

**S. M. PATEL COLLEGE OF HOME SCIENCE**  
(AN AUTONOMOUS INSTITUTE AFFILIATED WITH SARDAR PATEL UNIVERSITY)

Under Graduate Programme (Honors) Grant-in-Aid  
Course Structure with effect from: 2024-2025 (NEP-2020)

**B.Sc. (Home Science) Semester: IV**

Course Type	Course Code	Name of Course	T / P	Credit	Contact Hours Per Week	Exam Duration in hrs	Component of Marks		
							Internal	External	Total
Ability Enhancement Course									
	UHA4AECAH01	Theory – Approaches to Happiness	T	2	2	1 ½	25/9	25/9	50/18
Major Course (Any One Subject)									

<b>Foods, Nutrition and Dietetics</b>	UHA4MAFDN01	Theory-Institutional Food Service Management	T	2	2	1 ½	25/9	25/9	50/18
	UHA4MAFDN02	Practical-Institutional Food Service Management	P	2	4	2	25/9	25/9	50/18
	UHA4MAFDN03	Theory-Food Preservation	T	2	2	1 ½	25/9	25/9	50/18
	UHA4MAFDN04	Practical-Food Preservation	P	2	4	2	25/9	25/9	50/18
	UHA4MAFDN05	Theory-Biochemistry	T	4	4	2 ½	50/18	50/18	100/36
<b>Family Resource Management</b>	UHA4MAFRM01	Theory- Furniture Design and Arrangement	T	2	2	1 ½	25/9	25/9	50/18
	UHA4MAFRM02	Practical - Furniture Design and Arrangement	P	2	4	2	25/9	25/9	50/18

	UHA4MAFRM03	Theory-Creative and Applied Art	T	2	2	1 ½	25/9	25/9	50/18
	UHA4MAFRM04	Practical- Creative and Applied Art	P	2	4	2	25/9	25/9	50/18
	UHA4MAFRM05	Basics of Ergonomics	T	4	4	2 ½	50/18	50/18	100/36
<b>Human Development and Family Studies</b>	UHA4MAHUD01	Theory-Adulthood and Aging	T	2	2	1 ½	25/9	25/9	50/18
	UHA4MAHUD02	Practical-Adulthood and Aging	P	2	4	2	25/9	25/9	50/18
	UHA4MAHUD03	Theory-Welfare Programme and Community Involvement	T	2	2	1 ½	25/9	25/9	50/18
	UHA4MAHUD04	Practical-Welfare Programme and Community Involvement	P	2	4	2	25/9	25/9	50/18
	UHA4MAHUD05	Theory-Principles and Programme in ECCE	T	4	4	2 ½	50/18	50/18	100/36
<b>Textiles &amp; Clothing</b>	UHA4MATCL01	Theory- Textiles and Apparel Care	T	2	2	1 ½	25/9	25/9	50/18
	UHA4MATCL02	Practical- Textiles and Apparel Care	P	2	4	2	25/9	25/9	50/18
	UHA4MATCL03	Theory- Textile Science and Analysis	T	2	2	1 ½	25/9	25/9	50/18
	UHA4MATCL04	Practical- Textile Science and Analysis	P	2	4	2	25/9	25/9	50/18
	UHA4MATCL05	Theory- Clothes, Self and Family	T	4	4	2 ½	50/18	50/18	100/36

Course Type	Course Code	Name of Course	T / P	Credit	Contact Hours Per Week	Exam Duration in hrs	Component of Marks		
							Internal	External	Total
Minor Course (Any One Subject)									
Foods and Nutrition	UHA4MIFDN01	Theory-Family Meal Management	T	2	2	1 ½	25/9	25/9	50/18
	UHA4MIFDN02	Practical-Family Meal Management	P	2	4	2	25/9	25/9	50/18
Family Resource Management	UHA4MIFRM01	Theory- Fundamentals of Art and Design	T	2	2	1 ½	25/9	25/9	50/18
	UHA4MIFRM02	Practical- Fundamentals of Art and Design	P	2	4	2	25/9	25/9	50/18
Human Development and Family Studies	UHA4MIHUD01	Theory-Childhood Behaviour Problem and Parenting	T	2	2	1 ½	25/9	25/9	50/18
	UHA4MIHUD02	Theory-Childhood Behaviour Problem and Parenting	P	2	4	2	25/9	25/9	50/18
Textiles & Clothing	UHA4MITCL01	Theory-Furnishing Textiles	T	2	2	1 ½	25/9	25/9	50/18
	UHA4MITCL02	Practical-Furnishing Textiles	P	2	4	2	25/9	25/9	50/18

Course Type	Course Code	Name of Course	T / P	Credit	Contact Hours Per Week	Exam Duration in hrs	Component of Marks		
							Internal	External	Total
<b>Skill Enhancement Course (Any One Subject)</b>	UHA4SEFDN01	Practical-Practical Biochemistry	P	2	4	2	25/9	25/9	50/18
	UHA4SEFRM01	Practical: Ergonomics and Design	P	2	4	2	25/9	25/9	50/18
	UHA4SEHUD01	Practical-Montessori Materials and Teachers Training	P	2	4	2	25/9	25/9	50/18
	UHA4SETCL01	Practical-Flat Pattern Methods	P	2	4	2	25/9	25/9	50/18

<b>Value Added Course / <u>Indian Knowledge System</u> (Any One)</b>	UHA4VADMT01	Theory-Disaster Management	T	2	2	1 ½	25/9	25/9	50/18
	UHA4VAPDT02	Theory- Personality Development	T	2	2	1 ½	25/9	25/9	50/18



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**B.Sc. (Home Science) Semester: IV**



Course Code	UHA4AECAH01	Title of the Course	Approaches to Happiness
Total Credits of the Course	02	Hours per Week	02

Course Objectives	<ol style="list-style-type: none"><li>1. To enable learners to understand their expectations in relationships, develop empathy, and ensure healthy relationships with family, peers &amp; teachers</li><li>2. To enable learners to apply life skills to deal with stressful &amp; conflicting situations around them.</li><li>3. To develop social awareness &amp; human values in learners to engage in meaningful contribution in society.</li><li>4. To develop holistic approach to education in a universal context.</li></ol>
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Course Content		
Unit	Description	Weightage*(%)
1.	<p>(a) Happiness</p> <ol style="list-style-type: none"><li>i. Definition,</li><li>ii. Why does happiness matter?</li></ol> <p>(b) The role of positive emotions within happiness</p> <ol style="list-style-type: none"><li>i. So what does—and doesn't—make us happy?</li><li>ii. Understanding The Construct of Happiness :</li><li>iii. The key concepts to make up the science of happiness, and create the basic ground for the sessions to follow. It would also include pretests to assess current happiness and other related parameters.</li></ol>	25
2.	<p>(a) The Happiness Triad:</p> <ol style="list-style-type: none"><li>i. Learning &amp; Awareness , Harmony In Feelings, Through the Senses</li><li>ii. Factors Influencing Happiness : Biological, psychological &amp; socio-cultural factors Unanswered Questions: What Makes Us Happy? : Focus on the myths as well as the simple secrets of happiness and how to make the act successful through understanding and practice. (Case Study)</li></ol>	25

3.	(a) Scientific Approaches to Happiness & Education <ol style="list-style-type: none"> <li>Positive education</li> <li>Social and Emotional Learning</li> <li>Indian traditions of happiness</li> </ol> (b) Happiness in different situations : Getting rid of daily hassles, Happiness and efficiency, happiness and creativity and various other key components. Fine tuning work-life balance: Strategies to develop happiness	25
4.	The Power of Connection : <ol style="list-style-type: none"> <li>Social connections to foster happiness.</li> <li>Affiliation, affection, and attachment</li> <li>Happiness and romance, family, parenting, and friends</li> </ol>	25

Teaching-Learning Methodology	The course would be taught /learnt through ICT (e.g Power Point presentation, Audio-Visual Presentation), Lectures, Group Discussions, Role Playing, Practical's, Assignments and Case Studies.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	The learner becomes mindful and attentive.
2.	The learner develops critical thinking and reflection.
3.	The learner develops social-emotional skills.
4.	The learner develops a confident and pleasant personality.
5.	The learner will be able to develop healthy interpersonal relationships and wellbeing cherishing the values of Indian culture and philosophy.
6.	They will be able to apply the experience of Aananda at a personal level.

Sr. No.	References
1.	Das, A., & Ravindranath, S. (2022). <i>Happiness Curriculum: Theory, Practice and Way Forward</i> . Dream a Dream. <a href="https://dreamadream.org/financialstype/research-outputs/">https://dreamadream.org/ financialstype/research-outputs/</a>
2.	Lyubomirsky, S., King, L., & Diener, E. (2005). <i>The benefits of frequent positive affect: Does happiness lead to success?</i> Psychological Bulletin, 131(6), 803.
3.	Kahneman, D. (1999). <i>Objective happiness</i> . <i>Well-being: The foundations of hedonic psychology</i> , 3-25.
4.	Banavathy, V. K., & Choudry, A. (2014). <i>Understanding Happiness: A Vedantic Perspective</i> . Psychological Studies, 59(2), 141–152. <a href="https://doi.org/10.1007/s12646-013-0230-x">https://doi.org/10.1007/s12646-013-0230-x</a>
5.	Care, E., Talreja, V., Ravindranath, S., & Sahin, A. G. (2020). <i>Development of student and teacher measures of Happiness Curriculum factors</i> . Brookings and Dream a Dream.
6.	SCERT-Delhi, & DoE. (2019). <i>Happiness Curriculum</i> . State Council of Educational Research and Training and Directorate of Education. <a href="http://www.edudel.nic.in/welcome_folder/happiness/HappinessCurriculumFramework_2019.pdf">http://www.edudel.nic.in/welcome_folder/happiness/HappinessCurriculumFramework_2019.pdf</a>
7.	Banavathy, Vinayachandra & Choudry, Anuradha. (2013). <i>Understanding Happiness: A Vedantic Perspective</i> . Psychological Studies. 59. 141-152. 10.1007 /s12646-013-0230-x.

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**B.Sc. (Home Science) Semester: IV**  
**Food, Nutrition and Dietetics**



Course Code	UH04MAFDN01	Title of the Course	Theory-Institutional Food Service Management
Total Credits of the Course	02	Hours per Week	02

Course Objectives	<ol style="list-style-type: none"><li>1. To manage human resources within food service organization or department.</li><li>2. To develop key managerial skills ranging from leadership to the ability to take complex decision, team work and multicultural dimension.</li></ol>
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Course Content		
Unit	Description	Weightage (%)
1.	Food Service Management: (a) History and development. (b) Factors affecting development of Food service institutions. (c) Recent trends in food service system including In-flight catering, cloud kitchen, railway catering. (d) Principles of management. (e) Functions of management.	30
2.	Planning and setting a food service unit: (a) Prospectus/planning guide of food service unit. (b) Registration of the unit. (c) System approach in food service.	25
3.	Food Management- (a) Definitions and functions and types of menus. (b) Purchase and storage of food. (c) Records and controls.	25
4	Personnel management (a) Staff recruitment and selection (b) Induction and staff training	20



Teaching Learning Methodology	Lectures, PowerPoint Presentations, blackboard and chalk, Field Visits, ICT enabled Teaching, market surveys, discussions, assignments, Presentations, Individual / group project
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to:	
1	Open entrepreneurial venture in field of catering.
2	Apply strategic solutions to respond to the challenges of commercial and group catering.

Suggested References:	
Sr. No	References
1	Payne. J, Palacio. M, (2019) <i>Food Service Management, Principles and Practices</i> 13ed. Published by Pearson Education, ISBN-13-978-9353066987
2	Arora. R, (2007) <i>Food service and Catering Management</i> , APH publication.
3	Sethi. M. <i>Institutional Food Management</i> , 2ed New age publication
4	<i>Food and Beverage Approach</i> , Chadha. R, Orient Blackwell Publications
5	<i>Practical cookery for level 2 Commis chef Apprentices and nvqs</i> , 14 <sup>th</sup> ed, Foskett, Hodder education

On-line resources to be used if available as reference material
On-line Resources
<a href="https://books.google.com.vc/books">https://books.google.com.vc/books</a>
<a href="http://ecoursesonline.iasri.res.in/course">http://ecoursesonline.iasri.res.in/course</a>

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**Food, Nutrition and Dietetics**



Course Code	UHA4MAFDN02	Title of the Course	Practical- Institutional Food Service Management
Total Credits of the Course	02	Hours per Week	04

Course Objectives	<ol style="list-style-type: none"><li>1. To comprehend fundamentals of menu planning through management of resources in food service establishment.</li><li>2. To develop insight for recipe standardization and apply acquired skills in menu planning and quantity food production.</li><li>3. To use knowledge of preliminary steps for starting an entrepreneurial unit.</li></ol>
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Sr. No.	Description	Weightage *(%)
1.	Survey to find out the prevailing pricing of various food stuff.	10
2.	Analysis of relationship between the purchase amount, edible portion and cooked weight of foodstuff)	05
3.	Planning a layout -various phases for kitchen	05
4.	Prospectus /planning guide of a food service unit.	10
5.	Planning different types of menus.	10
6.	Planning and organizing a midday snack for preschool children.	10
7.	Planning and organizing meals for college canteen.	10
8.	Planning and organizing meals for college hostel mess	10
9.	Planning and organizing meals for working women hostel	05
10.	Planning and organizing meals for Industrial canteen	10
11.	Planning and organizing meals for different occasion (birthday, cocktail party, conferences etc.)	10
12.	Planning and organizing meal for Sports Academy	05

Teaching-Learning Methodology	The course will be delivered through a combination of active learning strategies. These will include: Lecture, Group Discussion, Quizzes, Expert talk, Audio video aids and active classroom-based discussion
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

**Course Outcomes:**

Having completed this course, the learner will be able to

Sr. No.	
1.	The students will be able to put into practice the knowledge gained in management of resources for planning quantity cookery.
2.	They will be able to standardize recipes for quantity food production.
3.	They will be able to use this knowledge for startups.

**References**

Sr. No	References
1.	Sethi M (2005) <i>Institutional Food Management</i> , New Age International Publisher

On-line resources to be used if available as reference material

On-line Resources

Relevant entries on Wikipedia and Encyclopaedia Britannica

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**B.Sc. (Home Science) Semester: IV**  
**Food, Nutrition and Dietetics**



Course Code	UHA4MAFDN03	Title of the Course	Theory-Food Preservation
Total Credits of the Course	02	Hours per Week	02

Course Objectives	<ol style="list-style-type: none"><li>1. To acquire knowledge regarding principles and methods of preserving foods.</li><li>2. To gain knowledge concerning nutritive value of preserved foods and packaging.</li><li>3. To develop ability in preparing and preserving various foods by household methods.</li></ol>
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Unit	Description	Weightage* (%)
1.	<ol style="list-style-type: none"><li>(a) Introduction to food preservation, Concept, importance of food preservation.</li><li>(b) Principles of preservation, Principles involved in preserving foods by different methods, preservation by salting, sugar, chemicals, fermentation antibiotics, Preservation techniques</li></ol>	25
2.	<p>Preparation of different products for preservation:</p> <ol style="list-style-type: none"><li>(a) Fruit juice, Squashes: Types of fruit beverages, Steps involved in preparation and preservation.</li><li>(b) Jams, Jellies and Marmalades: composition, Fruits rich in pectin and acid, Methods of determining pectin content in fruit extract, Extraction of pectin from fruit, Theory of jelly formation, Difficulties in jelly making.</li></ol>	25
3.	<p>Preparation of different products for preservation and Steps involved in preparation</p> <ol style="list-style-type: none"><li>(a) Tomato products: Different tomato products, Effect of heat on tomato pigments.</li><li>(b) Pickling: Principles involved, Types of Pickles, Spoilage of pickle.</li></ol>	25
4.	<ol style="list-style-type: none"><li>(a) Processing methods for food preservation: Canning &amp; bottling steps involved, Principle of processing acid &amp; non- acid foods (one each).</li><li>(b) Preservation by use of low temperature, Principles involved, Types of low temperature, Storage, Types of freezing changes during freezing &amp; thawing</li></ol>	25

Teaching-Learning Methodology	The course will be delivered through a combination of active learning strategies. These will include: Lecture, Group Discussion, Quizzes, Expert talk, Audio video aids and active classroom-based discussion
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes:	
Having completed this course, the learner will be able to	
Sr. No.	
1.	Develop skill of food preservation by different methods.
2.	Preserve food on small scale industry and household purpose and can learn about by products.

References	
Sr. No	References
1.	Kalia, M., Kalia, M., & Sood, S. (2004). <i>Food preservation and processing</i> . Kalyani Publishers.
2.	Srivastava, R. P., & Kumar, S. (2007). <i>Fruits and vegetables preservation-principles and practices</i> , (Edn 3), International Book Distribution Company.
3.	Lal, G., Siddappa, G. S., & Tandon, G. L. (2011). <i>Preservation of fruits and vegetables</i> . Publications and Information Division, Indian Council of Agricultural Research.

On-line resources to be used if available as reference material
On-line Resources
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**Food, Nutrition and Dietetics**



Course Code	UHA4MAFDN04	Title of the Course	Practical-Food Preservation
Total Credits of the Course	02	Hours per Week	04

Course Objectives	<ol style="list-style-type: none"><li>1. To acquire knowledge regarding principles of methods of preserving foods.</li><li>2. To acquire knowledge concerning nutritive value of preserved foods.</li><li>3. To develop ability in preparing &amp; preserving various foods by household and commercial methods.</li></ol>
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Sr. No.	Description	Weightage *(%)
1.	Sterilization of equipment.	05
2.	Labeling and costing of preserved products.	05
3.	Preparation of fruit products (any one): Fruit juice, squash and fruit juice cordial.	10
4.	Preparations of mix fruit jam, jelly or marmalade (any one).	10
5.	Blanching of vegetables by different methods.	10
6.	Preparation of pickle: mixed vegetables or lemon pickle	10
7.	Preparation of tomato product (any one): ketchup, sauce and chutney.	10
8.	Preparation of instant mix (any one): upma /dhokla /wadas	10
9.	Preparation of dehydrated products: Cereals, pulses (any one)	10
10.	Preparation of dehydrated products : Roots and tubers (any one)	10
11.	Dehydration of fruits and vegetables.	05
12.	Reconstitution of dried fruits and vegetables.	05

Teaching-Learning Methodology	The course will be delivered through a combination of active learning strategies. These will include: Demonstration Method, Questions-Answer method, Discussion method , Audio video aids
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
Sr. No.	
1.	Learn skills of food preservation by different methods on household and commercial basis.
2.	Acquainted with basic principles involved in food preservation.

References	
Sr. No	References
1.	Kalia, M., Kalia, M., & Sood, S. (2004). <i>Food preservation and processing</i> . Kalyani Publishers.
2.	Srivastava, R. P., & Kumar, S. (2007). <i>Fruits and vegetables preservation-principles and practices</i> , (Edn 3), International Book Distribution Company.
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Course Code	UHA4MAFDN05	Title of the Course	Theory-Biochemistry
Total Credits of the Course	04	Hours per Week	04

Course Objectives	<ol style="list-style-type: none"><li>1. To develop the principles of biochemistry as applicable to human nutrition.</li><li>2. To obtain an insight into chemistry of major nutrients and physiologically important compounds.</li><li>3. To comprehend the biological process and system as applicable to human nutrition.</li></ol>
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Unit	Description	Weightage *(%)
1.	Carbohydrates – (a) Classification, General structure, Properties. (b) Metabolism – Glycolysis, Citric acid cycle, Gluconeogenesis, glycogen synthesis and degradation, HMP shunt, Electron, Transport chain, Oxidative phosphorylation	25
2.	Proteins- (a) Classification, General structure, Properties (b) Biosynthesis of protein, degradation (transamination, deamination, urea cycle)	25
3.	Fat – (a) Classification, General structure, Properties (b) Oxidation of fatty acids ( $\alpha$ , $\beta$ ) biosynthesis of lipids (ketone bodies formation, Cholesterol, Synthesis, etc)	25
4.	Hormones Definition, classification and functions of Hormone	10
5.	Enzymes Introduction to Enzymes, Classification, nomenclature and properties of Enzymes, Co-enzymes, Enzyme Inhibition	15

Teaching-Learning Methodology	The course will be delivered through a combination of active learning strategies. These will include: Lecture, Group Discussion, Quizzes, Audio video aids and active classroom-based discussion
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

**Course Outcomes:**

Having completed this course, the learner will be able to

Sr. No.	
1.	Understand the importance of biological macromolecules and their functions.
2.	Acquire knowledge in the quantitative and qualitative estimation of biomolecules
3.	Study the influence and role of structure in reactivity of biomolecules

References	
Sr. No	References
1.	West, E. S., Todd, W. R., Mason, H. S., & Van Bruggen, J. T. (1974). <i>Textbook of Biochemistry</i> , New Delhi: Amerind Publ. Co. Pvt. Ltd.
2.	Vasudevan, D. M., Sreekumari, S., & Vaidyanathan, K. (2016). <i>Textbook of biochemistry for medical students</i> . New Delhi: Jaypee Medical Ltd.
3.	Nelson, D. L., Lehninger, A. L., & Cox, M. M. (2008). <i>Lehninger principles of biochemistry</i> . Ahmedabad: Macmillan India Ltd.

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**B.Sc. (Home Science) Semester: IV**  
**Family Resource Management**



Course Code	UHA4MAFRM01	Title of the Course	Theory: Furniture Design and Arrangement
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. To provide foundational knowledge of furniture design, its evolution, and the principles that guide its aesthetics and functionality.</li><li>2. To develop an understanding of various furniture materials, construction techniques, and sustainable design practices.</li><li>3. To enhance skills in furniture arrangement, considering ergonomic principles, space planning, and user needs.</li><li>4. To instill awareness about furniture care, maintenance, and the importance of eco-friendly practices in design.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Introduction to Furniture Design and Arrangement <ol style="list-style-type: none"><li>a) History and Evolution of Furniture Design<ol style="list-style-type: none"><li>i. Traditional vs. Contemporary Furniture.</li><li>ii. Global influences on furniture styles.</li></ol></li><li>b) Principles of Furniture Design<ol style="list-style-type: none"><li>i. Balance, proportion, harmony, and functionality.</li><li>ii. Ergonomics in furniture design</li></ol></li></ol>	25
2	Materials and Construction <ol style="list-style-type: none"><li>a) Furniture Materials<ol style="list-style-type: none"><li>i. Wood (types, properties, and uses).</li><li>ii. Metals, plastics, glass, and upholstered materials.</li><li>iii. Sustainable and eco-friendly materials.</li></ol></li><li>b) Construction Techniques<ol style="list-style-type: none"><li>i. Traditional joinery techniques.</li><li>ii. Modern manufacturing methods and modular designs</li></ol></li></ol>	25
3.	Planning and Layout <ol style="list-style-type: none"><li>a) Understanding Spaces</li></ol>	25

	<ul style="list-style-type: none"> <li>i. Types of spaces (living, dining, bedroom, study, and outdoor spaces).</li> <li>ii. Functional requirements and space utilization.</li> </ul> <p>c) Furniture Arrangement</p> <ul style="list-style-type: none"> <li>i. Guidelines for furniture placement.</li> <li>ii. Traffic flow, comfort, and accessibility</li> </ul>	
4.	<p>Furniture Aesthetics, Trends &amp; maintenance</p> <p>a) Furniture Styles and Themes</p> <ul style="list-style-type: none"> <li>i. Minimalist, vintage, industrial, and eclectic styles.</li> <li>ii. Impact of cultural and regional aesthetics.</li> </ul> <p>b) Modern Trends in Furniture Design</p> <ul style="list-style-type: none"> <li>i. Multi-functional and smart furniture.</li> <li>ii. Innovations in furniture materials and design</li> </ul> <p>c) Maintenance and Furniture Care and Maintenance</p> <ul style="list-style-type: none"> <li>i. Cleaning and preservation techniques for different materials.</li> </ul>	25

Teaching-Learning Methodology	Lectures, Power -point Presentations, blackboard and chalk, Field Visits, ICT enabled Teaching, market survey, discussions, assignments, Presentations, Individual / group project.
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Evaluation Pattern		
S.N.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Demonstrate knowledge of furniture design principles, styles, and trends, and apply them in real-life scenarios.
2.	Identify and evaluate materials used in furniture making, considering their properties, sustainability, and applications.
3.	Understand the maintenance of materials and finishes to create aesthetic and

	sustainable interiors.
4.	Gain knowledge of materials and construction techniques used in furniture and furnishings.

#### Suggested References:

Sr. No.	References
1.	Vyas, S. (2019). Fundamentals of interior design and furniture. [Available via NDLI].
2.	Rao, R., Singh, S., & Dinesh, S. (2024). Habitats: Holistic approaches to building, interiors, and technical systems. Noble Science Press. Delhi
3.	Gandotra, V., Shukul, M. and Jaiswal N. (2011). <i>Introduction to Interior Design and Decoration</i> . New Delhi: Dominant publishers, India.
4.	Bhatt, P. (2008). <i>Foundation of Art and Design</i> . Bombay: The Lakhani Book Depot.
5.	Ogle, N., Srinivasan, K. & Varghese, M. A. (1996). <i>Home Management</i> . New Delhi: New Age International Ltd.
6.	The Educational Planning Group Delhi. (1993). <i>Home management</i> . New Delhi: Arya Publishing House.
7.	Faulkner, R. and Faulkner, S. (1987). <i>Inside Today's Home</i> . New York: Rinehart Winston, India.
8.	Kasu, A. A. (2005). <i>Interior Design</i> . Delhi: Ashish Book Centre.
9.	Premavathy, S. (2005). <i>Interior Design and Decoration</i> . New Delhi: CBS Publishers and Distributors, India.
10.	Bhatt, P., Goenka, P., & Sharma, S. (2010). <i>Design of furniture and interior elements</i> . Tata McGraw Hill.

On-line resources to be used if available as reference material

On-line Resources

<http://ecoursesonline.iasri.res.in/mod/page/view.php?id=27384>

<https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=827>

P-02. Decorating the Interiors (Module16-27)

ePG Pathshala. (n.d.). Interior design and furniture design modules. Retrieved from

<https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=827>

SWAYAM. (n.d.). Interior design and resource management courses. Retrieved from

<https://swayam.gov.in/>

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**B.Sc. (Home Science) Semester: IV**  
**Family Resource Management**



Course Code	UHA4MAFRM02	Title of the Course	Practical: Furniture Designing and Arrangement
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To gain better understanding of interior enrichment.</li><li>2. To encourage creativity, innovation and exploratory thinking.</li><li>3. To impart knowledge on factors influencing planning of life space.</li></ol>
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Course Content		
Sr. No.	Description	Weightage * (%)
1.	Listing furniture requirements for various activities carried out in a household and categorized them according to various rooms	05
2.	Draw commonly used furniture with measurements for Living room and Dining room	05
3.	Draw commonly used furniture with measurements for Bed room and Kitchen	05
4.	Make templates of various furniture for Living room and make four arrangements.	10
5.	Make templates of various furniture for Dining Room and make four arrangements.	10
6.	Make templates of various furniture for Bed room and make four arrangements.	10
7.	Make templates of various furniture for Kitchen and make four arrangements.	10
8.	Write about types of various surface finishes on furniture with steps involved in the process	05
9.	Drawing various joints used in construction of furniture.	10

10.	Demonstration of upholstered furniture and flowchart of various steps involved in construction of upholstery.	10
11.	Creating a small furniture piece from scrap / waste material.	10
12.	Making 3D model for living room showing arrangement of furniture and furnishing.	10

Teaching-Learning Methodology	Practical Implementation, Scrapbook, Demonstration, Blended Learning, Workshops, DIY activities.
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Evaluation Pattern		
Sr.No	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understand the specific furniture needs for different rooms in a household, considering factors like functionality, aesthetics, and ergonomics.
2.	Gain insights into various furniture construction techniques, including jointing methods and upholstery processes
3.	Develop knowledge of standard furniture dimensions and proportions for common furniture pieces
4.	Learn techniques for removing stains from household linens

Suggested References:	
Sr.No.	References
1.	Bhatt, P., (2018). <i>Foundation of Art and Design</i> . Nasik: Mr. Sharad Dalal Square Arts.
2.	Varghese, M. A., Ogale. N. and Srinivasan K. (2020). <i>Home Management</i> . New Delhi: New Age International (P) Limited.

3.	Faulkner, R. and Faulkner, S. (1975). <i>Inside Today's Home</i> . New York: Rinehart
4.	Gandotra, V., Shukul, M., and Jaiswal, N. (2010-11). <i>Introduction to Interior Design and Decoration</i> . New Delhi: Dominant Publishers and Distributors.

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<a href="https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=827">https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=827</a> P-02. Decorating the Interiors (Module16-27)
ePG Pathshala. (n.d.). Interior design and furniture design modules. Retrieved from <a href="https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=827">https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=827</a>
SWAYAM. (n.d.). Interior design and resource management courses. Retrieved from <a href="https://swayam.gov.in/">https://swayam.gov.in/</a>

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**Family Resource Management**



Course Code	UHA4MAFRM03	Title of the Course	Theory: Creative and Applied Arts
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	1. To comprehend the significance of art concepts in day-to-day life spaces. 2. To identify and practice distinctions in creative arts.
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Course Content		
Unit	Description	Weightage* (%)
1.	Introduction to Visual Art a) Meaning and Philosophy of Art; Categories of Art Related to Interior Design and Architecture: Visual, Plastic, Decorative, Applied Arts b) Type of Arts and Designs: Visual Art and Graphic Art, Visual Design and Graphic Design	25
2.	Materials Used in Works of Art a) Materials and Their Use in Applied Arts: Wood, Earthenware, Ceramics, Glass, Plastics and Metals b) Availability, Processing and Use of Different Materials c) Ornamentation and Fine-Tuning Techniques	25
3.	Introduction to Art Forms a) Concept and ABC Of Design – Aesthetics, Basic Design and Creativity b) Significance of ABC In Design Development c) Varieties of Art: Art, Abstract and Surreal	25
4.	Applied Arts for Functional/ Aesthetic Use (a) Painting – Water, Oil, Madhubani, Worli, (b) Calligraphy (c) Pottery (d) Clay art (Mural, lippan)	25

	(e) Paper Mache (f) Floor and Wall Decorations – Kolam, Alpana, Mandala	
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Teaching-Learning Methodology	Lectures, Demonstrations, Workshops, Field Visits, ICT based exposures.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Appreciate aesthetics of arts and crafts
2.	Inculcate skills through hands – on experience in applied arts
3.	Apprehend learning as an enjoyable stress-free experience resulting in lifelong learning.

Suggested References:	
Sr. No.	References
1.	Kasu, A.A. (2005), “ <i>Interior Design</i> ”, Delhi: Ashish Book Centre
2.	Faulkner, R., and Faulkner, S. (1986), “ <i>Inside Today’s Home</i> ”, New York: Rinehart
3.	Shaw, R.B. (2003). “ <i>Interiors by Design</i> ”, London, New York: Ruland Peters and Small
4.	Seymour, P. (2003). “ <i>The Artist’s Hand Book – A Complete Professional Guide to Materials and Techniques</i> ”. London: Arctarus Publishing limited

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**Family Resource Management**



Course Code	UHA4MAFRM04	Title of the Course	Practical: Creative and Applied Arts
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To acquaint students with the techniques of 2D drawing.</li><li>2. To enlighten them with types of artwork and antiques</li><li>3. To familiarize the students with famous artists and their work.</li></ol>
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Course Content		
Sr. No.	Description	Weightage* (%)
1.	Draw 2D Design - Techniques of Drawing, Rendering and Painting (Water, Oil)	05
2.	Prepare 2 D Art Forms: Collage, Decoupage, Stencil	10
3.	Collection and display of antiques	05
4.	Collection and analysis of paintings/ work of art of famous artists	05
5.	Collection and display of artwork from different states (assignment)	05
6.	Creation of Accessories: Macramé, Paper Mache And Real Time (Working) Fountains, etc...	10
7.	Draw Madhubani paintings	10
8.	Draw Mandala paintings	10
9.	Draw Warali paintings	10
10.	Field visit at the workshops of local art work	10
11.	Field visits to Museums / Art Gallery to get an idea of art	10
12.	Prospects for self-employment by selling the art pieces in an exhibition	10

Teaching-Learning Methodology	Workshops, Portfolio Making, Hands on Experience, Demonstrations, Blended Learning, DIY activities, Field trips.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Experience hand-on experience of different types of art form.
2.	Appreciate and use art in day today life.
3.	Expand knowledge and equip skills and emerge as self-employed freelancers.

Suggested References:	
Sr. No.	References
1.	Kasu, A.A. (2005), “Interior Design”, Delhi: Ashish Book Centre
2.	Faulkner, R., and Faulkner, S. (1986), “Inside Today’s Home”, New York: Rinehart
3.	Shaw, R.B. (2003). “Interiors by Design”, London, New York: Ruland Peters and Small
4.	Seymour, P. (2003). “The Artist’s Hand Book – A Complete Professional Guide to Materials and Techniques”. London: Arctarus Publishing limited

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**Family Resource Management**



Course Code	UHA4MAFRM05	Title of the Course	Theory-Basics of Ergonomics
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To provide an in-depth understanding of ergonomics and its role in improving work efficiency and well-being.</li><li>2. To familiarize students with human work capabilities, types of work, and ergonomic evaluation techniques.</li><li>3. To create awareness of environmental and safety factors impacting human performance.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Introduction to Ergonomics <ol style="list-style-type: none"><li>a) Meaning, scope, and importance of ergonomics.</li><li>b) Historical development of ergonomics.</li><li>c) Interdisciplinary nature and applications of ergonomics.</li><li>d) Objectives: enhancing safety, comfort, and productivity</li></ol>	20
2.	Types of Work and Human Capabilities <ol style="list-style-type: none"><li>a) Types of work: physical, mental, and manual work.</li><li>b) Dynamic and static work: definitions, examples, and impacts.</li><li>c) Factors affecting work performance (e.g., age, gender, health).</li><li>d) Concept of fatigue and ways to manage it</li></ol>	20
3.	Postures <ol style="list-style-type: none"><li>a) Posture and its impact on health: neutral, awkward, and extreme postures.</li><li>b) Ergonomic risk factors in working with awkward postures</li></ol>	20
4.	Anthropometry and Workstation Design <ol style="list-style-type: none"><li>a) Definition and importance of anthropometry in ergonomics.</li></ol>	20

	b) Types of anthropometric data: <ul style="list-style-type: none"> <li>i. Static anthropometry (e.g., body height, arm length).</li> <li>ii. Dynamic anthropometry (e.g., reach, range of motion).</li> </ul> c) Elements of a well-designed workstation: <ul style="list-style-type: none"> <li>i. Proper seating: height, backrest, lumbar support.</li> <li>ii. Table dimensions: height, depth, and edge design.</li> <li>iii. Reach zones: primary, secondary, and tertiary.</li> <li>iv. Footrests and leg space</li> </ul>	
5.	Environmental Ergonomics and Safety <ul style="list-style-type: none"> <li>a) Effects of environmental factors: light, noise, temperature, and ventilation on work performance.</li> <li>b) Safety concerns in workspaces: common risks and solutions.</li> </ul>	20

Teaching-Learning Methodology	PowerPoint presentations, Lectures, Discussions, Project work/ assignments, Games
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Analyze and understand various types of work and associated ergonomic concerns.
2.	Apply ergonomic principles in assessing human posture and work efficiency.
3.	Use tools like REBA to evaluate and improve workplace ergonomics
4.	Comprehend interrelatedness of work, worker and work environment on productivity.
5.	Suggest ergonomic interventions to enhance safety and reduce fatigue in workspaces.

Suggested References:	
Sr. No.	References
1.	Grandjean (1973). <i>Ergonomics of the Home</i> . London: Taylor & Frances.
2.	Dubey, D.(2020). <i>Ergonomics</i> . New Delhi: Random publications
3.	Sanders, M. S., & McCormick, E. J. (1993). <i>Human Factors in Engineering and Design</i> . McGraw-Hill
4.	Chauhan, M.K. (2015). <i>Ergonomics: Practical Manual for Beginners</i> . New Delhi: Authorspress.
5.	Bridger R.S.(2011). <i>Introduction to Ergonomics</i> . New Delhi: Taylor & Frances.
6.	Grandjean, E., & Kroemer, K. H. E. (1997). <i>Fitting the Task to the Human</i> . Taylor & Francis
7.	Gandotra V., Oberoi, K.& Sharma, P.(2013). <i>Essentials of Ergonomics</i> . New Delhi:

On-line resources to be used if available as reference material
On-line Resources
<a href="https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/office-ergonomics/">https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/office-ergonomics/</a>
<a href="http://www.ilocis.org/documents/chpt29e.htm">http://www.ilocis.org/documents/chpt29e.htm</a>
<a href="https://www.danmacleod.com/ErgoForYou/10_principles_of_ergonomics.htm">https://www.danmacleod.com/ErgoForYou/10_principles_of_ergonomics.htm</a>
<a href="https://ehs.unc.edu/workplace-safety/ergonomics/">https://ehs.unc.edu/workplace-safety/ergonomics/</a>
<a href="https://www.osha.gov/ergonomics">https://www.osha.gov/ergonomics</a>

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**B.Sc. (Home Science) Semester: IV**  
**Human Development and Family Studies**



Course Code	UHA4MAHUD01	Title of the Course	Theory- Adulthood and Aging
Total Credits of the Course	02	Hours per Week	02

Course Objectives	<ol style="list-style-type: none"><li>1. To understand the theoretical significance of adulthood in life span development with special reference to aging</li><li>2. To develop a culturally relevant understanding of issues and concerns of adulthood and aging</li><li>3. To sensitize students to transitions in adult life and preparation for old age from a gender perspective</li><li>4. To create awareness about policy provisions for adults and elderly across various contexts.</li><li>5. Prepare students for outreach activities with varied groups of adults and elderly.</li></ol>
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Course Content		
Unit	Description	Weightage *(%)
1.	Stages of Adult Development and the Process of Aging: A Theoretical Overview <ol style="list-style-type: none"><li>(a) Historical perspectives on adulthood and aging</li><li>(b) Contemporary changes, increase in life expectancy and decrease in death rate</li><li>(c) Stages of Adulthood and Aging:<ol style="list-style-type: none"><li>i. Emerging adulthood (20-40),</li><li>ii. Middle adulthood (40-60),</li><li>iii. Late Adulthood/ Aging (60 and above)</li></ol></li><li>(d) Problems and needs in different stages of adulthood</li></ol>	25
2.	Development in Emerging or Early Adulthood <ol style="list-style-type: none"><li>(a) Definition, characteristics, developmental tasks</li><li>(b) Physical changes - Cardiovascular and Respiratory systems, Motor performance, Immune system</li><li>(c) Cognitive development - Changes in mental abilities - Crystallized and fluid intelligence, Attention, Memory, Problem solving</li></ol>	25



	(d) Life transitions and adjustments during early adulthood: Exploring sexual orientations, stable romantic relationships, marriage, parenting and caregiving, social mobility	
3.	Development in Middle Adulthood (a) Definition, characteristics, developmental tasks, (b) Physical and cognitive changes, Changes in interests, Social, emotional, vocational changes (c) Relationships at midlife - marriage and divorce, changing parent-child relationships, grandparenthood, siblings, friendships (d) Preparation for old age (From work to retirement, emotional, financial, social and familial transitions) (e) Social Responsibility and Leisure time activities	25
4.	Development in Late Adulthood/ Old Age (a) The phenomenon of aging- biological, psychological sociological, functional age, advanced old age (b) Gerontology- Definition, concept, importance, Types- Social gerontology, Bio gerontology, Medical gerontology (Geriatric) (c) Changing relationships in old age (d) Leisure time activities , Technology and aging (e) Vocational adjustments (f) Familial roles and relationships (g) Physical and mental changes (loneliness, depression, anxiety, dementia, other age related diseases etc.) (h) Dealing with stressful life events, divorce, illness, death and bereavement.	25

Teaching- Assignments, Learning	Lectures, PowerPoint Presentations, blackboard and chalk, field visits, ICT enabled teaching, market surveys, discussions, assignments, individual/ group project.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	The students will explain variations in the experiences of adulthood and old age across cultures and genders.
2.	The students will discuss factors that affect physical, cognitive and socio-emotional development during adulthood and old age.
3.	The students will identify developmental needs of varied groups of adults and elderly across contexts.
4.	The students will execute developmental programs of intervention for varied groups of adults and elderly.

Suggested References:	
Sr. No.	References
1.	Brubaker, T. H. (1987). <i>Aging, Health, and Family</i> . SAGE Publications.
2.	Dubey, J. P. & Sharma, A. (2014). <i>Care for the Ailing Senior Citizens</i> . Mittal Publications. New Delhi.
3.	Hurlock, B. E. (2016). <i>Child Development</i> (6 <sup>th</sup> ed.). Delhi: Tata McGraw-Hill.
4.	Hurlock, B. E. (2016). <i>Developmental psychology: A life-span approach</i> (5 <sup>th</sup> ed.). Delhi: Tata McGraw-Hill.
5.	Feldman, R. & Babu, N. (2009). <i>Discovering the life span</i> . New Delhi: Pearson.
6.	Feldman, R. S. & Babu, N. (2018). <i>Development Across the Life Span</i> . (8 <sup>th</sup> ed). Pearson India Education Services Pvt. Ltd.
7.	Bhatt, N. (2017). <i>Human Development</i> . Aavishkar Publishers, Distributors.
8.	Papalia, D. E. & Olds, S. W. (2003). <i>Human Development</i> . New York: McGraw Hill Higher Education.

On-line resources to be used if available as reference material
On-line Resources
<a href="https://bseh.org.in/uploads/files/5a59e8aa8fce02c51d1d1ca87adda3de.pdf">https://bseh.org.in/uploads/files/5a59e8aa8fce02c51d1d1ca87adda3de.pdf</a>
<a href="https://nios.ac.in/media/documents/376_ECCE_PDF/Practical_Manual/Practical_Manual.pdf">https://nios.ac.in/media/documents/376_ECCE_PDF/Practical_Manual/Practical_Manual.pdf</a>
<a href="https://www.ugc.gov.in/pdfnews/3880686_b.sc-home-science.pdf">https://www.ugc.gov.in/pdfnews/3880686_b.sc-home-science.pdf</a>
<a href="https://www.ugc.gov.in/pdfnews/0794736_LOCF-Home-Science-Final-Report.pdf">https://www.ugc.gov.in/pdfnews/0794736_LOCF-Home-Science-Final-Report.pdf</a>

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**B.Sc. (Home Science) Semester: IV**  
**Human Development and Family Studies**



Course Code	UHA3MAHUD02	Title of the Course	Practical – Adulthood and Aging
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To develop an understanding about the need and importance of studying adolescent development.</li><li>2. To learn about the characteristics, needs and developmental task of adolescence.</li><li>3. To identify the biological and environmental factors that affect development during adolescence.</li><li>4. To analyze key issues which influence adolescent development.</li></ol>
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Course Content		
Sr. No.	Description	Weightage (%)
1.	Prepare a questionnaire on adulthood challenges and problems.	10
2.	Prepare a checklist on elderly lifestyles.	10
3.	Case study on elderly people welfare institution.	10
4.	Visit to an old age home.	10
5.	Prepare a material to engage middle adulthood in leisure time activity.	05
6.	Planning different activities for retired people & elderly.	10
7.	Prepare a booklet on nutritious food from early adult to old age.	10
8.	Interviewing young adulthood about their marriage relationship, life challenges and job satisfactions.	10
9.	Preparing a list of specialized services for the elderly in the city and or preparing an elderly support kit.	05

10.	Design a photo-frame for newly married couple.	05
11.	Preparation of an album on family life transitions during adult life.	10
12.	List down problems of early adulthood on adjustments (financial, mental, social and marital).	05

Teaching-Learning Methodology	Practical, Field visits, Interview method, Observation, Survey, Questionnaire, Check list, DIY activities.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Students teach them culturally relevant understanding of issues and concerns of adulthood and aging.
2.	Students will acquire knowledge for outreach activities with varied groups of adults and elderly.
3.	The students will identify developmental needs of varied groups of adults and elderly across contexts.
4.	The students will execute developmental programs of intervention for varied groups of adults and elderly.

Suggested References:	
Sr. No.	References
1.	Brubaker, T. H. (1987). <i>Aging, Health, and Family</i> . SAGE Publications.
2.	Dubey, J. P. & Sharma, A. (2014). <i>Care for the Ailing Senior Citizens</i> . Mittal Publications. New Delhi.
3.	Hurlock, B. E. (2016). <i>Child Development</i> (6 <sup>th</sup> ed.). Delhi: Tata McGraw-Hill.
4.	Hurlock, B. E. (2016). <i>Developmental psychology: A life-span approach</i> (5 <sup>th</sup> ed.). Delhi: Tata McGraw-Hill.
5.	Feldman, R. & Babu, N. (2009). <i>Discovering the life span</i> . New Delhi: Pearson.

6.	Feldman, R. S. & Babu, N. (2018). <i>Development Across the Life Span</i> . (8 <sup>th</sup> ed). Pearson India Education Services Pvt. Ltd.
7.	Bhatt, N. (2017). <i>Human Development</i> . Aavishkar Publishers, Distributors.
8.	Papalia, D. E. & Olds, S. W. (2003). <i>Human Development</i> . New York: McGraw Hill Higher Education.

On-line resources to be used if available as reference material
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On-line Resources
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<a href="https://nios.ac.in/media/documents/376_ECCE_PDF/Practical_Manual/Practical_Manual.pdf">https://nios.ac.in/media/documents/376_ECCE_PDF/Practical_Manual/Practical_Manual.pdf</a>
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<a href="https://bseh.org.in/uploads/files/5a59e8aa8fce02c51d1d1ca87adda3de.pdf">https://bseh.org.in/uploads/files/5a59e8aa8fce02c51d1d1ca87adda3de.pdf</a>
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<a href="https://www.ugc.gov.in/pdfnews/3880686_b.sc-home-science.pdf">https://www.ugc.gov.in/pdfnews/3880686_b.sc-home-science.pdf</a>
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<a href="https://www.ugc.gov.in/pdfnews/0794736_LOCF-Home-Science-Final-Report.pdf">https://www.ugc.gov.in/pdfnews/0794736_LOCF-Home-Science-Final-Report.pdf</a>
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**B.Sc. (Home Science) Semester: IV**  
**Human Development and Family Studies**



Course Code	UHA4MAHUD03	Title of the Course	Theory – Welfare Programme and Community Involvement
Total Credits of the Course	02	Hours per Week	02

Course Objectives	<ol style="list-style-type: none"><li>1. To get acquainted with the child and family welfare services provided by Government and non Government organization at the state, national and international level</li><li>2. To provide the information about national, international, Government &amp; voluntary agencies working in the field.</li><li>3. To gain knowledge on various policies related to children, youth, women and the aged.</li><li>4. To enable students to become aware and sensitised to issues related to welfare of child, women &amp; elderly.</li><li>5. To give knowledge about parents &amp; community involvement in the overall development of young children.</li></ol>
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Course Content		
Unit	Description	Weightage*(%)
1.	Welfare Services to Community introduction (a) Concept of Welfare of Women, child & elderly. (b) History of Women & child welfare in India. (c) Agencies working for children <ol style="list-style-type: none"><li>i. Indian Council for child Welfare (ICCW)</li><li>ii. Indian Association for the pre school Education (IAPE)</li><li>iii. NCERT</li><li>iv. National Institute for Public Cooperation &amp; Child Development (NIPCCD)</li><li>v. UNICEF, UNESCO, WHO, CARE, CRY.</li><li>vi. Child Guidance clinics</li><li>vii. Central Social Welfare Board(CSWB)</li></ol>	25
2.	Agencies working for Youth, Women and Aged Welfare (a) Support services for youth development- Counseling, employment bureaus. (b) Agencies working for youth- Ministry of HRD, Development of Sports & youth affairs, Nehru Yuvak Kendra, Yuvak Mandal . (c) Services for women – RCH services, Family Planning services, short stay homes.	25

	(d) Women' study centre and Women's Universities. (e) The Women Helpline (WHL) Scheme (f) National Welfare Programmes for Women Indira Gandhi National Old Age Pension Scheme (IGNOAPS) (g) The National Programme for the Health Care for the Elderly (NPHCE)	
3.	Community welfare (a) Agencies working for the specific groups. i. Services for orphan, destitute, neglected, delinquent children, ii. Street children, working children, abused children, children for prostitutes. iii. Institutional services, SOS children's village, Orphanage, Foster care, Adoption, School social work. (b) Policies and Legislations i. National policy for children. ii. United National declaration of the Human Rights. iii. National policy for the Ageing. (c) Nutrition programmes in the Country	25
4.	Community Involvement and Communication with Parents (a) Understanding the concepts –parent involvement, community involvement and community mobilization. (b) Importance of community participation and empowerment (c) Constraints in parent involvement and factors influencing a successful parent involvement programme. (d) Guidelines for community involvement in health. (e) Individual contact, group contact, mass contact - newsletter, resource centre for parents. (f) Parents meeting – Planning, Organizing, Execution, Evaluation.	25

Teaching-Assignments, Learning	Lecture method ,Active learning methodology , Group discussions Method, Power Point Presentation, Audio Visual methods, Games, Seminar, Assignment, Quiz
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Students will gain knowledge of child and family related policies.
2.	Student will become aware about national international, Government and Voluntary agencies.
3.	It will prepare students to take join in welfare centres.
4.	Students will appreciate the importance of Parent and community involvement for overall development of young children.
5.	Students will be enabled to develop appropriate skills to work with and the community.

Suggested References:	
Sr.No.	References
1	Ajpai Pramod Kumar(1992): <i>Youth Education and Employment</i> , New Delhi: Ashish Publishing House, Unit VIII, Chapter II (pp.15-94)
2	Kavita Koradia et al(2010) <i>Status of Child and Welfare Originations</i> , Aaviskar Publishers, Distributors 807, Vyaa Building, Chaura Rasta Jaipur 302 003 (Raj.) India .
3	Menon R <i>The Teacher &amp; the parent</i> , Ministry of education. Govt. of India, New Delhi.
4	NIPCCD(1994): <i>Child in India: A Statistical Profile</i> , New Delhi: NIPCCD.
5	Sharma, V.P (1981) <i>Indian Urban Families: Child rearing &amp; child Growth</i> . New Delhi. NCERT
6	TISS(1994): <i>Enhancing the Role of Family as Agency for Social and Economic Development</i> , Bombay: TISS, Vol.II. Part II, pp.337-373, Units I, II, V, pp.16-60, 128-140.
7	UNICEF(1990): <i>Children and Women in India: A Situation Analysis</i> , Unit VI, VII.

On-line resources to be used if available as reference material
On-line Resources
Relevant entries on Wikipedia and Encyclopaedia Britannica
<a href="https://uni-mysore.ac.in/english-version/sites/default/files/content/human_development_nomenclature_nep_syllabus.pdf">https://uni-mysore.ac.in/english-version/sites/default/files/content/human_development_nomenclature_nep_syllabus.pdf</a>
<a href="https://sndt.ac.in/pdf/academics/syllabus-as-per-nep/faculty-of-science-and-technology/bsc-in-human-development.pdf">https://sndt.ac.in/pdf/academics/syllabus-as-per-nep/faculty-of-science-and-technology/bsc-in-human-development.pdf</a>
<a href="https://caluniv.ac.in/syllabus/Human_Development.pdf">https://caluniv.ac.in/syllabus/Human_Development.pdf</a>

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**B.Sc. (Home Science) Semester: IV**  
**Human Development and Family Studies**



Course Code	UHA4MAHUD04	Title of the Course	Practical – Welfare Programme and Community Involvement
Total Credits of the Course	02	Hours per Week	04

Course Objectives	<ol style="list-style-type: none"><li>5. To gain knowledge on various policies related to children, youth, women and the aged.</li><li>6. To enable students to become aware and sensitised to issues related to welfare of child, women &amp; elderly.</li><li>7. To give knowledge about parents &amp; community involvement in the overall development of young children.</li></ol>
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Course Content		
Sr. No.	Description	Weightage *(%)
1.	Collection of paper cutting / pamphlets related to any specific topic. Panchayatraj, household industry, family court / Legal aid centres. Social Welfare Department..	5
2.	Developing clip audio programmes for parents / community.	10
3.	Survey of child labour (minimum Ten) and report writing. / Visit to NGOs working for women./ Visit to Remand home/ Orphanage.	10
4.	Prepare display material/ slide on any concerned topic.	5
5.	Plan a parent education programme.	10
6.	Go for visit any government department.eg. Women Welfare Department ,Child Welfare Department	10
7.	Organize exhibition of the prepared materials.	10
8.	Collect useful material and distribute in the community	10
9.	Prepare Poster/ Slogan making & writing for community.	10
10.	Product development from Best out of Waste.	5
11.	Practical life activities for families for a cohesive family environment at home.	5
12.	Prepare a module on cross cutting issues related to community	10

Teaching-Assignments, Learning	Practical, Field visits, Interview method, Observation method.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Student will become aware about national international, Government and Voluntary agencies.
2.	Students will prepare students to take join in welfare centers.
3.	Students will appreciate the importance of Parent and community involvement for overall development of young children
4.	Students will be enabled to develop appropriate skills to work with and the community

Suggested References:	
Sr.No.	References
1.	Ajpai Pramod Kumar(1992): <i>Youth Education and Employment</i> , NewDelhi: Ashish Publishing House, Unit VIII, Chapter Ii(pp.15-94)
2.	Kavita Koradia et all(2010) <i>Status of Child and Welfare Originations</i> , Aaviskar Publishers, Distributors 807,Vyaa Building, Chaura Rasta Jaipur 302 003 (Raj.) India .
3.	Geetha C Anitha B(2015) <i>Welfare Programmes and Schemes in India</i> . Selfpage Developers. PVT. Ltd. ISBN978-6252-802-5
4.	NIPCCD(1994): <i>Child in India:A Statistical Profile</i> , NewDelhi: NIPCCD.
5.	Sharma, V.P (1981) <i>Indian Urban Families: Child rearing &amp; child Growth</i> . New Delhi. NCERT

6.	TISS(1994): <i>Enhancing the Role of Family as Agency for Social and Economic Development</i> , Bombay: TIIS, Vol.II. Part II,pp.337-373,Units I,II,V,pp.16-60,128-140.
7.	UNICEF(1990): <i>Children and Women in India:A Situation Analysis</i> ,UnitVI,VII.

On-line resources to be used if available as reference material
On-line Resources
<a href="https://www.sulross.edu/sites/default/files/sites/default/files/users/docs/education/counseling-hgd_7.pdf">https://www.sulross.edu/sites/default/files/sites/default/files/users/docs/education/counseling-hgd_7.pdf</a>
<a href="https://www.who.int/childgrowth/publications/monitoring/en/">https://www.who.int/childgrowth/publications/monitoring/en/</a>

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**Human Development and Family Studies**



Course Code	UHA4MAHUD05	Title of the Course	Theory- Principles and Programme in ECCE
Total Credits of the Course	04	Hours per Week	04

Course Objectives	<ol style="list-style-type: none"><li>1. To help the students understand various approaches to child education their understanding principles and applicability to the Indian Education system.</li><li>2. To acquaint the students with the contemporary programmes of child education evolved in India and abroad.</li><li>3. To help the students to integrate knowledge of child education by a study of various approaches</li></ol>
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Course Content		
Unit	Description	Weightage*(%)
1.	<p>Eminent Indian and Western educators in ECCE</p> <ol style="list-style-type: none"><li>(a) Meaning of education</li><li>(b) Pioneers of ECCE in India</li><li>(c) Contribution of Indian philosophers in early childhood care</li><li>(d) Early Childhood Education History: Theorists &amp; Theories</li><li>(e) Global situation for ECCE</li><li>(f) ECE changed over the years</li><li>(g) Recommendations highlighted in the global report on ECCE</li><li>(h) UNESCO's approach: UNESCO work to promote ECCE</li></ol>	20
2.	<p>Eminent Indian educators in ECCE</p> <ol style="list-style-type: none"><li>(a) Mahatma Gandhi's Basic Education<ol style="list-style-type: none"><li>i. Aims</li><li>ii. Principles</li><li>iii. Method of teaching</li><li>iv. Curriculum</li></ol></li><li>(b) Gijubhai Badheka (1885-1939)<ol style="list-style-type: none"><li>i. Gijubhai Badheka philosophy for education</li><li>ii. Gijubhai Badheka's Child-Centered Education: Learning through Freedom and Play</li><li>iii. Nutan Bal Shikshan Sangh</li><li>iv. Relevance of Gijubhai Badheka's Philosophy in Context to Nep-2020</li></ol></li><li>(c) Padma Bhushan Tarabai Modak (1892-1973)</li></ol>	20

	<ul style="list-style-type: none"> <li>i. Life Sketch of Tarabai Modak</li> <li>ii. Tarabai's Contribution to Pre School Education in India.</li> <li>iii. Types of Balwadi</li> </ul>	
3.	<p>Contributions of Indian philosophers to early childhood education</p> <ul style="list-style-type: none"> <li>(a) Rabindranath Tagore <ul style="list-style-type: none"> <li>i. Philosophy of life of Rabindranath Tagore</li> <li>ii. Educational Philosophy of Rabindranath Tagore</li> <li>iii. Method of Teaching and Rabindranath Tagore</li> <li>iv. Aims and method</li> <li>v. Curriculum</li> </ul> </li> <li>(b) J. Krishnamurthy's views of education <ul style="list-style-type: none"> <li>i. Krishnamurthy's philosophy of education</li> <li>ii. Aims of Education, Curriculum</li> <li>iii. Methods of Teaching</li> <li>iv. Reflections of Krishnamurti's philosophy of education in National Education Policy 2020</li> </ul> </li> <li>(c) Shri Aurobindo Ghosh (1872-1950) <ul style="list-style-type: none"> <li>i. Sketch of Sri Aurobindo's Life</li> <li>ii. Principles</li> <li>iii. Sri Aurobindo's thoughts on education</li> <li>iv. Relevance of Aurobindo's educational philosophy for holistic learning</li> <li>v. Implication of Aurobindo's philosophy in the modern and global era</li> </ul> </li> </ul>	20
4.	<p>Western Philosophers and their contributions for ECCE</p> <ul style="list-style-type: none"> <li>(a) Froebel's Kindergarten method <ul style="list-style-type: none"> <li>i. Aims and principles</li> <li>ii. Methods of teaching:, Merits and demerits</li> <li>iii. Methods used in kindergarten school</li> <li>iv. Philosophical thought of Froebel</li> </ul> </li> <li>(b) Maria Montessori's house of children <ul style="list-style-type: none"> <li>i. Principles</li> <li>ii. Equipment and their use</li> <li>iii. Montessori Education: The Philosophy and How it Works</li> </ul> </li> </ul>	20
5.	<p>Western philosophers and their contributions for ECCE</p> <ul style="list-style-type: none"> <li>(a) John Dewey's concept of Education <ul style="list-style-type: none"> <li>i. Dewey's educational philosophy</li> <li>ii. Method</li> <li>iii. Curriculum</li> </ul> </li> <li>(b) Mac Millan Sister's Nursery School <ul style="list-style-type: none"> <li>i. Aims</li> <li>ii. Principles</li> <li>iii. Method</li> <li>iv. Rachel and Margaret McMillan work</li> <li>v. Contribution to Early Years Education</li> </ul> </li> </ul>	20

Teaching-Assignments, Learning	Lecture method ,Active learning methodology , Group discussions Method, Power Point Presentation, Audio Visual methods, Games, Seminar, Assignment, Quiz
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

**Course Outcomes:**

Having completed this course, the learner will be able to

1.	Student will learn about the Indian and western educators involved in ECCE.
2.	They will learn about the educators views, approaches & philosophy toward ECCE.
3.	The aforesaid knowledge will help them in preparing ECCE curriculum

**Suggested References:**

Sr.No.	References
1.	Gill, S. (1993). <i>Child Care Programmes in India: Changing Trends In</i> Saraewati, S.S and Kaur, B New Delhi: Sage Publications, Unit II.
2.	Indian Association for Preschool Education (1976): <i>New approaches to child education: Children in rural and tribal settings</i> ,12 <sup>th</sup> annual conferences of IAPE, Unit I.
3.	Khalakdina. M. (1995). <i>Insight-Onsight Madras: M. S. Swaminathan Research Foundation</i> , Unit I
4.	Saxena, S. (2003). " <i>Principles of Education</i> ", Meerat, Surya Publication.
5.	Tandan, S. (2016). " <i>Teachers in the Making</i> ", New Delhi, Classical Publishing Company.

On-line resources to be used if available as reference material

On-line Resources

Relevant entries on Wikipedia and Encyclopaedia Britannica

[https://uni-mysore.ac.in/english-version/sites/default/files/content/human\\_development\\_nomenclature\\_nep\\_syllabus.pdf](https://uni-mysore.ac.in/english-version/sites/default/files/content/human_development_nomenclature_nep_syllabus.pdf)

<a href="https://sndt.ac.in/pdf/academics/syllabus-as-per-nep/faculty-of-science-and-technology/bsc-in-human-development.pdf">https://sndt.ac.in/pdf/academics/syllabus-as-per-nep/faculty-of-science-and-technology/bsc-in-human-development.pdf</a>
<a href="https://caluniv.ac.in/syllabus/Human_Development.pdf">https://caluniv.ac.in/syllabus/Human_Development.pdf</a>
<a href="https://rms.wa.edu.au/montessori-education-the-philosophy-and-how-it-works/#:~:text=Montessori%20developed%20her%20educational%20philosophy,things%20at%20their%20own%20pace.">https://rms.wa.edu.au/montessori-education-the-philosophy-and-how-it-works/#:~:text=Montessori%20developed%20her%20educational%20philosophy,things%20at%20their%20own%20pace.</a>
<a href="https://childcarestudies.co.uk/blog/margaret-mcmillan/">https://childcarestudies.co.uk/blog/margaret-mcmillan/</a>
<a href="https://theeducationhub.org.nz/deweys-educational-philosophy/">https://theeducationhub.org.nz/deweys-educational-philosophy/</a>
<a href="https://dspmuranchi.ac.in/pdf/Blog/111.pdf">https://dspmuranchi.ac.in/pdf/Blog/111.pdf</a>
<a href="https://teachers.institute/education-nature-purposes/gijubhai-badheka-child-centered-education/">https://teachers.institute/education-nature-purposes/gijubhai-badheka-child-centered-education/</a>
<a href="https://www.slideshare.net/jasvinderkaur46/gijubhai-badheka-philosophy-for-education">https://www.slideshare.net/jasvinderkaur46/gijubhai-badheka-philosophy-for-education</a>
<a href="https://epgp.inflibnet.ac.in/epgpdata/uploads/epgp_content/home_science/10._early_childhood_care,_education_and_development/14._aurobindo,_gijubhai_badheka,_tarabai_modak_et/6716_et_et.pdf">https://epgp.inflibnet.ac.in/epgpdata/uploads/epgp_content/home_science/10._early_childhood_care,_education_and_development/14._aurobindo,_gijubhai_badheka,_tarabai_modak_et/6716_et_et.pdf</a>
<a href="https://www.neuroquantology.com/open-access/RELEVANCE+OF+GIJUBHAI+BADHEKA%25E2%2580%2599S+PHILOSOPHY+IN+CONTEXT+TO+NEP-2020_12379/?download=true">https://www.neuroquantology.com/open-access/RELEVANCE+OF+GIJUBHAI+BADHEKA%25E2%2580%2599S+PHILOSOPHY+IN+CONTEXT+TO+NEP-2020_12379/?download=true</a>
<a href="http://ecoursesonline.iasri.res.in/mod/page/view.php?id=105060">http://ecoursesonline.iasri.res.in/mod/page/view.php?id=105060</a>
<a href="https://earlychildcareeducation.wordpress.com/about/philosophers/tarabai-modak/">https://earlychildcareeducation.wordpress.com/about/philosophers/tarabai-modak/</a>
<a href="https://ijfans.org/uploads/paper/bff483c86fd641862d86dffa280b39ae.pdf">https://ijfans.org/uploads/paper/bff483c86fd641862d86dffa280b39ae.pdf</a>
<a href="https://www.raijmr.com/ijrsml/wp-content/uploads/2020/12/IJRSML_2020_vol08_issue_8_Eng_01.pdf">https://www.raijmr.com/ijrsml/wp-content/uploads/2020/12/IJRSML_2020_vol08_issue_8_Eng_01.pdf</a>

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**B.Sc. (Home Science) Semester: IV**  
**Textiles and Clothing**



Course Code	UHA4MATCL01	Title of the Course	Theory-Textiles and Apparel Care
Total Credits of the Course	2	Hours per Week	2

Course Objectives:	<ol style="list-style-type: none"><li>1. To impart knowledge of the laundry reagents.</li><li>2. To gain knowledge on the additives used in laundry on various fibres &amp; fabrics.</li><li>3. To acquaint knowledge about clothing care</li><li>4. To know about various process in maintenance of clothing.</li><li>5. To create sustainable method for caring the wardrobe.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Water and its treatment (a) Water hardness- temporary and permanent (b) Problems caused by hard water (c) Chelating and sequestering agents (d) Methods of softening water	25
2.	Stain removal and care of textile (a) Ways of Stain Removal: Classification, types, principles and techniques of stain removal. (b) Alkaline and Acidic agents of stain removal (c) Care of Apparels: Dry cleaning, starches, stiffeners and softeners, polishing (d) Care labels: Importance, symbols, uses Indian care Labelling System, International Care Labelling System(GINETEX), The Japanese Care Labelling System, The Canadian Care Labelling System, The European Care Labelling System, The American Care Labelling System, ASTM care Labelling System.	25
3.	Soaps & Detergents: (a) Definition and types (b) Composition and cleansing action (c) Builders and their function (d) Ingredients of laundry soaps and detergents	25



4.	Whiteners, Stiffeners and Softeners (a) Bleaches-Classification, commercial products, application of Bleaches to various fibers and fabrics. (b) Bluening agents- various types & characteristics, application to various fabrics. (c) Optical brighteners and fluorescent whiteners (d) Stiffeners and Softeners	25
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Teaching-Learning Methodology	Blackboard and smart boards, power point presentation, through teaching aids as charts, figure, discussion and analysis of actual garments.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Gain insight on the concepts of textile cleaning and laundering.
2.	Acquire knowledge of laundry agents, role of additives used in them and its application on textile materials.

Suggested References:	
Sr. No.	References
1.	Deulkar, D. (1980). <i>A guide to Household Textiles and Laundry Work</i> . Delhi: Atma Ram & sons.
2.	Dantiyagi, S. (1996). <i>Fundamentals of Textiles and Their Care</i> . Bombay: Orient Longmans.
3	Brown, D. (1955). <i>The Principles of Laundering</i> . London: Heywood and Company LTD
4.	Shenai, V.A. (2000). <i>Technology of Textile Processing</i> . A Sevak Publication
5.	Trotmen,E.R. (1968). <i>Textile scouring &amp; bleaching</i> . London: Griffin Press.

6.	Marsh, J.T. (1979). <i>An Introduction of Textile Finishing</i> . Bombay: B.I. Publications
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On-line resources to be used if available as reference material
On-line Resources
Relevant entries on Wikipedia and Encyclopaedia Britannica

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**Textiles and Clothing**



Course Code	UHA4MATCL02	Title of the Course	Practical –Textiles and Apparel Care
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To impart knowledge of washing methods.</li><li>2. To identify the type of stain and its removal process.</li><li>3. To prepare soap and detergent for washing.</li><li>4. To select starches, blues for different fabric.</li></ol>
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Course Content		
Sr. No	Description	Weightage* (%)
1.	Study of laundry equipment- laundrettes, washing machines and Dryers, irons and form finishers.	10
2	Stain removal techniques for protein-based stains. (Baby food, Milk, Blood, Cream, Cheese sauce, Pudding, Egg, Gelatin, White glue, Ice cream)	10
3	Stain removal techniques for tannin-based stains. (Alcoholic beverages, Beer, Berries, Coffee, Tea, Juice, Cologne, Washable ink, Soft drinks.)	10
4	Stain removal techniques for oil-based stains. (Automobile oil, Hair oil, Lotion, Butter, Grease, Cooking oil, Creams Collar, Cuff greasing rings.)	10
5	Stain removal techniques for dye-based stains. (Cherry, blue berry, colour bleeding in wash (dye transfer) Grass, Indian IWL, Paint, Felt tip pen ink and mustard.)	10
6	Stain removal techniques for combination stains Group A Ball point link, Candle wax, Carbon paper, Crayon, Eye make-up pencils, Floor wax, resin, shoe polish, Tar. Group B Calamine lotion ketchup / tomato sauce, Cocoa or Chocolate, Face make up (power, rouge, foundation) Gravy or Hair spray	10
7.	Removal of Stains that require special treatment methods	10

8.	Analyzing color fastness properties of fabrics using natural and synthetic soaps and detergents	10
9.	Uses of starch and blues on fabrics.	05
10.	Uses of optical brighteners and fluorescent Whiteners on fabrics.	05
11	Use and Comparison of stiffeners and softeners on various fabrics.	05
12	Collection of textiles and apparels care labels	05

Teaching-Learning Methodology	Demonstration, Laboratory experiments, actual sample collection and discussion, Survey, Assignment
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Practical Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Gain insight on the concepts of laundry reagents.
2.	Acquire knowledge of auxiliaries used for washing and stain removal.
3.	Disinfect clothes for better hygiene.

Suggested References:	
Sr. No.	References
1.	Deulkar, D. (1980). <i>A guide to Household Textiles and Laundry Work</i> . Delhi: Atma Ram & sons.
2.	Dantyagi, S. (1996). <i>Fundamentals of Textiles and Their Care</i> . Bombay: Orient Longmans.

3.	Brown, D. (1955). <i>The Principles of Laundering</i> . London: Heywood and Company LTD
4.	Shenai, V.A. (2000). <i>Technology of Textile Processing</i> . A Sevak Publication
5.	Trotmen,E.R. (1968). <i>Textile scouring &amp; bleaching</i> . London: Griffin Press.
6.	Marsh, J.T. (1979). <i>An Introduction of Textile Finishing</i> . Bombay: B.I. Publications

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**Textiles and Clothing**



Course Code	UHA4MATCL03	Title of the Course	Theory-Textile Science and Analysis
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. To understand the desirable properties of textile fibres.</li><li>2. To acquire knowledge about various natural, synthetic, regenerated and major fibers.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	<b>Introduction to Textile Fibres</b> (a) Classification of textile fibres based on sources, polymer, thermos plasticity. (b) Polymers and polymerization, Degree of polymerization (c) Crystalline and Amorphous structure of fibres and its influence on fibre properties. (d) General properties of fibres: essential and desirable properties (e) Introduction & importance of textile testing, Standard atmospheric condition for testing, Sampling & its importance.	25
2.	<b>Natural cellulosic fibres: Impact of chemical composition, structure, microscopic appearance on physical, chemical and biological properties of fibre:</b> (a) Cotton (b) Jute (c) Linen (d) Minor fibres: Bamboo, Pineapple, Banana, Sisal, Hemp, Ramie, Coir, Abaca	25
3.	<b>Natural protein fibres: Chemical composition, microscopic appearance, physical &amp; chemical properties and its application:</b> (a) Wool (b) Silk	25

4.	Regenerated and synthetic fibres: Chemical composition, microscopic appearance, physical and chemical properties: (a) Rayon- viscose and cuprammonium (b) Acetate (c) Polyester (d) Nylon (e) Acrylic	25
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Teaching-Learning Methodology	Blackboard and smart boards, power point presentation, through teaching aids as charts, figure, discussion and analysis of actual fabrics.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Identify the natural, regenerated and synthetic fibers and fabrics through appearance and properties.
2.	Selection of appropriate fiber for its usage

Suggested References:	
Sr. No.	References
1.	Corbman, B.P.(1985). <i>Textile fibers to fabric</i> . MacGraw- Hill Book Co.
2.	Gohl, E.P.G., & Vilensky, L.D. (1983). <i>Textile Science, An Explanation of Fiber Properties</i> . Melbourne, 48: Longman Chesire.
3.	Newness B. W. <i>Manmade Fibers</i> , Moncrieff
4.	Braddock, S.& Mahony, M.O.(1997). <i>Techno Textiles</i> . London: Thames& Hudson Ltd.

5.	Namkar, A.(1996). <i>Fiber Science and Technology</i> . Bombay: Oxford & IBH Publication
6.	Murphy, W.S. (2002). <i>Elements of fiber science</i> . Abhishek Publication, Chandigarh
7.	Cowan, Jungerman. (1980). <i>Introduction to Textiles</i> . New York. :Appleton Century Crafts, Meredith Corporation

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**Textiles and Clothing**



Course Code	UHA4MATCL04	Title of the Course	Practical- Textile Science and Analysis
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To gain knowledge of physical properties of different textile fibres, yarns and fabrics.</li><li>2. To ensure the quality and durability of products.</li></ol>
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Course Content		
Sr. No	Description	Weightage* (%)
1.	Introduction & importance of textile testing. Standard atmospheric condition for testing, Sampling & its importance	05
2.	Identification of textile fibres using microscopic test method.	10
3.	Identification of textile fibres using burning test method.	10
4.	Identification of textile fibres using solubility test method.	10
Yarn testing:		
5.	Determine the yarn twist using yarn twist tester.	05
6.	Determine the yarn count by using yarn count balance.	10
7.	Determine the linear density of yarn in the terms of denier and tex.	10
Fabric testing:		
8.	Determine the crease recovery of fabric and observe the effect of loading time and recovery time on crease recovery.	10
9.	Determine the thickness of a fabric using compressible thickness tester.	10
10.	Determine the stiffness of given fabrics using stiffness tester.	10
11.	Determine weight per unit area of the different fabrics using GSM cutter.	05
12.	Determine the thread count by using counting glass.	05

Teaching-Learning Methodology	Laboratory experiments, assignments, analysis, etc.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Practical Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Measure property of textile material and determine the result for specific end use or next process.
2.	Analyze any deficit in the process using the result of testing and take remedial measures to ensure the quality.

Suggested References:	
Sr. No.	References
1.	Basu, A. (2001). <i>Textile Testing Fibre, Yarn &amp; Fabric</i> . Coimbatore: The South India.
2.	Kothary, V.K. (1999). <i>Progress in Textiles &amp; Quality Management</i> . New Delhi: Lafi Publication.
3.	Skinle, J. (1972). <i>Textiles Testing</i> . Bombay: Taraporewala publications
4.	Angappan P. (2002). <i>Textiles Testing</i> . Tamilnadu: SSMIIT.
5.	Grover,E.B. & Hamby, D. S.(1988). <i>Handbook of textile testing and quality control</i> . New Delhi: 2nd Ed. Wiley Eastman Ltd.
6.	J.E. Booth (1996). <i>Principle of Textile Testing</i> . CBS Publisher.3 <sup>rd</sup> Ed.

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**Textiles and Clothing**



Course Code	UHA4MATCL05	Title of the Course	Theory-Clothes, Self and Family
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To impart knowledge for selection of family clothing with reference to age, occasion, figure type and special needs.</li><li>2. To develop consumer awareness in clothing.</li><li>3. To acquire knowledge of wardrobe, its storage and care</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	<b>Clothing:</b> (a) Clothing based on needs: Comfort, functionality, and fashion/trend-based clothing, reversible and convertible clothing (b) Clothing based on environmental context: Weather-appropriate, outdoor/adventure, and indoor clothing. (c) Clothing based on cultural and social context: Traditional clothing and occasion-based wear (office, casual, evening, etc.). (d) Clothing for pregnant and lactating mother	25
2.	<b>Clothing for people with physical disabilities:</b> (a) Classification of Disabilities: By birth, accidental, and due to disuse or illness. (b) Common Disabilities: Mobility disabilities, amputations, arthritis, paralysis, cerebral palsy, visual impairments. (c) Clothing Needs: Adaptive features for easy dressing, accommodating prosthetics, functional designs for wheelchair users, etc. (d) Design Features: Adjustable waistbands, velcro closures, tactile tags, cushioned fabrics. (e) Fabric Use: Hypoallergenic, moisture-wicking, stretchable, and durable fabrics.	25
3.	<b>Clothing culture:</b> (a) First Impression <ol style="list-style-type: none"><li>i. Self-Concept</li><li>ii. Clothes, Self and society</li></ol> (b) Clothing relationships	25

	i. Class consciousness ii. Class Distinction iii. Social mobility and dress (c) Attitudes and values (d) Their roles and status	
4.	Clothing Brands: (a) Introduction of clothing brands (b) Importance and need of clothing brands (c) National and International clothing brands	10
5.	Care and Maintenance of Fabric (a) Role of shaking, brushing, airing and laundering cloth. (b) Getting ready to launder clothes at home. (c) Check stains and remove them. (d) Laundering (soaking, ironing, rinsing, washing, drying, finishing and storing) (e) Laundering of specific fabric (f) Handy hints for ironing	15

Teaching-Learning Methodology	Blackboard and smart boards, power point presentation, through teaching aids as charts, figure, discussion and analysis of actual garments.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Select material, color and style suitable to the family member of various age groups and special needs.
2.	Build a positive personality selecting garments as per their figure.
3.	Store and take proper care of garments and enable them to develop self-sufficient wardrobe.

Suggested References:	
Sr. No.	References
1.	Tate, M. B. T., & Glisson, O. (1961). <i>Family clothing</i> . Wiley.
2.	Armstrong, H. <i>Patternmaking for Fashion Design</i> , 5 <sup>th</sup> Ed.
3.	Alexander. (1977). <i>Textile Products, Selection, Use &amp; Care</i> . Boston, R.R Houghton Mifflin Co.
4.	Pandit, S.& Elizabeth,T.(1972). <i>Grooming Selection &amp; Care</i> . Baroda , Unity Printers
5.	Wingate, I.B. (1988). <i>Dictionary of Textiles</i> . Bombay. Universal Pub. Corporation
6.	Wingate, I.B. (1976). <i>Textile Fabrics and Their Selection</i> . New Jersey, Prentice Hall Inc
7.	Doongaji & Deshpande.(1970). <i>Basic Processes and Clothing Construction</i> , Delhi, New Raj Book Depot.
8.	Jacob, A. (1998). <i>The Art of Sewing</i> . New Delhi, B.S. Publishers Ltd,
9.	Katharine, H. <i>Textiles Fibers And Their Use</i> . Bombay, Oxford of IBH
10.	Zarapkar, K.R. <i>Zarapkar-System Of Cutting</i> . Bombay.
11.	Aldrich, F. <i>Matric Pattern For Women's wear</i> .
12.	Magazines related to Textiles and Clothing – Apparel, Cloths line, Cloth Market, The Indian Textile Journal

On-line resources to be used if available as reference material
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**B.Sc. (Home Science) Semester: IV**  
**Food, Nutrition and Dietetics**



Course Code	UHA4MIFDN01	Title of the Course	Theory-Family Meal Management
Total Credits of the Course	02	Hours per Week	02

Course Objectives	<ol style="list-style-type: none"><li>1. To gain knowledge about the nutritional requirements and the basics of meal planning for various physiological age groups.</li><li>2. To Design food plans to meet the needs of humans at various life cycle stages.</li><li>3. To Describe how socioeconomic, cultural and environmental factors influence nutrient needs across the lifecycle.</li></ol>
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Unit	Description	Weightage (%)
1.	Principles of meal planning (a) Terms related to efficient menu planning, Importance of meal planning (b) Factors effecting meal planning (c) Concept of Dietary Reference Intakes (d) Socioeconomic, cultural and environmental factors influence nutrient needs across the life cycle	25
2.	Nutrition during the adult and Old Age (a) Nutritional and Food requirements for of Adults (b) Dietary guidelines as per activity and income (c) Nutritional and Food requirements during old age (d) Dietary guidelines during old age	25
3.	Nutrition during Infancy, Preschool Age and School age (a) Advantages Breast feeding and Weaning foods (b) Nutritional requirements for Preschool and School age children	25
4.	Nutrition during Adolescent, Pregnant and Lactating Mother (a) Nutrition and Food requirements of Adolescents (b) Nutritional Problems during adolescents (c) Nutrition and Food requirements of Expectant Mother (d) Nutrition and Food requirements of Lactating Mother	25

Teaching-Learning Methodology	The course will be delivered through a combination of active learning strategies. These will include: Lecture, Group Discussion, Quizzes, Expert talk, Audio video aids and active classroom-based discussion
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC.-4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per R.AUG.HSC.-7)	25%
3.	Semester End Examination	50%

Course Outcomes: Having completed this course, the learner will be able to	
Sr. No.	
1.	Explore how nutrient needs vary during the lifespan, from nutrition during pregnancy and lactation, infant nutrition, childhood and adolescent nutrition, as well as adult and older adult Nutrition.
2.	Plan meals with enough nutrition requirements for family members, food selection, catering to individual family members' food preferences, healthy diets according to their ages, and energy, time, and money savings.

References	
Sr. No	References
1.	Mudambi, Sumati, R, Rajagopal, MV, (2012) <i>Fundamentals Of Foods, Nutrition And Diet Therapy</i> . 6 <sup>th</sup> Edition, New Age International (P) Ltd Publishers
2.	Swaminathan, D. M. (2013). <i>Handbook of food and nutrition</i> . The Bangalore Printing & Publishing Co. Ltd.
3.	Sharda Gupta, Santosh Jain Passi, Rama Seth, Ranjana Mahna, Seema Puri, Kumud Khanna, <i>Textbook of Nutrition and Dietetics</i> . Elite Publishing House Pvt. Ltd

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**Food, Nutrition and Dietetics**



Course Code	UHA4MIFDN02	Title of the Course	Practical-Family Meal Management
Total Credits of the Course	02	Hours per Week	04

Course Objectives	<ol style="list-style-type: none"><li>1. To familiarize the students with planning of balanced meals.</li><li>2. To sensitize the students to differences in dietary requirements and nutritional needs through the different stages of lifespan</li><li>3. To equip the students with skills to plan balanced meals</li></ol>
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Sr. No.	Description	Weightage* (%)
1.	Introduction to meal planning— Factors to be considered while planning meal. 24 hour dietary recall Use of food exchange list	10
2.	Diet during Infancy: Planning nutrient rich recipes for Infants (Complementary foods)	10
3.	Diet during Pre-schoolers (a) Food habits and Nutritional requirements (b) Planning nutrient rich recipes for pre-schoolers	10
4.	Diet during school age: (a) Food habits and Nutritional requirements (b) Planning nutrient rich recipes for school going child	10
5.	Diet during adolescent: (a) Food habits and Nutritional requirements (b) Planning whole day's meal for an adolescent(Boy and Girl)	10
6.	Adult man (Sedentary) (a) Food habits and Nutritional requirements (b) Planning whole day's meal for adult man as per different activities	10



7.	Adult man (Heavy) (a) Food habits and Nutritional requirements (b) Planning whole day's meal for adult man as per different activities	05
8.	Adult women (Sedentary) (a) Food habits and Nutritional requirements (b) Planning whole day's meal for adult women as per different activities	10
9.	Adult women (Heavy) (a) Food habits and Nutritional requirements (b) Planning whole day's meal for adult women as per different activities	05
10.	Nutrition during Pregnancy (a) Food habits and Nutritional requirements (b) Planning whole day's meal for pregnant mother	10
11.	Nutrition during Lactation (a) Food habits and Nutritional requirements (b) Planning whole day's meal for lactating mother	05
12.	Geriatric (elderly )Nutrition: (a) Physiological changes, Nutritional Requirement and Dietary Modification. (b) Planning nutrient rich recipes for an elderly	05

Teaching-Learning Methodology	The course will be delivered through a combination of active learning strategies. These will include: Lecture, Group Discussion, Quizzes, Expert talk, Audio video aids Group activities, Experiential learning.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	25%
3.	Semester End Examination	50%

Course Outcomes: Having completed this course, the learner will be able to	
Sr. No.	
1.	Understand the basics of meal planning and to gain knowledge in meal preparation.
2.	Gain knowledge in calculation of nutrients.

References	
Sr. No	References
1.	ICMR (2020) <i>Recommended Dietary Allowances for Indians</i> .Published by National Institute of Nutrition, Hyderabad.
2.	Chadha R and Mathur P eds.(2015) <i>Nutrition: A Lifecycle Approach</i> . Orient Blackswan. New Delhi.
3.	Seth V and Singh K (2006). <i>Diet Planning through the Life Cycle: Part 1 Normal Nutrition. A Practical Manual</i> . Elite Publishing House Pvt. Ltd. New Delhi.
4.	Gopalan C, Rama Sastri BV, Balasubramanian SC (1989) <u>Nutritive Value of Indian Foods</u> . National Institute of Nutrition, ICMR, Hyderabad
5.	“DietCal” Software for calculation

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**B.Sc. (Home Science) Semester: IV**  
**Family Resource Management**



Course Code	UHA4MIFRM01	Title of the Course	Theory: Fundamentals of Art and Design
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. To comprehend the fundamentals of art and design.</li><li>2. To appraise the effect of colours in interiors.</li><li>3. To acquaint the students with various techniques of art.</li></ol>
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Course Content		
Unit	Description	Weightage (%)
1.	Fundamentals of Art and Design (a) Elements of Art: Space, Point, Line, Shape, Form, Texture, Light & Colour. (b) Principles of Art: Rhythm, Balance, Proportion, Emphasis, Unity (c) Types of designs: Structural and Decorative	25
2.	Colour and Its Application (a) Significance of colour (b) Classification of colour: Primary, Secondary, Intermediate (c) Colour schemes	25
3.	Traditional & Contemporary Art (a) Tie & Dye (b) Alpana and Rangoli (c) Marble Printing (d) Stencil Printing	25

4.	Art of Floral Arrangement (a) Importance (b) Basic styles of arrangements (c) Equipment and Accessories	25
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Teaching-Learning Methodology	Lecture, Smart Board, PowerPoint Presentation, Class Discussion, Guest speaker, Quizzes Methodology, Collaborative Learning.
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Evaluation Pattern		
Sr. No	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Recognize the significance and application of fundamentals of Art and Design.
2.	Acquire the competency in assessing and implementing the true colours.
3.	Inculcate the skills in different traditional and contemporary arts.

Suggested References:	
Sr. No.	References
1.	Bhatt, P., (2018). <i>Foundation of Art and Design</i> . Nasik: Mr. Sharad Dalal Square Arts.
2.	Han Hall, <i>The Creative book of Flower Arranging</i> . London: Salmander Books Ltd.
3.	Hazel Crag., and Rush Day (1952). <i>Homes with Character</i> . Bosten: D. C. Health and Co.
4.	The Educational Planning Group Delhi. (2015). <i>Home Management</i> . New Delhi: Arya Publishing House.
5.	Rutt Anna Hong (1948). <i>Home Furnishing</i> . New York: Joh Wiley and Sons.
6.	Varghese, M.A., Ogale N.N., and Srinivasan, K. (2020). <i>Home Management</i> . New Age International Ltd.

On-line resources to be used if available as reference material
<a href="https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=8x0nJkh/R0vHkX1U70Z/CQ==">https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=8x0nJkh/R0vHkX1U70Z/CQ==</a> P-02. Decorating the Interiors – M-08/09/11
<a href="http://www.smphomescience.edu.in/lSource.htm">http://www.smphomescience.edu.in/lSource.htm</a> Principles of Design Colour Schemes

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**Family Resource Management**



Course Code	UHA4MIFRM02	Title of the Course	Practical: Fundamentals of Art and Design
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To acquaint with the elements and principles of design.</li><li>2. To understand the properties of colours.</li><li>3. Learn to formulate different colours and colour schemes.</li></ol>
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Course Content		
Sr. No.	Description	Weightage* (%)
1.	Learn types of design: Structural/ Decorative	05
2	Drawing of Colour Wheel	10
3	Filling of Colour Wheel	05
4.	Prepare motifs of classes of Primary and Secondary Colour	08
5.	Prepare colour Harmonies (Monochromatic, Complimentary, Triad)	10
6.	Application of techniques of Printing. (Marble, leaf)	05
7.	Application of techniques of Printing. (Stencil)	05
8.	Learning forms of Flower Arrangements	10
9.	Generate different floor Decoration. (Rangoli, Alpana)	10
10.	Designing Two Greeting Cards for various Occasions (Birthday, Anniversary)	10
11.	Prepare a creative styles of gift wrapping.	10
12.	Evaluation of any one art object in terms of Design, Elements, Principles, Colour, Material and Purpose.	10

Teaching-Learning Methodology	Practical Implementation, Scrapbook, Demonstration, Blended Learning, Workshops, DIY activities.
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Evaluation Pattern		
Sr.No	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Develop the competency in application of principle of design and colours artistically in interiors.
2.	Work as a colour consultant for Interiors.
3.	Create a well-balanced piece of Art.

Suggested References:	
Sr.No.	References
1.	Bhatt, P., (2018). Foundation of Art and Design. Nasik: Mr. Sharad Dalal Square Arts.
2.	Varghese, M. A., Ogale. N. and Srinivasan K. (2020). Home Management. New Delhi: New Age International (P) Limited
3.	Faulkner, R. and Faulkner, S. (1975). Inside Today's Home. New York: Rinehart
4.	Gandotra, V., Shukul, M., and Jaiswal, N. (2010-11). Introduction to Interior Design and Decoration. New Delhi: Dominant Publishers and Distributors.

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**S. M PATEL COLLEGE OF HOME SCIENCE**  
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Under Graduate Programme (Honors) Grant-in-Aid  
Syllabus with effect from: 2024-2025 (NEP-2020)  
**B.Sc. (Home Science) Semester: IV**  
**Human Development and Family Studies**



Course Code	UHA4MIHUD01	Title of the Course	Theory – Childhood Behaviour Problems and Parenting
Total Credits of the Course	02	Hours per Week	04

Course Objectives	<ol style="list-style-type: none"><li>1. To identify childhood behaviour problems and role of parents and teachers for holistic development of</li><li>2. To distinguish between types of behavioural problems in children.</li><li>3. To understand comprehensive childhood behaviour disorders</li><li>4. To acquire in-depth knowledge of behavioural problems in children and its remedies.</li><li>5. To understand in-depth the parent-child relationship and its complexity.</li><li>6. To acquire in-depth knowledge and understanding of important theories, concepts, and studies in the field of parent-child relations.</li></ol>
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Course Content		
Unit	Description	Weightage*(%)
1.	Behavioural Problems of children <ol style="list-style-type: none"><li>(a) Nature of behavioural Problems- Problems of children</li><li>(b) Types of behavioural problems</li><li>(c) Causes of behavioural problems</li><li>(d) Risk factors for behavioural disorders in children</li><li>(e) Consequences of behavioural and emotional Disorders</li></ol>	25
2.	Childhood behaviour disorders-Causes, Symptoms and Treatment <ol style="list-style-type: none"><li>(a) Attention deficit hyperactivity disorder ADHD</li><li>(b) Anxiety disorders</li><li>(c) Mood disorders</li><li>(d) Autism</li><li>(e) Child maltreatment and trauma</li><li>(f) Sleep &amp; elimination disorders</li><li>(g) Eating disorders</li><li>(h) Behavioural problems and remedies</li><li>(i) Remedial Measures: Role of teacher, parents, Counsellors/ Psychologist</li></ol>	25



3.	Parenting (a) Meaning, Importance (b) Types/ Styles of Parenting (c) Factors influencing parenting (d) 4 P's of parenting (e) Parent-child relationship (f) Elements for parent-child relationship. (g) Parental Expectations	25
4.	Determinants of Parenting (a) Cultural influences on Parenting (b) Theories and Guidelines on Parenting (c) Parenting children with Special Needs (d) Child-rearing practices & guidance (e) Effective Parenting & parenting skills (f) Family conflict and conflict resolution (g) Providing safe environment for children	25

Teaching-Assignments, Learning	Lecture method ,Active learning methodology , Group discussions Method, Power Point Presentation, Audio Visual methods, Games, Seminar, Assignment, Quiz
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes:	
Having completed this course, the learner will be able to	
1.	Differentiate between types of behavioural problems in children.
2.	Understand different behavioural category.
3.	Learn in-depth the parent-child relationship and its complexity.
4.	Identify behaviour problems.
5.	Analyse how different factors affect the parent-child relationship and children's development.
6.	Apply the course material for analysing relevant situations and cases pertaining to parent-child relationships.
7.	Critically evaluate relevant studies pertaining to parent-child relations

Suggested References:	
Sr.No.	References
1.	Bennett, N., & Blankenship, A. P. (2020). Behavioral problems in children. In L. T. Benuto, F. R. Gonzalez, & J. Singer (Eds.), <i>Handbook of cultural factors in behavioral health: A guide for the helping professional</i> (pp. 419–430). Springer Nature Switzerland AG. <a href="https://doi.org/10.1007/978-3-030-32229-8_29">https://doi.org/10.1007/978-3-030-32229-8_29</a>
2.	Bornstein, M. H. (Ed.). (2019). <i>Handbook of parenting: Children and parenting</i> (3rd ed.). Routledge/Taylor & Francis Group.
3.	Daley, Rebekah, and David Daley. <i>Helping Your Child with Behaviour Problems: A Self-Help Guide for Parents</i> . Little, Brown Book Group Limited, 2023.
4.	Dosani, Sabina. <i>Calm your hyperactive child: Coping with ADHD and other behavioural problems</i> . Oxford: Infinite Ideas, 2008.
5.	Jane B. Brooks (28 September 2012). <a href="#"><i>The Process of Parenting: Ninth Edition</i></a> . McGraw-Hill Higher Education. <a href="#">ISBN 978-0-07-746918-4</a> .
6.	Penzo Jeanine, ed. <i>Parenting a child who has intense emotions: Dialectical behavior therapy skills to help your child regulate emotional outbursts and aggressive behaviors</i> . Oakland, CA: New Harbinger Publications, 2009.
7.	Shizuka, P. (2019). Social Class, Gender, and Contemporary Parenting Standards in the United States: Evidence from a National Survey Experiment. <i>Social Forces</i> , 98(1), 31–58. <a href="https://doi.org/10.1093/sf/soy107">https://doi.org/10.1093/sf/soy107</a>

On-line resources to be used if available as reference material
On-line Resources
Relevant entries on Wikipedia and Encyclopaedia Britannica
<a href="https://uni-mysore.ac.in/english-version/sites/default/files/content/human_development_nomenclature_nep_syllabus.pdf">https://uni-mysore.ac.in/english-version/sites/default/files/content/human_development_nomenclature_nep_syllabus.pdf</a>
<a href="https://sndt.ac.in/pdf/academics/syllabus-as-per-nep/faculty-of-science-and-technology/bsc-in-human-development.pdf">https://sndt.ac.in/pdf/academics/syllabus-as-per-nep/faculty-of-science-and-technology/bsc-in-human-development.pdf</a>
<a href="https://caluniv.ac.in/syllabus/Human_Development.pdf">https://caluniv.ac.in/syllabus/Human_Development.pdf</a>

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**B.Sc. (Home Science) Semester: IV**  
**Human Development and Family Studies**



Course Code	UHA4MIHUD02	Title of the Course	Practical – Childhood Behaviour Problems and Parenting
Total Credits of the Course	02	Hours per Week	04

Course Objectives	<ol style="list-style-type: none"><li>1. To identify behaviour problems.</li><li>2. To distinguish between types of behavioural problems in children.</li><li>3. To understand in-depth the parent-child relationship and its complexity.</li><li>4. To acquire in-depth knowledge and understanding of important theories, concepts, and studies in the field of parent-child relation</li><li>5. To develop stimulating materials according to various age wise for holistic development.</li></ol>
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Course Content		
Sr. No.	Description	Weightage*(%)
1.	Prepare a checklist for Styles of Parenting- Authoritarian, Authoritative, Permissive, Neglectful	10
2.	Prepare a flyer on world disabled day.	05
3.	Collection of paper cutting / pamphlets related to any specific topic or write newspaper article or press note	05
4.	Case study of childhood behavioural problems and rearing practices.	10
5.	Create a google form on any suitable topic or prepare one teaching aid.	10
6.	Collect five videos on childhood behavioural problems.	05
7.	Finding resource person and arrange one guest lecture for parents and write a report with newspaper clippings.(Demo)	10
8.	Collect 10 students' data on parental expectations	10
9.	Prepare an invitation card/flyer/leaflet for parent meeting of pre-schooler.	10
10.	Prepare a role play or Prepare bedtime stories to foster empathy.	05

11.	Preparing video for strengthening relationships with family members./ Conduct a survey/field study using the self-prepared Questionnaire.	10
12.	Prepare a file/scrape book related to Nature and Science, Maths and language, game for cognitive development.	10

Teaching-Assignments, Learning	Practical, Field visits, Interview method, Observation method
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	The student will be able to develop distinguish between types of behavioural problems in children.
2.	The student will acquire a detailed understanding of the different behavioural category
3.	The students will understanding-depth the parent-child relationship and its complexity
4.	Students will acquaint identify behaviour problems
5.	The student will acquire a detailed understanding develop stimulating materials according to various age wise for holistic development

Suggested References:	
Sr.No.	References
1.	Amy L. Paine, Oliver Perra, Rebecca Anthony, and Katherine H. Shelton (August 2021). "Charting the trajectories of adopted children's emotional and behavioral problems: The impact of early adversity and post-adoptive parental warmth". Development and Psychopathology. 33 (3): 922–936. <a href="https://doi.org/10.1017/S0954579420000231">doi:10.1017/S0954579420000231</a> . PMC 8374623. PMID 32366341.
2.	Bennett, N., & Blankenship, A. P. (2020). Behavioral problems in children. In L. T. Benuto, F. R. Gonzalez, & J. Singer (Eds.), <i>Handbook of cultural factors in behavioral health: A guide for the helping professional</i> (pp. 419–430). Springer Nature Switzerland AG. <a href="https://doi.org/10.1007/978-3-030-32229-8_29">https://doi.org/10.1007/978-3-030-32229-8_29</a>

3.	Bornstein, M. H. (Ed.). (2019). <i>Handbook of parenting: Children and parenting</i> (3rd ed.). Routledge/Taylor & Francis Group.
4.	Daley, Rebekah, and David Daley. <i>Helping Your Child with Behaviour Problems: A Self-Help Guide for Parents</i> . Little, Brown Book Group Limited, 2023.
5.	Dosani, Sabina. <i>Calm your hyperactive child: Coping with ADHD and other behavioural problems</i> . Oxford: Infinite Ideas, 2008.
6.	Jane B. Brooks (28 September 2012). <i>The Process of Parenting: Ninth Edition</i> . McGraw-Hill Higher Education. ISBN 978-0-07-746918-4. For the legal definition of parenting and parenthood see: Haim Abraham, A Family Is What You Make It? Legal Recognition and Regulation of Multiple Parents (2017)
7.	Penzo Jeanine, ed. <i>Parenting a child who has intense emotions: Dialectical behavior therapy skills to help your child regulate emotional outbursts and aggressive behaviors</i> . Oakland, CA: New Harbinger Publications, 2009.
8.	Robinson, Clyde C.; Mandleco, Barbara; Olsen, Susanne Frost; Hart, Craig H. (December 1995). "Authoritative, Authoritarian, and Permissive Parenting Practices: Development of a New Measure". <i>Psychological Reports</i> . 77 (3): 819–830. doi:10.2466/pr0.1995.77.3.819. ISSN 0033-2941. S2CID 145062379.
9.	Shizuka, P. (2019). <i>Social Class, Gender, and Contemporary Parenting Standards in the United States: Evidence from a National Survey Experiment</i> . <i>Social Forces</i> , 98(1), 31–58. <a href="https://doi.org/10.1093/sf/soy107">https://doi.org/10.1093/sf/soy107</a>

On-line resources to be used if available as reference material
On-line Resources
<a href="https://www.sulross.edu/sites/default/files/sites/default/files/users/docs/education/counseling-hgd_7.pdf">https://www.sulross.edu/sites/default/files/sites/default/files/users/docs/education/counseling-hgd_7.pdf</a>
<a href="https://www.who.int/childgrowth/publications/monitoring/en/">https://www.who.int/childgrowth/publications/monitoring/en/</a>

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Syllabus with effect from: 2024-2025 (NEP-2020)  
**B.Sc. (Home Science) Semester: IV**  
**Textiles and Clothing**



Course Code	UHA4MITCL01	Title of the Course	Theory- Furnishing Textile
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. To gain insight of textile finishing, its Standard size care and maintenance.</li><li>2. To understand the relationship between designing and functional properties of various textiles furnishing.</li><li>3. To understand the structure, trends, and sustainability practices in the Indian household textile industry.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Introduction to Textile Furnishing: (a) Meaning and Terminologies of Textile Furnishing (b) Classification of Textile Furnishing (c) Factors affecting selection of materials for Textile Furnishing (d) Understanding pattern and repeat patterns	25
2.	Types and Applications of Textile Furnishings (a) Standard size, Material Selection, and care of <ol style="list-style-type: none"><li>i. Bed linens</li><li>ii. Table linens</li><li>iii. Bath linens</li><li>iv. Kitchen linens</li><li>v. Curtains, Pillow Covers</li></ol> (b) Standard size, Material Selection, and care of <ol style="list-style-type: none"><li>i. Draperies and Curtains</li><li>ii. Tapestries for sofa</li><li>iii. Rugs</li><li>iv. Floor coverings</li><li>v. Door mats</li></ol>	25
3.	Functional aspects and care labels in Textile Furnishing. (a) Functional Properties: Durability, stain resistance, ease of maintenance, Comfort and usability, Light control and UV protection (b) Care labels in Textile Furnishing	25

4.	Market Overview of the Indian Household Textile Industry (a) Overview of the Indian Household Textile Industry (b) Household Textile Brands in India: Overview of popular brands. (c) Sustainable Choices: Eco-friendly and sustainable options for household textiles	25
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Teaching-Learning Methodology	Blackboard and smart boards, power point presentation, through teaching aids as charts, figure, discussion and analysis of actual garments, market survey and collection of sample pieces
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understand and select textile furnishing according to requirement and its application.
2.	Take appropriate Standard size, care and maintenance of textile furnishing.
3.	Identify key market trends, major brands, and sustainable practices in the household textile sector.

Suggested References:	
Sr. No.	References
1.	Khurana S, (2012) <i>Fabrics for Fashion and Textile Design</i> Sonali Publication, New Delhi.
2.	D'Souza, N. (1998). <i>Fabric care: General information</i> . New Age International (P) Ltd.

3.	Anita Tyagi, (2011), <i>Textiles for Apparel and Home Furnishing</i> , Sonali Publication New Delhi.
5.	Deulkar, D. <i>Household and laundry work</i> . Lady Irwin College for Women

On-line resources to be used if available as reference material
On-line Resources
Parmar, S., & Malik, T. (2018). <i>Home Textiles: A Review</i> . Retrieved from <a href="https://www.researchgate.net/publication/326508042_Home_Textiles-A_Review">https://www.researchgate.net/publication/326508042_Home_Textiles-A_Review</a>
Geddess-Brown, L. (1980). <i>Home furnishing with fabrics</i> . Van Nostrand Reinhold. Retrieved from <a href="https://archive.org/details/homefurnishingwi0000gedd/mode/1up">https://archive.org/details/homefurnishingwi0000gedd/mode/1up</a>
Relevant entries on Wikipedia and Encyclopaedia Britannica

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**B.Sc. (Home Science) Semester: IV**  
**Textiles and Clothing**



Course Code	UHA4MITCL02	Title of the Course	Practical – Furnishing Textile
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To gain insight of textile furnishing, its care and maintenance.</li><li>2. To design and construction of furnishing product.</li><li>3. To understand the relationship between fibers and functional properties of various household textiles</li></ol>
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Course Content		
Sr.No.	Description	Weightage* (%)
1.	Motif development (Natural, Geometric, Stylized and Abstract) for furnishing product	05
2.	Creating design layout (Create A/3 size draft and application on product) by regular repeat, full repeat, full drop repeat, half drop repeat, alternate repeat, mirror image	10
3.	Theme Selection: Create Inspiration board / Theme board	05
4.	Preparation of mood board based on Inspiration board and Theme Board	05
5.	Creating colour board based on inspiration and mood board	05
6.	Collection of the fabric swatches used for Bed linen, kitchen linen, Table linen.	10
7.	Three types of Product illustration (Bed linen, kitchen linen, Table linen and curtain, pillow covers etc.)	10
8.	Product development of Textile furnishing from the above illustrated products.	10
9.	Selection of Suitable surface ornamentation techniques (Printing, Painting, embroidery, Patch and Applique work etc.) for the developed product.	10

10.	Prepare the tech pack for developed Product.	10
11.	Prepare the cost sheet for developed Product.	10
12.	Photoshoot of the developed Product.	10

Teaching-Learning Methodology	Demonstration, Actual sample collection and discussion Survey and Assignment
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Practical Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understand and select home textiles according to requirement and its application.
2.	Take appropriate care and maintenance of household textiles.

Suggested References:	
Sr. No.	References
1.	Barrett and Joanne C. (2013), Designing your Fashion portfolio from Concept to presentation, Fairchild Books
2.	D'Souza, N. (1998). <i>Fabric care: General information</i> . New Age International (P) Ltd.
3.	Geddess-Brown, L. (1980). <i>Home furnishing with fabrics</i> . Van Nostrand Reinhold. Retrieved from <a href="https://archive.org/details/homefurnishingwi0000gedd/mode/1up">https://archive.org/details/homefurnishingwi0000gedd/mode/1up</a>

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**B.Sc. (Home Science) Semester: IV**  
**Food, Nutrition and Dietetics**



Course Code	UHA4SEFDN01	Title of the Course	Practical- Practical Biochemistry
Total Credits of the Course	02	Hours per Week	04

Course Objectives	<ol style="list-style-type: none"><li>1. To develop the principles of biochemistry as applicable to human nutrition.</li><li>2. To obtain an insight into chemistry of major nutrients and physiologically important compounds.</li><li>3. To comprehend the biological process and system as applicable to human nutrition</li></ol>
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Sr. No.	Description	Weightage* (%)
1.	Determination of acid value of given sample of oil or fat	10
2.	Determination of saponification value of given sample of oil or fat	10
3.	Determination of iodine value of a given sample of fat and oil	10
4.	Measurement of pH of different solution with help of pH meter.	05
5.	Principle and working of colorimeter	05
6.	Qualitative tests for carbohydrates, find out unknown sugar.	10
7.	Qualitative tests for Protein	05
8.	Qualitative tests for oils and fat	05
9.	Detection of the presence of carbohydrate in food stuff	10
10.	Detection of the presence of fat and proteins in food stuff	10
11.	Determination of protein content of given sample by biuret method	10
12.	Determination of Glucose by Fehling's method	10

Teaching-Learning Methodology	The course will be delivered through a combination of active learning strategies. These will include: Lecture, Group Discussion, Audio video aids, surveys and data Collection, presentation and active classroom-based discussion
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
Sr. No.	
1.	Develop an understanding of the principles of biochemistry ( as applicable to human nutrition )
2.	Learn develop the principles of biochemistry as applicable to human nutrition and dietetics.
3.	Obtain an insight into the chemistry of major nutrients and physiologically important compounds.

References	
Sr.No	References
1.	Vasudevan, D. M., Sreekumari, S., & Vaidyanathan, K. (2016). <i>Textbook of biochemistry for medical students</i> . New Delhi: Jaypee Medical Ltd.
2.	West, E. S., Todd, W. R., Mason, H. S., & Van Bruggen, J. T. (1974). <i>Textbook of Biochemistry</i> , New Delhi: Amerind Publ. Co. Pvt. Ltd.
3.	Nelson, D. L., Lehninger, A. L., & Cox, M. M. (2008). <i>Lehninger principles of biochemistry</i> . Ahmedabad: Macmillan India Ltd

On-line resources to be used if available as reference material
On-line Resources
Relevant entries on Wikipedia and Encyclopaedia Britannica

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**B.Sc. (Home Science) Semester: IV**  
**Family Resource Management**



Course Code	UHA4SEFRM01	Title of the Course	Practical - Ergonomics and Design
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To provide insight into professional practice in design development.</li><li>2. To be able to design workspace efficiently for self and others.</li><li>3. To learn various ergonomic methods with real time applications in career.</li></ol>
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Course Content		
Sr. No.	Description	Weightage* (%)
1.	Draw and write about various ergonomic tools & instruments	10
2.	Measurement of various human biological aspects: Body Temperature, Blood pressure, Heart rate, BMI	05
3.	Analysing various posture at work through OWAS, `REBA and FLEXI curve	10
4.	Assessing the type of work and its cost on worker with respect to heart rate using: Tread mill, Step stool	10
5.	Assessing environment parameters: Light and Noise	05
6.	Analysing the various human body type w.r.t WHR	10
7	Time-motion study: Flow chart	05
8	Time-motion study: Pathway chart/ Process chart	05
9.	Anthropometric measurements: Sitting (Static and dynamic), Standing (static and dynamic), Calculating percentiles	10
10	Draw a computer workstation considering anthropometrics	10
11.	Designing work station for self: Table and chair	10
12.	Designing work station for self: Kitchen with Storage	10

Teaching-Learning Methodology	Demonstrations, first-hand experience by using available equipment, Field Visits, Drawing
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Practice in design development.
2.	Design various workspaces efficiently for self and others.
3.	Learn various ergonomic methods with real time applications in career
4.	Effective use of energy and time at home and work places.
5.	Work efficiently while maintaining health and wellbeing.

Suggested References:	
Sr. No.	References
1.	Rao, R., Singh, S., & Dinesh, S. (2024). Habitats: Holistic approaches to building, interiors, and technical systems. Noble Science Press.Delhi
2.	Grandjean (1973). <i>Ergonomics of the Home</i> , London: Taylor & Frances.
3.	Barnes, R.N. (1980). <i>Motion and Time Study, Design and Measurement of Work</i> . USA: John Willy.

On-line resources to be used if available as reference material
On-line Resources
<a href="http://www.ilocis.org/documents/chpt29e.htm">http://www.ilocis.org/documents/chpt29e.htm</a>

<https://ehs.unc.edu/workplace-safety/ergonomics/>

e-Courses IASRI. (n.d.). Resource management and ergonomics. Retrieved from  
<http://ecoursesonline.iasri.res.in/mod/page/view.php?id=27384>

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**B.Sc. (Home Science) Semester: IV**  
**Human Development and Family Studies**



Course Code	UHA4SEHUD01	Title of the Course	Practical – Montessori Materials and Teachers Training
Total Credits of the Course	02	Hours per Week	04

Course Objectives	<ol style="list-style-type: none"><li>1. To gain the knowledge and skills necessary to teach in a Montessori environment.</li><li>2. To be able to create a positive and nurturing learning environment for all children.</li><li>3. To be able to help children reach their full potential.</li><li>4. To be able to make a difference in the lives of young children</li></ol>
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Course Content		
Unit	Description	Weightage *(%)
1.	List down 30 Montessori activities and do five activities with the help of children.	5
2.	Prepare a 10 minute lesson plan on sensory/language/cognitive development for classroom.	10
3.	Prepare a lesson plan for half day and full day.(3 hours and 4 hours)	5
4.	Hands on experience on the practical teacher training of 15 hours in a classroom, 2 hours of SIL training and 120 minutes of guidance.	10
5.	Prepare a 3 minute video of Montessori school publicity and upload on You tube.	10
6.	Prepare Montessori materials for Jr/Sr. K.G. Children. / Prepare a teaching aid on pre writing readiness.	5
7.	Prepare a sensory development related activities for Nursery children.	10
8.	Prepare an album on language and mathematical activities.	10
9.	Prepare an art and craft related activities for Sr. K.G. students.	10
10.	Prepare a layout of classroom arrangement. (Doll house, block corner, library, music area etc.)	5



11.	Role Play/ Prepare a folder on school publicity/ Activities related to science experiment	10
12.	An interview on Nursery school teacher and write a report.	10

Teaching-Assignments, Learning	Practical, Field visits, Interview method, Observation method.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Student will become aware about the knowledge and skills necessary to teach in a Montessori environment.
2.	Students will Create a positive and nurturing learning environment for all children.
3.	Students will appreciate help children reach their full potential
4.	Students will be enabled make a difference in the lives of young children

Suggested References:	
Sr.No.	References
1.	Gordon, Cam. (2001). <i>Together with Montessori: The Guide to Help Montessori Teachers, Assistant Teachers, Resource Teachers, Administrators &amp; Parents Work in Harmony to Create Great Schools</i> . 2nd ed. Minneapolis, MN: Jola Publications. Nienhuis Montessori USA and The Montessori Foundation.
2.	Hardinge, Joy. (1992). <i>The Voice of Dr. Maria Montessori: Lectures</i> , Madras, India, 1941-1942. Lectures taken in shorthand. Silver Spring, MD: International Montessori Society.
3.	Hardinge, Joy. (1993). <i>Montessori Method. Lecture notes</i> , India, 1941-42. Silver Spring, MD: International Montessori Society.
4.	Kaul, V. (1991). <i>Early Childhood Education Programme</i> , New Delhi: NCERT.
5.	Krishna Kumar (1986). <i>The child's language and the teacher</i> , New Delhi: UNICEF
6.	Montessori, Maria. (1997). <i>Basic Ideas of Montessori's Educational Theory: Extracts from Maria Montessori's Writings and Teachings</i> . Comp. Paul Oswald; GÃ¼nter Schulz-Benesch. Trans. Lawrence Salmon. Oxford, England: Clio Press.
7.	Montessori, Maria. (1997). <i>The California Lectures of Maria Montessori, 1915:</i>

	Collected Speeches and Writings. Ed. Robert G. Bucken-Meyer. Oxford, England: Clio Press.
8.	Swaminathan, M. (1984). <i>Play activities for young children</i> , New Delhi : UNICEF.
9.	Swaminathan, M. (1991). <i>Play Activities for Young Children</i> . UNICEF.

On-line resources to be used if available as reference material
On-line Resources
<a href="https://www.sulross.edu/sites/default/files/sites/default/files/users/docs/education/counseling-hgd_7.pdf">https://www.sulross.edu/sites/default/files/sites/default/files/users/docs/education/counseling-hgd_7.pdf</a>
<a href="https://www.who.int/childgrowth/publications/monitoring/en/">https://www.who.int/childgrowth/publications/monitoring/en/</a>

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**S. M PATEL COLLEGE OF HOME SCIENCE**  
(AN AUTONOMOUS INSTITUTE AFFILIATED WITH SARDAR PATEL UNIVERSITY)  
Under Graduate Programme (Honors) Grant-in-Aid  
Syllabus with effect from: 2024-2025 (NEP-2020)  
**B.Sc. (Home Science) Semester: IV**  
**Textiles and Clothing**



Course Code	UHA4SETCL01	Title of the Course	Practical - Flat Pattern Methods
Total Credits of the Course	02	Hours per Week	04
Course Objectives:	<ol style="list-style-type: none"><li>1. To gain knowledge and develop skills in flat pattern methods</li><li>2. To develop ability in manipulating the dress design according to trends.</li></ol>		

Course Content		
Sr. No	Description	Weightage* (%)
1.	Prepare a standard block for child, teenage girl and boy	05
2.	Dart Manipulation: Slash- spread technique –single dart series, two dart series	10
3.	Dart Manipulation: Pivotal – transfer technique - single dart series, two dart series	10
4.	Fullness through Tucks	10
5.	Fullness through Gathers in upper and lower garment	10
6.	Fullness through Pleats in frock, skirt etc.	10
7.	Contouring: The Classic Empire –Princess line	05
8.	Types of Yokes - V, Round	05
9.	Types of Collars – Flat, Chinese, Peter pan, shirt	05
10.	Types of Sleeves – set –in, Cap, Puff, bottom flared	10
11	Drafting of 1 patterns using flat pattern techniques- for male, female and unisex dress (shirt/ frock/ trouser or short)	10
12.	Prepare Readymade patterns of the above drafted garments	10

Teaching-Learning Methodology	Draft making, Demonstration and talks by experts, visual sample analysis, discussion, assignments, field trips
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Develop skill in garment design for people with different figure types.
2.	Create pattern and selection of bodice, skirt, collars and necklines.
3.	Use all pattern making tools, truing, and altering pattern manipulations.
3.	Prepare ready-to-use paper patterns for commercial application

Suggested References:	
Sr. No.	References
1.	Ervin M.D. (1969). <i>Practical Dress Design</i> . The Macmillan Company
2.	Kinchen, E. (1970). <i>Clothing for Moderns</i> . The Macmillan Company
3.	Natie, B. (1970). <i>Dress Pattern Designing</i> . London, Crosby Lockwood and Son
4.	Natie, B. (1978). <i>More Dress Pattern Designing</i> . London, Garnate Publishing.
5.	Stanley, H.(1995). <i>Flat Pattern Cutting And Modeling For Fashion</i> . Thorns Publishers Ltd.
6.	Gerry, C.(1996). <i>Pattern Grading For Women's Clothes (The Technology of Sizing)</i> . Blackwell Science.
7.	Goul B. <i>Introducing Pattern Cutting, Grading and Modelling</i> . London B.T. Bradford Ltd.
8.	Ireland P.J. (1987). <i>Encyclopaedia of Fashion Details</i> .
9.	Pattern Making for Fashion Design; Armstrong H.J.



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**Syllabus with effect from: 2024-2025 (NEP-2020)**  
**B.Sc. (Home Science) Semester: IV**



Course Code	UHA4VADMT01	Title of the Course	Theory- Disaster Management
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	1. Make students aware with concepts of natural disasters. 2. Sensitize students with issues concerned with disaster management. 3. Impart Knowledge of measures to be taken during Disasters
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Course Content		
Unit	Description	Weightage* (%)
1.	Introduction to Disaster- (a) Meaning and types (b) Natural Calamities and disasters-Types, its effect and its mitigation- Flood, earthquake, drought, cyclonic storms, global warming, Heat and cold waves, volcano blast, Tsunami, forest fire, landslides etc. (c) Manmade disasters- Types, its effects and its mitigation. Technological disasters, Chemical, biological, nuclear, building fire, deforestation, airpollution, Water pollution, soil/land pollution, industrial effluents etc.	25
2.	Disaster Management (a) Importance and concepts of disaster management. (b) Role of police, armed forces, health workers, media, humanitarian organizations in disaster management	25
3.	(a) Framework and policies of government for disaster management. (b) Funds and financial aids for disaster management.	25
4.	Basic First Aid: Training on how to treat wounds, fractures, and other Common injuries. CPR Training: Learn Cardiopulmonary resuscitation techniques. Demonstration Fire Safety: Past Disaster Analysis:	25

Teaching-Learning Methodology	Lecture Method, Questions-Answer method, Discussion method, Brainstorming method, Observational method, Use of ICT
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per R.AUG.HSC. -4)	25%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance	25%
3.	Semester End Examination (As per R.AUG.HSC. -7)	50%

Course Outcomes: Having completed this course,	
1.	Students will be able to cope up with any situations during natural or manmade disasters.

Suggested References:	
Sr. No.	References
1.	H.K. Gupta. <i>Disaster Management</i> . (2003). Hyderabad, University Press (India)Private Ltd.
2.	Sinha P.C. <i>Disaster Mitigation, Preparedness, Recovery and Response</i> . (2007). NewDelhi, SBS Publishers and Distributers Pvt. Ltd.
3.	Singh, R.B. <i>Natural Hazard &amp; Disaster Management Vulnerability and Mitigation</i> .Jaipur, Rawat Publication.
4.	Singh, R.B. (2016). <i>Disaster Management of Mitigation</i> . New Delhi. World FocusPublisher.
5.	Sumit Malhotra (2005) <i>Natural Disaster Management</i> . Jaipur, Avishkar Publishers

On-line resources to be used if available as reference material
Epgp.inflibnet.ac.in/Home

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