

**SARDAR PATEL UNIVERSITY, VALLABH VIDYANAGAR**

**B.Sc. Home Science**

**(Under Choice Based Credit Scheme)**

**Semester - FIFTH (FOODS AND NUTRITION) YEAR 2023-2024**

Course Type	Course Code (10 Digit)	Name of Course	Theory (T) Practical (P)	Credit	Contact hrs/ week	Exam Duration in hrs	Marks		
							Internal	External	Total
<b>Ability Enhancement Courses</b>	UH05AHSC51	Programme for Rural and Urban Development	T	2	2	3	15/5	35/14	50/20
<b>Core Courses</b>	UH05CFDN51	Maternal and Child Nutrition	T	4	4	3	30/10	70/28	100/40
	UH05CFDN52	Food Science	T	4	4	3	30/10	70/28	100/40
	UH05CFDN53	Food Science	P	2	4	3	15/5	35/14	50/20
	UH05CFDN54	Medical Nutrition Therapy-1	T	2	2	2	15/5	35/14	50/20
	UH05CFDN55	Medical Nutrition Therapy-1	P	2	4	3	15/5	35/14	50/20
	UH05CFDN56	Pathophysiology of Diseases	T	4	4	3	30/10	70/28	100/40
<b>Skill Enhancement Courses</b>	UH05SFDN51	Proximate Analysis of Food	P	2	4	3	15/5	35/14	50/20
<b>Elective Courses (Any One)</b>	UH05EHSC51	Consumerism	T	2	2	2	15/5	35/14	50/20
	UH05EHSC52	NGO Management	T	2	2	2	15/5	35/14	50/20
	UH05EHSC53	Accessories and Adornment	T	2	2	2	15/5	35/14	50/20
	UH05EHSC54	Food Adulteration	T	2	2	2	15/5	35/14	50/20
	UH05EHSC55	Basics of Research	T	2	2	2	15/5	35/14	50/20
		<b>Total</b>		<b>24</b>	<b>30</b>		<b>180</b>	<b>420</b>	<b>600</b>



**SARDAR PATEL UNIVERSITY**  
**Vallabh Vidyanagar, Gujarat**  
**(Reaccredited with 'A' Grade by NAAC (CGPA 3.25)**  
**Syllabus with effect from the Academic Year 2023-2024**

Bachelor of Science - Home Science  
(B.Sc. - H. Sc.) (Home Science) Semester (V)

Course Code	UH05AHSC51	Title of the Course	Programmes for Rural and Urban Development
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. To develop understanding regarding the nation towards urban and rural development</li><li>2. To examine the cumulative impact of these developmental efforts in quantitative and qualitative dimensions</li></ol>
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Course Content		
Unit	Description	Weightage*(%)
1.	<ol style="list-style-type: none"><li>a. Introduction to Rural and Urban Development Programmes.</li><li>b. Role of Home Science in rural and urban development.</li><li>c. Five year plan and their focus, brief on Niti Ayog</li></ol>	20
2.	<ol style="list-style-type: none"><li>a. Thrust of agriculture</li><li>b. National food production programmes</li><li>c. National health mission ( NRHM, NUHM, NRLM)</li></ol>	20
3.	Poverty alleviation efforts: <ol style="list-style-type: none"><li>a. Rural and Urban communities, characteristics, nature, difference, village organization, rural and urban development(NGOs working), role of CAPART</li><li>b. Programmes for poverty alleviation for rural and urban areas, employment generation and social inputs.</li><li>c. Current programmes for rural and urban poor,</li></ol>	30
4.	Programmes for women and children: <ol style="list-style-type: none"><li>a. Women as target groups, Specific measures for women and children such as DWCRA, ICDS, IMY, ANARDE, SEWA, CHETNA, TF, SGSY, ARSP.</li><li>b. Current programmes for women as initiated and implemented by the different ministries and departments.</li></ol>	30

Teaching-Learning Methodology	Class Discussions/ Demonstrations, Power point presentations, Class activities/ assignments, group discussions, Field visits, chalk and board
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	The students can get the knowledge of different five years plan.
2.	They use the knowledge in self empowerment and indirectly help the society in poverty alleviation.

Suggested References:	
Sr. No.	References
1.	Upadhyay, H.C. (1991): Modernization and Rural Development New Delhi, Anmol publications
2.	National institute of Rural development, Hyderabad, 1991. Rural development statistics NIRD
3.	Narayan Manohar S (1989) Integrated Rural energy programmes, Delhi Shree Hari printers.
4.	Ghosh Bahanisikha (1990) The Indian population problem, Madras, Sage publications.
5.	Thingalaya N. K (1986) Rural India-Real India, Bombay, Himalaya Publishing House.
6.	Journal of Social welfare, Journal of Rural development ,Journal of Yojana, Journal of Family welfare, Journal of extension education

On-line resources to be used if available as reference material
On-line Resources
<a href="http://egyankosh.ac.in/">http://egyankosh.ac.in/</a>

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Bachelor of Science -Home Science  
(B.Sc. –H. Sc.) (Foods and Nutrition) Semester (V)

Course Code	UH05CFDN51	Title of the Course	Maternal and Child Nutrition
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. Understand the nutritional needs during pregnancy, lactation, infancy and preschool years.</li><li>2. Understand the relationship between maternal health and birth outcome.</li><li>3. Aware of problems encountered during pregnancy and lactation and how to cope with these problems.</li><li>4. Understand the concept of policies and programmes related to maternal and child health.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Nutrition need during pregnancy: (a) Current scenario of maternal and child nutrition, Placental development and function, embryonic and fetal growth and Development. Physiological changes during pregnancy. (b) Factors affecting outcome of pregnancy(nutritional and non-nutritional) (c) Common disorders and complications of pregnancy and its management- Pregnancy induced hypertension, Gestational diabetes, eating disorders during pregnancy.	30
2.	Nutrition during Lactation: (a)Anatomy of breast, Nutrition during lactation, importance of lacto gouges, Physiology of lactation, Factors affecting lactation (b)Lactation problems –sore nipples, engorged breast, inverted nipples etc., importance of milk banks.	25
3.	Infant and young child feeding and care - Current infant feeding practices, guidelines, nutritional concerns and complementary feeding, Human milk composition, role of BPNI in promotion of breast feeding in India, Care and management of the preterm and LBW infants.	25
4.	Overview of Adolescent pregnancy.	10
5.	Nutrition during menopause-sign and symptoms, problems, management of dietary needs and health	10





Teaching-Learning Methodology	Chalk and board, Power point presentations, Class Discussions, small Group activities / assignments, case studies, video clips
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understand current health problems and nutritional deficiency diseases affecting pregnant women, infants and adolescents.
2.	Aware of problems encountered in pregnancy during breast feeding and how to cope with these problems.
3.	Understand the concept of infant and young child feeding practices.
4.	Provide skills that allow students to objectively analyses new nutrition concepts and research, allowing them to consider which public health programs can be implemented to promote maternal and child health as well as adolescent health.

Suggested References:	
Sr. No.	References
1.	Mudambi, S. R. (2007). <i>Fundamentals of foods, nutrition and diet therapy</i> . New Delhi: New Age International.
2.	Requirement, I. N. (2010). <i>Recommended dietary allowances for Indians</i> . New Delhi: A report of the Expert Group of the Indian Council of Medical Research.
3.	Park, K. (2011). <i>Park's textbook of preventive and social medicine</i> . Jabalpur: BanarasidasBhanot, 463.
4.	Srilakshmi, B. (2014). <i>Dietetics</i> , New Delhi: New Age International (P)





	Ltd. Publishers.
5.	Williams, S. R. (2005). <i>Basic Nutrition and Diet Therapy</i> . (Ed. 12).
6.	Chadha, R., & Mathur, P. (2015). <i>A Textbook on Nutrition: A Lifecycle Approach</i> . Published by New Delhi: Orient Blackswan Private Limited.
7.	Robinson, C. H., & Lawler, M. R. (1982). <i>Normal and therapeutic nutrition</i> (No. Ed. 16). New York: Collier Macmillan Publishers.
8.	Joshi, S. A. (1995). <i>Nutrition and dietetics</i> . Ahmedabad: McGraw-Hill Education.
9.	Rani.A.(2017). <i>Nutrition of child,pregnant and lactating mother</i> . New Delhi : Sonali Publications

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

On-line Resources

<http://egyankosh.ac.in/>

[Epgp.inflibnet.ac.in/Home](http://Epgp.inflibnet.ac.in/Home)

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Bachelor of Science -Home Science  
(B.Sc. – H. Sc.) (Foods and Nutrition) Semester (V)

Course Code	UH05CFDN52	Title of the Course	Food Science
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	1. Get acquainted with the composition of different food stuffs. 2. Understand the chemistry of foods and food systems. 3. Apply the theoretical aspects in ensuring food quality.
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Course Content		
Unit	Description	Weightage* (%)
1.	Physical foundation of food science- Definition, solids and amorphous foods, liquids and role in food products, gases and role in products, true solutions, dispersions & suspensions, sols, gels,	10
2.	Carbohydrates: Classes and types, chemical reaction in food hydrolysis, thermal degradation, dehydration, caramalization, maillard reaction, applications in food industry & other sweetening agents	20
3.	Lipids: Physio-chemical properties of fat & application in food preparation, shortenings- shortening value and factors affecting it, fat substitutes determination of fats/oils rancidity reversion & polymerization	20
4.	Proteins: Physio-chemical properties of protein, hydration solubility viscosity gelation emulsification binding foams changes on cooking, denaturation, coagulation etc.	20
5.	(a) Pigments endogenous to food, structure, chemical and physical properties, effect of processing and storage (b) Flavours- Vegetables ,fruits and spices and condiments. (c )Enzymes: Nomenclature definite specificity, catalysis regulation enzyme modification of food by endogenous enzyme, enzyme inhibitor in food.	30

Teaching-Learning Methodology	Chalk and duster, 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 CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Learn about the properties of food.

Suggested References:	
Sr. No.	References
1.	Birch, G. G., Brennan, J. G., & Parker, K. J. (1977). <i>Sensory properties of food</i> . Ed. Applied Science Publishers, Ltd. ISBN, 85334, 7441.
2.	Charley Helen (1982) <i>Food Science</i> (2nd edition) Macmillan Publishing Co.
3.	Peterson, M. S., & Johnson, A. H. (1978). <i>Encyclopedia of food technology and food science series. Vol. 3. Encyclopedia of food science</i> . AVI Publishing Company Inc.
4.	Vieira, E. R. (1999). (3rd Edition) <i>Elementary food science</i> . Springer Science & Business Media.
5.	Swaminathan, M. S. (1987). <i>Food science, chemistry and experimental foods</i> . Bangalore: Print. & Publishing Company.

On-line resources to be used if available as reference material
On-line Resources: <a href="http://Epgp.inflibnet.ac.in/Home">Epgp.inflibnet.ac.in/Home</a>

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Bachelor of Science - Home Science  
(B.Sc. – H. Sc.) (Foods and Nutrition) Semester (V)

Course Code	UH05CFDN53	Title of the Course	Practical-Food Science
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. Understand the basic concepts of food science and its applications in processing of food.</li><li>2. Summarize and critically discuss and understand both fundamental and applied aspects of Food Science.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Carbohydrate: (a) Preparation of starch from potatoes. (b) Microscopic examination of starch. (c)Effect of blending on distribution of starch granules in suspension- Effect of adding sugar and other factors in gelatinization (heat, agitation etc).	20
2.	Proteins: (a) To determine gluten from different flours. (b)Functional role of egg in cookery. (c)Factors contributing to the volume and stability of egg white foam	30
3.	Fat: (a)Functional role of fat. (b) Melting point of fats and oils, smoke and flash points.	20
4.	Factors affecting fat absorption and emulsion, frying (role of moisture and Surface area).	10
5.	Pigments: Factors affecting colour, pH, time and cooking of fruits and vegetables.	10
6.	Enzymes: Browning reactions- to study different types of browning reactions in foods	10

Teaching-Learning Methodology	Demonstration Method, Questions-Answer method, Discussion method
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Gain knowledge about scope, importance and applications of Food Science.
2.	Identifying apply the principles from the various factors of foods and related disciplines to solve practical problems.

Suggested References:	
Sr. No.	References
1.	Birch, G. G., Brennan, J. G., & Parker, K. J. (1977). <i>Sensory properties of food</i> . Ed. Applied Science Publishers, Ltd. ISBN, 85334, 7441.
2.	Charley Helen (1982) <i>Food Science</i> : (2nd edition) Macmillan Publishing Co.
3	Peterson, M. S., & Johnson, A. H. (1978). <i>Encyclopedia of food technology and food science series. Vol. 3. Encyclopedia of food science</i> . AVI Publishing Company Inc..
4.	Ronsivalli, L. J., & Viera, E. R. (1992). <i>Elementary food science</i> 3rd Edition.
5.	Swaminathan, M. S. (1987). <i>Food science, chemistry and experimental foods</i> . Bangalore: Print. & Publishing Company.

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Bachelor of Science -Home Science  
(B.Sc. – H. Sc.) (Foods and Nutrition) Semester (V)

Course Code	UH05CFDN54	Title of the Course	Medical Nutrition Therapy-1
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. Orient students with role of dietician in maintaining good nutritional status and correct deficiencies or in disease condition.</li><li>2. Gain knowledge of principles of diet therapy and designing and formulating different therapeutic diets for various disease condition.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	(a) Principles of Nutrition Care Process and types of dietitian and their role in hospital and community (b) Therapeutic adaptations of a normal diet	25
2.	Etiology, pathophysiology, metabolic changes, clinical features and nutritional management of Infection and Fevers (a) Typhoid (b) Tuberculosis (c) HIV (d) Malaria/Dengue/Chikungunia (overview of any one)	25
3.	Nutritional management of the following: (a) Weight imbalances – Overweight and obesity, underweight (b) Eating disorders – Anorexia nervosa, Bulimia nervosa, EDNOS	25
4.	Etiology, pathophysiology, clinical features, diagnosis and nutritional management of the following (a) Food allergy and food intolerance (b) Inborn errors of metabolism (c) Nutrition in Bone disorder (d) Nutrition for oral health.	25

Teaching-Learning	Classroom teaching for theory periods Lectures and Power-point presentations will be the main method of
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Methodology	transaction Special lectures/ visits/ interactions with professionals will be undertaken Classroom quiz sessions for revision Extension activities will be encouraged for application oriented learning Any other method may be added, as per university norms and discretion of the teaching faculty
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Integrate knowledge of research principles and methods associated with nutrition and dietetics practices
2.	Understand aetiology, pathophysiology and metabolic changes occurring in organs during disease condition
3.	Use effective and appropriate communication skills in providing information, advice and opinion to individuals, groups, and communities.

Suggested References:	
Sr. No.	References
1.	Mahan, L. K., Escott-Stump, S., Raymond, J. L., & Krause, M. V. (2012). <i>Krause's Food &amp; Nutrition Therapy</i> . US: Elsevier/Saunders.
2.	Dietary guidelines by India(2020)Hyderabad: National Institute of Nutrition, Indian Council of Medical Research.500007





3.	Bagchi, D., & Nair, S. (Eds.). (2018). <i>Nutritional and Therapeutic Interventions for Diabetes and Metabolic Syndrome</i> . Cambridge: Academic Press.
4.	Antia, F. P. (1973). <i>Clinical Dietetics and Nutrition</i> . London: Oxford University Press, Ely House, 37 Dover Street.
5.	Joshi, S. A. (1995). <i>Nutrition and Dietetics</i> . Ahmedabad: McGraw-Hill Education.
6.	Manual (2018). <i>Clinical Dietetics</i> , Ahmedabad: JB International
7.	Bajaj .M. <i>Diet Metrics</i> (2019)
8.	Yadav.A, Arora.M, Swayam.S. (2019) : <i>Practical Manual of Nutrition and Dietetics</i> New Delhi: Kalpaz Publications
9.	Seth,V.,Singh,K.,Mathur,P.(2020):Diet Planning through life cycle, Part II,A Practical Manual, New Delhi: Elite Publishing House

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

On-line Resources

<http://www.nutrition.gov>.

<https://www.unicef.org/india/>

<https://www.nin.res.in/>

[Epgp.inflibnet.ac.in/Home](http://Epgp.inflibnet.ac.in/Home)

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Bachelor of Science -Home Science  
(B.Sc. – H. Sc.) (Foods and Nutrition) Semester (V)

Course Code	UH05CFDN55	Title of the Course	Practical-Medical Nutrition Therapy-1
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. Enable students to plan meals according to disease.</li><li>2. Able to calculate according to ICMR guidelines.</li></ol>
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Course Content		
Unit	Planning,calculating nutrients of the following diet according to the specification given using exchanges and ICMR guidelines and preparation of recipes of selected recipes.	Weightage* (%)
1.	Modification in normal diet (a) Clear fluid (b) Full fluid (c) Soft diet	20
2.	Medical nutrition therapy in weight management (a) Over weight (b) Underweight	20
3.	Medical nutrition therapy in fevers and infections (a) Acute Fever- Typhoid, (b) Chronic Fever- Tuberculosis (c) HIV	25
4.	Diet in bone disorder (a) Osteoporosis (b) Arthritis	20
5.	Diet in Inborn errors of metabolism-Phenylketonuria	15

Teaching-Learning Methodology	For practical, laboratory work for planning of diets with case study. Extension activities will be encouraged for application oriented learning. Any other method may be added, as per university norms and discretion of the teaching faculty.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Integrate knowledge of principles of diet therapy and research learn about different diets other than routine diets.
2.	Help them to plan and calculate diets according to the disease condition
3.	Take an entrepreneurial approach to advocate for a healthy society.

Suggested References:	
Sr. No.	References
1.	Mahan, L. K., Escott-Stump, S., Raymond, J. L., & Krause, M. V. (2012). <i>Krause's food &amp; nutrition therapy</i> . US: Elsevier/Saunders.
2.	Dietary guidelines by India: ICMR
3.	Bagchi, D., & Nair, S. (Eds.). (2018). <i>Nutritional and therapeutic interventions for diabetes and metabolic syndrome</i> . Cambridge: Academic Press.
4.	Antia, F. P. (1973). <i>Clinical dietetics and nutrition</i> . London: Oxford University Press, Ely House, 37 Dover Street.
5.	Joshi, S. A. (1995). <i>Nutrition and dietetics</i> . Ahmedabad: McGraw-Hill Education.
6.	Manual (2018). <i>Clinical Dietetics</i> , Ahmedabad: JB International
7.	Bajaj .M. <i>Diet Metrics</i> (2019)





8.	Yadav.A, Arora.M, Swayam.S. (2019) : <i>Practical Manual of Nutrition and Dietetics</i> New Delhi: Kalpaz Publications
9.	Seth,V.,Singh,K.,Mathur,P.(2020):Diet Planning through life cycle, Part II,A Practical Manual, New Delhi: Elite Publishing House

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

On-line Resources:

[Epgp.inflibnet.ac.in/Home](http://Epgp.inflibnet.ac.in/Home)

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Bachelor of Science- Home Science  
(B.Sc.-H. Sc.) (Foods and Nutrition) Semester (V)

Course Code	UH05CFDN56	Title of the Course	Pathophysiology of Diseases
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. Provide the students with the knowledge of various biochemical changes occurring in the body under various pathological conditions.</li><li>2. Impart knowledge on the specific markers used to identify a disease.</li><li>3. Evaluate the various nutritional assessment tools used in clinical decision making</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Introduction, principles of clinical nutrition (a) Effects of disorders on nutritional requirements. (b) Importance of nutritional screening. (c) Clinical assessment of nutritional status. (d) Nutritional assessment tools in clinical decision making. (MUST, SGA, NIA, AND MNA GMRI).	15
2.	Over nutrition and under nutrition (a) Introduction, clinical presentation, and pathophysiology, clinical assessment (b) Chronic Energy deficiency-Children, Adults and Elderly	15
3.	(a)Gastrointestinal tract-the pathophysiology, laboratory assessment- (i) Esophagitis, (ii) Peptic ulcers, (iii)Celiac disease-ulcerative colitis (iv)Irritable Bowel Syndrome  (b) Liver diseases-- the pathophysiology, laboratory assessment. (i) Acute Viral Hepatitis (ii)Chronic Viral Hepatitis (iii)Alcoholic Liver Diseases-Hepatic Steatosis (iv)Alcoholic Hepatitis (v)Alcoholic Cirrhosis (vi)Malnutrition in Liver Disease.  ( c ) Pancreatic disorder- the pathophysiology, laboratory assessment. (i)Diseases of Exocrine Pancreas (ii)Acute Pancreatitis	30





	(iii)Chronic Pancreatitis (iv)Diseases of Endocrine Pancreas (v)Diabetes mellitus-types, complications of Diabetes Mellitus- DKA, Macro Vascular Diseases, Micro Vascular Diseases	
4.	(a) Kidney Disorder- the pathophysiology, laboratory assessment (i)Nephritis-Acute and Chronic (ii) Nephrotic Syndrome (iii)Nephrolithiasis (iv)Renal Failure (v)ESRD (b) Heart and blood vessels- the pathophysiology, laboratory assessment (i) Lipoproteins- their role in CVD (ii)Atherosclerosis- (iii)Hyper tension (iv) Congestive Heart Failure	25
5.	(a) Nutrition in surgery and trauma i. Introduction, stress response to trauma and its effects on mechanism (b) Nutrition and Drug interaction (i) Drug food Interactions (ii) Drug nutrient Interactions	15

Teaching-Learning Methodology	Class Discussions/ Demonstrations, Power point presentations, Class activities/ assignments, group discussions, video clips, chalk and board
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%





Course Outcomes: Having completed this course, the learner will be able to

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|----|--|
| 1. | Define various terminologies used in the field of clinical nutrition |
| 2. | Describe the pathophysiology of various diseases                     |
| 3. | Identify various markers used in diagnosing the diseases             |
| 4. | Relate the normal and pathological functioning of various organs     |

Suggested References:

Sr. No.	References
1.	Antia, F.P. (2000). <i>Clinical Dietetics &amp; Nutrition 3rd</i> . New Delhi/Bombay: Oxford University Press.
2.	Mahan, K. L. & Escott-Stump., S. (2016) <i>Food and The Nutrition Care Process</i> . (13 <sup>th</sup> Ed) : Elsevier Publications
3.	Passmore, R., & Eastwood, M. A. (1986). <i>Human Nutrition and Dietetics: 8th Edition</i> . : Churchill Livingstone.
4.	Chatterjee, M. N., & Shinde, R. (2011). <i>Textbook of Medical Biochemistry</i> . New Delhi: Jaypee Publications (P)Ltd.
5.	Gibney, M.J., Marinos, E., (2005) <i>Clinical Nutrition India</i> : Replika Press Private Ltd.

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

On-line Resources

[www.aaopr.org](http://www.aaopr.org)

[Eatright.org](http://Eatright.org) - Academy of Nutrition and Dietetics

[www.nhlbi.nih](http://www.nhlbi.nih)

<http://www.nwkidney.org/>

[www.renalnet.org](http://www.renalnet.org)

[IGNOU - Student Zone](#)

[Krause's Food & the Nutrition Care Process, Mea Edition E-Book](#)

LK Mahan, JL Raymond - 2016 - books.google.com

[Epgp.inflibnet.ac.in/Home](http://Epgp.inflibnet.ac.in/Home)

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Bachelor of Science -Home Science  
(B.Sc. – H. Sc.) (Foods and Nutrition) Semester (V)

Course Code	UH05SFDN51	Title of the Course	Practical – Proximate Analysis of Food
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. Get familiarity with the analytical instruments through an understanding of the working principles and applications.</li><li>2. Acquire laboratory skills require for performing a range of nutrient analyses of food components.</li></ol>
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Course Content		
Estimation in Foods: Proximate principles, minerals, trace elements & Vitamins in the following:		
Unit	Description	Weightage * (%)
1.	Determination of moisture by hot air oven and sun drying method	10
2.	Determination of ash from foodstuff	05
3.	Proteins Determination of proteins by Micro Kjeldahl methods	15
4.	Lipids Estimation of fat by Soxhlet extraction method	10
5.	Fibre: Crude fibre	10
6.	Minerals Determination of: (a) Calcium (b) phosphorous (c) iron	30
7.	Vitamins Determination of vitamin C (titrimetric)	10
8.	Isolation and identification of $\beta$ carotene by column chromatography	10

Teaching-Learning Methodology	Chalk and board, Class Discussions, assignments, video clips(technology tool )
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Choose appropriate strategies and instrumentation for analysis of different sample types
2.	Get familiarity with the analytical instruments through an understanding of the working principles and applications and apply the knowledge food analysis employed in research and food industry.
3.	Choose appropriate analytical techniques for foods and when/how to use the min a food processing industries.

On-line resources to be used if available as reference material
On-line Resources:
<a href="http://egyankosh.ac.in/">http://egyankosh.ac.in/</a>
<a href="http://Epgp.inflibnet.ac.in/Home">Epgp.inflibnet.ac.in/Home</a>

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC51	Title of the Course	Consumerism
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. To make them understand the role of consumer in the market.</li><li>2. To increase their awareness about consumer buying behaviour, their rights and responsibilities.</li><li>3. To familiarize them with various consumer problems.</li><li>4. To enhance their knowledge base about redressal agencies.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Consumer and consumer problems (a) Definition of a consumer. (b) Problems of consumer (including services as water, gas, electricity etc.) (c) Unfair consumer practices: adulteration and faulty weights and measures	25
2.	Consumer Buying Behaviour (a) Factors influencing buying behaviour (b) Consumer aids: classification – Labels, Trademarks, Brand Names, Patents, Warranty, Guarantee, Quality Control and After Sales Service (c) Advertisement features, importance, media, usefulness	25
3.	Consumer protection (a) Meaning, characteristics and objectives (b) Need and ways for providing consumer education (c) Consumer rights and responsibilities (d) Consumer Laws	25
4.	Consumer protection agencies (a) Consumer organizations – origin, functioning, role and types (b) Consumer cooperatives – role, history and growth in India (c) Consumer redress: role of consumer forums and consumer courts	25





	in safeguarding consumers	
Teaching-Learning Methodology	Lectures, active learning, reflective learning, written exercises, collaborative learning, problem solving, case studies, ICT enabled learning	

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Emerge as informed consumers
2.	Becoming familiarized to the changing trends in consumerism
3.	It also provides an understanding of the procedure of redress of consumer complaints, and the role of different agencies in establishing product and service standards

Suggested References:	
Sr. No.	References
1.	Misra S., Sree Kumaran G. N., and Chadah, S. (2015). <i>Consumer Handbook</i> . New Delhi: Department of Consumer Affairs.
2.	Singh, G. (1990). <i>Law of Consumer Protection</i> . Jaipur: Bharat law publishers.
3.	Agarwal, A. (1989). <i>A practical handbook for consumers</i> . Bombay: India book house.





4.	Sarkar, A.(1989). <i>Problems of Consumers in Modern India</i> . New Delhi: Discovery publishing House.
5.	<i>Recent issues of magazines: Insight</i> , Ahmedabad : CERC.
6.	<i>Consumer Voice</i> :New Delhi: VOICE Society.

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

On-line Resources

Consumer handbook English [https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer\\_information/Consumer\\_Handbook\\_H.pdf](https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer_information/Consumer_Handbook_H.pdf)

Consumer handbook Hindi [https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer\\_information/Consumer\\_Handbook.pdf](https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer_information/Consumer_Handbook.pdf)

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc) (Home Science) Semester (V)

Course Code	UH05EHSC52	Title of the Course	NGO Management
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. Acquaint students regarding Non-Government Organizations (NGO).</li><li>2. Acquaint them about the steps of starting the NGO.</li><li>3. Enable the students to manage the NGO consequently, which enhance the employability.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	<p>Concept of NGO</p> <ul style="list-style-type: none"><li>(a) Meaning of NGO and GO</li><li>(b) Difference between Government Organization and NGO</li><li>(c) Characteristics of good NGO</li><li>(d) Structure of NGO</li><li>(e) Functions of NGO</li><li>(f) Advantages of NGO</li><li>(g) Present status of NGO</li><li>(h) Contribution of NGO in the development</li></ul>	25
2.	<p>Legal Frame Work for Establishing NGO</p> <ul style="list-style-type: none"><li>(a) Steps for starting NGO</li><li>(b) Registration of NGO</li><li>(c) Identifying Funding agencies</li><li>(d) Resource Mobilization</li><li>(e) Methods and Techniques of fund raising</li><li>(f) Foreign contributions and Regulation Act (FCRA)</li><li>(g) Statutory obligations, Income Tax Exemption (80-G, 12-A and 35 NC)</li></ul>	25
3.	<p>NGO Management</p> <ul style="list-style-type: none"><li>(a) Managing people and teams in NGOs</li><li>(b) NGO Management competencies</li><li>(c) Applying NGO principles and values</li></ul> <p>Policies and Programmes</p> <ul style="list-style-type: none"><li>(a) New regulations for NGO and government control</li><li>(b) Government laws, partnership model, Governing Schemes through ministries /Department / Bodies, government grant-in-aid</li></ul>	25





4.	Problems of NGO (a) Training (b) Recruitment (c) Funding (d) Resource Mobilization (e) Documentation	25
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Teaching- Learning Methodology	Lecture method ,Active learning methodology , Group discussions Method, Power Point Presentation , Audio Visual methods, Seminar, Assignment, Quiz, Field visit, debates
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Know the concept of NGO and present status of NGO.
2.	Manage NGO & required resource mobilization.
3.	Enhance employability in NGO.

Suggested References:	
Sr. No.	References
1.	Abraham A. <i>Formation and Management of NGOs</i> (2003). New Delhi: Third Edition, Published by Univarsal Law publishing Co. Pvt Ltd.
2.	Clark J. (1991). <i>Voluntary Organizations: Their Contribution to Development</i> . London: Earth Scan





3.	Lewis D. <i>Management of Non Governmental Development Organization</i> (2001). Newyork: Second Edition, Published by Routledge.
4.	Dorothea H. (2003). <i>the real world of NGO's, Discourses, Diversity and Development</i> . New Delhi: Zed books Ltd.
5.	Jain R.B. (1995). <i>NGO's in Development Perspective</i> . New Delhi: Vivek Prakasan.
6.	Joel, S.G.R., and Bhose. (2003). <i>NGO's and Rural Development – Theory and Practice</i> . New Delhi: Concept Publishing Company.
7.	John M. R. (2002). <i>Stakeholders in Rural Development – Critical Collaboration in State – NGO Partnerships</i> . New Delhi: Sage Publications.
8.	Julie F. (2003). <i>Governments, NGO's and the Political Development of the Third World</i> . Jaipur: Rawat Publications.
9.	Julie F. (2003). <i>Non Governments – NGO's and the Political Development of the Third World</i> . New Delhi: Rawat Publications.
10.	Kalyan S. (2013). <i>An Easy Guide to NGO</i> . Kolkata: Book Corporation.
11.	Kumar, A. (2003). <i>Social Change through NGO's</i> . New Delhi: Anmol Publishers.
12.	Kavita K. et al (2010). <i>Status of Child and Welfare Originations</i> , Jaipur: Aaviskar Publishers.
13.	Singh R.S. (2003). <i>Role of NGO's in Developing Countries (Potentials, Constraints and Policies)</i> . New Delhi: Deep & Deep Publications (P) Ltd.
14.	Chandra S. (2003). <i>Guidelines for NGO Management in India</i> . New Delhi: Published by Kanishka Distributors.

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Bachelor of Science – Home Science  
(B.Sc. – H.Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC53	Title of the Course	Accessories and Adornment
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. Gain knowledge on importance of accessories &amp; adornments in dress design.</li><li>2. Enable students gather knowledge on accessories &amp; adornment used in garments.</li><li>3. Make students aware of the materials, styles and placement of accessories and adornments.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Importance of adornment and accessories	10
2.	Accessories & adornments during middle age	20
3.	Accessories in modern times: (a) Hats & headgear (b) Jewellery (c) Sash (d) Shoes & boots (e) Muffs & gloves (f) Handbags	30
4.	Adornments: (a) Buttons (b) Lapel pins (c) Laces & ruffles (d) Ribbons (e) Braids (f) Through surface ornamentation (g) Hand & machine embroidery	30
5.	Innovations in adornment & accessories	10

Teaching-Learning	Lectures, Power -point Presentations, blackboard and chalk, Field Visits, ICT enabled Teaching, market survey, discussions, assignments,
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Methodology	Presentations, Individual / group project.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Appreciate the role of accessories in fashion.
2.	Comprehend the techniques of adornment.
3.	Develop the skill to coordinate adornments & accessories in garments.

Suggested References:	
Sr. No.	References
1.	Dickerson K.G. (2003), <i>Inside the Fashion Business</i> . New Delhi: VII Edition, Person Education Pvt. Ltd., Indian Branch.
2.	Jarnow, Guerreiro, Judelle, (1987), <i>Inside the Fashion Business</i> , New York: IV Edition, Macmillan Publishing Company.
3.	Kumar. A. (2010), <i>Fashion Tourism</i> , New Delhi: Sonali Publication, India.
4.	Makelvey K. (2006), <i>Fashion Source Book</i> , U.S.A.: II Edition, Blackwell Publishing Ltd.
5.	Pundir N., (2007), <i>Fashion Technology- Today &amp; Tomorrow</i> , New Delhi: Mittal Publication, India.
6.	Neelima, (2009), <i>Fashion &amp; Textile Design</i> , New Delhi: Sonali Publications.

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Bachelor of Science -Home Science  
(B.Sc. – H. Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC54	Title of the Course	Food Adulteration
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. Familiarize students with food standards.</li><li>2. Enable testing of different foods for their quality.</li><li>3. Familiarize students with tests used for finding adulterations and quality assessments.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Food Adulteration – Definition, types, classification in details.	15
2.	Present laws and procedure of Adulteration-Highlights of food safety and standards. Food safety and Standards Authority of India rules and procedure of local authorities. Food Laws Voluntary /Mandatory. Role of National & International Voluntary Agencies. e.g AGMARK ,BIS etc	25
3.	Adulteration of common foods and methods of detection- Detection in milk, oil, grains, spices, condiments, Processed foods, fruits, vegetables, additives and sweetening agents( Any Two Methods of detection).	35
4.	Specifications according to Prevention of Food Adulteration Act of the following: (Any give products of the following Foods groups) (a) Milk & milk products (b) Oil and Fats (c) Spices & Condiments (d) Food grains. (e) Flours and Cereals (f) Canned Foods (g) Fruits and vegetable products (h) Sugar & preserves (i) Beverages- alcoholic & non-alcoholic	25

Teaching-Learning	Chalk and board, Power point presentations, Class Discussions, Class activities / assignments, quiz
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Methodology		
Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to

- |    |   |
|----|---|
| 1. | Conduct adulteration test on a small scale basis, enterprise, and household level will gain knowledge of agencies working for it. |
|----|---|

Suggested References:

Sr.No.	References
1.	ISI Publications on above topics
2.	Association of Official Agricultural Chemists, & Horwitz, W. (1975). <i>Official methods of analysis</i> (Vol. 222). Washington, DC: Association of Official Analytical Chemists.
3.	Raghuramulu, N., Nair, K. M., & Kalyanasundaram, S. (Eds.). (1983). <i>A manual of laboratory techniques</i> . New Delhi: National Institute of Nutrition, Indian Council of Medical Research.
4.	Ramesh V Bhatt , (1992)Food safety, case studies. NIN

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

On-line Resources

[Epgp.inflibnet.ac.in/Home](http://Epgp.inflibnet.ac.in/Home)

[Http://Old.fssai.gov.in/portals/o/pdf/draft-Manuals/Beverages](http://Old.fssai.gov.in/portals/o/pdf/draft-Manuals/Beverages) and Confectionary pdf.

[Http://www.fssai.gov.in](http://www.fssai.gov.in)

[Http://indianlegislation.com/laws-on](http://indianlegislation.com/laws-on) food adulteration

[Http://fssai.gov.in/dart/](http://fssai.gov.in/dart/).





Vikaspedia

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC55	Title of the Course	Basics of Research
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. To develop understanding of the basic framework of research process.</li><li>2. To develop an understanding of various research designs and techniques.</li><li>3. To identify various sources of information for literature review and data collection.</li><li>4. To develop an understanding of the ethical dimensions of conducting research</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Introduction to Research (a) Meaning ,purpose, approaches and types of research (b) Identification of problem (c) Collecting review and keywords (d) Research ethics and plagiarism	25
2.	Methods of data collection (a) Primary and Secondary data collection methods (b) Qualitative methods of data collection, (c) Survey methods of data collection (d) Sampling and types of sampling	25
3.	Processing and analysis of data (a) Measures of central Tendency (Mean, medium, Mode), (b) Measures of dispersion (range, mean deviation, standard deviation) (c) Graphical representation of Data.	25
4.	Preparing a small project and report writing ( Title page, Abstract, Introduction, Methodology, Results, Discussion, References, and Appendices)	25





Teaching-Learning Methodology	Lectures, active learning, reflective learning, written exercises, collaborative learning, problem solving, case studies, ICT enabled 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)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understand research terminology
2.	Identify the components of a literature review process
3.	Understand the research methodology
4.	Prepare a scientific report of the given project

Suggested References:	
Sr.No.	References
1.	Bernard, H.R. (2013). <i>Social Research Methods: Qualitative and Quantitative Approaches</i> . New Delhi: Sage publications.
2.	Best and Kahn. (2009). <i>Research Methodology</i> . New Delhi: PHI Learning Private Limited.
3.	Kothari, C.R. (2004). <i>Research Methodology (Methods and Techniques)</i> . New Delhi: New Age Publisher.
4.	Bandarkar, P.L., and Wilkinson, T.S. (2000). <i>Methodology and Techniques of Social Research</i> . Mumbai: Himalaya Publishing House.
5.	Dooley, D. (1995). <i>Strategies for Interpreting Qualitative Data</i> . California: Sage Publications.
6.	Gay, L.R. (1981). <i>Educational Research: Competencies for Analysis and Applications</i> . (2 <sup>nd</sup> ed.) Columbus: Charles E. Merrill Publishing Company and A. Bell and Howell Company.
7.	Ahuja, R.(2010). <i>Research Method</i> . New Delhi: Rawat Publication

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**SARDAR PATEL UNIVERSITY, VALLABH VIDYANAGAR**

**B.Sc. Home Science**

**(Under Choice Based Credit Scheme)**

**Semester - FIFTH (FAMILY RESOURCE MANAGEMENT) YEAR 2023-2024**

Course Type	Course Code	Name of Course	Theory (T) Practical (P)	Credit	Contact hrs/ week	Exam Duration in hrs	Marks		
							Internal	External	Total
<b>Ability Enhancement Course</b>	UH05AHSC51	Programme for Rural and Urban Development	T	2	2	2	15/5	35/14	50/20
<b>Core Courses</b>	UH05CFRM51	Housekeeping	T	4	4	3	30/10	70/28	100/40
	UH05CFRM52	Housekeeping	P	2	4	3	15/5	35/14	50/20
	UH05CFRM53	Building Structure& Materials	T	4	4	3	30/10	70/28	100/40
	UH05CFRM54	Building Structure& Materials	P	2	4	3	15/5	35/14	50/20
	UH05CFRM55	Ergonomics and Design	T	4	4	3	30/10	70/28	100/40
<b>Skill Enhancement Courses</b>	UH05SFRM51	Computer Aided Interior Designing - II	P	2	4	3	15/5	35/14	50/20
	UH05SFRM52	Ergonomics and Design	P	2	4	3	15/5	35/14	50/20
<b>Elective Courses (Any One)</b>	UH05EHSC51	Consumerism	T	2	2	2	15/5	35/14	50/20
	UH05EHSC52	NGO Management	T	2	2	2	15/5	35/14	50/20
	UH05EHSC53	Accessories & Adornment	T	2	2	2	15/5	35/14	50/20
	UH05EHSC54	Food Adulteration	T	2	2	2	15/5	35/14	50/20
	UH05EHSC55	Basics of Research	T	2	2	2	15/5	35/14	50/20
		<b>Total</b>		<b>24</b>	<b>32</b>		<b>180</b>	<b>420</b>	<b>600</b>



**SARDAR PATEL UNIVERSITY**  
**Vallabh Vidyanagar, Gujarat**  
**(Reaccredited with 'A' Grade by NAAC (CGPA 3.25)**  
**Syllabus with effect from the Academic Year 2023-2024**

Bachelor of Science - Home Science  
(B.Sc. - H. Sc.) (Home Science) Semester (V)

Course Code	UH05AHSC51	Title of the Course	Programmes for Rural and Urban Development
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. To develop understanding regarding the nation towards urban and rural development</li><li>2. To examine the cumulative impact of these developmental efforts in quantitative and qualitative dimensions</li></ol>
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Course Content		
Unit	Description	Weightage*(%)
1.	<ol style="list-style-type: none"><li>a. Introduction to Rural and Urban Development Programmes.</li><li>b. Role of Home Science in rural and urban development.</li><li>c. Five year plan and their focus, brief on Niti Ayog</li></ol>	20
2.	<ol style="list-style-type: none"><li>a. Thrust of agriculture</li><li>b. National food production programmes</li><li>c. National health mission ( NRHM, NUHM, NRLM)</li></ol>	20
3.	Poverty alleviation efforts: <ol style="list-style-type: none"><li>a. Rural and Urban communities, characteristics, nature, difference, village organization, rural and urban development(NGOs working), role of CAPART</li><li>b. Programmes for poverty alleviation for rural and urban areas, employment generation and social inputs.</li><li>c. Current programmes for rural and urban poor,</li></ol>	30
4.	Programmes for women and children: <ol style="list-style-type: none"><li>a. Women as target groups, Specific measures for women and children such as DWCRA, ICDS, IMY, ANARDE, SEWA, CHETNA, TF, SGSY, ARSP.</li><li>b. Current programmes for women as initiated and implemented by the different ministries and departments.</li></ol>	30

Teaching-Learning Methodology	Class Discussions/ Demonstrations, Power point presentations, Class activities/ assignments, group discussions, Field visits, chalk and board
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	The students can get the knowledge of different five years plan.
2.	They use the knowledge in self empowerment and indirectly help the society in poverty alleviation.

Suggested References:	
Sr. No.	References
1.	Upadhyay, H.C. (1991): Modernization and Rural Development New Delhi, Anmol publications
2.	National institute of Rural development, Hyderabad, 1991. Rural development statistics NIRD
3.	Narayan Manohar S (1989) Integrated Rural energy programmes, Delhi Shree Hari printers.
4.	Ghosh Bahanisikha (1990) The Indian population problem, Madras, Sage publications.
5.	Thingalaya N. K (1986) Rural India-Real India, Bombay, Himalaya Publishing House.
6.	Journal of Social welfare, Journal of Rural development ,Journal of Yojana, Journal of Family welfare, Journal of extension education

On-line resources to be used if available as reference material
On-line Resources
<a href="http://egyankosh.ac.in/">http://egyankosh.ac.in/</a>

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Bachelor of Science - Home Science  
(B.Sc.- H. Sc.) (Family Resource Management) Semester (V)

Course Code	UH05CFRM51	Title of the Course	Housekeeping
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To make the students aware of different areas and functions of housekeeping department.</li><li>2. To familiarize students with housekeeping activities.</li><li>3. To acquaint them with linen handling and laundry procedure.</li><li>4. To enhance students with professional skills in hospitality institutes</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	(a) Introduction and importance of hospitality industry: Types of institutions offering hospitality services, Departments of a hotel, Role of housekeeping department in hospitality industry. (b) Housekeeping Department: Functions, Organization and Layout, Co-ordination with other departments, Competencies of housekeeping personnel, Job description and job specification of housekeeping staff, Record keeping.	20
2.	Cleaning (a) Cleaning agents and equipment. (b) Cleaning procedures: cleaning methods, types of cleaning-, Cleaning guest room & public area (c) Cleaning and care of different surfaces. (d) Pest Control	20
3	Linen and uniform room (a) Layout and physical features. (b) Types of linen, uniforms and their selection. (c) Storage of linens (d) Stock determination, control and distribution. (e) Recycling of condemned linens.	20



4	Laundry (a) Types of laundry systems: in house, contracted outa (b) Layout and physical features of laundry (c) Laundry equipment and laundry agents (d) Laundry procedure. (e) Stain removal (f) Valet service and care labels	20
5	Safety and security in housekeeping (a) Occupational hazards. (b) Housekeeper's responsibilities towards safety (c) Fire prevention and fire fighting (d) First Aid. for commonly occurring health problems (e) Keys and their control (f) Guest and employee theft (g) Dealing with emergencies	10
6.	Eco practices in Housekeeping Department: (a) Eco friendly practices for rooms, (b) Green building, (c) Energy audit: Lighting, Laundry, Water management, Ecotel, Environment friendly cleaning agents.	10

Teaching- Learning Methodology	Lectures, Power -point Presentations, Field Visits, ICT enabled learning, Group Discussions, e learning through videos
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%



Course Outcomes: Having completed this course, the learner will be able to

1.	Know working procedures of housekeeping department of a hotel
2.	Demonstrate operations management in cleaning and safety systems.
3.	Appreciate the need for maintenance of facilities and services.
4.	Demonstrate the working of laundry equipment.
5.	Develop competence for professional practice in housekeeping.

Suggested References:

Sr. No.	References
1.	Andrews, S. (2008). <i>Hotel Housekeeping Management and Operations</i> . New Delhi: Tata McGraw Hill Education Pvt. Ltd.
2.	Raghubalan, G., and Raghubalan, S. (2007). <i>Hotel Housekeeping Operations and Management</i> . New Delhi: Oxford University Press.
3.	Andrews, S. (1980). <i>Housekeeping Training Manual</i> . New Delhi: Tata Mc Graw Hill Pub Co Ltd.

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

On-line Resources

<https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=827>  
P-04. Front Office and Housekeeping ( M-18-39)

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Bachelor of Science - Home Science  
(B.Sc.- H. Sc.) (Family Resource Management) Semester (V)

Course Code	UH05CFRM52	Title of the Course	Practical - Housekeeping
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To understand the importance of care and maintenance of cleaning equipment used in housekeeping department.</li><li>2. To understand the importance and role of the housekeeping control desk.</li><li>3. To acquaint them with the standard contents of guestrooms.</li><li>4. To comprehend different types of linen.</li><li>5. To know uses of laundry agents, stain removal, dry cleaning.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Layout of housekeeping department and responsibilities of housekeeping staff.	05
2.	Method of cleaning room and bathroom. Method of bed making Method of setting maid's cart Process of preparing Room inspection check list.	15
3.	Cleaning & maintenance of various surfaces glass articles, silver, brass, copper, sink stainless steel	10
4.	Methods of removing stains from various linens and uniforms. Method of laundering cotton, woollen, silk and synthetic garments Method of starching linens and uniforms	10
5.	Draw layout of linen room and explain activities of linen room.	10
6.	Visit to various hospitality institutes to explore  (a) Organization (b) Job description and job specification of housekeeping staff (c) Maintenance of registers (d) Safety aspects	10



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7.	Draw organization structure of small medium and large hotel.	10
8.	To know various registers and files maintained by housekeeping department.	10
9.	Prepare-First aid box.	10
10.	Understanding the felt/ unfelt needs of the customers with special needs like physically handicap, pregnant, lactating, elderly, children	10

Teaching-Learning Methodology	Power -point Presentations, blackboard and chalk, Field Visits, actual performance of practical, e learning through videos of working of housekeeping department, presentations.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understand various cleaning procedures followed in the housekeeping department.
2.	Understand the basic functions of cleaning equipment and its methods of operation.
3.	Know the different systems adopted and practices by the housekeeper for the efficient functioning of the hotel.
4.	Apply various aspects of the linen room planning, layout, location and activities.
5.	Demonstrate appropriate skills in housekeeping activities.



Suggested References:

Sr. No.	References
1.	Andrews, S. (2008). <i>Hotel Housekeeping Management and Operation</i> . New Delhi: Tata McGraw Hill Education Pvt. Ltd.
2.	Raghubalan, G., and Raghubalan, S. (2007). <i>Hotel Housekeeping Operations and management</i> . New Delhi: Oxford University Press.
3.	Andrews, S. (1980). <i>Housekeeping Training Manual</i> . New Delhi: Tata Mc Graw Hill Pub Co Ltd.

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

On-line Resources

<https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=827>  
P-04. Front Office and Housekeeping ( M-18-39)

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Family Resource Management) Semester (V)

Course Code	UH05CFRM53	Title of the Course	Building Structure And Materials
Total Credits of the Course	04	Hours per Week	04
Course Objectives:	1. To familiarize them with exterior and interior features of the house. 2. To explain the domestic services essential for a building. 3. To give an insight for the recent trends in construction materials and finishes.		

Course Content		
Unit	Description	Weightage* (%)
1.	Building components	05
2.	Exterior Construction features (a) Foundation: Deep & Shallow. (b) Roof: Pitched & flat. (c) Wall: Load bearing & non load bearing	20
3.	Interior Construction features of house (a) Stairways : terms and types (b) Doors and Windows : location, terms ,types (c) Floors: construction , material	20
4.	Construction Materials (a) Structural material: Brick, Cement, Plaster, Mortar, Concrete, R.C.C, Stone, metal, prefabricated material. (b) Finishing Materials: Paints, Wall Paper, Glazed tiles, Wood, plastic	20
5.	Domestic services in building (a) Water Supply. (b) Drainage. (c) Electricity	20
6.	Recent advances in building materials and finishes (a) Construction materials, interior finishes and exterior finishes, partition materials. (b) Approximate cost of building materials and finishes. (c) Concept of green building materials.	15



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Teaching-Learning Methodology	Power point presentations, Field visits, Assignments, Quiz, Participatory lectures, Discussions and display of various building materials, lectures, tutorials, library use and e-learning through videos of various building materials coupled with market survey.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Identify various materials used in the construction of the building.
2.	Know various structural features and types of latest trends in a building.
3.	Determine the materials best suited for a particular building

Suggested References:	
Sr.No.	References
1.	Agan, M.S.(1970). <i>The house its plan and use</i> . New Delhi: Oxford & IBH pub.Co.
2.	Bindra, S.P. & Arora,S. P.(2003). <i>Building Construction</i> . New Delhi: Dhanpat Rai Pub.
3.	Deshpande, R.S. (1978). <i>Modern ideal homes for Indians</i> . New Delhi: United Book Corp.
4.	Arora, S.P. & Bindra, S.P. (2013). <i>A Text book of Building Construction</i> . New Delhi: Dhanpat Rai Publications.

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Bachelor of Science - Home Science  
(B.Sc.- H. Sc.) (Family Resource Management) Semester (V)

Course Code	UH05CFRM54	Title of the Course	Practical - Building Structure and Materials
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. Gain knowledge on concepts, types and use of building materials and selection tactics</li><li>2. Learn use of materials at different levels or stages of a building construction and finishes in buildings</li><li>3. Appraise usage and characteristics of building materials and finishes for strength, durability and aesthetics.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Collection and identification of various building materials use in house construction.	05
2.	Drawing a floor plan of selected house along with furniture arrangement on the given scale	10
3.	Draw landscape plan and decide color scheme	10
4.	Introduction to concept of model making and various materials and tools used for model making	05
5.	Preparation of base for models using wood or boards: Introduction to block models of buildings (or 3D Compositions) involving the usage of various materials like Thermocol, Soap/Wax, Boards, Clay Flex etc.	10
6.	Scaled models of furniture of various rooms	10
7.	Developing building models - showing details on exterior components – Windows/Glazing/treatment, Doors, Sunshades, Wall Panel, Roof	10
8.	Creating models showing interior of house with furniture and interior components.	30
9.	Various site elements – Contour representation, Roads/Pavements, Trees/Shrubs, Lawn, Water bodies, Street furniture, Fencing etc.	05
10.	Visits to various construction sites.	05



Teaching-Learning Methodology	Power point presentations, Videos, Field visits, Assignments, Discussions and display of various building materials, tutorials, library use and e-learning through videos of various building materials coupled with market survey ,field-based learning
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Comprehend the techniques of model making
2.	Determine scale model requirements
3.	Benefit from the hands-on experience gained for future career prospects
4.	Appraise/ compare feasibility of different materials for making models

Suggested References:	
Sr. No.	References
1.	Leger, E. (2003). <i>Complete Building Construction</i> . London: Wiley-dreamtech India Pvt Ltd.
2.	Curl, J.S. (2006). <i>A Dictionary of Architecture and Landscape Architecture</i> . London: Oxford University Press.
3.	Faulkner, R., and Faulkner, S. (1986) . <i>Inside Today's Home</i> . New York: Rinehart publishing Co.

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Bachelor of Science - Home Science  
 (B.Sc.- H.Sc.) (Family Resource Management) Semester (V)

Course Code	UH05CFRM55	Title of the Course	Ergonomics and Design
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"> <li>1. To familiarize with the intricacies of ergonomics with increase in efficiency and improved health.</li> <li>2. Build knowledge on human interaction with task and technology in day today life.</li> <li>3. To augment the workspace needed for various activities.</li> <li>4. To develop aptitude in identifying the product / space design problems at home and at work, using basic design principles.</li> <li>5. To understand interface of the human element and the user's perspective in the evolution of product/space design.</li> </ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Ergonomic concepts (a) Significance and scope of ergonomics: Aims, objectives, Definition and benefits of ergonomics, Role of the ergonomist. (b) Ergonomic components and their interrelationship: Components of worker input (affective, cognitive, temporal and physical), Human characteristics, capabilities and limitations.	10
2.	Body at work (a) Significance of Anatomy and physiology in ergonomics: (b) Work physiology -Body type, Physical fitness - age, BP, HR and BMI, Physiology of Musculoskeletal system, Muscular-Contraction initiation, Tendons, Joints, ligaments. (c) Anthropometry: Meaning, importance, methods of taking measurements, Types of dimensions (structural/ functional, Static/ Dynamic), Techniques of taking Anthropometric measurements.	20
3.	Biomechanics (a) Concept of biomechanics: Work postures- postural variations and discomfort (b) Measurement of physical work capacity: Caloric cost of various activities, factors affecting energy requirement, Methods of measuring human cost of work. (c) Muscular Work: Types and Muscle Contractions/extension/rotation (d) Fatigue: Physiological and Psychological (e) Manual material handling: Pushing, Pulling, Repetitive task, Muscular skeletal disorders	20





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4.	Indices of indoor comfort: (a) Physical Factors of the Work Environment: Lighting (Lighting levels, contrast and glare), Noise (Noise induced hearing loss, Distraction, annoyance and emergency signals), Thermal Environment (Body temperature regulation and acclimatization, thermal comfort and Discomfort), Vibration effects and subjective assessment. (b) Functional design and arrangement of workplaces.	20
5.	Applications of anthropometry in design: (a) Ergonomic principles for good workspace design. (b) Work heights (standing, sitting, Workspaces- Elbow room, Knee room, Clearances, Circulation space in rooms and corridors, Room to grasp and move things) (c) Percentiles, Design for extreme individuals, Design for adjustable range and Design for average.	20
6.	Product Design and Development: (a) Design concept- functionalism and aesthetics. (b) Ergonomic considerations in designing products: Design for standing /seated worker.	10

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 CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Distinguish the terms referring to health and safety and ergonomics.
2.	Identify and use ergonomic controls to reduce and prevent work-related disorders.
3.	Comprehend interrelatedness of work, worker and work environment on productivity.
4.	Comprehend interrelatedness of work, worker and work environment on productivity.
5.	Relate significance of anthropometry to workplace designing.



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
2.	Barnes, R.N. (1980). <i>Motion and Time Study, Design and Measurement of Wor.</i> USA: John Willy.
3.	Hudso, W.R (1962). <i>Work place Dimensions and Physiological Cost To The Worker</i> . The Journal of Industrial Engineering.
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.	Jhamb L.C.(2008). <i>Work Study and Ergonomics</i> . Pune :
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

<https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/office-ergonomics/>

<http://www.ilocis.org/documents/chpt29e.htm>

[https://www.danmacleod.com/ErgoForYou/10\\_principles\\_of\\_ergonomics.htm](https://www.danmacleod.com/ErgoForYou/10_principles_of_ergonomics.htm)

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

<https://www.osha.gov/ergonomics>

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Bachelor of Science - Home Science  
(B.Sc.- H. Sc.) (Family Resource Management) Semester (V)

Course Code	UH05SFRM51	Title of the Course	Practical - Computer Aided Interior Designing - II
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To make use of Drafting Tool and Isometric drawings for Interiors designing.</li><li>2. Get practically oriented with the 3 D drawing in designing Interior.</li><li>3. Understand the power and precision of computer-aided modelling and drafting</li><li>4. Create 3D objects as plan view, elevations and complex 3D shapes</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Basic 2D Drawing (a) Floor plan (b) Elevation plan	10
2.	Floors (a) Creating Floor slab (b) Modifying floor slab	10
3.	Stairs (a) Designing Stairs (b) Modifying Stairs	10
4.	2D Isometric Drawings (a) Setting Up the Isometric mode (b) An Isometric Plan (c) Drawing an Iso-Circle Isometric Drawing	10
5.	Designing using AutoCAD (a) Furniture (b) Interior related objects	10



6..	3-D Drawing in AutoCAD (a) Introduction to 3D (b) Creating solid primitives (c) Mesh primitives (d) Working in 3D (e) Introduction to free form design	10
8.	Working with the User Coordinate System 3-D Surfaces	10
9.	Solid Model Creation from 2D	05
10	Rendering	05
11.	Project work : 3D plan of a house	20

Teaching-Learning Methodology	Demonstrations, Workshop, , Practical guidance, Power point presentations, actual performance of practical
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Apply and maintain user-defined coordinate systems to aid in the construction of 3D objects.
2.	Create 3D surface models using a variety of techniques
3.	Demonstrate dimensioning concepts and techniques in 3D presentation



Suggested References:

Sr. No.	References
1.	Hamad, M. (2018). <i>AutoCAD 2019 Beginning and Intermediate</i> . US: Stylaw Publishing LLC.
2.	Gindis, E. J., and Kaebisch, R.C. (2017). <i>Up and Running with Auto CAD 2018: 2D Drafting and Design</i> . Cambridge: Academic Press.

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

On-line Resources

[https://www.youtube.com/watch?v=2c5mLCPeMh8&ab\\_channel=CADCAMTutorials](https://www.youtube.com/watch?v=2c5mLCPeMh8&ab_channel=CADCAMTutorials)

<https://images-na.ssl-images-amazon.com/images/I/C1BxaOC0-IS.pdf>

<https://www.thesourcecad.com/autocad-tutorials/>

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Family Resource Management) Semester (V)

Course Code	UH05SFRM52	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		
Unit	Description	Weightage* (%)
1.	Study of various ergonomic tools & instruments	10
2.	(a) Measurement of various human biological aspects: Body Temperature, Blood pressure, Heart rate, BMI (b) Analysing the various human body type w.r.t WHR	10
3.	Analysing various posture at work through OWAS / REBA / FLEXI curve	10
4.	Assessing physiological workload through various parameters.	10
5.	Assessing the type of work and its cost on worker with respect to heart rate using: Tread mill, Ergo bicycle, Step stool, Body mapping technique	10
6.	Assessing environment parameters: Light, Noise, Heat and Vibration.	10
7.	Anthropometric measurements: Sitting (Static and dynamic), Standing (static and dynamic), Calculating percentiles	10
8.	Designing work station for self: Table, chair; Kitchen; Storage (wardrobe)	15
9.	Designing for group working with percentiles: Table, chair; Kitchen; Storage (wardrobe)	15



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 / Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

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.	Grandjean (1973). <i>Ergonomics of the Home</i> , London: Taylor & Frances.
2.	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>
<a href="https://ehs.unc.edu/workplace-safety/ergonomics/">https://ehs.unc.edu/workplace-safety/ergonomics/</a>

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC51	Title of the Course	Consumerism
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. To make them understand the role of consumer in the market.</li><li>2. To increase their awareness about consumer buying behaviour, their rights and responsibilities.</li><li>3. To familiarize them with various consumer problems.</li><li>4. To enhance their knowledge base about redressal agencies.</li></ol>
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Course Content		
Unit	Description	Weightage * (%)
1.	Consumer and consumer problems (a) Definition of a consumer. (b) Problems of consumer (including services as water, gas, electricity etc.) (c) Unfair consumer practices: adulteration and faulty weights and measures	25
2.	Consumer Buying Behaviour (a) Factors influencing buying behaviour (b) Consumer aids: classification – Labels, Trademarks, Brand Names, Patents, Warranty, Guarantee, Quality Control and After Sales Service (c) Advertisement features, importance, media, usefulness	25
3.	Consumer protection (a) Meaning, characteristics and objectives (b) Need and ways for providing consumer education (c) Consumer rights and responsibilities (d) Consumer Laws	25
4.	Consumer protection agencies (a) Consumer organizations – origin, functioning, role and types (b) Consumer cooperatives – role, history and growth in India (c) Consumer redress: role of consumer forums and consumer courts in safeguarding consumers	25

Teaching-Learning Methodology	Lectures, active learning, reflective learning, written exercises, collaborative learning, problem solving, case studies, ICT enabled 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)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Emerge as informed consumers
2.	Becoming familiarized to the changing trends in consumerism
3.	It also provides an understanding of the procedure of redress of consumer complaints, and the role of different agencies in establishing product and service standards

Suggested References:	
Sr. No.	References
1.	Misra S., Sree Kumaran G. N., and Chadah, S. (2015). <i>Consumer Handbook</i> . New Delhi: Department of Consumer Affairs.
2.	Singh, G. (1990). <i>Law of Consumer Protection</i> . Jaipur: Bharat law publishers.
3.	Agarwal, A. (1989). <i>A practical handbook for consumers</i> . Bombay: India book house.
4.	Sarkar, A.(1989). <i>Problems of Consumers in Modern India</i> . New Delhi: Discovery publishing House.
5.	<i>Recent issues of magazines: Insight</i> , Ahmedabad : CERC.
6.	<i>Consumer Voice</i> :New Delhi: VOICE Society.



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

On-line Resources

Consumer handbook English [https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer\\_information/Consumer\\_Handbook\\_H.pdf](https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer_information/Consumer_Handbook_H.pdf)

Consumer handbook Hindi [https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer\\_information/Consumer\\_Handbook.pdf](https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer_information/Consumer_Handbook.pdf)

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc) (Home Science) Semester (V)

Course Code	UH05EHSC52	Title of the Course	NGO Management
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. Acquaint students regarding Non-Government Organizations (NGO).</li><li>2. Acquaint them about the steps of starting the NGO.</li><li>3. Enable the students to manage the NGO consequently, which enhance the employability.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Concept of NGO (a) Meaning of NGO and GO (b) Difference between Government Organization and NGO (c) Characteristics of good NGO (d) Structure of NGO (e) Functions of NGO (f) Advantages of NGO (g) Present status of NGO (h) Contribution of NGO in the development	25
2.	Legal Frame Work for Establishing NGO (a) Steps for starting NGO (b) Registration of NGO (c) Identifying Funding agencies (d) Resource Mobilization (e) Methods and Techniques of fund raising (f) Foreign contributions and Regulation Act (FCRA) (g) Statutory obligations, Income Tax Exemption (80-G, 12-A and 35 NC)	25
3.	NGO Management (a) Managing people and teams in NGOs (b) NGO Management competencies (c) Applying NGO principles and values Policies and Programmes (a) New regulations for NGO and government control (b) Government laws, partnership model, Governing Schemes through ministries /Department / Bodies, government grant-in-aid	25



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4.	Problems of NGO (a) Training (b) Recruitment (c) Funding (d) Resource Mobilization (e) Documentation	25
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Teaching-Learning Methodology	Lecture method ,Active learning methodology , Group discussions Method, Power Point Presentation , Audio Visual methods, Seminar, Assignment, Quiz, Field visit, debates
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Know the concept of NGO and present status of NGO.
2.	Manage NGO & required resource mobilization.
3.	Enhance employability in NGO.

Suggested References:	
Sr. No.	References
1.	Abraham A. <i>Formation and Management of NGOs</i> (2003). New Delhi: Third Edition, Published by Universal Law publishing Co. Pvt Ltd.
2.	Clark J. (1991). <i>Voluntary Organizations: Their Contribution to Development</i> . London: Earth Scan



3.	Lewis D. <i>Management of Non Governmental Development Organization</i> (2001). Newyork: Second Edition, Published by Routledge.
4.	Dorothea H. (2003). <i>the real world of NGO's, Discourses, Diversity and Development</i> . New Delhi: Zed books Ltd.
5.	Jain R.B. (1995). <i>NGO's in Development Perspective</i> . New Delhi: Vivek Prakasan.
6.	Joel, S.G.R., and Bhose. (2003). <i>NGO's and Rural Development – Theory and Practice</i> . New Delhi: Concept Publishing Company.
7.	John M. R. (2002). <i>Stakeholders in Rural Development – Critical Collaboration in State – NGO Partnerships</i> . New Delhi: Sage Publications.
8.	Julie F. (2003). <i>Governments, NGO's and the Political Development of the Third World</i> . Jaipur: Rawat Publications.
9.	Julie F. (2003). <i>Non Governments – NGO's and the Political Development of the Third World</i> . New Delhi: Rawat Publications.
10.	Kalyan S. (2013). <i>An Easy Guide to NGO</i> . Kolkata: Book Corporation.
11.	Kumar, A. (2003). <i>Social Change through NGO's</i> . New Delhi: Anmol Publishers.
12.	Kavita K. et al (2010). <i>Status of Child and Welfare Originations</i> , Jaipur: Aaviskar Publishers.
13.	Singh R.S. (2003). <i>Role of NGO's in Developing Countries (Potentials, Constraints and Policies)</i> . New Delhi: Deep & Deep Publications (P) Ltd.
14.	Chandra S. (2003). <i>Guidelines for NGO Management in India</i> . New Delhi: Published by Kanishka Distributors.

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Bachelor of Science – Home Science  
(B.Sc. – H.Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC53	Title of the Course	Accessories and Adornment
Total Credits of the Course	02	Hours per Week	02
Course Objectives:	1. Gain knowledge on importance of accessories & adornments in dress design. 2. Enable students gather knowledge on accessories & adornment used in garments. 3. Make students aware of the materials, styles and placement of accessories and adornments.		

Course Content		
Unit	Description	Weightage* (%)
1.	Importance of adornment and accessories	10
2.	Accessories & adornments during middle age	20
3.	Accessories in modern times: (a) Hats & headgear (b) Jewellery (c) Sash (d) Shoes & boots (e) Muffs & gloves (f) Handbags	30
4.	Adornments: (a) Buttons (b) Lapel pins (c) Laces & ruffles (d) Ribbons (e) Braids (f) Through surface ornamentation (g) Hand & machine embroidery	30
5.	Innovations in adornment & accessories	10

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		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Appreciate the role of accessories in fashion.
2.	Comprehend the techniques of adornment.
3.	Develop the skill to coordinate adornments & accessories in garments.

Suggested References:	
Sr. No.	References
1.	Dickerson K.G. (2003), <i>Inside the Fashion Business</i> . New Delhi: VII Edition, Person Education Pvt. Ltd., Indian Branch.
2.	Jarnow, Guerreiro, Judelle, (1987), <i>Inside the Fashion Business</i> , New York: IV Edition, Macmillan Publishing Company.
3.	Kumar. A. (2010), <i>Fashion Tourism</i> , New Delhi: Sonali Publication, India.
4.	Makelvey K. (2006), <i>Fashion Source Book</i> , U.S.A.: II Edition, Blackwell Publishing Ltd.
5.	Pundir N., (2007), <i>Fashion Technology- Today &amp; Tomorrow</i> , New Delhi: Mittal Publication, India.
6.	Neelima, (2009), <i>Fashion &amp; Textile Design</i> , New Delhi: Sonali Publications.

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Bachelor of Science -Home Science  
(B.Sc. – H. Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC54	Title of the Course	Food Adulteration
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. Familiarize students with food standards.</li><li>2. Enable testing of different foods for their quality.</li><li>3. Familiarize students with tests used for finding adulterations and quality assessments.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Food Adulteration – Definition, types.	15
2.	(a) Food Laws Voluntary /Mandatory. Role of National & International Voluntary Agencies and legal aspects of consumer protection. (b) Food Standards.	25
3.	Specifications for the following (a) Milk & milk products (b) Oil and Fats (c) Spices & Condiments (d) Food grains. (e) Flours. (f) Canned Foods (g) Fruits and vegetable products (h) Flesh Foods (i) Sugar & preserves (j) Beverages- alcoholic & non-alcoholic	35
4.	(a) Contaminants, residues & pollutants (b) Conditions for Sale & License	25

Teaching-Learning Methodology	Chalk and board, Power point presentations, Class Discussions, Class activities / assignments, quiz
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Conduct adulteration test on a small scale basis, enterprise, and household level will gain knowledge of agencies working for it.

Suggested References:	
Sr. No.	References
1.	ISI Publications on above topics
2.	Association of Official Agricultural Chemists, & Horwitz, W. (1975). <i>Official methods of analysis</i> (Vol. 222). Washington, DC: Association of Official Analytical Chemists.
3.	Raghuramulu, N., Nair, K. M., & Kalyanasundaram, S. (Eds.). (1983). <i>A manual of laboratory techniques</i> . New Delhi: National Institute of Nutrition, Indian Council of Medical Research.

On-line resources to be used if available as reference material
On-line Resources
<a href="http://Egpp.inflibnet.ac.in/Home">Egpp.inflibnet.ac.in/Home</a>

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC55	Title of the Course	Basics of Research
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. To develop understanding of the basic framework of research process.</li><li>2. To develop an understanding of various research designs and techniques.</li><li>3. To identify various sources of information for literature review and data collection.</li><li>4. To develop an understanding of the ethical dimensions of conducting research</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Introduction to Research (a) Meaning ,purpose, approaches and types of research (b) Identification of problem (c) Collecting review and keywords (d) Research ethics and plagiarism	20
2.	Methods of data collection (a) Primary and Secondary data collection methods (b) Qualitative methods of data collection, (c) Survey methods of data collection (d) Sampling and types of sampling	20
3.	Processing and analysis of data (a) Measures of central Tendency (Mean, medium, Mode), (b) Measures of dispersion (range, mean deviation, standard deviation) (c) Graphical representation of Data.	20
4.	Preparing a small project and report writing ( Title page, Abstract, Introduction, Methodology, Results, Discussion, References, and Appendices)	40

Teaching-Learning Methodology	Lectures, active learning, reflective learning, written exercises, collaborative learning, problem solving, case studies, ICT enabled 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)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understand research terminology
2.	Identify the components of a literature review process
3.	Understand the research methodology
4.	Prepare a scientific report of the given project

Suggested References:	
Sr.No.	References
1.	Bernard, H.R. (2013). <i>Social Research Methods: Qualitative and Quantitative Approaches</i> . New Delhi: Sage publications.
2.	Best and Kahn. (2009). <i>Research Methodology</i> . New Delhi: PHI Learning Private Limited.
3.	Kothari, C.R. (2004). <i>Research Methodology (Methods and Techniques)</i> . New Delhi: New Age Publisher.
4.	Bandarkar, P.L., and Wilkinson, T.S. (2000). <i>Methodology and Techniques of Social Research</i> . Mumbai: Himalaya Publishing House.
5.	Dooley, D. (1995). <i>Strategies for Interpreting Qualitative Data</i> . California: Sage Publications.
6.	Gay, L.R. (1981). <i>Educational Research: Competencies for Analysis and Applications</i> . (2 <sup>nd</sup> ed.) Columbus: Charles E. Merrill Publishing Company and A. Bell and Howell Company.
7.	Ahuja, R.(2010). <i>Research Method</i> . New Delhi: Rawat Publication

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**SARDAR PATEL UNIVERSITY, VALLABH VIDYANAGAR**

**B.Sc. Home Science**

**(Under Choice Based Credit Scheme)**

**Semester - FIFTH (GENERAL) YEAR 2023-2024**

Course Type	Course Code (10 Digit)	Name of Course	Theory (T) Practical (P)	Credit	Contact hrs/ week	Exam Duration in hrs	Marks		
							Internal	External	Total
<b>Ability Enhancement Courses</b>	UH05AHSC51	Basics of Research	T	2	2	3	15/5	35/14	50
<b>Core Courses</b>	UH05CGEN51	Maternal and Child Nutrition	T	4	4	3	30/10	70/28	100
	UH05CGEN52	Working With Parents and Community	T	2	2	2	15/5	35/14	50
	UH05CGEN53	Working With Parents and Community	P	2	4	3	15/5	35/14	50
	UH05CGEN54	Historic Textiles and Costumes	T	4	4	3	30/10	70/28	100
	UH05CGEN55	Communication Model in Extension	T	4	4	3	30/10	70/28	100
	UH05CGEN56	Communication Model in Extension	P	2	4	3	15/5	35/14	50
<b>Skill Enhancement Courses</b>	UH05SGEN51	Application of Managerial Skills	P	2	4	3	15/5	35/14	50
<b>Elective Courses (Any One)</b>	UH05EHSC51	Consumerism	T	2	2	2	15/5	35/14	50
	UH05EHSC52	NGO Management	T	2	2	2	15/5	35/14	50
	UH05EHSC53	Accessories and Adornment	T	2	2	2	15/5	35/14	50
	UH05EHSC54	Food Adulteration	T	2	2	2	15/5	35/14	50
		<b>Total</b>		<b>24</b>	<b>30</b>		<b>180</b>	<b>420</b>	<b>600</b>



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Bachelor of Science - Home Science  
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Course Code	UH05AHSC51	Title of the Course	Programmes for Rural and Urban Development
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. To develop understanding regarding the nation towards urban and rural development</li><li>2. To examine the cumulative impact of these developmental efforts in quantitative and qualitative dimensions</li></ol>
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Course Content		
Unit	Description	Weightage*(%)
1.	<ol style="list-style-type: none"><li>a. Introduction to Rural and Urban Development Programmes.</li><li>b. Role of Home Science in rural and urban development.</li><li>c. Five year plan and their focus, brief on Niti Ayog</li></ol>	20
2.	<ol style="list-style-type: none"><li>a. Thrust of agriculture</li><li>b. National food production programmes</li><li>c. National health mission ( NRHM, NUHM, NRLM)</li></ol>	20
3.	Poverty alleviation efforts: <ol style="list-style-type: none"><li>a. Rural and Urban communities, characteristics, nature, difference, village organization, rural and urban development(NGOs working), role of CAPART</li><li>b. Programmes for poverty alleviation for rural and urban areas, employment generation and social inputs.</li><li>c. Current programmes for rural and urban poor,</li></ol>	30
4.	Programmes for women and children: <ol style="list-style-type: none"><li>a. Women as target groups, Specific measures for women and children such as DWCRA, ICDS, IMY, ANARDE, SEWA, CHETNA, TF, SGSY, ARSP.</li><li>b. Current programmes for women as initiated and implemented by the different ministries and departments.</li></ol>	30

Teaching-Learning Methodology	Class Discussions/ Demonstrations, Power point presentations, Class activities/ assignments, group discussions, Field visits, chalk and board
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	The students can get the knowledge of different five years plan.
2.	They use the knowledge in self empowerment and indirectly help the society in poverty alleviation.

Suggested References:	
Sr. No.	References
1.	Upadhyay, H.C. (1991): Modernization and Rural Development New Delhi, Anmol publications
2.	National institute of Rural development, Hyderabad, 1991. Rural development statistics NIRD
3.	Narayan Manohar S (1989) Integrated Rural energy programmes, Delhi Shree Hari printers.
4.	Ghosh Bahanisikha (1990) The Indian population problem, Madras, Sage publications.
5.	Thingalaya N. K (1986) Rural India-Real India, Bombay, Himalaya Publishing House.
6.	Journal of Social welfare, Journal of Rural development ,Journal of Yojana, Journal of Family welfare, Journal of extension education

On-line resources to be used if available as reference material
On-line Resources
<a href="http://egyankosh.ac.in/">http://egyankosh.ac.in/</a>

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Bachelor of Science -Home Science  
(B.Sc. –H. Sc.) (General) Semester (V)

Course Code	UH05CGEN51	Title of the Course	Maternal and Child Nutrition
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. Understand the nutritional needs during pregnancy, lactation, infancy and preschool years.</li><li>2. Understand the relationship between maternal health and birth outcome.</li><li>3. Aware of problems encountered in pregnancy during breast feeding and menopause and how to cope with these problems.</li><li>4. Understand the concept of infant and young child feeding practices.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Nutrition during pregnancy: Current scenario of maternal and child nutrition, Placental development and function, embryonic and fetal growth and development, physiological changes during pregnancy, Factors affecting outcome of pregnancy(nutritional and non-nutritional),common disorders of pregnancy (Anaemia, HIV infection, Pregnancy induced hypertension, Gestational diabetes),Eating disorders (ED) during pregnancy, Complications of pregnancy and management and importance of antenatal care of at – risk mothers.	30
2.	Nutrition during Lactation: Development of mammary tissue ,Nutrition during lactation and dietary management, lactogogues, Physiology of lactation, Factors affecting lactation, Rooming in lactation problems –sore nipples, engorged breast, inverted nipples etc., HIV and breast feeding, drug abuse and breast feeding, milk bank in India and its function.	25
3.	Infant and young child feeding and care - Current infant feeding practices, guidelines, nutritional concerns and complementary feeding, Human milk composition, role of BPNI in promotion of breast feeding in India, importance of world breast feeding week. Care and management of the preterm and LBW infants.	20
4.	Adolescent Nutrition and health, physical changes, malnutrition and adolescent pregnancy, Eating disorders (ED) during adolescents, recent advances	15



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5.	Nutrition during Menopause-Sign and symptoms, Problems, Management of dietary needs and health	10
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Teaching-Learning Methodology	Chalk and board, Power point presentations, Class Discussions, small Group activities / assignments, case studies, video clips
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understand current health problems and nutritional deficiency diseases affecting pregnant women, infants and adolescents.
2.	Aware of problems encountered in pregnancy during breast feeding and menopause and how to cope with these problems.
3.	Understand the concept of infant and young child feeding practices.
4.	Provide skills that allow students to objectively analyses new nutrition concepts and research, allowing them to consider which public health programs can be implemented to promote maternal and child health as well as adolescent health.

Suggested References:	
Sr. No.	References
1.	Mudambi, S. R. (2007). <i>Fundamentals of foods, nutrition and diet therapy</i> . New Delhi: New Age International.
2.	Requirement, I. N. (2010). <i>Recommended dietary allowances for Indians</i> . New Delhi: A report of the Expert Group of the Indian Council of Medical Research.





3.	Park, K. (2011). <i>Park's textbook of preventive and social medicine</i> . Jabalpur: BanarasidasBhanot, 463.
4.	Srilakshmi, B. (2014). <i>Dietetics</i> , New Delhi: New Age International (P) Ltd. Publishers.
5.	Williams, S. R. (2005). <i>Basic Nutrition and Diet Therapy</i> . (Ed. 12).
6.	Chadha, R., & Mathur, P. (2015). <i>A Textbook on Nutrition: A Lifecycle Approach</i> . Published by New Delhi: Orient Blackswan Private Limited.
7.	Robinson, C. H., & Lawler, M. R. (1982). <i>Normal and therapeutic nutrition</i> (No. Ed. 16). New York: Collier Macmillan Publishers.
8.	Joshi, S. A. (1995). <i>Nutrition and dietetics</i> . Ahmedabad: McGraw-Hill Education.
9.	Rani.A.(2017). <i>Nutrition of child,pregnant and lactating mother</i> . New Delhi : Sonali Publications

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

On-line Resources

<http://egyankosh.ac.in/>

[Epgp.inflibnet.ac.in/Home](http://Epgp.inflibnet.ac.in/Home)

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (General) Semester (V)

Course Code	UH05CGEN52	Title of the Course	Working with Parents and Community
Total Credits of the Course	04	Hours per Week	04
Course Objectives:	1. To give knowledge about parents & community involvement in the overall development of young children. 2. To acquaint them about methods, materials, techniques & approaches. 3. To teach them about programme planning for parents education.		

Course Content		
Unit	Description	Weightage* (%)
1.	Need and importance of Parent Education and involvement (a) Understanding the concepts – parent education, parent involvement, community education, community involvement and community mobilization. (b) Need and importance of parent education for building better home school, relationship for overall development of children for smooth functioning of school programme. (c) Understanding different kinds of parent education programmes and roles parents can play as participators, planners of programmes, advisors, volunteers and resource persons. (d) Constraints in parent involvement and factors influencing a successful parent involvement programme.	20
2.	Parenthood and Parenting: (a) Parenthood, its importance in child rearing practices (b) Issues emerging in the child rearing practices from the complexities in relation to modern technology. (c) Parenting style	20
3.	Community Education: Understanding the concept of community education and community involvement. (a) Types of community(rural, urban, tribal, slum) (b) Characteristics and needs of community. (c) Agencies & services available in community. (d) Their role in providing supportive services to parents.	20
4.	Ways & Means of Parents contact- (a) Individual contact, group contact, mass contact - news sletter, resource centre for parents. (b) Parents meeting: planning, organizing, execution, evaluation.	20



5.	Communication Strategies (a) Importance of communication. (b) Factors determining the selection of appropriate methods and techniques of communication (c) Different approaches for communication individual, group & mass media. (d) Role of Mobile Internet Technology and Social Media in communication.	20
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Teaching-Learning Methodology	Lecture method, 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 CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Students will appreciate the importance of Parent and community involvement for overall development of young children.
2.	Students will be able to use effective methods technique for parent and community involvement
3.	Students will be enabled to develop appropriate skills to work with and the community.
4.	Students will be able to plan programme for parent education and involvement in school related activities & the community mobilization.



Suggested References:

Sr. No.	References
1.	Kulkarni, S. (1988). <i>Parent education: perspectives and approaches</i> .
2.	Sharma, V.P (1981). <i>Indian Urban Families: Child rearing &amp; child Growth</i> . New Delhi: NCERT
3.	Hildebrand, V. <i>Parenting &amp; Teaching</i> . New Delhi: Macmillan Publishers.
4.	Menon, R. <i>The Teacher &amp; the parent</i> . New Delhi: Ministry of Education, Government of India.

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (General) Semester (V)

Course Code	UH05CGEN53	Title of the Course	Practical - Working with Parents and Community
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To give knowledge about parents &amp; community involvement in the overall development of young children.</li><li>2. To acquaint them about methods, materials, techniques &amp; approaches.</li><li>3. To teach them about programme planning for parents education.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Developing techniques for parents & community education & involvements.	10
2.	Preparing booklets for parents	10
3.	Prepare Slogan making & writing	15
4.	Prepare display material.	10
5.	Plan a parent education programme.	10
6.	Prepare an invitation card for parent meeting meeting of preschooler	10
7.	Organize exhibition of the prepared materials.	10
8.	Collect useful material and distribute in the community	15
9.	Product develop form west out of best	10

Teaching-Learning Methodology	Group discussions Method, Power Point Presentation , Audio Visual methods, Games ,Field visit, Seminar, Assignment, Quiz
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Students will give knowledge about parents & community involvement in the overall development of young children.
2.	Students will acquaint them about methods, materials, techniques & approaches.
3.	Students teach them about programme planning for parents education.

Suggested References:	
Sr. No.	References
1.	Kulkarni, S. (1988). <i>Parent education: perspectives and approaches</i> .
2.	Sharma, V.P. (1981). <i>Indian Urban Families: Child rearing &amp; child Growth</i> . New Delhi: NCERT.
3.	Hildebrand, V. <i>Parenting &amp; Teaching</i> . New Delhi: Macmillan Publishers
4.	Menon, R. <i>The Teacher &amp; the Parent</i> . Ministry of Education. New Delhi: Govt. of India.

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Bachelor of Science - Home Science  
(B.Sc. - H.Sc.) (General) Semester (V)

Course Code	UH05CGEN54	Title of the Course	Historic Textiles and Costumes
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. Gain knowledge about history of costumes and textiles.</li><li>2. Develop understanding in application of knowledge of historic textiles and Costumes in fashion.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Importance and sources of information for Historic textiles & costumes	10
2.	Traditional textiles of oriental countries (a) Spain, (b) China, (c) Africa	20
3.	Textiles and costumes of ancient times (a) Egypt (b) Greece (c) Rome (d) France	20
4.	Textiles and costumes of medieval Europe (a) Middle ages (b) 18 to 20 centuries	30
5.	Costumes of ancient India (a) Vedic (b) Mughal (c) Rajput	20

Teaching-Learning Methodology	Lecture and discussion using multimedia and Power Point presentation, assignments, videos, film, visits to museum, theatre events,
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Gain knowledge of world textiles and costume and its impact on today's fashion world.
2.	Design speciality apparels for special events, theatre's, stage shows, fashion events

Suggested References:	
Sr. No.	References
1.	Laver, J. (1967). <i>Costumes through the ages</i> . New York: Simon & Schaster.
2.	Boucher, F. (1987). <i>A History of Costumes in the West</i> . London: Thames and Hudson Ltd.
3.	Gillow & Polly. (1999). <i>World textiles</i> . London: Thames and Hudson Ltd.
4.	Osborne H. (1975). <i>The Oxford Companion to the Decorative arts</i> . England: Clarendon Press
5.	(1980). <i>Treasures of Indian Textiles</i> . Bombay: The Calico Museum, Marg Publication.

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (General) Semester (V)

Course Code	UH05CGEN55	Title of the Course	Communication Model in Extension
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. Understand the concept and process of communication for development.</li><li>2. Acquire skill in information education and communication.</li><li>3. Learn the concept of diffusion and acquires skill to transfer the Innovation.</li><li>4. Strengthen the knowledge of traditional and modern media in development communication.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	<b>Communication Model</b> (a) Concept of communication model and significance (b) Functions – teaching elements of communication process, conducting research, predicting the success of failures of communication process. (c) Importance of communication model – easy understanding of communication process, showing information flow, introducing the parts of communication process, easy presentation of communication process and understanding the communication process.	25
2.	<b>Methods of Communication</b> (a) Extension methods of communication – Individual method – Farm and home visit, farmer’s call, personal letter, adaptive or minikit trial, farm clinic (b) Group method – result demonstration, method demonstration, group meeting, small group training, field day or farmer’s day and study tour Elements of extension communication system – communicator, message, channel treatment and presentation, audience, audience response (c) Characteristics of change agent – empathy, linkage, structure, synergy, energy, proximity, opens 2.5 Role and competencies of change agent – broad knowledge, operational and relational knowledge, sensitivity and maturity, authenticity	25



3.	Media in Development Communication (a) Traditional media – types (folk songs, drama, and puppetry) characteristics and role in development communication (b) Radio – Origin and history, news, features and commentaries, role in development communication 3.3 Television and cinema– history, features and role in development communication 3.4 ICTs – scope and development communication	25
4.	Diffusion of Innovations (a) Diffusion-concept, elements of diffusion, difference between communication and diffusion (b) Innovation - form, functions and meaning of innovation, perceived attributes of innovation, preventive innovation Adoption (c) Definition, adoption process – diffusion network – the innovation decision process, the innovation decision period, rate of adoption, mandates for adoption, over adoption, adopter categories, measurement of adoption, role of extension agent in the adoption and diffusion of innovation.	25

Teaching-Learning Methodology	Regular lectures, exercises on innovations and adoption and group discussion, case studies, films and documentaries
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%



Course Outcomes: Having completed this course, the learner will be able to

1.	Explain the basic concept, nature and significance of Communication model
2.	Learn the communication channel and skill
3.	Analyze the media in development communication
4.	Understand the adoption and diffusion process to help the extension agents to accelerate them

Suggested References:

Sr. No.	References
1.	Gupta, D. (2007). <i>“Development communication in Rural Sector.”</i> New Delhi: Abhijeet Publishers.
2.	Meenakshi Raman and Sangeetha Sharma. (2013). <i>“Technical Communication-Principles and Practice.”</i> New Delhi: Oxford University Press Mukhopadhyay Abhijeet Publication
3.	Nair, R. (1993). <i>“Perspectives in Development Communication.”</i> New Delhi: Sage Publications.
4.	Nisha, M. (2006). <i>“Understanding Extension Education.”</i> New Delhi: Kalpay Publications
5.	Parveen Pannu and Yuki Azaad Tomer. (2012). <i>“Communication Technology for Development.”</i> New Delhi: International Publishing House Pvt Ltd.
6.	Ray, G.L. (2015). <i>“Extension Communication and Management.”</i> Ludhiana: Kalyani Publishers
7.	Reddy, A.A. (2001). <i>“Extension Education.”</i> Bapatla: Sri Lakshmi Press
8.	Rogers Everett, M. (2003). <i>“Diffusions of Innovations.”</i> 5th Edition. New York: Sage Publication.
9.	Singh, U.K. and Nayak, A.K. (2007). <i>“Extension Education.”</i> New Delhi: Common The Free Press, Wealth Publishers.

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (General) Semester (V)

Course Code	UH05CGEN56	Title of the Course	Practical - Communication Model in Extension
Total Credits of the Course	2	Hours per Week	4

Course Objectives:	<ol style="list-style-type: none"><li>1. Understand the concept and process of communication for development .</li><li>2. Acquire skill in information education and communication.</li><li>3. Learn the concept of diffusion and acquires skill to transfer the Innovation.</li><li>4. Strengthen the knowledge of traditional and modern media in development communication.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Preparation of charts, posters, flash cards	20
2.	Preparation of IEC material on various topics for different	20
3.	Target audience	20
4.	Project preparation on specific area in development communication	20
5.	Case studies in development communication	20

Teaching-Learning Methodology	Exercises on innovations and adoption and group discussion, case studies, films and documentaries
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance, Project Preparation, Report & Records, Journal/Portfolio (As per CBCS R.6.8.3)	15%



3.	University Examination	70%
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Course Outcomes: Having completed this course, the learner will be able to

1.	Explain the basic concept, nature and significance of Communication model
2.	Learn the communication channel and skill
3.	Analyze the media in development communication
4.	Understand the adoption and diffusion process to help the extension agents to accelerate them

Suggested References:

Sr. No.	References
1.	Gupta, D. (2007). <i>“Development communication in Rural Sector.”</i> New Delhi: Abhijeet Publishers.
2.	Meenakshi Raman and Sangeetha Sharma. (2013). <i>“Technical Communication-Principles and Practice.”</i> New Delhi: Oxford University Press MukhopadhyayAbhijeet Publication
3.	Nair, R. (1993). <i>“Perspectives in Development Communication.”</i> New Delhi: Sage Publications.
4.	Nisha, M. (2006). <i>“Understanding Extension Education.”</i> New Delhi: Kalpaya Publications
5.	ParveenPannu and Yuki AzaadTomer. (2012). <i>“Communication Technology for Development.”</i> New Delhi: International Publishing House Pvt Ltd.
6.	Ray, G.L. (2015). <i>“Extension Communication and Management.”</i> Ludhiana: Kalyani Publishers
7.	Reddy, A.A. (2001). <i>“Extension Education.”</i> Bapatla: Sri Lakshmi Press
8.	Rogers Everett, M. (2003). <i>“Diffusions of Innovations.”</i> 5th Edition. New York: Sage Publication.
9.	Singh, U.K. and Nayak, A.K. (2007). <i>“Extension Education.”</i> New Delhi: Common The Free Press, Wealth Publishers.

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Bachelor of Science - Home Science  
(B.Sc.- H. Sc.) (General) Semester (V)

Course Code	UH05SGEN51	Title of the Course	Practical - Application of Managerial Skills
Total Credits of the Course	02	Hours per Week	04
Course Objectives:	<ol style="list-style-type: none"><li>1. To inculcate the understanding of managerial skills.</li><li>2. To make them aware about concepts of management.</li><li>3. To raise the competency of recognizing the obstacles of good management.</li><li>4. To cultivate the aptitude of organizing events / functions by application of various managerial skills</li></ol>		

Course Content		
Unit	Description	Weightage* (%)
1.	Significance of managerial skills in group activity	05
2.	Basic table manners & etiquettes	10
3.	Styles of food service: Traditional and Contemporary	10
4.	Types of napkin fold	05
5.	Types of table settings and table decorations	10
6.	Flower arrangements & decorations for different occasions.	10
7.	Planning of an event.	20
8.	Application of managerial skills in shaping various events.	10
9.	Recognizing and solving different managerial problems in organizing the events.	10
10.	Prepare of a report of the event organized.	10
11.	Personal evaluation and analysis	

Teaching-Learning Methodology	Demonstration, Power Point Presentations, Bulletin boards, Collaborative learning spaces, Hands-on activities, Problem solving activities, Student-conceived projects.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Evolve the ability of solving conflicts.
2.	Turnout to be a good manager.
3.	Organize various events and become an event manager.

Suggested References:	
Sr. No.	References
1.	Deacon, R.E. and Firebough, F.M. (1975). <i>Home Management: Context and Concept</i> . Boston: Houghton Mifflin crop.
2.	Gandotra, V., Jaiswal, N., and Ajwani, D. (2004). <i>Home Management Residence Manual</i> Vadodara: Department of Home Management, Faculty of Home Science, M.S. University of Baroda.
3.	Gross, I., Crandall, E., and Knoll, M. (1980). <i>Management for Modern Families</i> . New Jersey: Prentice-Hall Inc.
4.	Arora, R. (2011). <i>Napkin Folding</i> . New Delhi: APH Publishing Corporation.
5.	Sharma, S. (2011). <i>Event Planning and Management</i> . Jaipur: Aadi Publications.

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC51	Title of the Course	Consumerism
Total Credits of the Course	02	Hours per Week	02
Course Objectives:	<ol style="list-style-type: none"><li>1. To make them understand the role of consumer in the market.</li><li>2. To increase their awareness about consumer buying behaviour, their rights and responsibilities.</li><li>3. To familiarize them with various consumer problems.</li><li>4. To enhance their knowledge base about redressal agencies.</li></ol>		

Course Content		
Unit	Description	Weightage* (%)
1.	Consumer and consumer problems (a) Definition of a consumer. (b) Problems of consumer (including services as water, gas, electricity etc.) (c) Unfair consumer practices: adulteration and faulty weights and measures	25
2.	Consumer Buying Behaviour (a) Factors influencing buying behaviour (b) Consumer aids: classification – Labels, Trademarks, Brand Names, Patents, Warranty, Guarantee, Quality Control and After Sales Service (c) Advertisement features, importance, media, usefulness	25
3.	Consumer protection (a) Meaning, characteristics and objectives (b) Need and ways for providing consumer education (c) Consumer rights and responsibilities (d) Consumer Laws	25
4.	Consumer protection agencies (a) Consumer organizations – origin, functioning, role and types (b) Consumer cooperatives – role, history and growth in India (c) Consumer redress: role of consumer forums and consumer courts in safeguarding consumers	25

Teaching-Learning Methodology	Lectures, active learning, reflective learning, written exercises, collaborative learning, problem solving, case studies, ICT enabled 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)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Emerge as informed consumers
2.	Becoming familiarized to the changing trends in consumerism
3.	It also provides an understanding of the procedure of redress of consumer complaints, and the role of different agencies in establishing product and service standards

Suggested References:	
Sr. No.	References
1.	Misra S., Sree Kumaran G. N., and Chadah, S. (2015). <i>Consumer Handbook</i> . New Delhi: Department of Consumer Affairs.
2.	Singh, G. (1990). <i>Law of Consumer Protection</i> . Jaipur: Bharat law publishers.
3.	Agarwal, A. (1989). <i>A practical handbook for consumers</i> . Bombay: India book house.
4.	Sarkar, A.(1989). <i>Problems of Consumers in Modern India</i> . New Delhi: Discovery publishing House.
5.	<i>Recent issues of magazines: Insight</i> , Ahmedabad : CERC.
6.	<i>Consumer Voice</i> :New Delhi: VOICE Society.



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

On-line Resources

Consumer handbook English [https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer\\_information/Consumer\\_Handbook\\_H.pdf](https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer_information/Consumer_Handbook_H.pdf)

Consumer handbook Hindi [https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer\\_information/Consumer\\_Handbook.pdf](https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer_information/Consumer_Handbook.pdf)

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc) (Home Science) Semester (V)

Course Code	UH05EHSC52	Title of the Course	NGO Management
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. Acquaint students regarding Non-Government Organizations (NGO).</li><li>2. Acquaint them about the steps of starting the NGO.</li><li>3. Enable the students to manage the NGO consequently, which enhance the employability.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	<p>Concept of NGO</p> <ul style="list-style-type: none"><li>(a) Meaning of NGO and GO</li><li>(b) Difference between Government Organization and NGO</li><li>(c) Characteristics of good NGO</li><li>(d) Structure of NGO</li><li>(e) Functions of NGO</li><li>(f) Advantages of NGO</li><li>(g) Present status of NGO</li><li>(h) Contribution of NGO in the development</li></ul>	25
2.	<p>Legal Frame Work for Establishing NGO</p> <ul style="list-style-type: none"><li>(a) Steps for starting NGO</li><li>(b) Registration of NGO</li><li>(c) Identifying Funding agencies</li><li>(d) Resource Mobilization</li><li>(e) Methods and Techniques of fund raising</li><li>(f) Foreign contributions and Regulation Act (FCRA)</li><li>(g) Statutory obligations, Income Tax Exemption (80-G, 12-A and 35 NC)</li></ul>	25
3.	<p>NGO Management</p> <ul style="list-style-type: none"><li>(a) Managing people and teams in NGOs</li><li>(b) NGO Management competencies</li><li>(c) Applying NGO principles and values</li></ul> <p>Policies and Programmes</p> <ul style="list-style-type: none"><li>(a) New regulations for NGO and government control</li><li>(b) Government laws, partnership model, Governing Schemes through ministries /Department / Bodies, government grant-in-aid</li></ul>	25



**SARDAR PATEL UNIVERSITY**  
**Vallabh Vidyanagar, Gujarat**  
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**Syllabus with effect from the Academic Year 2023-2024**

4.	Problems of NGO (a) Training (b) Recruitment (c) Funding (d) Resource Mobilization (e) Documentation	25
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Teaching-Learning Methodology	Lecture method ,Active learning methodology , Group discussions Method, Power Point Presentation , Audio Visual methods, Seminar, Assignment, Quiz, Field visit, debates
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Know the concept of NGO and present status of NGO.
2.	Manage NGO & required resource mobilization.
3.	Enhance employability in NGO.

Suggested References:	
Sr. No.	References
1.	Abraham A. <i>Formation and Management of NGOs</i> (2003). New Delhi: Third Edition, Published by Univarsal Law publishing Co. Pvt Ltd.
2.	Clark J. (1991). <i>Voluntary Organizations: Their Contribution to Development</i> . London: Earth Scan



3.	Lewis D. <i>Management of Non Governmental Development Organization</i> (2001). Newyork: Second Edition, Published by Routledge.
4.	Dorothea H. (2003). <i>the real world of NGO's, Discourses, Diversity and Development</i> . New Delhi: Zed books Ltd.
5.	Jain R.B. (1995). <i>NGO's in Development Perspective</i> . New Delhi: Vivek Prakasan.
6.	Joel, S.G.R., and Bhose. (2003). <i>NGO's and Rural Development – Theory and Practice</i> . New Delhi: Concept Publishing Company.
7.	John M. R. (2002). <i>Stakeholders in Rural Development – Critical Collaboration in State – NGO Partnerships</i> . New Delhi: Sage Publications.
8.	Julie F. (2003). <i>Governments, NGO's and the Political Development of the Third World</i> . Jaipur: Rawat Publications.
9.	Julie F. (2003). <i>Non Governments – NGO's and the Political Development of the Third World</i> . New Delhi: Rawat Publications.
10.	Kalyan S. (2013). <i>An Easy Guide to NGO</i> . Kolkata: Book Corporation.
11.	Kumar, A. (2003). <i>Social Change through NGO's</i> . New Delhi: Anmol Publishers.
12.	Kavita K. et al (2010). <i>Status of Child and Welfare Originations</i> , Jaipur: Aaviskar Publishers.
13.	Singh R.S. (2003). <i>Role of NGO's in Developing Countries (Potentials, Constraints and Policies)</i> . New Delhi: Deep & Deep Publications (P) Ltd.
14.	Chandra S. (2003). <i>Guidelines for NGO Management in India</i> . New Delhi: Published by Kanishka Distributors.

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Bachelor of Science – Home Science  
(B.Sc. – H.Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC53	Title of the Course	Accessories and Adornment
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. Gain knowledge on importance of accessories &amp; adornments in dress design.</li><li>2. Enable students gather knowledge on accessories &amp; adornment used in garments.</li><li>3. Make students aware of the materials, styles and placement of accessories and adornments.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Importance of adornment and accessories	10
2.	Accessories & adornments during middle age	20
3.	Accessories in modern times: (a) Hats & headgear (b) Jewellery (c) Sash (d) Shoes & boots (e) Muffs & gloves (f) Handbags	30
4.	Adornments: (a) Buttons (b) Lapel pins (c) Laces & ruffles (d) Ribbons (e) Braids (f) Through surface ornamentation (g) Hand & machine embroidery	30
5.	Innovations in adornment & accessories	10



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		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Appreciate the role of accessories in fashion.
2.	Comprehend the techniques of adornment.
3.	Develop the skill to coordinate adornments & accessories in garments.

Suggested References:	
Sr. No.	References
1.	Dickerson K.G. (2003), <i>Inside the Fashion Business</i> . New Delhi: VII Edition, Person Education Pvt. Ltd., Indian Branch.
2.	Jarnow, Guerreiro, Judelle, (1987), <i>Inside the Fashion Business</i> , New York: IV Edition, Macmillan Publishing Company.
3.	Kumar. A. (2010), <i>Fashion Tourism</i> , New Delhi: Sonali Publication, India.
4.	Makelvey K. (2006), <i>Fashion Source Book</i> , U.S.A.: II Edition, Blackwell Publishing Ltd.
5.	Pundir N., (2007), <i>Fashion Technology- Today &amp; Tomorrow</i> , New Delhi: Mittal Publication, India.
6.	Neelima, (2009), <i>Fashion &amp; Textile Design</i> , New Delhi: Sonali Publications.

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Bachelor of Science -Home Science  
(B.Sc. – H. Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC54	Title of the Course	Food Adulteration
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. Familiarize students with food standards.</li><li>2. Enable testing of different foods for their quality.</li><li>3. Familiarize students with tests used for finding adulterations and quality assessments.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Food Adulteration – Definition, types.	15
2.	(a) Food Laws Voluntary /Mandatory. Role of National & International Voluntary Agencies and legal aspects of consumer protection. (b) Food Standards.	25
3.	Specifications for the following (a) Milk & milk products (b) Oil and Fats (c) Spices & Condiments (d) Food grains. (e) Flours. (f) Canned Foods (g) Fruits and vegetable products (h) Flesh Foods (i) Sugar & preserves (j) Beverages- alcoholic & non-alcoholic	35
4.	(a) Contaminants, residues & pollutants (b) Conditions for Sale & License	25

Teaching-Learning Methodology	Chalk and board, Power point presentations, Class Discussions, Class activities / assignments, quiz
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Conduct adulteration test on a small scale basis, enterprise, and household level will gain knowledge of agencies working for it.

Suggested References:	
Sr. No.	References
1.	ISI Publications on above topics
2.	Association of Official Agricultural Chemists, & Horwitz, W. (1975). <i>Official methods of analysis</i> (Vol. 222). Washington, DC: Association of Official Analytical Chemists.
3.	Raghuramulu, N., Nair, K. M., & Kalyanasundaram, S. (Eds.). (1983). <i>A manual of laboratory techniques</i> . New Delhi: National Institute of Nutrition, Indian Council of Medical Research.

On-line resources to be used if available as reference material
On-line Resources
<a href="http://Egpp.inflibnet.ac.in/Home">Egpp.inflibnet.ac.in/Home</a>

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**SARDAR PATEL UNIVERSITY, VALLABH VIDYANAGAR**  
**B.Sc. Home Science**  
**(Under Choice Based Credit Scheme)**  
**Semester - FIFTH (HUMAN DEVELOPMENT) YEAR 2023-2024**

Course Type	Course Code (10 Digit)	Name of Course	Theory (T) Practical (P)	Credit	Contact hrs/ week	Exam Duration in hrs	Marks		
							Internal	External	Total
<b>Ability Enhancement Courses</b>	UH05AHSC51	Programme for Rural and Urban Development	T	2	2	2	15/5	35/14	50/20
<b>Core Courses</b>	UH05CHUD51	Adulthood and Aging	T	4	4	3	30/10	70/28	100/40
	UH05CHUD52	Development Challenges and Children with Disability	T	4	4	3	30/10	70/28	100/40
	UH05CHUD53	Child Psychology	T	4	4	3	30/10	70/28	100/40
	UH05CHUD54	Working With Parents & Community	T	4	4	3	30/10	70/28	50/20
	UH05CHUD55	Working With Parents & Community	P	2	4	3	15/5	35/14	50/20
<b>Skill Enhancement Courses</b>	UH05SHUD51	Programme Planning in ECCE	P	2	4	3	15/5	35/14	50/20
	UH05SHUD52	Computer Application in Human Development	P	2	2	2	15/5	35/14	50/20
<b>Elective Courses (Any One)</b>	UH05EHSC51	Consumerism	T	2	2	2	15/5	35/14	50/20
	UH05EHSC52	NGO Management	T	2	2	2	15/5	35/14	50/20
	UH05EHSC53	Accessories and Adornment	T	2	2	2	15/5	35/14	50/20
	UH05EHSC54	Food Adulteration	T	2	2	2	15/5	35/14	50/20
	UH05EHSC55	Basics of Research	T	2	2	2	15/5	35/14	50/20
		<b>Total</b>		<b>24</b>	<b>30</b>		<b>180</b>	<b>420</b>	<b>600</b>



**SARDAR PATEL UNIVERSITY**  
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Bachelor of Science - Home Science  
(B.Sc. - H. Sc.) (Home Science) Semester (V)

Course Code	UH05AHSC51	Title of the Course	Programmes for Rural and Urban Development
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. To develop understanding regarding the nation towards urban and rural development</li><li>2. To examine the cumulative impact of these developmental efforts in quantitative and qualitative dimensions</li></ol>
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Course Content		
Unit	Description	Weightage*(%)
1.	<ol style="list-style-type: none"><li>a. Introduction to Rural and Urban Development Programmes.</li><li>b. Role of Home Science in rural and urban development.</li><li>c. Five year plan and their focus, brief on Niti Ayog</li></ol>	20
2.	<ol style="list-style-type: none"><li>a. Thrust of agriculture</li><li>b. National food production programmes</li><li>c. National health mission ( NRHM, NUHM, NRLM)</li></ol>	20
3.	Poverty alleviation efforts: <ol style="list-style-type: none"><li>a. Rural and Urban communities, characteristics, nature, difference, village organization, rural and urban development(NGOs working), role of CAPART</li><li>b. Programmes for poverty alleviation for rural and urban areas, employment generation and social inputs.</li><li>c. Current programmes for rural and urban poor,</li></ol>	30
4.	Programmes for women and children: <ol style="list-style-type: none"><li>a. Women as target groups, Specific measures for women and children such as DWCRA, ICDS, IMY, ANARDE, SEWA, CHETNA, TF, SGSY, ARSP.</li><li>b. Current programmes for women as initiated and implemented by the different ministries and departments.</li></ol>	30

Teaching-Learning Methodology	Class Discussions/ Demonstrations, Power point presentations, Class activities/ assignments, group discussions, Field visits, chalk and board
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	The students can get the knowledge of different five years plan.
2.	They use the knowledge in self empowerment and indirectly help the society in poverty alleviation.

Suggested References:	
Sr. No.	References
1.	Upadhyay, H.C. (1991): Modernization and Rural Development New Delhi, Anmol publications
2.	National institute of Rural development, Hyderabad, 1991. Rural development statistics NIRD
3.	Narayan Manohar S (1989) Integrated Rural energy programmes, Delhi Shree Hari printers.
4.	Ghosh Bahanisikha (1990) The Indian population problem, Madras, Sage publications.
5.	Thingalaya N. K (1986) Rural India-Real India, Bombay, Himalaya Publishing House.
6.	Journal of Social welfare, Journal of Rural development ,Journal of Yojana, Journal of Family welfare, Journal of extension education

On-line resources to be used if available as reference material
On-line Resources
<a href="http://egyankosh.ac.in/">http://egyankosh.ac.in/</a>

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Human Development) Semester (V)

Course Code	UH05CHUD51	Title of the Course	Adulthood and Aging
Total Credits of the Course	04	Hours per Week	04

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 (work, family, retirement, health, welfare).</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.	<p>Stages of Adult Development and the Process of Aging: A Theoretical Overview</p> <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: Emerging adulthood (18-25), mature adulthood (25-45), middle age (45-55), late adulthood (55-65), old age (65 and above)</li><li>(d) Characteristics and needs in different stages of adulthood</li><li>(e) Theories of adult development and aging (Erikson's theory, Wisdom theories, Disengagement, Activity, Continuity theory, Ashrama Dharma framework)</li></ol>	20
2.	<p>Development in Emerging and Early Adulthood</p> <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, Information processing - Speed, Attention, Memory, Problem solving and Creativity</li><li>(d) Life transitions and adjustments during early adulthood: Exploring sexual orientations, stable romantic relationships, alternative life choices, marriage, family life, parenting and caregiving, social mobility</li><li>(e) Cultural, gender and social class variations in the experience of adulthood and aging</li></ol>	20



3.	Development in Middle and Late 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, relationship across generations- Middle aged children and their aging parents (d) Preparation for old age (From work to retirement, emotional, financial, social and familial transitions, ) (e) Contextual variations in the experience of late adulthood and aging (rural-urban, socioeconomic, employed-unemployed, organized-unorganized sector etc.)	20
4.	Development in Old Age (a) The phenomenon of aging - biological, psychological, sociological and functional age; optimal aging, normal aging, primary and secondary aging and successful aging (b) Gerontology - Definition, concept, history, importance and scope (c) Types - Social gerontology, Bio gerontology, Medical gerontology (Geriatric) (d) Theories of aging process – Sociological, Psychological and Biological theories of aging. (e) Changing relationships in old age – marriage and divorce, widowhood, never-married, childless older adults, siblings, friendships (f) Myths and realities of aging Adjustments - Physical and mental changes, Vocational adjustments- adjustment to retirement, different living arrangements, familial roles and relationships. (g) Dealing with stressful life events, divorce, terminal illness, death and bereavement (h) Policy provisions for the elderly: Global and national	20
5.	Aging and Well-Being in the 21st Century (a) Demographic profile of elderly in the world and India (b) Living arrangements (intergenerational families, old age homes, institutions etc.) and new models of care giving (c) Overcoming mental health challenges (loneliness, depression, anxiety, dementia, other agerelated diseases etc.) (d) Life style changes and holistic health (physical well-being, food choices, yoga and restorative fitness, counseling and therapy, social and interpersonal support systems) (e) Technology and aging (use of internet, advances in health and medical treatment, gadgets supporting safety and security of elderly) (f) Leisure time activities and innovative models of developmental intervention	20

Teaching-Learning Methodology	Regular lectures, group discussions, participant observation and follow up discussion, case studies, films and documentaries
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

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 elders

Suggested References:	
Sr. No.	References
1.	Arnett, J. J., & Jensen, L. A. (2019). <i>Human Development: A Cultural Approach</i> (3 <sup>rd</sup> ed.). New York: Pearson.
2.	Cavanaugh, J., & Blanchard-Fields, F. (2011). <i>Adult Development and Aging</i> (7 <sup>TH</sup> ed). Stamford: CT: Cengage Learning.
3.	Kakar, S. (Ed.). (1993). <i>Identity and Adulthood</i> . New Delhi: Oxford University Press
4.	Lamb, S. E. (Ed.). (2009). <i>Aging and the Indian diaspora: Cosmopolitan families in India and abroad</i> . Indiana University Press.
5.	Menon, U. (2013). <i>Women, wellbeing, and the ethics of domesticity in an Odia Hindu temple town</i> . Springer India.
6.	Rajan, S. I., Perera, M., & Risseeuw, C. (Eds.). (2008). <i>Institutional Provisions and care for the Aged</i> . Anthem Press..



7.	Reddy, P.A., Devi, U., &Harinath, N. (2010). <i>Ageing: The Global Phenomenal Issues and Strategies</i> . New Delhi: Sonali.
8.	Sahoo, F. M. (Ed.). (2009). <i>Behavioral Issues in Ageing: Care, Concern and Commitment</i> . New Delhi: Concept Publishers.
9.	Sahu, R. N. (2018). Relevance of Cultural Affinity for Tribal Development. <i>Asian Man (The)-An International Journal</i> , 12(2), 212-215.
10.	Shankardass, M. K. (2020). Ageing Issues and Responses in India: A Synopsis. In <i>Ageing Issues and Responses in India</i> (pp. 1-7). Springer, Singapore..
11.	Soneja, S. (2001). <i>Elder Abuse in India</i> . Report for the World Health Organization.
12.	Srivastava, V. (2010). <i>Women and ageing</i> . New Delhi: Rawat Publisher.
13.	Tanner, D., & Harris, J (2007). <i>Working with the Older People</i> . New York: Routledge Publishers.
14.	Tornstram, L. (2005). <i>Gerotranscendence: A Developmental Theory of Positive Aging</i> . New York: Springer.

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Human Development) Semester (V)

Course Code	UH05CHUD52	Title of the Course	Development Challenges and Children with Disability
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To get acquainted with the special needs children with different disabilities &amp; disorder.</li><li>2. To gain insight into the cause of disability and disorder in children and their prevention and management.</li><li>3. To understand the importance of family and the community in the development of the child with special needs.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Introduction: (a) Definition and terminology relationship of delayed development and disability. (b) Prevalence in India. (c) Rights of the disabled child (d) Issues in classification and labeling. (e) Genetic an environment factors in disability. (f) Prevention of disability. (g) Early detection , identification, assessment in the community.	15
2.	Child with Blindness , Low vision hearing Impairment speech & caguag disability (a) Definition of each , classification of each (b) Genetic and environmental causes (c) Prevention & treatment (d) Characteristic (e) Early stimulation & motility training (f) Services for rehabilitation (g) Communication in children with hearing loss (h) Type of education.	15
3.	Child with Intellectual disability, Au (a) Definition of each (b) Characteristic (c) Genetic & environmental causes (d) Prevention & treatment / training (e) Characteristic of each (f) Early stimulation & its importance (g) Importance of special education & rehabilitation	20



4.	Cerebral palsy, locomotors disability, Muscular dystrophy, Chronic Neurological conditions: (a) Definition of each (b) Classification (c) Causes & associated condition (d) Prevention & treatment (e) Characteristics (f) Support mechanism	20
5.	Specific learning disabilities: (a) Definition of LD (b) Difference between difficulty and disability (c) Types of Learning Disability (d) Definition of each learning disability <ul style="list-style-type: none"><li>• Dyslexia, Dyscalculia, Dysgraphia, Dyspraxia</li></ul> (a) Characteristics(identification) (b) Remedial teaching (c) Importance of Remedial teaching (d) Main streaming	15
6.	Other disabilities: Dwarfism, Mental illness, Multiple sclerosis, Thalassemia, haemophilia, Sickle cell disease Acid attack, Victims, Parkinson's disease	15

Teaching-Learning Methodology	Lecture method ,Active learning methodology , Group discussions Method, Power Point Presentation , Audio Visual methods, Seminar, Assignment, Quiz
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%



Course Outcomes: Having completed this course, the learner will be able to

1.	Student will the need and importance of studying children with different disabilities
2.	Student will know about describe the causes, the characteristics, assessment and intervention of various disabilities.
3.	Student will know about describe the coping strategies adopted by parents and family while dealing with children with disabilities.
4.	Student will design academic and extra- curricular activities for children with special need.

Suggested References:

Sr. No.	References
1.	Berk, L. E., & Petersen, A. (2004). <i>Development through the lifespan</i> . Boston, MA: Allyn and Bacon.
2.	Chopra, G. (2012). <i>Early detection of Disabilities and persons with disabilities in the community</i> . New Delhi: Engage Publications.
3.	Chopra, G. (2012). <i>Stimulating Development of Young Children with Disabilities at Anganwadi and at home: A practical guide</i> . New Delhi: Engage Publication
4.	Dhawan, M. (2011). <i>Education of children with special needs</i> . New Delhi: Isha Books.
5.	Haring, N. G. (1974). <i>Behavior of exceptional children: An introduction to special education</i> . New Jersey: Prentice Hall Inc.
6.	Hegarty, S., & Alur, M. (Eds.). (2002). <i>Education &amp; Children with Special Needs: From Segregation to Inclusion</i> . Sage Publication.
7.	Karna, G. N. (1999). <i>United Nations and the rights of disabled persons: a study in Indian perspective</i> . APH Publishing.
8.	Kumar, S. G., Roy, G., & Kar, S. S. (2012). <i>Disability and rehabilitation services in India: Issues and challenges</i> . Journal of Family Medicine and Primary Care, 1(1), 69.
9.	Kusuma A Rama R (2000). <i>Education of Children with special needs Discovery</i> , New Delhi : New Delhi Publishing House.
10.	Mani, R. (1988). <i>Physically Handicapped in India</i> . Delhi: Ashish Publishing House.



11.	Mastropieri, M. A., & Scruggs, T. E. (2004). <i>The Inclusive classroom: Strategies for effective instruction</i> . New York: Pearson Publications.
12.	Mangal, S. K. (2007). <i>Educating exceptional children: An introduction to special education</i> . PHI Learning Pvt. Ltd..
13.	Reddy, G.L (2000). <i>Learning Disability Common Wealth</i> . New Delhi: New Delhi Publishing House.
14.	Sharma, N. (2010). <i>The Social ecology of disability. Technical Series-3</i> . New Delhi: Academic Excellence.
15.	Singh, S. (2000). <i>Education &amp; Rehabilitation of Handicapped Children</i> . Jaipur: Classic Publications.
16.	Singh, A. (Ed). (2015). <i>Foundations of Human Development: A life span approach</i> . New Delhi: Orient Black Swan.
17.	Sukumanran, P.S. (2000). <i>Parental Involvement in education of Mentally handicapped children</i> . New Delhi: Discovery Publishers.

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Human Development) Semester (V)

Course Code	UH05CHUD54	Title of the Course	Child Psychology
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To develop an understanding of the major concept and process of human development</li><li>2. To develop an understanding of the major theoretical and research contributions in the study of human development.</li><li>3. To develop sensitivity to the socio cultural context of human behaviour and development.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Meaning and importance of child psychology. (a) Historical and theoretical perspectives in human development. (b) Scope of Child Psychology (c) Old and new thoughts about children	20
2.	Sources of development a) Role of biology- maturation b) Role of environment- learning. c) Reciprocal / integrationist role of biology and environment. d) Role of cultural context- Key theoretical issues in Human development (a) Continuity and discontinuity in development. (b) Nature and nurture issue.	20
3.	Social and Emotional development (a) Socialization process (b) Bronfenbenner – Ecological view (c) Cultural variations in socialization (d) Gender variations in socialization Major theories that contribute in understanding psycho social and moral development. (a) Freud's Psychoanalytic theory (b) Erikson's psychosocial theory (c) Kohlberg's moral judgment theory: Attachment, Aggression, Pro social behavior , sex role identity, Moral reasoning, Primary and secondary emotions , relations between culture and emotions	20



4.	Language and Thought (a) Theoretical contributions to understanding language acquisition (b) Social Learning Theory (c) Prelinguistic communication, Multilingualism in India	20
5.	Cognitive Development (a) Piaget's theory of cognitive development (b) Neo – Piagetian theories of cognitive development (c) Intelligence – Definition, concepts of crystallized & fluid intelligence, Multiple Intelligence in India.	20

Teaching- Learning Methodology	Lecture method ,Active learning methodology , Group discussions Method, Power Point Presentation , Audio Visual methods, Seminar, Assignment, Quiz
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Student will come to know the importance of child psychology.
2.	They will develop understanding about the various theories.



Suggested References:

Sr. No.	References
1.	Cole M & Cole. S (1993). <i>The Development of children</i> . New York: Scientific American Books.
2.	Arun Kumar, (2000). <i>Child Psychology</i> . New Delhi: Anmol Pub. Pvt Ltd.
3.	Kumar K (1993). <i>Study of Childhood and Family</i> . In T.S.Saraswati & B. kaur (ed) <i>Human Development &amp; Family Studies in India: An agenda for research and policy</i> (PP67-76). New Delhi : Sage Publications.
4.	Lerner R.M & Hostech, D.F (1983). <i>Human Development: A Life Span perspective</i> . New York: MsGrawHill.
5.	Mussen, P. N Conger, J.J. Kagar, J & Huston, A C (1990). <i>Child Development &amp; Personality</i> (7 <sup>ed</sup> ). New York: Harper Collins.

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Human Development) Semester (V)

Course Code	UH05CHUD54	Title of the Course	Working with Parents and Community
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To give knowledge about parents &amp; community involvement in the overall development of young children.</li><li>2. To acquaint them about methods, materials, techniques &amp; approaches.</li><li>3. To teach them about programme planning for parents education.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	<p>Need and importance of Parent Education and involvement</p> <ol style="list-style-type: none"><li>(a) Understanding the concepts – parent education, parent involvement, community education, community involvement and community mobilization.</li><li>(b) Need and importance of parent education for building better home school, relationship for overall development of children for smooth functioning of school programme.</li><li>(c) Understanding different kinds of parent education programmes and roles parents can play as participators, planners of programmes, advisors, volunteers and resource persons.</li><li>(d) Constraints in parent involvement and factors influencing a successful parent involvement programme.</li></ol>	20
2.	<p>Parenthood and Parenting:</p> <ol style="list-style-type: none"><li>(a) Parenthood, its importance in child rearing practices</li><li>(b) Issues emerging in the child rearing practices from the complexities in relation to modern technology.</li><li>(c) Parenting style</li></ol>	20
3.	<p>Community Education:</p> <p>Understanding the concept of community education and community involvement.</p> <ol style="list-style-type: none"><li>(a) Types of community(rural, urban, tribal, slum)</li><li>(b) Characteristics and needs of community.</li><li>(c) Agencies &amp; services available in community.</li><li>(d) Their role in providing supportive services to parents.</li></ol>	20





4.	Ways & Means of Parents contact- (a) Individual contact, group contact, mass contact - news sletter, resource centre for parents. (b) Parents meeting: planning, organizing, execution, evaluation.	20
5.	Communication Strategies (a) Importance of communication. (b) Factors determining the selection of appropriate methods and techniques of communication (c) Different approaches for communication individual, group & mass media. (d) Role of Mobile Internet Technology and Social Media in communication.	20

Teaching- Learning Methodology	Lecture method, 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 CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Students will appreciate the importance of Parent and community involvement for overall development of young children.
2.	Students will be able to use effective methods technique for parent and community involvement
3.	Students will be enabled to develop appropriate skills to work with and the community.
4.	Students will be able to plan programme for parent education and involvement in school



related activities & the community mobilization.

Suggested References:

Sr. No.	References
1.	Kulkarni, S. (1988). <i>Parent education: perspectives and approaches</i> .
2.	Sharma, V.P (1981). <i>Indian Urban Families: Child rearing &amp; child Growth</i> . New Delhi: NCERT
3.	Hildebrand, V. <i>Parenting &amp; Teaching</i> . New Delhi: Macmillan Publishers.
4.	Menon, R. <i>The Teacher &amp; the parent</i> . New Delhi: Ministry of Education, Government of India.

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Human Development) Semester (V)

Course Code	UH05CHUD55	Title of the Course	Practical - Working with Parents and Community
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To give knowledge about parents &amp; community involvement in the overall development of young children.</li><li>2. To acquaint them about methods, materials, techniques &amp; approaches.</li><li>3. To teach them about programme planning for parents education.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Developing techniques for parents & community education & involvements.	10
2.	Preparing booklets for parents	10
3.	Prepare Slogan making & writing	15
4.	Prepare display material.	10
5.	Plan a parent education programme.	10
6.	Prepare an invitation card for parent meeting meeting of preschooler	10
7.	Organize exhibition of the prepared materials.	10
8.	Collect useful material and distribute in the community	15
9.	Product develop form west out of best	10

Teaching-Learning Methodology	Group discussions Method, Power Point Presentation , Audio Visual methods, Games ,Field visit, Seminar, Assignment, Quiz
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Students will give knowledge about parents & community involvement in the overall development of young children.
2.	Students will acquaint them about methods, materials, techniques & approaches.
3.	Students teach them about programme planning for parents education.

Suggested References:	
Sr. No.	References
1.	Kulkarni, S. (1988). <i>Parent education: perspectives and approaches</i> .
2.	Sharma, V.P. (1981). <i>Indian Urban Families: Child rearing &amp; child Growth</i> . New Delhi: NCERT.
3.	Hildebrand, V. <i>Parenting &amp; Teaching</i> . New Delhi: Macmillan Publishers
4.	Menon, R. <i>The Teacher &amp; the Parent</i> . Ministry of Education. New Delhi: Govt. of India.

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Human Development) Semester (V)

Course Code	UH05SHUD51	Title of the Course	Practical - Programme Planning in ECCE
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To study the contemporary emergence and positioning of Early Childhood Care and Education</li><li>2. To provide analytical framework for pedagogy and curricular framework</li><li>3. To understand effective implementation and assessment of early childhood development programmes for fostering optimal growth of young children</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Plan a curriculum for a programme in any one ECCE setting (a) Short term and Long term (b) Write Project talk and list down the material needed (c) Collect 5 rhymes and singing with action (d) Collect 5 stories and tell in the class.	10
2.	Planning the daily schedule and list down the teaching aid / material needed (a) Three hour (b) Four hour (c) Day care	10
3.	Plan compilation of nutritious recipes for young children	10
4.	Plan a field trip and execute with nursery school children	10
5.	Plan science activities and execute	10
6.	Visit of ICDS Aganawadi and report writing	10
7.	Collect and create learning material for children in different age groups and domains	10
8.	Plan and conduct any two activities in an ECCE setting (storytelling, puppet show etc.).	10



9.	Prepare a checklist to study major components of ecce programme and then visit one ECCE settings and conduct the checklist.	10
10.	Planning and Conducting workshops by students in any one of the following: (a) Developing worksheets to teach readiness concepts (b) Enhancing social and language skills (c) Music, movement and drama for children (d) Nutrition and health for young children (e) Developing projects and themes for ECCE	10

Teaching-Learning Methodology	Regular Prectical ,Group discussion, exercises, use of library for simple research projects, observations and follow up discussion, films, documentaries and debates. Audio video aid, Role play Game
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	They can delineate the significance of stimulating environment for fostering holistic development and assess developmental indicators using tools and checklists.
2.	The students will develop skills in planning and creating development and programmatic activities with respect to all domains of development for children in first six years of life.
3.	The students will develop skills in creating learning materials and use them in family and community in multiple contexts

Suggested References:	
Sr.	References



No.	
1.	Aggarwal, J. C. (2007). <i>Early Childhood Care and Education: Principles and Practices</i> . New Delhi: Shipra.
2.	Arni, K. and Wolf G. (1999). <i>Child Art with Everyday Materials</i> . TARA Publishing.
3.	Upadyay G.C. (2015). <i>Early Childhood Care and Education, A Way Forward A hand book of Teachers and Teacher Education</i> . New Delhi: NCERT.
4.	Mohanty, J. Mohanty, B. (1996). <i>Early childhood care and Education</i> . New Delhi: Deep and Deep Publication.
5.	Morrison, G. S. (2003). <i>Fundamentals of Early Childhood Education</i> . Virginia: Merrill/Prentice Hall.
6.	Padma Y. (2017) <i>Exepler Guidelines for implementation of Early Childhood Care and Education (ECCE),Curriculum Frame work</i> . New Delhi: NCERT.
7.	RomilaSoni, R. (2015). <i>Theme Based Early Childhood Care and Education Programme: A Resource Book</i> . National Council of Educational Research and Training.
8.	Swaminathan, M. (Ed.). (1998). <i>The First Five Years: A critical perspective on early childhood care and education in India</i> . SAGE Publications Pvt. Limited.

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

On-line Resources

Play Activities for Preschoolers – 1 and 2. Indira Gandhi National Open University DECE Study Material. <http://www.ignouhelp.in/ignou-dece-study-material/>

Organizing a Child Care Centre. Indira Gandhi National Open University DECE Study Material. <http://www.ignouhelp.in/ignou-dece-study-material/>

Theory and Practice in Early Childhood Care and Education. Managing Children's Programmes: Some Perspectives. Indira Gandhi National Open University DECE Study Material. <http://www.ignouhelp.in/ignou-dece-study-material/>

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**SARDAR PATEL UNIVERSITY**  
**Vallabh Vidyanagar, Gujarat**  
**(Reaccredited with 'A' Grade by NAAC (CGPA 3.11))**  
**Syllabus with effect from the Academic Year 2023-2024**

Bachelor of Science (Home Science)  
(B.Sc.- H.Sc.) (Human Development) Semester (V)

Course Code	UH05SHUD52	Title of the Course	Practical - Computer Application in Human Development
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. To acquaint the students with computer application in the field of Human Development</li><li>2. To learn about PowerPoint presentation and use of goggle drive</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	PowerPoint Presentation (a) Auto wizard, creating a presentation using auto content wizard. (b) Blank presentation creating, saving and printing a presentation. (c) Adding a slide to a presentation. (d) Navigating through presentation slide sorter, slideshow, editing slides. (e) Using clipart. Word art gallery. (f) Setting timings for slide show, preparing audience handouts. (g) Using action button and Hyperlink.	20
2.	Creating Cartoons in PowerPoint Creation of-i) Word document ii) word sheet iii) graphs and mail merge.	10
3.	Net surfing specific topics related to the subject including the latest advancements.	10
4.	Use of Google Drive, Google form, Mail attachment	15
5.	Prepare Time Table	15
6.	Prepare leaflet/Folder/Invitation Card	15
7.	Prepare worksheet with use of Paint	15





**SARDAR PATEL UNIVERSITY**  
**Vallabh Vidyanagar, Gujarat**  
**(Reaccredited with 'A' Grade by NAAC (CGPA 3.11))**  
**Syllabus with effect from the Academic Year 2023-2024**

Teaching-Learning Methodology	PowerPoint presentation, practical, ICT
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	The students will computer application in the field of Human Development
2.	The students will learn about PowerPoint presentation and use of goggle drive
3.	Students will apply their computer knowledge in the field of human development.
4.	Student will prepare worksheets, Invitation Card, leaflets and browsers for nursery school children .
5.	Student will surfing human development related topics.

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC51	Title of the Course	Consumerism
Total Credits of the Course	02	Hours per Week	02
Course Objectives:	<ol style="list-style-type: none"><li>1. To make them understand the role of consumer in the market.</li><li>2. To increase their awareness about consumer buying behaviour, their rights and responsibilities.</li><li>3. To familiarize them with various consumer problems.</li><li>4. To enhance their knowledge base about redressal agencies.</li></ol>		

Course Content		
Unit	Description	Weightage* (%)
1.	Consumer and consumer problems (a) Definition of a consumer. (b) Problems of consumer (including services as water, gas, electricity etc.) (c) Unfair consumer practices: adulteration and faulty weights and measures	25
2.	Consumer Buying Behaviour (a) Factors influencing buying behaviour (b) Consumer aids: classification – Labels, Trademarks, Brand Names, Patents, Warranty, Guarantee, Quality Control and After Sales Service (c) Advertisement features, importance, media, usefulness	25
3.	Consumer protection (a) Meaning, characteristics and objectives (b) Need and ways for providing consumer education (c) Consumer rights and responsibilities (d) Consumer Laws	25
4.	Consumer protection agencies (a) Consumer organizations – origin, functioning, role and types (b) Consumer cooperatives – role, history and growth in India (c) Consumer redress: role of consumer forums and consumer courts in safeguarding consumers	25



Teaching-Learning Methodology	Lectures, active learning, reflective learning, written exercises, collaborative learning, problem solving, case studies, ICT enabled 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)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Emerge as informed consumers
2.	Becoming familiarized to the changing trends in consumerism
3.	It also provides an understanding of the procedure of redress of consumer complaints, and the role of different agencies in establishing product and service standards

Suggested References:	
Sr. No.	References
1.	Misra S., Sree Kumaran G. N., and Chadah, S. (2015). <i>Consumer Handbook</i> . New Delhi: Department of Consumer Affairs.
2.	Singh, G. (1990). <i>Law of Consumer Protection</i> . Jaipur: Bharat law publishers.
3.	Agarwal, A. (1989). <i>A practical handbook for consumers</i> . Bombay: India book house.
4.	Sarkar, A.(1989). <i>Problems of Consumers in Modern India</i> . New Delhi: Discovery publishing House.



5.	<i>Recent issues of magazines: Insight, Ahmedabad : CERC.</i>
6.	<i>Consumer Voice:New Delhi: VOICE Society.</i>

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

On-line Resources

Consumer handbook English [https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer\\_information/Consumer\\_Handbook\\_H.pdf](https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer_information/Consumer_Handbook_H.pdf)

Consumer handbook Hindi [https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer\\_information/Consumer\\_Handbook.pdf](https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer_information/Consumer_Handbook.pdf)

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc) (Home Science) Semester (V)

Course Code	UH05EHSC52	Title of the Course	NGO Management
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. Acquaint students regarding Non-Government Organizations (NGO).</li><li>2. Acquaint them about the steps of starting the NGO.</li><li>3. Enable the students to manage the NGO consequently, which enhance the employability.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Concept of NGO (a) Meaning of NGO and GO (b) Difference between Government Organization and NGO (c) Characteristics of good NGO (d) Structure of NGO (e) Functions of NGO (f) Advantages of NGO (g) Present status of NGO (h) Contribution of NGO in the development	25
2.	Legal Frame Work for Establishing NGO (a) Steps for starting NGO (b) Registration of NGO (c) Identifying Funding agencies (d) Resource Mobilization (e) Methods and Techniques of fund raising (f) Foreign contributions and Regulation Act (FCRA) (g) Statutory obligations, Income Tax Exemption (80-G, 12-A and 35 NC)	25
3.	NGO Management (a) Managing people and teams in NGOs (b) NGO Management competencies (c) Applying NGO principles and values Policies and Programmes (a) New regulations for NGO and government control (b) Government laws, partnership model, Governing Schemes through ministries /Department / Bodies, government grant-in-aid	25



4.	Problems of NGO (a) Training (b) Recruitment (c) Funding (d) Resource Mobilization (e) Documentation	25
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Teaching-Learning Methodology	Lecture method ,Active learning methodology , Group discussions Method, Power Point Presentation , Audio Visual methods, Seminar, Assignment, Quiz, Field visit, debates
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Know the concept of NGO and present status of NGO.
2.	Manage NGO & required resource mobilization.
3.	Enhance employability in NGO.

Suggested References:	
Sr. No.	References
1.	Abraham A. <i>Formation and Management of NGOs</i> (2003). New Delhi: Third Edition, Published by Univarsal Law publishing Co. Pvt Ltd.
2.	Clark J. (1991). <i>Voluntary Organizations: Their Contribution to Development</i> . London: Earth Scan
3.	Lewis D. <i>Management of Non Governmental Development Organization</i> (2001). Newyork: Second Edition, Published by Routledge.



4.	Dorothea H. (2003). <i>the real world of NGO's, Discourses, Diversity and Development</i> . New Delhi: Zed books Ltd.
5.	Jain R.B. (1995). <i>NGO's in Development Perspective</i> . New Delhi: Vivek Prakasan.
6.	Joel, S.G.R., and Bhose. (2003). <i>NGO's and Rural Development – Theory and Practice</i> . New Delhi: Concept Publishing Company.
7.	John M. R. (2002). <i>Stakeholders in Rural Development – Critical Collaboration in State – NGO Partnerships</i> . New Delhi: Sage Publications.
8.	Julie F. (2003). <i>Governments, NGO's and the Political Development of the Third World</i> . Jaipur: Rawat Publications.
9.	Julie F.(2003). <i>Non Governments – NGO's and the Political Development of the Third World</i> . New Delhi: Rawat Publications.
10.	Kalyan S. (2013). <i>An Easy Guide to NGO</i> . Kolkata: Book Corporation.
11.	Kumar, A. (2003). <i>Social Change through NGO's</i> . New Delhi: Anmol Publishers.
12.	Kavita K. et al (2010). <i>Status of Child and Welfare Originations</i> , Jaipur: Aaviskar Publishers.
13.	Singh R.S. (2003). <i>Role of NGO's in Developing Countries (Potentials, Constraints and Policies)</i> . New Delhi: Deep & Deep Publications (P) Ltd.
14.	Chandra S. (2003). <i>Guidelines for NGO Management in India</i> . New Delhi: Published by Kanishka Distributors.

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Bachelor of Science – Home Science  
(B.Sc. – H.Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC53	Title of the Course	Accessories and Adornment
Total Credits of the Course	02	Hours per Week	02
Course Objectives:	<ol style="list-style-type: none"><li>1. Gain knowledge on importance of accessories &amp; adornments in dress design.</li><li>2. Enable students gather knowledge on accessories &amp; adornment used in garments.</li><li>3. Make students aware of the materials, styles and placement of accessories and adornments.</li></ol>		

Course Content		
Unit	Description	Weightage* (%)
1.	Importance of adornment and accessories	10
2.	Accessories & adornments during middle age	20
3.	Accessories in modern times: (a) Hats & headgear (b) Jewellery (c) Sash (d) Shoes & boots (e) Muffs & gloves (f) Handbags	30
4.	Adornments: (a) Buttons (b) Lapel pins (c) Laces & ruffles (d) Ribbons (e) Braids (f) Through surface ornamentation (g) Hand & machine embroidery	30
5.	Innovations in adornment & accessories	10

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		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Appreciate the role of accessories in fashion.
2.	Comprehend the techniques of adornment.
3.	Develop the skill to coordinate adornments & accessories in garments.

Suggested References:	
Sr. No.	References
1.	Dickerson K.G. (2003), <i>Inside the Fashion Business</i> . New Delhi: VII Edition, Person Education Pvt. Ltd., Indian Branch.
2.	Jarnow, Guerreiro, Judelle, (1987), <i>Inside the Fashion Business</i> , New York: IV Edition, Macmillan Publishing Company.
3.	Kumar. A. (2010), <i>Fashion Tourism</i> , New Delhi: Sonali Publication, India.
4.	Makelvey K. (2006), <i>Fashion Source Book</i> , U.S.A.: II Edition, Blackwell Publishing Ltd.
5.	Pundir N., (2007), <i>Fashion Technology- Today &amp; Tomorrow</i> , New Delhi: Mittal Publication, India.
6.	Neelima, (2009), <i>Fashion &amp; Textile Design</i> , New Delhi: Sonali Publications.

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Bachelor of Science -Home Science  
(B.Sc. – H. Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC54	Title of the Course	Food Adulteration
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. Familiarize students with food standards.</li><li>2. Enable testing of different foods for their quality.</li><li>3. Familiarize students with tests used for finding adulterations and quality assessments.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Food Adulteration – Definition, types.	15
2.	(a) Food Laws Voluntary /Mandatory. Role of National & International Voluntary Agencies and legal aspects of consumer protection. (b) Food Standards.	25
3.	Specifications for the following (a) Milk & milk products (b) Oil and Fats (c) Spices & Condiments (d) Food grains. (e) Flours. (f) Canned Foods (g) Fruits and vegetable products (h) Flesh Foods (i) Sugar & preserves (j) Beverages- alcoholic & non-alcoholic	35
4.	(a) Contaminants, residues & pollutants (b) Conditions for Sale & License	25

Teaching-Learning Methodology	Chalk and board, Power point presentations, Class Discussions, Class activities / assignments, quiz
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Conduct adulteration test on a small scale basis, enterprise, and household level will gain knowledge of agencies working for it.

Suggested References:	
Sr. No.	References
1.	ISI Publications on above topics
2.	Association of Official Agricultural Chemists, & Horwitz, W. (1975). <i>Official methods of analysis</i> (Vol. 222). Washington, DC: Association of Official Analytical Chemists.
3.	Raghuramulu, N., Nair, K. M., & Kalyanasundaram, S. (Eds.). (1983). <i>A manual of laboratory techniques</i> . New Delhi: National Institute of Nutrition, Indian Council of Medical Research.

On-line resources to be used if available as reference material
On-line Resources
<a href="http://Epgp.inflibnet.ac.in/Home">Epgp.inflibnet.ac.in/Home</a>

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC55	Title of the Course	Basics of Research
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. To develop understanding of the basic framework of research process.</li><li>2. To develop an understanding of various research designs and techniques.</li><li>3. To identify various sources of information for literature review and data collection.</li><li>4. To develop an understanding of the ethical dimensions of conducting research</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Introduction to Research (a) Meaning ,purpose, approaches and types of research (b) Identification of problem (c) Collecting review and keywords (d) Research ethics and plagiarism	25
2.	Methods of data collection (a) Primary and Secondary data collection methods (b) Qualitative methods of data collection, (c) Survey methods of data collection (d) Sampling and types of sampling	25
3.	Processing and analysis of data (a) Measures of central Tendency (Mean, medium, Mode), (b) Measures of dispersion (range, mean deviation, standard deviation) (c) Graphical representation of Data.	25
4.	Preparing a small project and report writing ( Title page, Abstract, Introduction, Methodology, Results, Discussion, References, and Appendices)	25

Teaching-Learning Methodology	Lectures, active learning, reflective learning, written exercises, collaborative learning, problem solving, case studies, ICT enabled 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)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understand research terminology
2.	Identify the components of a literature review process
3.	Understand the research methodology
4.	Prepare a scientific report of the given project

Suggested References:	
Sr. No.	References
1.	Bernard, H.R. (2013). <i>Social Research Methods: Qualitative and Quantitative Approaches</i> . New Delhi: Sage publications.
2.	Best and Kahn. (2009). <i>Research Methodology</i> . New Delhi: PHI Learning Private Limited.
3.	Kothari, C.R. (2004). <i>Research Methodology (Methods and Techniques)</i> . New Delhi: New Age Publisher.
4.	Bandarkar, P.L., and Wilkinson, T.S. (2000). <i>Methodology and Techniques of Social Research</i> . Mumbai: Himalaya Publishing House.
5.	Dooley, D. (1995). <i>Strategies for Interpreting Qualitative Data</i> . California: Sage Publications.
6.	Gay, L.R. (1981). <i>Educational Research: Competencies for Analysis and Applications</i> . (2 <sup>nd</sup> ed.) Columbus: Charles E. Merrill Publishing Company and A. Bell and Howell Company.
7.	Ahuja, R.(2010). <i>Research Method</i> . New Delhi: Rawat Publication

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**SARDAR PATEL UNIVERSITY, VALLABH VIDYANAGAR**  
**B.Sc. Home Science**  
**(Under Choice Based Credit Scheme)**  
**Semester - FIFTH (TEXTILES AND CLOTHING) YEAR 2023-2024**

Course Type	Course Code (10 Digit)	Name of Course	Theory (T) Practical (P)	Credit	Contact hrs/ week	Exam Duration in hrs	Marks		
							Internal	External	Total
<b>Ability Enhancement Courses</b>	UH05AHSC51	Programme for Rural and Urban Development	T	2	2	2	15/5	35/14	50/20
<b>Core Courses</b>	UH05CTCL51	Fabric Manufacture	T	4	4	3	30/10	70/28	100/40
	UH05CTCL52	Fabric Manufacture	P	2	4	3	15/5	35/14	50/20
	UH05CTCL53	Advances in Textiles	T	4	4	3	30/10	70/28	100/40
	UH05CTCL54	Historic Textiles and Costumes	T	4	4	3	30/10	70/28	100/40
	UH05CTCL55	Design-Textiles and Apparel	T	2	2	2	15/5	35/14	50/20
<b>Skill Enhancement Courses</b>	UH05STCL51	Men's Clothing	P	2	4	3	15/5	35/14	50/20
	UH05STCL52	Draping	P	2	4	3	15/5	35/14	50/20
<b>Elective Courses (Any One)</b>	UH05EHSC51	Consumerism	T	2	2	2	15/5	35/14	50/20
	UH05EHSC52	NGO Management	T	2	2	2	15/5	35/14	50/20
	UH05EHSC53	Accessories and Adornment	T	2	2	2	15/5	35/14	50/20
	UH05EHSC54	Food Adulteration	T	2	2	2	15/5	35/14	50/20
	UH05EHSC55	Basics of Research	T	2	2	2	15/5	35/14	50/20
		<b>Total</b>		<b>24</b>	<b>30</b>		<b>180</b>	<b>420</b>	<b>600</b>



**SARDAR PATEL UNIVERSITY**  
**Vallabh Vidyanagar, Gujarat**  
**(Reaccredited with 'A' Grade by NAAC (CGPA 3.11)**  
**Syllabus with effect from the Academic Year 2023-2024**

Bachelor of Science - Home Science  
(B.Sc. - H. Sc.) (Home Science) Semester (V)

Course Code	UH05AHSC51	Title of the Course	Programmes for Rural and Urban Development
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. To develop understanding regarding the nation towards urban and rural development</li><li>2. To examine the cumulative impact of these developmental efforts in quantitative and qualitative dimensions</li></ol>
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Course Content		
Unit	Description	Weightage*(%)
1.	<ol style="list-style-type: none"><li>a. Introduction to Rural and Urban Development Programmes.</li><li>b. Role of Home Science in rural and urban development.</li><li>c. Five year plan and their focus, brief on Niti Ayog</li></ol>	20
2.	<ol style="list-style-type: none"><li>a. Thrust of agriculture</li><li>b. National food production programmes</li><li>c. National health mission ( NRHM, NUHM, NRLM)</li></ol>	20
3.	Poverty alleviation efforts: <ol style="list-style-type: none"><li>a. Rural and Urban communities, characteristics, nature, difference, village organization, rural and urban development(NGOs working), role of CAPART</li><li>b. Programmes for poverty alleviation for rural and urban areas, employment generation and social inputs.</li><li>c. Current programmes for rural and urban poor,</li></ol>	30
4.	Programmes for women and children: <ol style="list-style-type: none"><li>a. Women as target groups, Specific measures for women and children such as DWCRA, ICDS, IMY, ANARDE, SEWA, CHETNA, TF, SGSY, ARSP.</li><li>b. Current programmes for women as initiated and implemented by the different ministries and departments.</li></ol>	30

Teaching-Learning Methodology	Class Discussions/ Demonstrations, Power point presentations, Class activities/ assignments, group discussions, Field visits, chalk and board
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	The students can get the knowledge of different five years plan.
2.	They use the knowledge in self empowerment and indirectly help the society in poverty alleviation.

Suggested References:	
Sr. No.	References
1.	Upadhyay, H.C. (1991): Modernization and Rural Development New Delhi, Anmol publications
2.	National institute of Rural development, Hyderabad, 1991. Rural development statistics NIRD
3.	Narayan Manohar S (1989) Integrated Rural energy programmes, Delhi Shree Hari printers.
4.	Ghosh Bahanisikha (1990) The Indian population problem, Madras, Sage publications.
5.	Thingalaya N. K (1986) Rural India-Real India, Bombay, Himalaya Publishing House.
6.	Journal of Social welfare, Journal of Rural development ,Journal of Yojana, Journal of Family welfare, Journal of extension education

On-line resources to be used if available as reference material
On-line Resources
<a href="http://egyankosh.ac.in/">http://egyankosh.ac.in/</a>

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Textiles and Clothing) Semester (V)

Course Code	UH05CTCL51	Title of the Course	Fabric Manufacture
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. Gain knowledge about yarn &amp; fabric manufacture processes.</li><li>2. Acquire knowledge of types of yarn, weaves &amp; fabrics.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	<b>Yarn manufacture</b> (a) Preparatory Process of yarn manufacture (b) Spinning processes for Spun yarns-cotton system, linen system, wool and worsted system, open end spinning, ring , friction, fasciated, self-twist, integrated composite, tow to top, direct tow to yarn spinning (c) Spinning processes for Filament yarns-chemical spinning, wet, dry, melt, gel and emulsion spinning (d) Spinning processes for Bi-component yarns (e) Processes to produce textured yarns	30
2.	<b>Types and classification of yarns (as per application and use)</b> (a) As per size – spun and filament (b) As per fineness-direct and indirect system (c) As per twist – S & Z (d) As per appearance & no. of parts - simple, novelty, texturized and thread	20
3.	<b>Methods of Fabric Construction</b> (a) Fabrics made from solution – films & foam (b) Fabrics made from fibers - felts & nonwovens (c) Fabrics made from yarns - Braids, laces, woven, knitted (d) Multi layer fabrics – Double cloth, bonded, laminated, quilted, coated, flocked, poromeric, support scrim structure, fiber reinforced etc.	10



4.	Weaves: (a) Manufacture process of woven fabrics (b) Classification of weaves (c) Basic weaves, plain, twill, satin, types, characteristics & end uses. (d) Decorative weaves – crepe/ mommie, leno, dobby, jacquard (e) Extra yarn weaves - lappet, swivel, pile, double cloth weave	20
5.	Knits (a) Manufacture process of knitted fabrics (b) Classification of knits, types of knitting needles and machines, stitches (c) Weft knits-characteristics and use of single jersey, double jersey, pile knit, jacquard knit, weft insertion, sliver pile, rib structure, purl structure, interlock structure (d) Warp knits-characteristics and use of tricot, raschel, Milanese, simplex and warp insertion knits	20

Teaching-Learning Methodology	Lecture and discussion using multimedia and powerpoint presentation, assignments, actual sample visualization, market surveys and collection etc.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Identify various types of yarns, fabrics, their properties and end use.
2.	Develop insight of yarn and fabric manufacturing done by industries.



Suggested References:

Sr. No.	References
1.	Hollen, N.& saddler, J.(1968). <i>Textiles</i> . London: Macmillan Company.
2.	Rastogi, M.(2009). <i>Fibres&amp; yarns</i> . New Delhi: Sonali Publications.
3.	Murthy, W.S.(2007). <i>Textile weaving &amp; design</i> . Chandigarh: Abhishek Publication.
4.	Lowan, M.& Jungerman(1980). <i>Introduction to Textiles</i> . Bombay: D.B. Taraporwala Sons & Company Pvt. Ltd.
5.	Nisbet, H.(1978). <i>Grammar of Textiles Design</i> . Bombay: D.B. Taraporwala Sons & Company Pvt. Ltd.
6.	Klibbe,J.W.(1965). <i>Structural fabric design</i> . North Carolina : North Carolina State University Print Shop
7.	Ajgaonkar, D.B.(1998). <i>Knitting Technology</i> . Bombay: Universal Publishing Corp.
8.	S. Braddock, S.& Mahony, M.O.(1997). <i>Techno Textiles</i> . London: Thames& Hudson Ltd.

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Bachelor of Science - Home Science  
(B.Sc. - H.Sc.) (Textiles and Clothing) Semester (V)

Course Code	UH05CTCL52	Title of the Course	Practical - Fabric Manufacture
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. Enable students with techniques of fabric manufacture</li><li>2. Inculcate skills in product development through various weaving, knitting and other techniques.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Weave notation, draft and peg plan (a) Basic weaves (b) Decorative weave	20
2.	Calculating length and width of the yarn required for weaving	10
3.	Collection and analysis of samples of different types of woven fabrics (a) Basic weave-plain, twill, satin (b) Decorative weave (c) Extra yarn weave	15
4.	Developing samples of weaving techniques (a) Basic weaves – plain, twill, satin (b) Decorative weave- pile, gauze, extra yarn weave	20
5.	Collection and analysis of different types of knit fabrics. (a) Warp knit (b) Weft knit	15
6.	Loom weaving and card weaving	20

Teaching-Learning Methodology	Actual yarn and fabric sample collection, discussion and analysis, assignment, portfolio preparation, making the samples
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Practical examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understand and apply knowledge practically in fabric production areas.
2.	Generate income by using skills to make value added products.

Suggested References:	
Sr. No.	References
1.	Hollen, N.& saddler, J.(1968). <i>Textiles</i> . London: Macmillan Company.
2.	Rastogi, M.(2009). <i>Fibres &amp; yarns</i> . New Delhi: Sonali Publications.
3.	Murthy, W.S.(2007). <i>Textile weaving &amp; design</i> . Chandigarh: Abhishek Publication.
4.	Lowan, M.& Jungerman(1980). <i>Introduction to Textiles</i> . Bombay: D.B. Taraporwala Sons & Company Pvt. Ltd.
5.	Nisbet, H.(1978). <i>Grammar of Textiles Design</i> . Bombay: D.B. Taraporwala Sons & Company Pvt. Ltd.
6.	Klibbe,J.W.(1965). <i>Structural fabric design</i> . North Carolina : North Carolina State University Print Shop
7.	Ajgaonkar, D.B.(1998). <i>Knitting Technology</i> . Bombay: Universal Publishing Corp.
8.	S. Braddock, S.& Mahony, M.O.(1997). <i>Techno Textiles</i> . London: Thames& Hudson Ltd.

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Bachelor of Science - Home Science  
(B.Sc. - H.Sc.) (Textiles and Clothing) Semester (V)

Course Code	UH05CTCL53	Title of the Course	Advances in Textiles
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. Acquire knowledge about various natural, synthetic, regenerated and minor fibers in detail.</li><li>2. Make students aware about eco-friendly textiles.</li><li>3. Enable students understanding the textile finishes and their performance.</li><li>4. Impart knowledge on use of fibres as technical textiles in agriculture, medical geographical, industrial and packaging field's</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Fiber morphology and its relation to fiber properties & performance (a) Natural Fibres: Cotton, Wool, Jute, Linen (b) Synthetic Fibres: Polyester, Polyamide, Acrylic (c) Regenerated Fibres: Rayon, Modal, Lyocell	30
2.	Structure, composition, microscopic appearance, properties and uses of (a) Minor fibers (b) Special-use fibers (c) Elastometric Fibres: Polyurethane, spandex	20
3.	Technical textiles – Characteristic, Fibres used & application of Indutech, medtech, agrotech, geotech, Home tech, Pactech, Oekotech, clothtech, sporttech, mobiltech, etc.	10
4.	Latest development in textile fibers and its environmental friendly production at different levels	20
5.	Non-woven technology (a) Fibers used (b) Manufacture process-fiber selection, web formation, web consolidation, finishing and converting (c) Characteristics and end-uses	20

Teaching-Learning Methodology	Lecture and discussion using multimedia and powerpoint presentation, assignments, actual sample visualization, videos, film shows, visits
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Gain knowledge of common and speciality fibers, their production and processing technology.
2.	Become sensitive to the environment and ecology and will be able to safeguard it.

Suggested References:	
Sr.No.	References
1.	Hollen, N.& saddler, J.(1968). <i>Textiles</i> . London: Macmillan Company.
2.	Newness B. W. <i>Manmade Fibers, Moncrieff</i> .
3.	Namkar, A.(1996). <i>Fiber Science And Technology</i> . Bombay: Oxford & IBH Publication
4.	Lowan, M.& Jungerman(1980). <i>Introduction to Textiles</i> . Bombay: D.B. Taraporwala Sons & Company Pvt. Ltd.
5.	Mishra, S.P.(2000). <i>A Text book of fiber Science &amp; Technology</i> . New Delhi: New age International Publication.
6.	Korth, H.(1977). <i>Textiles</i> . London: Work Ltd.
7.	Cobman, B.P.(1983). <i>Textile Fibers &amp; Fabrics</i> . New York: Mcgraw Hill Pub.
8.	Braddock, S.& Mahony, M.O.(1997). <i>Techno Textiles</i> . London: Thames& Hudson Ltd.
9.	Hess.(1996). <i>Textile fibers and their use</i> . Bombay: Oxford & IBH Publishing Co. Pvt. Ltd.

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Bachelor of Science - Home Science  
(B.Sc. - H.Sc.) (Textiles and Clothing) Semester (V)

Course Code	UH05CTCL54	Title of the Course	Historic Textiles and Costumes
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. Gain knowledge about history of costumes and textiles.</li><li>2. Develop understanding in application of knowledge of historic textiles and Costumes in fashion.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Importance and sources of information for Historic textiles & costumes	10
2.	Traditional textiles of oriental countries (a) Spain, (b) China, (c) Africa	20
3.	Textiles and costumes of ancient times (a) Egypt (b) Greece (c) Rome (d) France	20
4.	Textiles and costumes of medieval Europe (a) Middle ages (b) 18 to 20 centuries	30
5.	Costumes of ancient India (a) Vedic (b) Mughal (c) Rajput	20

Teaching-Learning Methodology	Lecture and discussion using multimedia and powerpoint presentation, assignments, videos, film, visits to museum, theatre events,
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Gain knowledge of world textiles and costume and its impact on today's fashion world.
2.	Design speciality apparels for special events, theatre's, stage shows, fashion events

Suggested References:	
Sr. No.	References
1.	Laver, J. (1967). <i>Costumes through the ages</i> . New York: Simon & Schaster.
2.	Boucher, F. (1987). <i>A History of Costumes in the West</i> . London: Thames and Hudson Ltd.
3.	Gillow & Polly. (1999). <i>World textiles</i> . London: Thames and Hudson Ltd.
4.	Osborne H. (1975). <i>The Oxford Companion to the Decorative arts</i> . England: Clarendon Press
5.	(1980). <i>Treasures of Indian Textiles</i> . Bombay: The Calico Museum, Marg Publication.

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Bachelor of Science - Home Science  
(B.Sc. - H.Sc.) (Textiles and Clothing) Semester (V)

Course Code	UH05CTCL55	Title of the Course	Design-Textiles and Apparel
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. Gain knowledge on elements &amp; principles of design with reference to textiles &amp; apparel</li><li>2. Enable students develop knowledge on textiles &amp; apparel design its rough surface &amp; structural ornamentation</li><li>3. Enable students developing skills in enhancement of fabrics &amp; garments.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Application of Elements of design in Textiles and apparels (a) Line (b) Colour (c) Silhouette (d) Texture	25
2.	Application of Principles of design in Textiles and apparels (a) Balance (b) Proportion (c) Rhythm (d) Emphasis (e) Harmony	25
3.	Surface and decorative design in textiles/Fabric Printing (a) Surface design-Painting, Embroidery, Appliqué work (b) Decorative design-through yarns, weaves, colour and weave effect	25
4.	Surface and decorative design in apparels (a) Surface design- Accessories, Embroidery, Ruffles, Braiding, Laces (b) Decorative designs-collars, fullness, tucks, pockets and pleats	15
5.	To prepare portfolio of five of each textile design and apparel design with details.	10

Teaching-Learning Methodology	Lecture and discussion using multimedia and powerpoint presentation, assignments, actual sample visualization and analysis, market surveys and collection etc.
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understand and create designs for textiles and garment.

Suggested References:	
Sr. No.	References
1.	Hollen, N. & Saddler, J. (1968). <i>Textiles</i> , London: Macmillan Company.
2.	Rastogi, M. (2009). <i>Fibres &amp; yarns</i> . New Delhi: Sonali Publications.
3.	Murthy, W.S. (2007). <i>Textile weaving &amp; design</i> . Chandigarh: Abhishek Publication.
4.	Neelima (2009). <i>Fashion &amp; textile design</i> . New Delhi: Sonali Publications Ltd.
5.	Nisbet, H. (1978). <i>Grammar of Textiles Design</i> . Bombay: D.B. Taraporwala Sons & Company Pvt. Ltd.
6.	Klibbe, J.W. (1965). <i>Structural fabric design</i> . North Carolina: North Carolina State University Print Shop.
7.	Parvathi, K. (2007). <i>Textile Designing</i> . Jaipur: Avishkar Publishers.
8.	Carr, H. & Pomery J. (1992). <i>Fashion Design &amp; Product Development</i> . New Jersey: Blackwell Scientific Publication
9.	Colchester, C. (1993). <i>The New Textiles</i> . London: Thames & Hudson Ltd.

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Bachelor of Science - Home Science  
(B.Sc. - H.Sc.) (Textiles and Clothing) Semester (V)

Course Code	UH05STCL51	Title of the Course	Practical - Men's Clothing
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. Impart knowledge on prevailing styles in men's clothing</li><li>2. Develop skills in designing and construction of men's clothing</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Study and adaptation of ready to use basic blocks for men's wear (40, 42, 44)	10
2.	Adaptation and construction of night dress (a) Pyjama (b) Kurta / shirt	30
3.	Adaptation and construction of shirt (shirt collar with band)	20
4.	Adaptation and construction of trouser	20
5.	Adaptation and construction of jacket	20

Teaching-Learning Methodology	Lab work, discussion and demonstration, garment making
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Practical Examination(As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%



Course Outcomes: Having completed this course, the learner will be able to

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|----|--|
| 1. | Develop insight regarding minute details and techniques of designing and construction of men's wear. |
| 2. | Seek jobs in apparel industry.   |

Suggested References:

Sr. No.	References
1.	Cooklin, G. (1997). <i>Garment technology for Fashion</i> . U.K: Blackwell Science.
2.	Rita, J. (1998). <i>Handbook for fashion designing</i> . New Delhi: Mittal Publishers.
3.	Erwin, M.D. (1969) <i>Practical dress design</i> . The Macmillan Company.
4.	Doongaji S.C.& Deshpande.(1964). <i>Basic process &amp; Clothing Construction</i> . New Delhi: New Raj Book.
5.	Shaeffer, C.(2000). <i>Sewing for Apparel Industry</i> . New Jersey: Prentice Hall.
6.	Zarapkar,K.(1994). <i>Zarapkar – System of cutting</i> . Bombay: Navneet Prakashan.

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Bachelor of Science - Home Science  
(B.Sc. - H.Sc.) (Textiles and Clothing) Semester (V)

Course Code	UH05STCL52	Title of the Course	Practical - Draping
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	<ol style="list-style-type: none"><li>1. Visualize and transfer the designs on dress form.</li><li>2. Acquire skills in designing garments on dress form</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Importance of dress form in designing	-
2.	Draping of garments with following features: Basic slope and manipulation of darts (a) Single dart series (b) Two- dart series	20
3.	Draping and construction of garment with yoke variation- yoke at bust/ midriff yoke as straight/square/round/v shapes	30
4.	Draping and construction of garment with collar variation- flat/shirt/notch	30
5.	Draping and construction of garment with princess line	20

Teaching-Learning Methodology	Lab practicals, discussion and demonstrations'
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Practical Examination(As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%



Course Outcomes: Having completed this course, the learner will be able to

- |    |   |
|----|---|
| 1. | Design and construct garments using draping techniques. |
|----|---|

Suggested References:

Sr. No.	References
1.	Hilde, J.(1993). <i>Draping for fashion design</i> . 2 <sup>nd</sup> Ed . New Jersey: Prentice Hall Publication.
2.	Stanley, H.(1995). <i>Flat pattern cutting &amp; modeling for Fashion</i> . England: Stanley thorns Publication Ltd.
3.	Erwin, M.D.(1969). <i>Practicals dress design</i> . New York: The Macmillan Company.
4.	Winefred Aldrich W.(1996). <i>Fabric for flat pattern cutting</i> . New Jersey: Blackwell science.
5.	Goulbourn.(1971). <i>Introducing pattern Cutting, modelling</i> . London: B.T. Batford Ltd.

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC51	Title of the Course	Consumerism
Total Credits of the Course	02	Hours per Week	02
Course Objectives:	<ol style="list-style-type: none"><li>1. To make them understand the role of consumer in the market.</li><li>2. To increase their awareness about consumer buying behaviour, their rights and responsibilities.</li><li>3. To familiarize them with various consumer problems.</li><li>4. To enhance their knowledge base about redressal agencies.</li></ol>		

Course Content		
Unit	Description	Weightage* (%)
1.	Consumer and consumer problems (a) Definition of a consumer. (b) Problems of consumer (including services as water, gas, electricity etc.) (c) Unfair consumer practices: adulteration and faulty weights and measures	25
2.	Consumer Buying Behaviour (a) Factors influencing buying behaviour (b) Consumer aids: classification – Labels, Trademarks, Brand Names, Patents, Warranty, Guarantee, Quality Control and After Sales Service (c) Advertisement features, importance, media, usefulness	25
3.	Consumer protection (a) Meaning, characteristics and objectives (b) Need and ways for providing consumer education (c) Consumer rights and responsibilities (d) Consumer Laws	25
4.	Consumer protection agencies (a) Consumer organizations – origin, functioning, role and types (b) Consumer cooperatives – role, history and growth in India (c) Consumer redress: role of consumer forums and consumer courts in safeguarding consumers	25





Teaching-Learning Methodology	Lectures, active learning, reflective learning, written exercises, collaborative learning, problem solving, case studies, ICT enabled 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)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Emerge as informed consumers
2.	Becoming familiarized to the changing trends in consumerism
3.	It also provides an understanding of the procedure of redress of consumer complaints, and the role of different agencies in establishing product and service standards

Suggested References:	
Sr. No.	References
1.	Misra S., Sree Kumaran G. N., and Chadah, S. (2015). <i>Consumer Handbook</i> . New Delhi: Department of Consumer Affairs.
2.	Singh, G. (1990). <i>Law of Consumer Protection</i> . Jaipur: Bharat law publishers.
3.	Agarwal, A. (1989). <i>A practical handbook for consumers</i> . Bombay: India book house.
4.	Sarkar, A. (1989). <i>Problems of Consumers in Modern India</i> . New Delhi: Discovery publishing House.



5.	<i>Recent issues of magazines: Insight, Ahmedabad : CERC.</i>
6.	<i>Consumer Voice:New Delhi: VOICE Society.</i>

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

On-line Resources

Consumer handbook English [https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer\\_information/Consumer\\_Handbook\\_H.pdf](https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer_information/Consumer_Handbook_H.pdf)

Consumer handbook Hindi [https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer\\_information/Consumer\\_Handbook.pdf](https://consumeraffairs.nic.in/sites/default/files/file-uploads/consumer_information/Consumer_Handbook.pdf)

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc) (Home Science) Semester (V)

Course Code	UH05EHSC52	Title of the Course	NGO Management
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. Acquaint students regarding Non-Government Organizations (NGO).</li><li>2. Acquaint them about the steps of starting the NGO.</li><li>3. Enable the students to manage the NGO consequently, which enhance the employability.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Concept of NGO (a) Meaning of NGO and GO (b) Difference between Government Organization and NGO (c) Characteristics of good NGO (d) Structure of NGO (e) Functions of NGO (f) Advantages of NGO (g) Present status of NGO (h) Contribution of NGO in the development	25
2.	Legal Frame Work for Establishing NGO (a) Steps for starting NGO (b) Registration of NGO (c) Identifying Funding agencies (d) Resource Mobilization (e) Methods and Techniques of fund raising (f) Foreign contributions and Regulation Act (FCRA) (g) Statutory obligations, Income Tax Exemption (80-G, 12-A and 35 NC)	25
3.	NGO Management (a) Managing people and teams in NGOs (b) NGO Management competencies (c) Applying NGO principles and values Policies and Programmes (a) New regulations for NGO and government control (b) Government laws, partnership model, Governing Schemes through ministries /Department / Bodies, government grant-in-aid	25



4.	Problems of NGO (a) Training (b) Recruitment (c) Funding (d) Resource Mobilization (e) Documentation	25
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Teaching-Learning Methodology	Lecture method ,Active learning methodology , Group discussions Method, Power Point Presentation , Audio Visual methods, Seminar, Assignment, Quiz, Field visit, debates
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Know the concept of NGO and present status of NGO.
2.	Manage NGO & required resource mobilization.
3.	Enhance employability in NGO.

Suggested References:	
Sr. No.	References
1.	Abraham A. <i>Formation and Management of NGOs</i> (2003). New Delhi: Third Edition, Published by Univarsal Law publishing Co. Pvt Ltd.
2.	Clark J. (1991). <i>Voluntary Organizations: Their Contribution to Development</i> . London: Earth Scan
3.	Lewis D. <i>Management of Non Governmental Development Organization</i> (2001). Newyork: Second Edition, Published by Routledge.



4.	Dorothea H. (2003). <i>the real world of NGO's, Discourses, Diversity and Development</i> . New Delhi: Zed books Ltd.
5.	Jain R.B. (1995). <i>NGO's in Development Perspective</i> . New Delhi: Vivek Prakasan.
6.	Joel, S.G.R., and Bhose. (2003). <i>NGO's and Rural Development – Theory and Practice</i> . New Delhi: Concept Publishing Company.
7.	John M. R. (2002). <i>Stakeholders in Rural Development – Critical Collaboration in State – NGO Partnerships</i> . New Delhi: Sage Publications.
8.	Julie F. (2003). <i>Governments, NGO's and the Political Development of the Third World</i> . Jaipur: Rawat Publications.
9.	Julie F.(2003). <i>Non Governments – NGO's and the Political Development of the Third World</i> . New Delhi: Rawat Publications.
10.	Kalyan S. (2013). <i>An Easy Guide to NGO</i> . Kolkata: Book Corporation.
11.	Kumar, A. (2003). <i>Social Change through NGO's</i> . New Delhi: Anmol Publishers.
12.	Kavita K. et al (2010). <i>Status of Child and Welfare Originations</i> , Jaipur: Aaviskar Publishers.
13.	Singh R.S. (2003). <i>Role of NGO's in Developing Countries (Potentials, Constraints and Policies)</i> . New Delhi: Deep & Deep Publications (P) Ltd.
14.	Chandra S. (2003). <i>Guidelines for NGO Management in India</i> . New Delhi: Published by Kanishka Distributors.

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Bachelor of Science – Home Science  
(B.Sc. – H.Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC53	Title of the Course	Accessories and Adornment
Total Credits of the Course	02	Hours per Week	02
Course Objectives:	<ol style="list-style-type: none"><li>1. Gain knowledge on importance of accessories &amp; adornments in dress design.</li><li>2. Enable students gather knowledge on accessories &amp; adornment used in garments.</li><li>3. Make students aware of the materials, styles and placement of accessories and adornments.</li></ol>		

Course Content		
Unit	Description	Weightage* (%)
1.	Importance of adornment and accessories	10
2.	Accessories & adornments during middle age	20
3.	Accessories in modern times: (a) Hats & headgear (b) Jewellery (c) Sash (d) Shoes & boots (e) Muffs & gloves (f) Handbags	30
4.	Adornments: (a) Buttons (b) Lapel pins (c) Laces & ruffles (d) Ribbons (e) Braids (f) Through surface ornamentation (g) Hand & machine embroidery	30
5.	Innovations in adornment & accessories	10

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		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Appreciate the role of accessories in fashion.
2.	Comprehend the techniques of adornment.
3.	Develop the skill to coordinate adornments & accessories in garments.

Suggested References:	
Sr. No.	References
1.	Dickerson K.G. (2003), <i>Inside the Fashion Business</i> . New Delhi: VII Edition, Person Education Pvt. Ltd., Indian Branch.
2.	Jarnow, Guerreiro, Judelle, (1987), <i>Inside the Fashion Business</i> , New York: IV Edition, Macmillan Publishing Company.
3.	Kumar. A. (2010), <i>Fashion Tourism</i> , New Delhi: Sonali Publication, India.
4.	Makelvey K. (2006), <i>Fashion Source Book</i> , U.S.A.: II Edition, Blackwell Publishing Ltd.
5.	Pundir N., (2007), <i>Fashion Technology- Today &amp; Tomorrow</i> , New Delhi: Mittal Publication, India.
6.	Neelima, (2009), <i>Fashion &amp; Textile Design</i> , New Delhi: Sonali Publications.

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Bachelor of Science -Home Science  
(B.Sc. – H. Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC54	Title of the Course	Food Adulteration
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. Familiarize students with food standards.</li><li>2. Enable testing of different foods for their quality.</li><li>3. Familiarize students with tests used for finding adulterations and quality assessments.</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Food Adulteration – Definition, types.	15
2.	(a) Food Laws Voluntary /Mandatory. Role of National & International Voluntary Agencies and legal aspects of consumer protection. (b) Food Standards.	25
3.	Specifications for the following (a) Milk & milk products (b) Oil and Fats (c) Spices & Condiments (d) Food grains. (e) Flours. (f) Canned Foods (g) Fruits and vegetable products (h) Flesh Foods (i) Sugar & preserves (j) Beverages- alcoholic & non-alcoholic	35
4.	(a) Contaminants, residues & pollutants (b) Conditions for Sale & License	25

Teaching-Learning Methodology	Chalk and board, Power point presentations, Class Discussions, Class activities / assignments, quiz
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Conduct adulteration test on a small scale basis, enterprise, and household level will gain knowledge of agencies working for it.

Suggested References:	
Sr. No.	References
1.	ISI Publications on above topics
2.	Association of Official Agricultural Chemists, & Horwitz, W. (1975). <i>Official methods of analysis</i> (Vol. 222). Washington, DC: Association of Official Analytical Chemists.
3.	Raghuramulu, N., Nair, K. M., & Kalyanasundaram, S. (Eds.). (1983). <i>A manual of laboratory techniques</i> . New Delhi: National Institute of Nutrition, Indian Council of Medical Research.

On-line resources to be used if available as reference material
On-line Resources
<a href="http://Epgp.inflibnet.ac.in/Home">Epgp.inflibnet.ac.in/Home</a>

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Bachelor of Science - Home Science  
(B.Sc.- H.Sc.) (Home Science) Semester (V)

Course Code	UH05EHSC55	Title of the Course	Basics of Research
Total Credits of the Course	02	Hours per Week	02

Course Objectives:	<ol style="list-style-type: none"><li>1. To develop understanding of the basic framework of research process.</li><li>2. To develop an understanding of various research designs and techniques.</li><li>3. To identify various sources of information for literature review and data collection.</li><li>4. To develop an understanding of the ethical dimensions of conducting research</li></ol>
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Course Content		
Unit	Description	Weightage* (%)
1.	Introduction to Research (a) Meaning ,purpose, approaches and types of research (b) Identification of problem (c) Collecting review and keywords (d) Research ethics and plagiarism	25
2.	Methods of data collection (a) Primary and Secondary data collection methods (b) Qualitative methods of data collection, (c) Survey methods of data collection (d) Sampling and types of sampling	25
3.	Processing and analysis of data (a) Measures of central Tendency (Mean, medium, Mode), (b) Measures of dispersion (range, mean deviation, standard deviation) (c) Graphical representation of Data.	25
4.	Preparing a small project and report writing ( Title page, Abstract, Introduction, Methodology, Results, Discussion, References, and Appendices)	25

Teaching-Learning Methodology	Lectures, active learning, reflective learning, written exercises, collaborative learning, problem solving, case studies, ICT enabled 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)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understand research terminology
2.	Identify the components of a literature review process
3.	Understand the research methodology
4.	Prepare a scientific report of the given project

Suggested References:	
Sr. No.	References
1.	Bernard, H.R. (2013). <i>Social Research Methods: Qualitative and Quantitative Approaches</i> . New Delhi: Sage publications.
2.	Best and Kahn. (2009). <i>Research Methodology</i> . New Delhi: PHI Learning Private Limited.
3.	Kothari, C.R. (2004). <i>Research Methodology (Methods and Techniques)</i> . New Delhi: New Age Publisher.
4.	Bandarkar, P.L., and Wilkinson, T.S. (2000). <i>Methodology and Techniques of Social Research</i> . Mumbai: Himalaya Publishing House.
5.	Dooley, D. (1995). <i>Strategies for Interpreting Qualitative Data</i> . California: Sage Publications.
6.	Gay, L.R. (1981). <i>Educational Research: Competencies for Analysis and Applications</i> . (2 <sup>nd</sup> ed.) Columbus: Charles E. Merrill Publishing Company and A. Bell and Howell Company.
7.	Ahuja, R.(2010). <i>Research Method</i> . New Delhi: Rawat Publication

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