%20(Eng)%20Ch-16.pdf https://nios.ac.in/media/documents/srsec321newE/321-E-Lesson-13.pdf https://nios.ac.in/media/documents/srsec321newE/321-E-Lesson-17.pdf https://www.nios.ac.in/media/documents/SecEcoCour/English/Chapter-24.pdf https://www.nios.ac.in/media/documents/Secbuscour/English/chapter-18.pdf https://www.nios.ac.in/media/documents/Secbuscour/English/chapter-17.pdf		
Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus• Test with multiple choice questions/ short and long answer questions• Attendance		

Programme/Class: Certificate in Home Science		Year: First	Semester: Second
Course Code: BHS-204		Course Title: Communication and Instructional Technology	
Course outcomes: The student at the completion of the course will be able to: ➤ To learn various concepts of communication, audio-visual aids ➤ To familiarize and acquire practical skills to plan, prepare and use of AV aids			
Credits: 4		Major	
Max. marks: 100		Min. passing marks:	
Total no. of lectures-tutorials-practical: L-T-P: 4-0-0			
Unit	Topics		No. of lectures
I	Concept, nature and significance of communication process, types of communication, models of communication, barriers to communication		10
II	Communication media/audio-visual aids -meaning, classification, advantages and limitations		10
III	Communication aids- chalkboard, flat pictures, diagram, photographs, charts, graphs, posters, flash cards		10
IV	Projected Communication aids- transparencies and slides, non projected communication aids-display, specimen,		10
V	Electronic Communication aids-radio, T.V		10
VI	Instructional technology- meaning, importance, scope, selection and use		10
	Total		60
Suggested Readings: 1. Adivi Reddy.A, Extension Education, seventh edition, Sri lakshmi Press,Bapatla 2. Agarwal J.C. 2007 Textbook on Essentials of Educational Technology Innovations in Teaching –Learning, second edition, Vikas Publishing House Pvt Ltd. 3. Sumita Roy, Tej Verma and Pushpa Gupta 2006 textbook on family approach in extension programmemanagement,firstedition,indiancouncilofagriculturalresearch,newdelhi. 4. Dahama O.P. and Bhatnagar O.P, Education and Communication Development, second edition, oxford and IBH publishing pvt. Ltd,calcutta. 5. Ray GL (1996) Extension Communication and Management, Naya Prakash Publications, Calcutta.			
Suggested Continuous Evaluation Methods: Seminar/ presentation on any topic of the above syllabus □ test with multiple choice questions/ short and long answer questions □ attendance			

Programme/Class: Certificate in Home Science		Year: First	Semester: Second
Course Code: BHS 205		Practical: Food Processing and Storage & Communication and Instructional Technology	
Course outcomes: The Student at the completion of the course will be able to: <ul style="list-style-type: none">• Apply the principles and methods involved in the processing of different foods.• Prepare different communication media.• Learn through communication center.			
Credits: 4		MAJOR	
Max. Marks: 100		Min. Passing marks:	
Total No. of lectures-Tutorials- Practical: L-T-P: 0-0-4			
Unit	Topics		No. of Practical
I	Preparation of popped corn and sorghum.		3
II	Dehydration and drying of vegetables: green leafy vegetables, tubers and others.		5
III	Preparation and bottling of tomato sauce.		3
IV	Preparation and bottling of fruit jam and jellies.		5
VI	Preparation and bottling of fruit squash.		4
VII	Preparation of fermented food- <i>dhokla, idli</i> .		5
VIII	Preparation of wheat malt.		5
IX	Preparation and use of instructional media: chart, poster, flash card, graph, use of blackboard, use of bulletin board		5
X	Demonstration as an instructional technology		5
XI	Organizing and participating in various types of group discussions		10
XII	Visit to communication centre, familiarization of radio, T.V. and video equipments and programme production		10
	TOTAL		60
Suggested Readings: <ol style="list-style-type: none">1. Sivasankar, B. (2014). Food processing and preservation: Hall of India Pvt., New Delhi.2. Zeuthen, P. & Bogh- Sprensen, L. (2003). Food Preservation Techniques: CRC Press, Boca Raton.3. B. Srilakshmi, Food science, New Age Publishers, 20024. Meyer, Food Chemistry, New Age, 20045. O.P. Dhama and O.P. Bhatnagar, Education and Communication for Development, second edition, New Delhi, 2009			
Suggested Digital Platform: https://onlinecourses.nptel.ac.in/noc22_ag03/preview			
Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus• Test with multiple choice questions/ short and long answer questions• Attendance			

III SEMESTER

Programme/Class: Diploma in Home Science		Year: Second	Semester: Third
Course Code: BHS-301		Course Title: Community Nutrition	
Course outcomes: The Student at the completion of the course will be able to: ➤ Learn about nutrition, health and hygiene. ➤ Know about different nutritional programmes run by government			
Credits: 4		MAJOR	
Max. Marks:		Min. Passing marks:	
Total No. of lectures-Tutorials-Practical : L-T-P: 4-0-0			
Unit	Topics		No. of Lectures
I	Role of nutrition education programme in eradication of malnutrition: improving amount and variety of food supplies, improving family income and its influence on nutritional status, improving food consumption to meet individual needs in the family, improving environmental hygiene. Community nutrition as a field, public health nutrition, goals for nutrition programmes, dietary guidelines, present trends and focus for community nutrition.		10
II	Introduction to national nutrition programmes and policies programmes for improving nutritional status at national level, ICDS, NRDP, NREP, miscellaneous monofocal programmes. Role of International agencies and programmes in community nutrition, FAO, WHO, UNICEF; other voluntary and government agencies.		10
III	Planning, implementation and evaluation of a nutrition education programme.		10
IV	Assessment of nutritional knowledge by informal discussion and by simple questionnaire and rapid rural appraisal.		5
V	Food production systems in India; Their influence on food supply; major foods and their state wise production in India		5
VI	Food distribution system: Public Distribution System, Food Corporation of India, intra household distribution and per capita availability of food.		5
VII	Food consumption pattern in different parts of India. Magnitude of nutrition problem in India: PEM, vitamin A deficiency, endemic goiter, flourosis and lathyrism, strategies for control of malnutrition		5
VIII	Vicious cycle of low food production: Poverty and malnutrition in subsistence agricultural families		5
IX	Food security and poverty, augmenting food supplies for population groups.		5
Suggested Readings: ➤ Roger C. Andersen. (1997). Nutrition Support Theory and Therapeutics, Nutrition Support and Pregnancy. (pp508-517). New York, International Thomson Publishing ➤ Sharon Rady Rolfesetal (1998). Life Span Nutrition. (pp 36-106). Conception through life, Belmont, An International Thomson Publishing Company.			

- Sheel Sharma. (2006). Human Nutrition and Meal Planning. (pp 390-400).New Delhi, Jnanada Prakasham (P&D)
- Salil Sehgal and Rita Raghuvanshi. Text book of community nutrition

Suggested Digital Platform:

https://onlinecourses.nptel.ac.in/noc22_ag03/preview

Suggested Continuous Evaluation Methods:

Seminar/ Presentation on any topic of the above syllabus• Test with multiple choice questions/ short and long answer questions• Attendance

Programme/Class: Diploma in Home Science		Year: Second	Semester: Third
Course Code: BHS -302		Course Title: Indian Embroidery and Traditional Textile Costumes	
Course outcomes: The Student at the completion of the course will be able to: ➤ To impart knowledge about traditional woven textiles and embroidery of India ➤ To introduce student with the creative art of embroidery			
Credits: 4		Major	
Total No. of lectures-Tutorials-Practical :L-T-P: 4-0-0			
Unit	Topics		No. of Lectures
I	Traditional woven Textiles of India: Dacca muslin and Jamdani saree, Baluchar sarees, Pochampallisrees, patola and ikat sarees, kanchipuram sarees, chanderi sarees, maheswari sarees, Vichitrapuri sarees and brocades, woven shawls of Kashmir, Himachal Pradesh and North Eastern states		15
II	Printed and painted textiles: Block printed textiles, Tie and dyed textiles, Kalamkari and Madhubani		10
III	Embroideries of states of India: Kashida of Kashmir, ChambaRumal, Phulkari and Bagh of Punjab, Embroideries of Gujarat, Chikankari and Zari work of Uttar Pradesh, Kanthas of Bengal, Manipuri Embroidery, Kasuti of Karnataka, Embroidery and Patchwork of Bihar		15
IV	Traditional costumes of India: Kashmir, Punjab, Uttar Pradesh, West Bengal, NE states, Rajasthan, Gujarat, Maharashtra, South Indian states		7
V	Importance of traditional costumes and textiles and apparel industry: a. Impact of adaptation of traditional motifs and designs for modern textiles b. Revival of traditional costume and style throughcontemporary Dresses		11
VI	Factors affecting diversity of textiles and costumes of India: Geographical factors, socio-economic factors, customs and traditions and religious factors		2
	Total		60
Suggested Readings: ➤ Crill, R. (1999). Indian Embroidery. London: Victoria and AlbertMuseum ➤ Synge, L. (2005). Art of Embroidery: History of style and Technique. New York: ACC Art Book			

Programme/Class: Diploma in Home Science		Year: Second	Semester: Third
Course Code: BHS-303		Course Title: Household Equipment and Appropriate Technology	
Course outcomes: The Student at the completion of the course will be able to: 1. To acquaint students with anthropometry study related to man machine and environment system interactions. 2. To study about the drudgery reduction of farm women through appropriate technologies.			
Credits: 4		MAJOR	
Max. Marks: 100		Min. Passing marks:	
Total No. of lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0			
Description of theory			
Unit	Topics		No. of Lectures
I	Work-worker and workplace relationship and Work simplification techniques, mundel’s classes of change, body mechanics Definition of ergonomics, principles of ergonomics and its application Physiological Aspects of Work : Work capacity, Stress and fatigue Factors affecting work capacity		10
II	Energy cost work : meaning, methods of to calculate energy cost of work and technology of calculating Energy cost work, fatigues, types of fatigues, methods of relieving from fatigues Measurement of the physiological cost of work.		15
III	Household drudgery- definition, drudgery prone areas in home, farm and allied activities, drudgery reduction technologies used in household and farms		15
IV	Household equipment- introduction, definition, classification and base materials used in construction, selection, use, care and maintenance		15
V	Renewable and nonrenewable energy saving technologies		5
	Total		60
Suggested Readings: 1. Grandjean, E. (1981). Ergonomics of the Home Taylor and Francis Ltd. New York. 2. Grandjean, E. and Kroemer, K.H.E. (1999). Fitting the Task to the Human a Text Book of Occupational Ergonomics. Taylor and Francis, New York. 3. Peet, I.J and Arnold, M.G. (1993). Household Equipment. John Wiley, New York. 4. Science and Technology for Women. (1993). Compiled by Center of Science for Village. Waradha. Department of Science and Technology, New Delhi. 5. Singh, S. (2007). Ergonomics Integration for Health and Productivity. Himanshu Publication, Udaipur, New Delhi. 6. Varghese, M.N., Ogale, N.N. and Srinivasan, K. (1992). Home Management. Wiley Eastern, New Delhi. 7. Gandotra, G., Oberoi, K. and Sharma, P. (2008). Appropriate technology for rural women.			

Suggested Digital Platform:

<https://nios.ac.in/media/documents/srsec321newE/321-E-Lesson-11.pdf>

<https://www.yourarticlelibrary.com/home-management/home-science-work-simplification-techniques/47808>

<https://www.yourarticlelibrary.com/home-management/home-science-work-simplification-methods-with-diagram/47806>

<http://ecoursesonline.iasri.res.in/mod/page/view.php?id=28568>

<http://ecoursesonline.iasri.res.in/mod/page/view.php?id=28587>

<https://nios.ac.in/media/documents/srsec321newE/321-E-Lesson-16.pdf>

Suggested Continuous Evaluation Methods:

Seminar/ Presentation on any topic of the above syllabus• Test with multiple choice questions/ short and long answer questions• Attendance

Programme/Class: Diploma in Home Science		Year: Second	Semester: Third
Course Code: BHS -304		Course Title: Life Span Development	
Course outcomes: The Student at the completion of the course will be able to: ➤ Focus on the physical, cognitive, social, and emotional development of human from prenatal period up to old age.			
Credits: 4		MAJOR	
Max. Marks: 100			
Total No. of lectures-Tutorials-Practical (in hours per week): L-T-P: -4-0-0			
Unit	Topics	No. of Lectures	
I	Prenatal Development Stages: Genetic and environmental factors; critical influence; birth process and complications.	5	
II	Infancy: Physical, psychological, cognitive and social capabilities. Four weeks up to 2 years: physical and motor, social and emotional, cognitive and language development. Early environment (critical periods) and its importance; child rearing practices; growth monitoring.	10	
III	Childhood (Early, middle and late): Physical, motor, social, emotional, cognitive and language development. Developmental milestones of an antecedent influences. Development of positive and negative emotions; factors influencing emotions. Growth trends, measurement and antecedent influences; culture and class. The function of the family; school and community in the growth of children during middle childhood	10	
IV	Adolescence: Physical changes and health needs; changes in social behaviours; development of emotional maturity; trends in adolescent thinking; personal, social, recreational and vocational interest. Heterosexual relationships. Problems at home and school. Family relationships and relationship with teachers. Outside influences on adolescents; drug abuse and AIDS. Adolescence guidance.	15	
V	Adulthood (early, middle and late): meaning, Physical, motor, social, emotional, cognitive and linguistic characteristics. Personality development. The family, the community and the world of work. Problems in adulthood.	10	
VI	Old age and maturity: Physical, motor, social, emotional, cognitive and linguistic characteristics. Attitudes towards life and death among the elderly. Psychological changes before death. Problems during elderly. Special needs of elderly.	10	
	Total	60	
Suggested Readings: <ul style="list-style-type: none">Fabes R ., & Martin. C.L. (2003), Discovering Child Development. (pp 341-344). United States of America: Pearson Education Inc.Owens, K. (2003), Child and Adolescent Development, An integrated Approach (pp 380-400). Wards worth: United States.Hurlock E.B. (1980), Developmental Psychology, A Life span Approach, 5 th edition, New Delhi: Tata Mc. Graw Hill Publishing company Ltd.			
Suggested Digital Platform: https://onlinecourses.nptel.ac.in/noc22_ag03/preview			
Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus• Test with multiple choice questions/ short and long answer questions• Attendance			

Programme/Class: Diploma in Home Science		Year: Second	Semester: Third
Course Code: BHS -305		Course Title: Practical- Indian Embroidery and Traditional Textile + Training Methods for Rural Women	
Course outcomes: The Student at the completion of the course will be able to: ➤ To impart knowledge about traditional woven textiles and embroidery of India ➤ To introduce student with the creative art of embroidery			
Credits: 4		Major	
Total No. of lectures-Tutorials-Practical : L-T-P: 0-0-4			
Unit	Topics		No. of Practical
I	Sample preparation of traditional Indian embroideries and machine Embroideries		10
II	Preparation of two articles using different hand embroideries		8
III	Preparation of two articles using machine embroideries		8
IV	Documentation of Indian textiles and costumes		4
V	Development of survey schedules for obtaining demographic information on village and profile of households.		5
VI	Collection of information through survey schedule, Identification of felt needs of assigned households through structured schedules.		5
VI	Formation of project based on felt needs of households Content planning and development of communication materials of indentified needs.		10
VII	Conducting demonstration on identified needs, Organizing an exhibition of developed products.		10
	Total		60
Suggested Readings: ➤ Crill, R. (1999). Indian Embroidery. London: Victoria and Albert Museum ➤ Synge, L. (2005). Art of Embroidery: History of style and Technique. New York: ACC Art Book			

IV SEMESTER

Programme/Class: Diploma in Home Science		Year: Second	Semester: Fourth
Course Code: BHS-401		Course Title: Therapeutic Nutrition and Diet Counseling	
Course outcomes: The Student at the completion of the course will be able to: <ul style="list-style-type: none">• Define the terms dietetics, therapeutic diet and explain the concept of diet planning in disease,• Enumerate the scope of dietetics and the role of dietitian in health care,• Discuss the adaptation of normal diet to therapeutic diets• Describe the types of therapeutic modifications with respect to consistency, frequency of meals, methods of cooking etc.			
Credits: 4		Major	
Max. Marks:100		Min. Passing marks:	
Total No. of lectures-Tutorials-Practical: L-T-P: 4-0-0			
Unit	Topics		No. of Lectures
I	Introduction: Nutrition and immunity, catabolic effects of infections. Effect of illness of food acceptance and utilization, Types of feeding. Use of food exchange list in diet planning.		10
II	Fever: metabolic alteration, types, dietary management of short and long duration fever		10
III	Principles of dietetic management of disorders of the gastrointestinal tract -gastritis, peptic ulcer, diarrhea, constipation.		10
IV	Etiology, symptoms, metabolic alterations and nutritional therapy of liver disease-hepatitis, cirrhosis.		4
V	Diabetes mellitus: Clinical characteristics, risk factors, dietary management and Complications		4
VI	Risk factors, metabolic anomalies and principles of nutritional therapy in hyperlipidemias, atherosclerosis and heart diseases		8
V	Nutritional considerations in under nutrition/underweight.		6
VI	Principles of nutritional therapy in diseases of the kidney-glomerulonephritis, renal failure, urinary calculi.		4
VII	Nutritional considerations in children's disease- measles, gastrointestinal problems, allergies.		4
	Total		60
Suggested Readings <ul style="list-style-type: none">• Antia F.P. (1989). Clinical Dietetics and Nutrition. Third Edition. (pp- 226-239), Bombay, Oxford University Press.• Bamji . S.M., Rao,P.N., and Reddy, V. Textbook of Human Nutrition. Pp-360-67. Oxford and IBH publishing Co Pvt Ltd			
Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus• Test with multiple choice questions/ short and long answer questions• Attendance			

Programme/Class: Diploma in Home Science		Year: Second	Semester: Fourth
Course Code: BHS-402		Course Title: Fabric Formation and Finishes	
Course outcomes: The Student at the completion of the course will be able to: ➤ To study the chemicals used in textile processing from sizing to finishing, along with the essential properties of raw materials used in their manufacture and study the recent developments in various finishing processes.			
Credits: 4		Major	
Total No. of lectures-Tutorials-Practical: L-T-P: 4-0-0			
Unit	Topics		No. of Lectures
I	Method of fabric formation: basic weaves, Non woven fabric construction; felts and non-woven, knitted fabric; warp knitting, weft knitting, circular knitting		10
II	Looms: Shuttle looms, shuttleless looms, gripper loom, rapier loom, water jet and air jet loom		5
III	Introduction to fabric finishes a) Processes of removing impurities from fabrics: scouring, degumming, carbonizing b) Basic finishes that alter hand or texture; felting, singeing, stiffening, decatizing c) Surface finishes: Bleaching, delustering, calendaring, beetling, napping, flocking, burnt out design, plisse design, acid design, tenetring, shearing and brushing		15
	Functional finishes: water proof and water repellent finish, soil repellent finish, shrinkage control, wrinkle resistance, durable press finish, flame retardant finish, mildew proof, rot proof, moth proof finishes, antistatic and antibacterial finishes		
IV	Adding colour to textiles: Natural dyes and synthetic dyes a) Classification of dyes: Direct dyes, acid dye, basic dye, vat dye, sulphur dye, azoic dye, mordant dye, disperse dye, reactive dye and pigments b) Dyeing techniques; solution dyeing, fiber and yarn dyeing, piece dyeing, cross dyeing, union dyeing and tone on-tone dyeing		15
V	Standardization and quality control of fabrics		5
VI	Textiles and environment: Health hazards to workers and consumers, toxicity of chemicals, textile as a source of air and water pollution		10
	Total		60
	Suggested Readings ➤ Bernard P Corbman. 1983. <i>Textiles - Fiber to Fabric</i> . McGraw-Hill. ➤ Hall AJ. 1955. <i>Handbook of Textile Dyeing & Printing</i> . The National Trade Press. ➤ Shenai VA. 1994. <i>Technology of Dyeing</i> . Sevak Publ. Shenai. 1995. <i>Technology of Bleaching & Mercerizing</i> . Sevak Publ.		

Programme/Class: Diploma in Home Science		Year: Second	Semester: Fourth
Course Code: BHS -403		Course Title: Family Welfare and Community Education	
Course outcomes: The Student at the completion of the course will be able to: <ul style="list-style-type: none">• To aware the student about concept of family and child welfare• To provide knowledge about national and international family and chid welfare services.			
Credits: 4		MAJOR	
Max. Marks: 100			
Total No. of lectures-Tutorials (in hours per week): L-T-P: -4-0-0			
Unit	Topics		No. of Lectures
I	Child and family welfare: Children’s right and National Policy for children, demographic profile of child in India, children with special needs, deprived children and abused children		5
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		10
III	Rural extension services and community ICDS, DWCRA, IRDP and CHEB		10
IV	Family and larger community; culture and recent alternate childcare arrangements Relationships of home, school and community		10
V	Planning parent education programme/family intervention strategies and community involvement for the welfare of their children and family, organizing community parents as part of community; role of child development workers; guide enabler-expert; need assessment and designing programme for community; educating community of available, child and family welfare pogrammes		10
VI	The role of teacher and other specialists in parents and community education programme. Teacher as a motivator; the community worker		10
VII	Ethical consideration in dealing with parents and community		5
	Total		60
Suggested Readings: <ul style="list-style-type: none">• Chowdary, D. P. (1980). <i>Child welfare development</i>. New Delhi: Atma Ram & Sons.• Costn L.B. (1979). <i>Child welfare- Policies and practice</i>, 2nd Edition. New York: Mc.grow Hill Book Company.• Council on Social Work Education (1959). <i>Child Welfare in Description of Practice: Statements in Fields of Social work Practice</i>. New York. Council on Social Work Education, Mimeo.• Pramila, P. (1999) <i>Hand book on child</i> (with Historical Background). New Delhi: Barooah Concept Publishing company.• Neel, A.F. (1971). Trends and Dilemmas in Child Welfare Research. <i>Child Welfare</i>. 50, p:25-32.			
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Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus• Test with multiple choice questions/			

short and long answer questions• Attendance		
Programme/Class: Diploma in Home Science	Year: Second	Semester: Fourth
Course Code: BHS-404	Course Title: Population and Family Life Education	
Course Outcomes: The student at the completion of the course will be able to: ➤ Students will learn about family life education and population education		
Credits: 4	Major	
Max. Marks:100	Min. Passing Marks:	
Total no. of lectures-tutorials-practical : L-T-P: 4-0-0		
Unit	Topics	No. of lectures
I	Population in perspective, theories of population education, growth of world population, population of India, India’s population problem in perspective, socio-cultural aspects of population growth in India. Population policy in India, measures of population composition and growth of population: measures of mortality and life table, measures of fertility and reproduction	16
II	Population growth and development concerns, the role of governmental, non-governmental and international organization in the field of population.	12
III	Population education, meaning of population education, need and importance of population education	8
IV	Family life education: Conception, pregnancy and pre-natal development process of conception, determination of sex techniques, fertilization techniques: amniocentesis, Sonography, GIFT, I.V.F. and A.I, pregnancy and its management. Planning family: family planning, motivation and responsibility, human reproductive system and contraceptive technology, Planned Parenthood-spacing between children, size of family.	16
V	Planning population awareness and family life education campaigns, population awareness programmes, family life education campaigns	8
	Total	60
Suggested Readings: • Essentials of Community Health Nursing. K.Park. 2015. 7 th edition. • Introduction to family life education. Dr. Subhakanta Mahapatra. SOITS, IGNOU.		
Suggested continuous evaluation methods: Seminar/ presentation on any topic of the above syllabus□ test with multiple choice questions/ short and long answer questions□ attendance		

Programme/Class: Diploma in Home Science	Year: Second	Semester: Fourth
Credits: 4	Major	
Total No. of lectures-Tutorials-Practical : L-T-P: 0-0-4		
Course Code: BHS-405	Course Title: Practical-Fabric Formation and Finishes & Therapeutic Nutrition and Diet Counseling	
Course outcomes: The Student at the completion of the course will be able to: ➤ To study the chemicals used in textile processing from sizing to finishing, along with the essential properties of raw materials used in their manufacture and study the recent developments in various finishing processes. ➤ Planning and preparation of different diet charts of clinical conditions		
Unit	Topics	No. of Practical
I	Preparation of basic weaves on cardboard	10
II	Fabric finishes: Mercerization, scouring, bleaching, flame retardant, fabric shrinkage test Identification of various fabric finishes	5
III	Knitting machine and its parts; accessories and their use, pattern making: sample of tuck stitches, slip stitches and multi coloured knitting	5
IV	Preparation of samples: Screen printing, Block printing, stencil printing, tie and dye and batik with different dyes	10
V	Planning and preparing normal diet for patients who do not require special diets: adults, children	5
VI	Soft diet and liquid diets.	5
VII	Diet in fevers	2
VIII	Bland diet	3
IX	High fiber diet	3
X	Diet in hepatitis	5
XI	Diet for diabetic patients using exchange lists	5
XII	Low cost diet for protein calorie malnutrition	2
	Total	60
	Suggested Readings: ➤ Bernard P Corbman. 1983. <i>Textiles - Fiber to Fabric</i> . McGraw-Hill. ➤ Hall AJ. 1955. <i>Handbook of Textile Dyeing & Printing</i> . The National Trade Press. ➤ Shenai VA. 1994. <i>Technology of Dyeing</i> . Sevak Publ. ➤ Shenai. 1995. <i>Technology of Bleaching & Mercerizing</i> . Sevak Publ.	

V SEMESTER

Programme/Class: Bachelor in Home Science		Year: Third	Semester: Fifth
Course Code: BHS- 501		Course Title: Food Safety and Quality Control	
Course outcomes: The Student at the completion of the course will be able to: ➤ Explain the application of food quality and food safety system ➤ Examine the chemical and microbiological quality of food samples ➤ Adulteration in food samples.			
Credits: 4		MAJOR	
Max. Marks:100		Min. Passing marks:	
Total No. of lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0			
Unit	Topics		No. of Lectures
I	Food safety concept: - Importance of food safety in the food processing industry, Quality standards, assurance and factors affecting quality.		10
II	Methods and techniques for assessment of food quality. 1. Objective evaluation: Physical parameters and their testing. 2. Sensory evaluation: Sensory characteristics of foods, conducting sensory tests, selection of taste panel, type of tests- difference, ranking, sensitivity and descriptive tests. 3. Nutritional evaluation: Proximate composition, iron, calcium, phosphorus, vitamin C.		15
III	Food safety: Microbiological evaluation of raw material/products, microbiological limits, colony count, Quality assurance, Total Quality Management		15
IV	Hazard Analysis and Risk Assessment: Physical hazards (metals, glass, etc), Chemical hazards (food additive toxicology, natural toxins, pesticides, antibiotics, hormones, heavy metals and packaging components), Biological hazards (epidemiology of biological pathogens: virus, bacteria and fungi), Evaluation of the severity of a hazard Controlling Food Hazards. Hazard Analysis Critical Control Point (HACCP) system.		10
V	Food standards, food laws and regulations: PFA, Essential Commodity Act, FPO, MPO, MMPO, Misbranding, BIS, AGMARK, Export Quality Control and Inspection Act		10
	Suggested Readings: <ul style="list-style-type: none">• Bhatti,S1995.Vame, Fruit and vegetable processing. CBS Publishers, Distributors, NewDelhi.• Coles, R., McDowell, D., Kirwan, M .J. 2003. Food Packaging Technology. Blackwell Publishing Co.• Dauthy, M. E. 1995. Fruits and Vegetables Processing- FAO Bulletin 119. International Book Distributing Co., Lucknow.• Devendra, K. B. and Priyanka, T. 2006. An Introduction to Food Science and technology and Quality Management. Kalyani Publishers 81-272-2521-5.• FAO - Training Manual No.17/2. 2007. Prevention of post-harvest food losses: Fruits, Vegetables and Root crops. Daya Publishing House, Delhi.• Fellows, P. J. 1998. Food Processing Technology – principles and Practices. Ellis Horwood.• Girdhari Lal, G.S. Siddappa and G.L. Tandon. 1959. Preservation of Fruits and Vegetables. ICAR, New Delhi.		

	Suggested Digital Platform: https://onlinecourses.swayam2.ac.in/cec20_ag06/preview
	Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus• Test with multiple choice questions/ short and long answer questions• Attendance

Programme/Class: Bachelor in Home Science		Year: Third	Semester : Fifth
Course Code: BHS -502		Course Title: Apparel Designing	
Credits: 4		Major	
Max. Marks:100			
Total No. of lectures-Tutorials-Practical : L-T-P: 4-0-0			
Unit	Topics		No. of Lectures
I	Sources of inspiration for apparel designing fashion and current fashion trends		10
II	Study of costume designing and flat pattern making: basic paper pattern, types of basic pattern		10
III	Principles of pattern making rules in costume designing		7
IV	Standards of good fit and fitting problems, grading and adaptation of basic block		10
V	Underlying or supporting materials: different types of supporting fabrics, their preparation and use		8
VI	Techniques of garment designing through draping: Draping on dress form to prepare basic pattern, alteration and grading of basic pattern		15
	Total		60
Suggested Readings:			
➤ Connie Amaden-Crawford. 1989. <i>The Art of Fashion Draping</i> . Fair Child Publ.			
➤ Janine Mee & Michal Purdy. 1987. <i>Modelling on the Dress Stand</i> . BSP Professional Books.			
➤ Natalie Bray. 1994. <i>Dress Fitting</i> . Blackwell.			

Programme/Class: Bachelor in Home Science		Year: Third	Semester: Fifth
Course Code: 503		Course Title: Housing and Interior Planning and Decoration	
Course outcomes: The Student at the completion of the course will be able to: 1. To apply basic knowledge of principles involved in planning in a residential place. 2. To understand the trends and functional designing of residential building. 3. To learn about elements and principles of art and their application in interior designing.			
Credits: 4		Major	
Max. Marks: 100		Min. Passing marks:	
Total No. of lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0			
Description of theory			
Unit	Topics		No. of Lectures
I	Home: functions of home, Renting verses owning house, Advantages and disadvantages of renting and owning a house. Factors to be considered in selection of family housing, selection of site, soil, locality, orientation and sanitation of a house, principles of planning a house, housing needs at different stages of family life cycle. Housing problems – rural and urban housing problems in India. Housing policies - government and non- government housing policies and housing schemes. Housing finance - government and non- government finance nstitutes.		10
II	Types of house planning – floor plan, site plan, cross sectional plan, perspective plan, elevation plan and landscape plan.Technology in housing – advance technology in housing construction, low cost building technology, low cost building materials.		10
III	Concepts of design, Types of design: structural & decorative Elements and principles of designs and their application in interiors, Colour: Sources of colour, Properties of colour , Emotional effect of colour , Colour schemes, Colour plans for interior.		10
IV	Furniture – types, construction, selection and purchase, arrangement, care and maintenance. Material selection for furniture and furnishings. Furnishings – selection, care and maintenance of fabrics used for: Soft furnishings: curtains and draperies, upholstered furniture, cushions and pillows, etc.		10
V	Traditional and modern surface finishes – types and uses: • Wall • Floor • Ceilings Accessories – uses, classification, design, selection & arrangement		10
VI	Functional and decorative accessories for interiors Flower arrangement: Materials used, principles involved and Types of flower management Lighting applications: Energy efficient lighting, Types of lamps and luminaires		10
	Total		60
Suggested Readings:			

- Bhargava, B. 2001. Housing and Space Management, University Book House Ltd. Jaipur.
- Seetharaman P. and Sethi M. (2002). Interior Design and Decoration. CBS Publishers and Distributors. New Delhi.
- Goel, S., Seetharaman, P. & Kakkar, A. (2015). *Interior space designing: A practical manual*. New Delhi: Elite Publishing House Pvt. Ltd. (2nd Ed). Chapter 1, 2, 3, 4, 5, 6, 9, 10
- Gupta, G. Garg, N. and Aggarwal, N (2007). Text Book of Family Resource Management Hygiene and Physiology. Kalyani Publishers.
- Agan, T. 1970. The House Plan and Use. J.B. Lippincott and Company, New York.
- Mathur, G.C. (1993). Low Cost Housing in Developing Countries. New Delhi: Mohan Pramlani, Oxford and IBH.
- Mohanty, A.B. 1985. Guide to House Buildings. Inter India Publications, New Delhi.

Suggested Digital Platform:

- <http://ecoursesonline.iasri.res.in/mod/page/view.php?id=121484>
- [https://www.nios.ac.in/media/documents/SecHmsscicour/english/Home%20Science%20\(Eng\)%20Ch-12.pdf](https://www.nios.ac.in/media/documents/SecHmsscicour/english/Home%20Science%20(Eng)%20Ch-12.pdf)
- <https://nios.ac.in/media/documents/srsec321newE/321-E-Lesson-12.pdf>
- <http://ecoursesonline.iasri.res.in/mod/page/view.php?id=120895>
- <http://ecoursesonline.iasri.res.in/mod/page/view.php?id=120949>
- <http://ecoursesonline.iasri.res.in/mod/page/view.php?id=121013>
- <https://www.slideshare.net/ritamitra2004/window-and-window-treatment-33207823>

Suggested Continuous Evaluation Methods:

Seminar/ Presentation on any topic of the above syllabus • Test with multiple choice questions/ short and long answer questions • Attendance

Further Suggestions: It widens the scope for students to join Government and Non-Government organization upskilling the people at different levels.

Programme/Class: Bachelor in Home Science		Year: Third	Semester: Fifth
Course Code: BHS -504		Course Title: Early Childhood Education	
Course outcomes: The Student at the completion of the course will be able to: 1. Interaction of biological, psychological and social aspects of development. 2. Focus on the physical, cognitive, social, and emotional development of humans from the prenatal period up to adulthood.			
Credits: 4		MAJOR	
Max. Marks: 100			
Total No. of lectures-Tutorials-Practical (in hours per week): L-T-P: -4-0-0			
Unit	Topics		No. of Lectures
I	Early childhood education, its meaning and importance. Origin of early childhood education in India and abroad.		5
II	Different methods and philosophies of early childhood education. Montessori school, pre-basic school, the progressive method of education. Social changes and its Impact on early childhood education and management.		10
III	Early childhood education centre: infrastructure and administration, staff, building and equipments, keeping records and reports, contact with parents.		10
IV	The curriculum for early childhood education centers plan, layout and conduction of varies activities for early childhood education, model lesson plan for a day.		10
V	Concept pf play in early childhood education, stages of development in play and way techniques, planning the play environment, supervision of different play activates, value of play, ways of fostering creativity.		5
VI	Importance of science, nature, music, role plays and stories in early childhood education programme. Teacher-parent relationship, parental involvement in ECCE programme.		10
VII	Understanding and guiding children. a). Helping the child to adjust in new situation. b). Handling emotional behaviour c). Defining behavioural limits. d). Helping in he development of group relationship.		10
	Total		60
Suggested Readings: 1. Nasim Siddiqi, Suman Bhatia and Suptika Biswas (2007) Early Childhood Care and Education –Book IV, DOABA HOUSE, New Delhi. 2. Sen Gupta, M. (2009). Early Childhood Care and Education. New Delhi: PHI Learning Pvt. Ltd. 3. Soni,R., 2015,Theme based early childhood care and education programme- A Resource Book, NCERT			
Suggested Digital Platform: https://onlinecourses.nptel.ac.in/noc22_ag03/preview			
Suggested Continuous Evaluation Methods:			

Seminar/ Presentation on any topic of the above syllabus• Test with multiple choice questions/ short and long answer questions• Attendance

Programme/Class: Bachelor in Home Science	Year: Third	Semester: Fifth
Credits: 4	Major (Practical)	
Total No. of lectures-Tutorials-Practical : L-T-P: 0-0-4		
Course Code: BHS-505	Course Title: Practical (Housing and Interior Planning and Decoration)	
Course outcomes: The Student at the completion of the course will be able to: ➤ To learn about elements and principles of art and their application in interior designing. ➤ To gain better understanding of interior enrichment. ➤ To apply basic knowledge of principles involved in planning in a residential place. ➤ To make students aware of the trends and functional designing of residential building.		
Unit	Topics	No. of Practical
I	Learning architectural symbols, planning, preparing and reading of blue prints, development of master plan	10
II	Drawing of house plans for different income levels, interior and exterior design developments	10
III	Development of motif for primary, secondary and tertiary colors	5
IV	Drawing color wheel, color schemes, values and intensity scale	5
V	Preparing drawing for arrangement of furniture in different rooms <ul style="list-style-type: none">• Bed Room• Kitchen• Drawing Room• Study Room	10
VI	Preparing drawings for different surface arrangements of interiors <ul style="list-style-type: none">• Wall coverings & decorations (pictures, etc)• Floor coverings & decorations.• Window & door treatments.• Lighting systems.• Flower arrangement• Window treatment	10
VII	Development of functional and decorative accessories	5
VIII	Market survey – different types of wall and floor coverings. Market survey to study the available building materials in the local market	5
	Total	60
➤ Bhargava, B. 2001. Housing and Space Management, University Book House Ltd. Jaipur. ➤ Seetharaman P. and Sethi M. (2002).Interior Design and Decoration.CBS Publishers and Distributors. New Delhi. ➤ Goel, S., Seetharaman, P. &Kakkar, A. (2015). <i>Interior space designing: A practical manual</i> .New Delhi: Elite Publishing House Pvt. Ltd. (2nd Ed). Chapter 1, 2, 3, 4, 5, 6, 9, 10 ➤ Deshpande, R. S. (1975). <i>Modern ideal homes for India</i> . Pune: United book corporation ➤ Lawrence M (1987). <i>Interior decoration</i> . New Jersey: Chartwell Books ➤ Riley & Bayern (2003). <i>The elements of design</i> . Mitchell Beazley ➤ Goldstein& Goldstein. (2013). <i>Art in everyday life</i> . New York: The Macmillan Company ➤ Rutt. A. H. (1991). <i>Home furnishing</i> . Wiley Eastern Private Ltd		

This major core (Course Paper) is compulsory for all the students those are taking admission in the course of Home Science

Suggested Continuous Evaluation Methods: Practical record and Attendance

Further Suggestions: It widens the scope for students to join Government and Non-Government organization upskilling the people at different levels.

Programme/Class: Bachelor in Home Science		Year: Third	Semester: Fifth
Course Code: BHS-506		Course Title: Entrepreneurship Development	
Course outcomes: The Student at the completion of the course will be able to: 1. To learn about the importance of entrepreneurship Development in the development of Indian economy 2. Creating awareness regarding entrepreneurial traits, entrepreneurial support system, opportunity identification, project report preparation and understanding of legal and managerial aspects.			
Credits: 4		Minor Elective	
Max. Marks: 100		Min. Passing marks:	
Total No. of lectures-Tutorials-Practical (in hours per week): L-T-P: 4-0-0			
Description of theory			
Unit	Topics	No. of Lectures	
I	Entrepreneurship Development Introduction, Concept of Entrepreneur, Entrepreneurship and Enterprise, need and significance of entrepreneurship development in India, entrepreneurship growth process, Definition of Entrepreneurship, Objectives of Entrepreneurship Development, Phases of Entrepreneurship Development, Role of Entrepreneurship, Characteristics of Entrepreneurship, Traits of Entrepreneurship..	12	
II	Types of entrepreneurs, characteristics of entrepreneurs. Entrepreneurship education model. Entrepreneurial Motivation, challenges faced by women entrepreneurs	8	
III	Types of enterprises, classification based on capital, product, location, ownership pattern and process. Project Identification: Idea generation, sensing business, opportunities, feasibility study Project Formulation: Project report & its components, writing a business proposal. Project Appraisal: Technical, marketing, financial, legal and Environmental.	12	
IV	Steps involved in functioning of an enterprise. Selection of the product / services, selection of form of ownership; registration, selection of site, capital sources, legal requirement for starting an enterprise Infrastructure and support systems- Good policies, schemes for entrepreneurship development; role of financial institutions, and other agencies in entrepreneurship development.	10	
V	Enterprise Management: Production Management, Marketing Management- Understanding markets and marketing: types, functions & marketing mix. Financial Management –Concept, types and sources of finance, financial ratios & projections, Human resource management – Concept, significance, practices, Challenges, Crises management	16	
VI	SWOC/SWOT analysis	2	
	Total	60	
Suggested Readings: 1. Bhawal, C. P. 2005. Entrepreneurship and Entrepreneurial Development. New Royal Company, Lucknow 2. Vasant Desai. (2011). Entrepreneurial Development Potential beyond Boundaries; Himalaya Publishing House.			

3. Gundry Lisa K. & Kickul Jill R., 2007, Entrepreneurship Strategy: Changing Patterns in New Venture Creation, Growth, and Reinvention, SAGE Publications, Inc.
4. Taneja & Gupta, 2001, Entrepreneur Development- New Venture Creation, Galgotia Publishing Company.

Suggested Digital Platform:

[https://www.nios.ac.in/online-course-material/secondary-courses/entrepreneurship-\(249\).aspx](https://www.nios.ac.in/online-course-material/secondary-courses/entrepreneurship-(249).aspx)

<http://ecoursesonline.iasri.res.in/course/view.php?id=242>

Suggested Continuous Evaluation Methods:

Seminar/ Presentation on any topic of the above syllabus • Test with multiple choice questions/ short and long answer questions • Attendance

VI SEMESTER

Programme/Class: Bachelor in Home Science		Year: Third	Semester: Sixth
Course Code: BHS -601		Course Title: Food Service Management	
Course outcomes: The Student at the completion of the course will be able to: 1. To acquire knowledge on the organizational aspects and functioning of different types of food service institutions. 2. Develop abilities to procure and store quantity food. 3. Understand the fundamentals of sanitation and safety.			
Credits: 4		MAJOR	
Max. Marks: 100			
Total No. of lectures-Tutorials-Practical : L-T-P: -4-0-0			
Unit	Topics		No. of Lectures
I	Food service institutions-Introduction and Types		10
II	Principles and Funtions of catering		10
III	Organization of kitchen- <ul style="list-style-type: none">• Storage space and service areas,• Layout designs.		10
IV	Equipment: <ul style="list-style-type: none">• Classification,• Selection,• Operation,• Purchasing,• Care and maintenance.		10
V	Food purchasing, receiving, storage, menu planning, food production and service.		5
VI	Financial management: <ul style="list-style-type: none">• Cost concepts,• Food cost control,• Pricing,• Book-keeping and accounting.		5
VII	Personnel management: <ul style="list-style-type: none">• Policies,• Recruitment, selection,• Facilities,• Benefits,• Training and development		5
VIII	Sanitation, hygiene and safety.		5
	Total		60
Suggested Readings: 1. Sethi, M., and Malhan, S. (2015). Catering Management: An integrated approach. (3rd ed). New Delhi : New age international publishers. 2. Sethi, M. (2015). Institutional Food Management. (3rd ed.). New Delhi : New age international publishers. 3. Singaravelavan, R. (2012). Food and Beverage Services. (1st ed.). India: Oxford University			

Press.

4. Suganthi, V., and Premakumari, C. (2019). Food Service Management. (1st ed.). Dipti Press (OPC) Pvt. Ltd, Chennai
5. Roday, S. (2017). Food Hygiene and Sanitation. (2nd ed.). India: McGraw-Hill Education (India) Pvt Limited.

Suggested Digital Platform:

https://onlinecourses.nptel.ac.in/noc22_ag03/preview

Suggested Continuous Evaluation Methods:

Seminar/ Presentation on any topic of the above syllabus • Test with multiple choice questions/ short and long answer questions • Attendance

Programme/Class: Bachelor in Home Science		Year: Third	Semester: Sixth
Course Code: BHS -602		Course Title: Textile Designing & Use of CAD	
Course outcomes: The Student at the completion of the course will be able to: ➤ To introduce the students about the Textile and Apparel Designing concepts through CAD.			
Credits: 4		Major	
Total No. of lectures-Tutorials-Practical : L-T-P: 4-0-0			
Unit	Topics		No. of Lectures
I	Interaction with personal computer components: Processor, motherboard, Monitor, scanners and Printer		10
II	Using search Engines for knowledge bases, Internet, Downloading files and Email use		5
III	MS word: Opening/creating file, saving file		5
IV	Use of CAD in Textile Industry: Textile Designing, Knitting and Embroidery Design.		4
V	Basics of Design and Repeat software: Tools for designing, drawing and editing different menus.		8
VI	Creating and editing motifs, Adaptation of basic motif for design organization, use of computer colour palette for colouring the designs		15
VII	Introduction to textile designs. a) Woven design: simple and compound structures of the fabric b) Decorative designs: naturalistic, conventional, abstract & geometric designs		8
VIII	Application of various design principles and elements in textile designing.		5
	Total		60
	Suggested readings ➤ CAD design software manuals ➤ Davis L Msrin. 1980. <i>Visual Design in Dress</i> . PrenticeHall. ➤ Rene Weiss Chase 1997. <i>CAD for Fashion Design</i> . PrenticeHall. ➤ Winfred Aldrich 1992. <i>CAD in Clothing & Textiles</i> . BSP ProfessionalBooks. ➤ Yates MP. 1996. <i>Textiles – A Handbook for Designers</i> . W.W.Norton.		

Programme/Class: Bachelor in Home Science		Year: Third	Semester: Sixth
Course Code: BHS -603		Course Title: Management of Child Care Centers and Nursery School	
Course outcomes: The Student at the completion of the course will be able to: <ul style="list-style-type: none">• To be able to plan and manage child care center			
Credits: 4		MAJOR	
Max. Marks: 100			
Total No. of lectures-Tutorials-Practical: L-T-P: -4-0-0			
Unit	Topics		No. of Lectures
I	Introduction to Child Care Centers and Nursery School Survey on community needs with regard to day care centre/child care centre.		5
II	Management of the centre: layout planning of day care centre/child care centre, planning policies of the centers, procedures and rules, budgeting, building, equipments and closed room planning.		10
III	Utilization of resources: Hiring staff, qualification and salary, procuring toys, other equipments and furniture, maintaining records and registers.		5
IV	Training in service staff: methods of communicating with children, learning methods of handling children, setting class room limits, observing and testing children.		10
V	Advertising/publicity. Involving parents: building rapport with children, arranging parent teacher conferences.		5
VI	Curriculum planning for young children: planning syllabus, annual, monthly, weekly and daily planning of activities.		5
VII	Planning play environment: Preparation and putting up play room for teaching young children, teaching strategies in child care centre. a) Play way teaching methods. b) Planning science-nature experiences. c) Planning music dramatization and story session. d) Putting up display of play equipment in classroom and teaching methods. e) Preparation and submission of project report.		10
VIII	Observation of teaching in Nursery School and Building rapport with the children. Organizing and participating in the pre-school activities in: 1. Laboratory Nursery School. 2. Community Balwadi.		10
	Total		60

Suggested Readings:
Suggested Digital Platform: https://onlinecourses.nptel.ac.in/noc22_ag03/preview
Suggested Continuous Evaluation Methods: Seminar/ Presentation on any topic of the above syllabus• Test with multiple choice questions/ short and long answer questions• Attendance

Programme/class: Bachelor in Home Science		Year: Third	Semester: Sixth
Course Code: BHS-604		Course Title: Training Methods for Rural Women	
Course Outcomes: The student at the completion of the course will be able to:			
➤ To learn about the concept of training			
➤ To enhance the students in the selection and use of different training methods			
Credits: 4		Major	
Max. Marks: 100		Min. Passing Marks:	
Total no. of lectures-tutorials-practical : L-T-P: 4-0-0			
Unit	Topics		No. of lectures
I	Training concept, Meaning and definition, need and importance, training skills, characteristics, types of trainings, training process: phases of training process, difference between training and education, Padagogy and andragogy		15
II	Characteristics of adult learners, Factors affecting learners, functions of trainer for successful training		10
III	Extension training methods- individual, group, mass contact		10
IV	Participating techniques (PRA) for training		10
V	Designing and conducting training: steps for designing training		05
VI	Evaluation of training: Meaning of evaluation, areas and tools of evaluation, criteria for selecting evaluation technique		05
VII	Training for HRD in Home Science: objectives of training and development , approaches, Phases of training		05
	Total		60
Suggested Readings:			
1. Anandaram K.S. 2009 Human Resource Development and Training Symbiosis Center for Distance Learning Pune.			
2. Punna Rao P. and Sudarshan Reddy M. 2001 Human Resources Development Mechanisms for Extension Organizations Kalyani Publishers, Hyderabad.			
3. Rolf P Lynton and Udai Pareek 1990. Training for Development Second Edition. Vistaar Publications			
Suggested Continuous Evaluation Methods:			
Seminar/ presentation on any topic of the above syllabus☐ test with multiple choice questions/ short and long answer questions☐ attendance			

Programme/Class: Bachelor in Home Science		Year: Third	Semester: Sixth
CourseCode:BHS-605		Course Title: Practical-Food Service Management and Textile Designing & Use of CAD	
Course outcomes: The Students after the completion of the course will be able to: ➤ Develop skills in setting up food service units. ➤ To gain knowledge and develop skills in handling equipment and maintenance. ➤ To introduce students to the various Textile and Apparel Designing concepts through CAD			
Credits:4		MAJOR	
Max. Marks: 100			
TotalNo.oflectures-Tutorials-Practical(inhoursperweek):L-T-P:0-0-4			
Unit	Topics		No. of Lectures
I	Standardization of recipes of snacks and meals for portion and cost. • Cooking methods (moist, dry, combination) • Weight, measures and conversion		5
II	Running a canteen for fifty persons		10
III	Planning, preparation and service for special occasions- • Holi • Diwali • Birthday Party • Mocktail Party		10
IV	Visit to nearby food service institutions.		5
V	Basic knowledge of Computer: parts of computer, MS word, internet and search engine and Email use.		6
VI	CAD: different tools used in CAD		3
VII	Weaving: Graphical representation of straight draft plan, lift plan and tie-up of plain weave and its variations		5
VIII	Design development: All over design, border design, spot design and pallav design and Design Arrangements		7
IX	Creating library for various designs i.e. Ethnic designs, historic designs, contemporary designs, abstract designs, abstract designs, stylized designs, geometric designs, naturalistic designs, realistic design		9
	Total		60
SuggestedReadings: ➤ S. Malhan & M. Sethi, 1989: Catering Management in Integrated approach. ➤ Sethi Mohini, 2008: Institutional Food Management, New Age Internaitonal (P) Limited, Published ➤ Rene Weiss Chase 1997. CAD for Fashion Design, Prentice Hall ➤ Yates MP, 1996. Textiles – A Handbook for Designers. W.W. Norton.			