

ST JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS)

VISAKHAPATNAM

DEPARTMENT OF HOME SCIENCE

The Department of **Home Science**, St. Joseph's College for Women (A) seeks to serve BSc Programme students interested in careers related to Nutrition, Resource Management, Textiles and Human Development. The department offers Home Science with three core subjects namely Foods and Nutrition, Human Development and Family Resource Management. In order to oblige to the varied interests of students, a total of

Programme Specific Outcomes of BSc Programme with Home Science

PSOs: On completing the six-semester program, the students shall be acquiring theoretical domain knowledge and practical experience/exposure/hands-on experience and

PSO 1: Be able to learn the physiological, psychological, social, intellectual and cultural influences during different stages of life and helps to build skills in preschool teaching.

PSO 2: Be able to gain knowledge, understand the role of food, nutrition and dietetics in promoting healthy living in the community, and be familiar with different lab techniques related to nutrition.

PSO 3: To enable the students with managerial skills required in day-to-day life situations and acquire knowledge in being a good consumer. Be versatile in designing garments using various surface enrichment techniques.

PSO 4: To be able to develop extra-curricular skills, analytical skills, communication skills, leadership qualities and entrepreneurship skills.

ASSESSMENT METHODOLOGY:

PSO 1: Be able to learn the physiological, psychological, social, intellectual and cultural influences during different stages of life and helps to build skills in preschool teaching.

Direct method of computing PSO 1 attainment is based on the student performance in all assessment tools namely online and offline - subjective and objective tests along with accessory

assignments for all the courses offered (HS1101, HS1151, HS 2101, HS 3101, HS 5101, HS 5152, HS 6101, HS 6303, HS 6353). In addition, if the specific domain chosen by the students' is Human Development, three internships are included which help in gaining some practical experience. These exams test students' learning at knowledge and understanding, application and analysing levels in the respective courses. Indirect method of computing PSOs is done through students' course exit survey wherein a structured questionnaire is administered to the students and their response is solicited on a 5-point scale. Responses from students are consolidated and students' satisfaction level with reference to course transaction will be computed. Average percentage of level of attainments of all the courses in Human Development core is given below.

Level of attainment of PSO1 (all theory and practical courses offered under Human Development core): 75.72%

PSO 2: Be able to gain knowledge, understand the role of food, nutrition and dietetics in promoting healthy living in the community, and be familiar with different lab techniques related to nutrition.

Direct method of computing PSO 2 attainment is based on the student performance in all assessment tools namely online and offline - subjective and objective tests along with accessory assignments for all the courses offered (HS 1201, HS 1251, HS 2201, HS 2251, HS 3200, HS 3201, HS 4201, HS 4251, HS 5201, HS 5251, HS 5202, HS 5252, HS 6201, HS 6251, HS6202, HS 6252, HS 6203, HS 6303) . In addition, if the specific domain chosen by the students' is Nutrition, two internships are included which help in gaining some practical experience. These exams test students' learning at knowledge and understanding, application and analysing levels in the respective courses. Indirect method of computing PSOs is done through students' course exit survey wherein a structured questionnaire is administered to the students and their response is solicited on a 5-point scale. Responses from students are consolidated and students' satisfaction level with reference to course transaction will be computed. Average percentage of level of attainments of all the courses in Nutrition core is given below.

Level of attainment of PSO2 (all theory and practical courses offered under Nutrition core): 80.81%

PSO 3: To enable the students with managerial skills required in day-to-day life situations and acquire knowledge in being a good consumer. Be versatile in designing garments using various surface enrichment techniques.

Direct method of computing PSO 3 attainment is based on the student performance in all assessment tools namely online and offline - subjective and objective tests along with accessory assignments for all the courses offered (HS 1301, HS 1351, HS 2301, HS 2351, HS 3301, HS 3351, HS 4301, HS 4351, HS 5301, HS 5351, HS 5302, HS 5352, HS 6301, HS 6351, HS 6451, HS 6301). In addition, if the specific domain chosen by the students' is resource management, specific subjects along with Auto CAD software training is included in the curriculum. These exams test students' learning at knowledge and understanding, application and analysing levels in the respective courses. Indirect method of computing PSOs is done through students' course exit survey wherein a structured questionnaire is administered to the students and their response is solicited on a 5-point scale. Responses from students are consolidated and students' satisfaction level with reference to course transaction will be computed. Average percentage of level of attainments of all the courses in Resource Management core is given below

Level of attainment of PSO3 (all theory and practical courses offered under Resource Management core): 77.79%

PSO 4: To be able to develop extra-curricular skills, analytical skills, communication skills, leadership qualities and entrepreneurship skills.

Assessment of this outcome is done based on the students' performance in different areas in the practical papers, which include the visits to different places for academic purpose, projects done, the summer internship. In addition, some special elective papers help in assessing the theoretical aspects of this PSO4.

Level of attainment measurement

Level of attainment of course outcomes includes both direct and indirect assessments. Direct assessment is done by testing the knowledge and/or skills of the student in that course by conducting standardised examinations. In indirect assessment we use the student feedback on course which is measured on 5 point scale. The sum of these two assessments is shown as the level of attainment of that course.

Assessment of all the theory courses is done in two parts, namely by formative assessment (40%) which is internal and summative assessment (60%) which is external. The evaluation of 100% of the assessment in each semester is distributed as follows:

Mid Semester Examination 1	15% (which is offline)
Mid Semester Examination 2	15% (which is online)
Accessory Assessment	5% (written quiz, Assignment etc.)
Attendance	5% (above 75% attendance will be rewarded)
End semester examination	60% (which is descriptive)

Assessment of all the practical courses: Assessment is done in two parts, namely by continuous assessment (40%) and summative assessment (60%). In Continuous assessment, each practical course will be assessed for 40% by considering the 50% (best scored) of the experiments and the total will be calculated for 40%. Summative assessment (60%) of practical courses is through end semester practical exams designed to test student's knowledge as well as skills in the conduct of experiments and generation of reliable results. A written record of experimental work carried out throughout the semester is also assessed under Summative assessment.

COURSE OUTCOMES OF ALL THE COURSES OFFERED BY HOME SCIENCE DEPARTMENT:

I. FOODS AND NUTRITION CORE

HS 1201	FOOD SCIENCE	CO1: To relate the concept of genetically modified foods with present trends.
		CO2: To demonstrate and show how to measure and weigh foods
		CO3: To explain the importance and classifications of food and their nutrients
		CO4: To interpret the advantages and disadvantages of different methods of cooking
		CO5: To explain the structure and composition of the different food groups.
		CO6: To extend the knowledge about the products of different food groups, their storage measures.
		CO7: To summarize the nutritional needs and identify deficiency symptoms of different age groups.
		CO8: To compare and learn the nutritive value of different food groups.
		CO9: To formulate the skills in different methods of cooking.
		CO10: To elaborate about the usage and importance of microwave and solar cooking.
Level of attainment from CO1 –CO10 – 80.87%		

HS 1251	FOOD SCIENCE PRACTICAL	CO1:To relate, classify, explain and demonstrate gelatinization, fermentations, and extraction of gluten from flours.
		CO2:Classify the various methods of cooking, effects of sprouting.
		CO3:Identify the difference between the fresh eggs and stale eggs.
		CO4:Demonstration of lactometer for testing the quality of milk.
		CO5:To analyze the effect of pH, heat on vegetables
Level of attainment from CO1 – CO5 –87.28%		

HS 2201	NUTRITION SCIENCE	CO1:To relate the interrelationship between nutrients.
		CO2:Extend knowledge on various nutrients, sources and their functions and deficiencies.
		CO3:To summarize the nutritional needs and identify deficiency symptoms of different age groups.
		CO4:To make use of food preparation techniques and present in an attractive and appetizing manner.
		CO5:To classify signs of good and poor nutritional status

		CO6: To determine BMR, and the factors affecting total energy requirement.
		CO7: To elaborate the relationship between nutrition and health.
		CO8: To demonstrate and show how to measure and weigh foods.
		CO9: To know how to weigh and measure ingredients.
		CO10: To learn different methods of cooking based on combination of different food groups.
Level of attainment from CO1 –CO10 – 71.9%		

HS 2251	NUTRITION SCIENCE PRACTICAL	CO1: To choose and develop a recipe in combination with other food groups.
		CO2: Evaluation of the scorecard.
		CO3: Analysis and assessment of recipes and methods.
		CO4: Evaluation of calculations of cost and nutritive value of one serving.
		CO5: To plan and organize how to present in attractive and appetizing manner.
Level of attainment from CO1 – CO5 –93.82%		

HS 3200	MICROBIOLOGY	CO1: To recall about bacterial cell, structure and various functions of microorganisms.
		CO2: To understand microbial growth and metabolisms.
		CO3: To summarize about the causes of food borne infections.
		CO4: To develop laboratory skills like aseptic and pure cultures techniques.
		CO5: To experiment with different staining techniques.
		CO6: To make use of microorganisms in food production and preservations.
		CO7: To analyse the various ways to control their growth by physical and chemical means.
		CO8: To distinguish the advantages and disadvantages of usage of antibiotics.
		CO9: To justify the vital roles of microorganisms like fermentation, pasteurization etc.
		CO10: To know the integral role of microorganisms in causing diseases.
Level of attainment from CO1 – CO10 – 71.15%		

HS 3201	MICROBIOLOGY PRACTICAL	CO1: Apply the knowledge on usage of microscope.
		CO2: Compare the various staining techniques in simple, grams staining.

		CO3: Demonstration and measure the various colonies in the media.
		CO4: Examination of bacteriological of water, milk, soils etc.
		CO5: To take part in a survey related to dairy farms, sewage plant etc.
Level of attainment from CO1 – CO5 –88.01%		

HS 4201	FOOD SERVICE MANAGEMENT	CO1: To acquire knowledge on various food service systems.
		CO2: Extend knowledge on quantity cookery and production process.
		CO3: To classify various styles of services.
		CO4: To know the importance of quantity control and purchasing.
		CO5: To estimate budgeting in food processing.
		CO6: To determine selection tips for various ingredients in cookery.
		CO7: To create meal plans and know different types of menus.
		CO8: To understand the importance of store keeping.
		CO9: To acquire knowledge on records maintained in food service systems.
		CO10: To understand the concept of food service institution.
Level of attainment from CO1 – CO10 – 83.07%		

HS 4251	BAKING & CONFECTIONARY	CO1: To build skills in the preparation of cakes, pastries and other bakery products.
		CO2: Extend the knowledge about appropriate techniques in baking.
		CO3: Develop entrepreneurship skills in setting up a bakery.
		CO4: To categorize different types of bakery products.
		CO5: To estimate the weights equivalent to household estimates.
Level of attainment from CO1 – CO5 –88.88%		

HS 5201	FAMILY NUTRITION	CO1: To inspect the various food fads and fallacies prevalent in the community
		CO2: To assess growth and development, nutritional requirements for all age groups.
		CO3: To learn about the importance of colostrum and breastmilk
		CO4: To estimate the nutritive value of various nutrients and comparing them with RDA.
		CO5: To justify the importance of breakfast, packed lunch and healthy snacks.
		CO6: To determine the food requirement changes influencing the nutritional status for expectant and lactating mothers.
		CO7: To formulate a balanced diet using food group system.

		CO8: To interpret various nutritional problems and plan menus accordingly.
		CO9: To understand the process of ageing and modifications required in the diet.
		CO10: To know about different nutritional problems of different age groups.
Level of attainment from CO1 – CO10 – 80.86%		

HS 5251	FAMILY NUTRITION PRACTICALS	CO1: To plan and develop meal planning for the family according to nutritional requirement.
		CO2: To identify and apply the meal planning for infants, preschool, school children.
		CO3: To assess the anthropometric measurement of pregnancy and lactating mothers and plan a diet.
		CO4: To apply knowledge on planning and develop a diet chart for all age groups.
		CO5: To organize a visit to ICDS centers.
Level of attainment from CO1 – CO5 –84.17%		

HS 5202	COMMUNITY NUTRITION	CO1: To extend the knowledge about the strategies of agricultural production, Post-harvest handling marketing.
		CO2: To identify the factors affecting food availability in a community.
		CO3: To apply knowledge of nutrition in order to combat nutritional disorders in the community.
		CO4: To make use of the techniques and applications of all standard methods of assessment.
		CO5: To discover the need for nutrition in the community.
		CO6: To infer the role of food and nutrients in health and diseased process.
		CO7: To evaluate the availability of food and its consumption pattern in the community
		CO8: To interpret the incidence of common nutritional problem in India.
		CO9: To determine the current schemes and programs implemented by the government.
		CO10: To evaluate the nutritional status of the community with the help of anthropometry.
Level of attainment from CO1 – CO10 – 79.52%		

HS 5251	COMMUNITY NUTRITION PRACTICALS	CO1: To assess the anthropometric measurements in the community.
		CO2: Assess clinically the symptoms of various disease.
		CO3: To organize field visits and survey the surveillance system for utilization.
		CO4: To plan and conduct diet survey.

		CO5: To assess the nutritional status of community.
Level of attainment from CO1 – CO5 –83.27%		

HS E1 6201	BIOCHEMISTRY	CO1: To define the various structure and metabolism of protein.
		CO2: To summarize the knowledge on roles of nutrients in human metabolism.
		CO3: Outline the metabolic pathway, which is involved in metabolism of nutrients in human body.
		CO4: Understands the qualitative and quantitative food analyses.
		CO5: To determine the chemical structure of major nutrients.
		CO6: To explain the importance of principles of biochemical methods.
		CO7: To prove the presence of ascorbic acid in food.
		CO8: To compile the knowledge on digestion, absorption of nutrients in health.
		CO9: To discuss about how energy metabolism varies between tissues.
		CO10: To know the various functions of nutrients in a cell.
Level of attainment from CO1 – CO10 – %		

HS E1 6251	BIOCHEMISTRY PRACTICALS	CO1: To identify different glassware used in laboratory.
		CO2: Construct skills in common laboratory techniques like pipetting, titrating, and weight using chemical balance.
		CO3: To know about different biochemical tests of carbohydrates, proteins and lipids.
		CO4: To understand the chemistry of lipids.
		CO5: To explain the principles behind the biochemical analysis.
Level of attainment from CO1 – CO5 –		

HS A16201	DIETETICS	CO1: Relate the planning of diet and diet counselling to etiology and symptoms.
		CO2: Outline about prebiotics and probiotics, functional foods nutraceuticals and prevention of disease.
		CO3: To identify the roles and responsibilities of dietitian, code of ethics assessment and diet planning.
		CO4: Learn and gain knowledge and develop skill in planning and preparation of therapeutic diets.
		CO5: Distinguish the pre-operative and post-operative diets
		CO6: To know the importance of prevalence, etiology principles of dietary management and treatment of life styles disease.

		CO7: To formulate the routine hospital diets and special feeding methods during critical care.
		CO8: To predict the metabolic changes, clinical manifestation of life -style and degenerative diseases.
		CO9: To design diets during infection and all types of fevers.
		CO10: To modify diets using food exchange list.
Level of attainment from CO1 – CO10 – 89.94%		

HS A16251	DIETETICS PRACTICALS	CO1: To apply knowledge on routine hospital diet.
		CO2: To understand the different lifestyle disorders and plan a diet accordingly.
		CO3: To organize a counselling cell to council the students and faculty on their disorders.
		CO4: To select the various case studies and apply in the preparation the diet.
		CO5: To understand and plan a special feeding diet.
Level of attainment from CO1 – CO5 –90.03%		

HS A2 6201	FOOD & NUTRITION SECURITY	CO1: To define the concept of food security.
		CO2: To analyze the current trend of nutritional situation in India.
		CO3: To inspect the government system and in maintaining food security.
		CO4: To compare Indian food security with other countries.
		CO5: To understand the functioning of food security strategies in India.
		CO6: To discover the methods of preventing food insecurity.
		CO7: To determine the factors influencing food and nutrition security.
		CO8: To assess the food supply demand in the country.
		CO9: To compile the knowledge on nutrition survey and planning it.
		CO10: To work as a group and make report about the complex problems connected to food security and nutrition.
Level of attainment from CO1 – CO10 – 84.17%		

HS A2 6251	FOOD AND NUTRITION SECURITY PRACTICALS	CO1: To study the current models of current policies and scheme of the government.
		CO2: To study the literature of published journals.
		CO3: To assess the food security in India.
		CO4: To survey nutritional status of rural & urban area.
		CO5: To report the summarized knowledge about food security.
Level of attainment from CO1 – CO5 –80.6%		

HS A3 6201	FOOD MICROBIOLOGY	CO1: To learn about history of microbiology.
		CO2: To know about the different microorganisms in food and their toxicity.
		CO3: To get familiarize with the methods of preservation of foods.
		CO4: To relate the source of microorganism in food and infection caused by food.
		CO5: To understand and learn the concept of sterilization and disinfectant techniques and uses.
		CO6: Comprehend the knowledge about the different parameters that effect the survival of microorganisms.
		CO7: To understand the importance of personal and work place hygiene.
		CO8: To learn about different staining techniques and isolation methods.
		CO9: To know about the microbiological analyses and assessment of commonly used media and compare with indices.
		CO10: To apprehend the importance of microbes in food preparation and fermentations.
Level of attainment from CO1 – CO10 – 86.6%		

HS A3 6351	FOOD MICROBIOLOGY PRACTICALS	CO1: To apply the knowledge on cultivation of bacteria, yeast, molds.
		CO2: To classify isolation methods and apply the different streaking methods for cultivation of microorganisms.
		CO3: To examine the morphological identification of important molds and yeast.
		CO4: To relate the study of various sources of transmission of microorganisms in foods.
		CO5: Demonstration of microbial analysis of water, milk, food.
Level of attainment from CO1 – CO5 –92.7%		

II. HUMAN DEVELOPMENT CORE

HS 1101	COMMUNICATION PROCESS	CO1: Learn about the importance of communication.
		CO2: Learn different types of communication.
		CO3: Know about the qualities of good/poor communicators.
		CO4: Understand about the treatment of message in communication process.

		CO5: Acquire knowledge about individual contacts and its importance in community development.
		CO6: Learn various group contacts in community participation.
		CO7: Be able to apply knowledge in the preparation of visual aids (poster charts etc) and audio aids (projected and non-projected).
		CO8: Know about the advantages and limitations of audio visual aids (TV, cctv, etc.).
		CO9: Learn the importance of folk art and drama in a motivational way to convey message through traditional art.
Level of attainment from CO1 – CO10 – 75.44%		

HS 1151	COMMUNICATION PROCESS PRACTICALS	CO1: Able to prepare various visual aids like posters, charts etc.
		CO2: Able to prepare various audio-visual aids like power point presentations.
		CO3: Let the students know how to communicate efficiently in one-way and two-way process.
		CO4: Enable the students in preparing a script or a story on an event on the lines of newspaper.
		CO5: Enable the students with the skill required in communicating a large gathering.
Level of attainment from CO1 – CO5 –68.76%		

HS 2101	PHYSIOLOGY	CO1: To recall the physiological functions of digestive system, digestive glands.
		CO2: To outline about the physiology of human body in relation to different systems and organ functioning.
		CO3: To understand the functions of heart and relate to its role in circulation.
		CO4: To understand the concept of mechanical disintegration, chemical action and absorption of food.
		CO5: To interpret the path of formation of urine and sweat and describing the functions of each organ involved in the process.
		CO6: To explain about the structure and function of respiratory organs and abnormalities of respiration.
		CO7: Extend the knowledge on the anatomy of male and female reproductive organs.
		CO8: To summarize the events of menstrual cycle and role of hormones in reproduction
		CO9: To gain knowledge about structure and functions of nervous system in relation to perception of senses.

		CO10: To distinguish the different blood groups and their compatibilities.
Level of attainment from CO1 – CO10 – %		

HS 2152	PHYSIOLOGY PRACTICALS	CO1: To show and summarize about different tissues.
		CO2: Learn the facts about various Alzheimer’s disease.
		CO3: To develop skills in techniques of assessing various blood parameters.
		CO4: To acquire skills of qualitative analysis.
		CO5: To know and compare a freshly mounted and stained blood cells.
Level of attainment from CO1 – CO5 –		

HS 3101	PSYCHOLOGY	CO1: Identify how psychologists study human behaviours.
		CO2: To outline about the physiology of human body in relation to different systems and organ functioning.
		CO3: To classify various theories of general psychology.
		CO4: Explain the structures of major sensory system.
		CO5: Relate how sensory information is perceived and processed.
		CO6: To build the interaction skills.
		CO7: Application of case studies involving in various studies.
		CO8: Identify how psychologists study human behaviors.
		CO9: Identify and evaluate factors affecting physical, social, emotional, intelligence, development in children and adulthood.
		CO10: To classify the memory (long and short-term memory), discover different ways to help people to remember.
Level of attainment from CO1 – CO10 – 60.4%		

HS 3150	COMPUTER APPLICATIONS IN HOME SCIENCE – I	CO1: Acquire knowledge about computer fundamentals.
		CO2: Make use of skills learnt in MS-Office in giving presentations for seminars.
		CO3: Able to create a mail ID.
		CO4: Able to design presentations with special effects like importing graphics, transformation in MS – PowerPoint.
		CO5: Able to develop designs for brochures, book covers and posters.
Level of attainment from CO1 – CO5 –83.4%		

HS 4101	PRE AND POST NATAL DEVELOPMENT	CO1: Be able to review the reproductive system.
		CO2: Be able to understand the biological and physiological foundations of development.
		CO3: Learn about various complications and discomforts during pregnancy.
		CO4: Learn about factors affecting growth and development during human life span.
		CO5: Let the students know about the importance of parenthood.
		CO6: Enable the students to apply the knowledge of sterilization techniques in the formula preparation for infants.
		CO7: Know the relationship between various developments.
		CO8: To identify the various infectious diseases during infancy and respective diets to be given.
		CO9: Be able to know the importance of registration of birth.
		CO10: Be able to assess various anthropometric measurements during infancy and babyhood.
Level of attainment from CO1 – CO10 – 80.84%		

HS4151	PRE AND POST NATAL DEVELOPMENT PRACTICALS	CO1: Case study on pregnant women.
		CO2: Observation of neonate.
		CO3: Be able to plot a growth-monitoring chart for children.
		CO4: Be able to understand about an immunization schedule.
		CO5: Able to design a simple napkin, bib and soft toy – ball for children.
Level of attainment from CO1 – CO5 –89.7%		

HS 5101	LIFE SPAN DEVELOPMENT	CO1: Comprehend the knowledge about the moral development – types and essentials of discipline.
		CO2: Be acquainted with the food patterns and general care of children during early and late childhood.
		CO3: Relate the different types and theories of play with its importance.
		CO4: Outline the developmental stages, mainly about the early and late childhood, along with physical and motor development.
		CO5: Get familiarize with the common emotions and emotional patterns of both early and late childhood.
		CO6: Understand the social behavior and development during early and late childhood.
		CO7: Be familiarize with the stages of personality development and different defence mechanisms.

		CO8: Identify the specific characteristics of early and late childhood.
		CO9: Compare and learn about the different stages of language development in early and late childhood.
		CO10: Compare and contrast the cognitive development of early and late childhood.
Level of attainment from CO1 – CO10 –80.8 %		

HS 5151	LIFE SPAN DEVELOPMENT PRACTICALS	CO1: To assess and observe a school, crèche, and orphanage according to different criteria.
		CO2: To interpret and explain the importance of a sociogram.
		CO3: To assess different children based on different developments.
		CO4: Acquire skills of measuring and recording various developments of children during childhood.
		CO5: To design and create indigenous toys.
Level of attainment from CO1 – CO5 –		

HS 5152	EARLY CHILDHOOD EDUCATION	CO1: Learn about the importance and role of pre-school education.
		CO2: Learn about the basic needs of the child during pre-school education.
		CO3: Understand and learn how to maintain different records in a pre-school.
		CO4: Attain skills in planning and arranging various corners, which can convey concepts.
		CO5: Acquire techniques of planning and organizing pre-school programme.
		CO6: Get familiar with the concept of programme planning and acquire skills in implementing it.
		CO7: Acquire skills in programme evaluation.
		CO8: Know about the different types of pre-schools and their education pattern in India.
		CO9: Learn about the importance of interaction with peers.
		CO10: Comprehend about different developments during early childhood.
Level of attainment from CO1 – CO10 – 77.02%		

HS 5152	EARLY CHILDHOOD EDUCATION PRACTICALS	CO1: Able to arrange various corners for preschool children.
		CO2: Able to plan a day's program for a preschool.
		CO3: Able to prepare story aids for preschool children.
		CO4: Enable the students with the knowledge required in maintain various records for a preschool.
		CO5: Visit to various types of preschools available locally.

Level of attainment from CO1 – CO5 –74.63%

HS E1 6101	FAMILY AND CHILD WELFARE	CO1: Learn about the rights and needs of a child according to UN convention.
		CO2: Understand the importance of Early Childhood experiences.
		CO3: Comprehend the knowledge about different behavioral problems.
		CO4: Learn about different crisis in family.
		CO5: Understand the coping techniques in the family.
		CO6: Learn the need and function of child guidance clinics.
		CO7: Become familiar with governmental and non – governmental organizations.
		CO8: Learn how to cope up with the behavioral problems.
		CO9: Know about the role of National and International organizations.
		CO10: Learn how to cope up with family crisis.
Level of attainment from CO1 – CO10 – 82.7 %		

HS E1 6151	FAMILY AND CHILD WELFARE PRACTICALS	CO1: Able to analyses various behavioral problems in children.
		CO2: Visit to family counselling centers.
		CO3: Visit to government and non-government organizations in fields of family and child welfare.
		CO4: Visit to rehabilitation centers.
		CO5: Case study on behavioral problems.
Level of attainment from CO1 – CO5 – 86.1%		

HS A3 6303	EXTENTION EDUCATION	CO1: Learn the need and scope in extension.
		CO2: Understand about rural administration.
		CO3: Learn various national schemes in literacy, women etc.
		CO4: Learn recent trends in community development.
		CO5: Learn about digitalization and their limitation.
		CO6: Become familiar with recent trends in women empowerment.
		CO7: Learn how digitalization is applicable in extension.
		CO8: Be able to apply the principles to bring about sustainable development.
		CO9: Learn the linking home science with community development..
		CO10: Be able to apply the principles to bring about sustainable development.
Level of attainment from CO1 – CO10 – 84.05 %		

HS A3 6353	EXTENTION EDUCATION PRACTICALS	CO1: Apply knowledge of human development in community development.
		CO2: Apply knowledge of resource management in community development.
		CO3: Be able to prepare low cost nutritious recipes.
		CO4: Prepare a project report on any of the government schemes related to women, health, disability, housing.
		CO5: Review on government schemes in fields of related to literacy, energy, water etc.
Level of attainment from CO1 – CO5 –89.4%		

III. RESOURCE MANAGEMENT CORE

HS 1301	RESIDENTIAL SPACE DESIGN	CO1: Interpret about family housing needs.
		CO2: Acquire knowledge about the factors influencing site selection.
		CO3: Enables the students to classify various types of residential buildings.
		CO4: Be able to understand the elements in landscape design.
		CO5: Apply knowledge in designing and planning work centers.
		CO6: Apply knowledge in designing residential spaces according to orientation of house and influence of vastu on position of rooms.
		CO7: Learn the selection of furniture and its arrangement and materials used in the construction of furniture for residential use.
		CO8: Be able to know how the organizations related to housing work -VUDA, APSHCL etc.
		CO9: Learn about the importance of prefabrication as a method of construction.
		CO10: Learn about the importance of and the methods of planning a kitchen garden.
Level of attainment from CO1 – CO10 – 81.23%		

HS 1351	RESIDENTIAL SPACE DESIGNING PRACTICALS	CO1: Be able to plan a single bedroom and double bedroom house according to vastu.
		CO2: Able to plan work centres – laundry and kitchen.
		CO3: Able to apply the knowledge of anthropometry and space measurement.
		CO4: To understand the various architectural symbols.
		CO5: To understand the care of various household appliances.
Level of attainment from CO1 – CO5 –87.86%		

HS 2301	BASICS OF TEXTILES	CO1: Gain knowledge of terminologies used and classification of textile fibres.
		CO2: Know about minor cellulosic fibres and their importance in blending.
		CO3: Obtain knowledge in manufacture of man-made fibres and its properties.
		CO4: Know about yarn making and standards of ASTM for industrial purpose.
		CO5: Understand the basic properties of fibres helps in construction of fabric
		CO6: Acquire economic way of cultivating and production of natural fibres
		CO7: Know about mechanical and chemical spinning techniques in yarn production
		CO8: Obtain skills on blends and mixtures of textiles fibres and their changes of action after fabric construction
		CO9: Apply skills on action of soaps and detergents on different types of fabrics.
		CO10: Develop skills to remove hardness in water for industrial use in treatment of effluent.
Level of attainment from CO1 – CO10 – 71.21%		

HS 2351	BASICS OF TEXTILES PRACTICALS	CO1: Apply skill in stitching embroidery and make use for fabric enrichment.
		CO2: Demonstrate the use of washing machine, soaps and detergents on natural and synthetic fibers.
		CO3: Demonstrate the laundering and finishing of cotton, wool, silk, synthetic, rayon and special articles.
		CO4: Evaluate various textile fibers by doing burning test.
		CO5: Test the colour fastness under the sunlight on a given sample.
Level of attainment from CO1 – CO5 –89.6%		

HS 3301	FOUNDATION OF ART AND DESIGN	CO1: Gain knowledge about elements of design.
		CO2: Understand the basic art principles and their application in interior, exteriors and flower arrangement.
		CO3: Gain understanding about different types of windows and window treatments.
		CO4: Acquire knowledge about the types of lighting and fixtures.
		CO5: Learn design modification to suit different requirements.

		CO6: Learn about the attributes of color.
		CO7: Learn about the application of color in interiors and exteriors.
		CO8: Learn the various types of furnishing and their selection and use in residential interiors.
		CO9: Become well versed in identifying and making different styles of flower arrangement.
		CO10: Learn about the classification of various styles of furniture (period, contemporary, etc.)
Level of attainment from CO1 – CO10 – 62.7%		

HS 3351	FOUNDATION OF ART AND DESIGN PRACTICALS	CO1: Able to identify various structural and decorative design.
		CO2: Able to apply art principles in sketching interiors.
		CO3: Able to apply the knowledge of color schemes in designing interiors.
		CO4: Able to modify the design.
		CO5: Able to do various flower arrangements using the art principles.
Level of attainment from CO1 – CO5 –86.82%		

HS 4301	MANAGEMENT PRINCIPLES	CO1: Be able to understand the managerial situations in family.
		CO2: Be able to know the traits of a good manager.
		CO3: Be able to understand various motivating factors in management like values, goals and standards.
		CO4: Learn about importance of decision making and process involved in it
		CO5: Learn about importance of role played by the home maker.
		CO6: Learn about importance and tools involved in time and energy management.
		CO7: Learn to classify fatigue and methods of reducing it.
		CO8: Apply knowledge in how to deal with conflict in managerial situations.
		CO9: Apply knowledge in using various techniques involved in work simplification.
		CO10: Obtain knowledge about components and concept of system approach in management.
Level of attainment from CO1 – CO10 –81.3 %		

HS 4351	MANAGEMENT PRINCIPLES PRACTICALS	CO1: Be able to implement management skill with reference to house.
		CO2: Be able to prepare a time schedule for home science / non home science students.

		CO3: Make various household accessories using technologies like braiding, quilting, patchwork.
		CO4: Be able to analyse various tools of time management in various household activities.
Level of attainment from CO1 – CO4 –92.5%		

HS 5301	TEXTILE DESIGN	CO1: Acquire knowledge of basic operation of loom and power loom technology used in industries.
		CO2: Gain information about surface design using new technologies to produce garments in industries.
		CO3: Know about the importance of traditional costumes and jewellery of India.
		CO4: Gain knowledge of methods of weaves construction helps in identify types of weaves.
		CO5: Understand the importance of traditional textiles and its contribution to increase Nation economy.
		CO6: Know about different finishing treatment to increase the serviceability.
		CO7: Obtain awareness on special finishes to enhance the properties of fabric for a specific use.
		CO8: Acquire types of structural design of industrial production in bulk.
		CO9: Obtain knitted and non-woven fabric construction, application and its unique properties.
		CO10: Apply skills in dyes and printing techniques to enhance the beauty of various fabrics.
Level of attainment from CO1 – CO10 –78.43 %		

HS 5351	TEXTILE DESIGN PRACTICALS	CO1: Identify and make use of various types of weaves.
		CO2: Understand the uses and care of sewing machine.
		CO3: Construct different types of plackets and neckline finishes.
		CO4: Design a fabric using different methods of printing like painting, tie and dye.
		CO5: Examine the action of mercerization finish on cotton fabric.

Level of attainment from CO1 – CO5 –78.05%

HS 5302	FAMILY ECONOMICS	CO1: Be able to understand about modes of savings.
		CO2: Be able to understand about the long and short term financial records.
		CO3: Know about the various credits instruments.
		CO4: Be able to classify families and their functions.
		CO5: Learn about the types of credit.
		CO6: Learn about the economic goals of family.
		CO7: Acquire knowledge about different sources of family income.
		CO8: Learn the ways of handling family income and supplementing family income.
		CO9: Learn how to plan a monthly budget for different income groups.
		CO10: Be able to plan various ways to reduce expenditure.

Level of attainment from CO1 – CO10 –79.5 %

HS 5352	FAMILY ECONOMICS PRACTICALS	CO1: Survey on economic goals of the family.
		CO2: Survey on various credit instruments.
		CO3: Survey on nodes of saving and types of taxes.
		CO4: Be able to plan a monthly budget for different socio-economic groups.
		CO5: Be able to plan various ways to reduce expenditure.

Level of attainment from CO1 – CO5 – 86.1%

HS B1 6301	COMPUTER AIDED DESIGN – RESIDENTIAL SPACE DESIGN	CO1: Apply knowledge in designing residential spaces using computer application.
		CO2: Apply knowledge in how to set a paper size, limit and the name.
		CO3: Apply knowledge in using commands in designing.
		CO4: Apply knowledge in using keyboard shortcuts and function keys in designing residential spaces.
		CO5: Apply knowledge in drawing simple diagrams in imperial and metric units with given dimensions.
		CO6: Apply knowledge in designing using coordinates of different views, surface, 3D rotate etc.
		CO7: Know about how to use dimensions in designing
		CO8: Be able to create 2D sections and elevations from plan.
		CO9: Learn creating simple floor plan by using commands.
		CO10: Learn creation of different layers with colors.

Level of attainment from CO1 – CO10 –81.2%

HS B1 6351	COMPUTER AIDED DESIGN – RESIDENTIAL SPACE DESIGN PRACTICALS	CO1: Apply the knowledge of using editing command in designing residential space.
		CO2: Apply the knowledge of various co-ordinate systems in designing a residential space.
		CO3: Be able to apply the knowledge of computer application CAD in designing.
		CO4: Be able to create 3D dimensions to a floor plan.
		CO5: Be able to use various drawing commands in designing interiors of a residential space.
Level of attainment from CO1 – CO5 – 92.5%		

HS E1 6351	APPAREL DESIGN	CO1: Gain information about how to plan wardrobe.
		CO2: Understand the choosing of garment preference in adolescents.
		CO3: Obtain knowledge on recording body measurements.
		CO4: Obtain basic drafting methods using different techniques.
		CO5: Obtained skills to stitch adult garments.
		CO6: Apply basic techniques to construct nightwear.
		CO7: Acquire drafting skills of various collars and sleeves.
		CO8: Develop skill in maintenance of sewing machine and its care.
		CO9: Developed skills in various seams and seam finishes.
		CO10: Learn to construct different types of frocks for children.
Level of attainment from CO1 – CO10 – %		

HS A2 6301	ADVANCED TEXTILE DESIGN	CO1: Gain knowledge on standards of national organization in sampling of textile testing
		CO2: Know about the definitions, formulas in related to textile testing.
		CO3: Acquire information on direct, discharge and resist printing in advanced level.
		CO4: Understand the importance of handlooms and its contribution to increase national economy.
		CO5: Obtained knowledge on special finishes and their uses.
		CO6: Gain knowledge on role of textiles in industrial and medical fields.

		CO7: Acquire information about history and origin of contemporary embroideries of India.
		CO8: Know about various natural dyes and its application to produce eco- friendly textiles.
		CO9: Apply skills in dyeing, its defect and remedies.
		CO10: Apply skills in stitching various traditional embroideries and its unique features.
Level of attainment from CO1 – CO10 –83.05 %		

HS A2 6351	ADVANCE TEXTILE DESIGN PRACTICALS	CO1: select different fabric samples of different textile design techniques (printing, dyeing, weaving) by recollecting the previous learning concepts.
		CO2: Designing an article by using embroideries and printing.
		CO3: Applying the methods of direct and naphthol dyes and types of batik and screen printing techniques.
		CO4: Illustration of sleeves, skirts, yokes to design a garments.
		CO5: Recalling about natural dyes, their properties and their applications on cellulose fibers.
Level of attainment from CO1 – CO5 –90.75%		