

Soban Singh Jeena University, Almora

Faculty of Arts

Department of Home Science

Courses offered in first Semester

Year	Semester	Course code	Paper Title	Theory/ Practical	Credits
First	I	DSC 01	Fundamentals of Nutrition and Human Development	Theory	03
			Cooking Skills and Healthy Recipe Development	Practical	01
		GE 01	Techniques of Food Preservation	Theory	04
		SEC 01	House Keeping	Theory	02

DSC 01

Fundamentals of Nutrition and Human Development

Credit 04 (Theory 03; Practical 01)

Programme - B.A./Certificate	Year- 01	Semester 01
Subject- Home Science		
Course - DSC 01		
Course Title- Fundamentals of Nutrition and Human Development		
Credit Distribution- 03+ 01		Total No. of hours = 45+ 30
Course Outcome- The student at the completion of the course will be able to: • Understand the role of nutrients and apply the concept of a balanced diet to maintain good health. • Learn about various cooking methods and gain practical skills in preparing nutrient-rich foods. • Understand the stages, principles, and factors influencing human development from conception to infancy.		
THEORY (03 Credit)		
Unit	Topics	No. of lectures
1.	Home Science and its relevance in the current era. Contribution made by Indian Home	04

	Scientists i.e. Swaminathan, C.V. Gopalan, S.K. Dey, Rabindra Nath Tagore, Shanti Ghosh, etc.	
2.	Food- meaning, Classification and function, Basic food groups, Importance of basic food groups, Balanced diet, Concept of Nutrition and Health Macronutrients (Carbohydrates, Fat, Protein and Energy) and Micronutrients (Vitamins and Minerals)- sources, functions, requirement and deficiency diseases	07
3.	Preliminary preparations before cooking, Cooking Methods- Dry and Moist Heat methods; importance; advantages and disadvantages; Preservation of Nutrients while Cooking; Traditional methods of enhancing nutritional value of foods-germination, fermentation, etc.	06
4.	Introduction to Human Development Concept, Definition and need to study Human Development Domains, Stages of development. Principles of Growth and Development.	05
5.	Prenatal Development and Birth Process: Conception, Pregnancy and Childbirth, Problems of Pregnancy, Stages of prenatal development, Factors affecting pre-natal development, Physical appearance and capacities of the new-born Maternal and Infant mortality.	05
6.	Infancy: Developmental task during Infancy and Preschool Stage Physical and Motor Development Social and emotional development Cognitive and language development Common ailments of babyhood	07
PRACTICAL - Cooking skills and Healthy Recipe Development (Credit 01)		
1.	● Basic Cooking skills ● Weighing of raw materials, purchasing for various food items ● Preparation of various dishes using different methods of cooking-	30

	Boiling/steaming; Roasting; Frying- Deep/ shallow; Pressure cooking; Hot air cooking; Baking • Different styles of cutting fruits and vegetables. • Salad decoration and salad dressing • Table Setting and Napkin Folding • Preparation of nutrient rich dishes- Protein rich dish; Carbohydrate rich dish; Fat rich dish; Vitamins rich dish; Minerals rich dish and Fiber rich dish	
Suggested Reading 1. Dr. Brinda Singh, Manav Sharir evam Kriya Vigyan Panchchee Prakashan, Jaipur, 2015, 15th Ed. 2. Chatterjee, C.C, "Human Physiology" Medical Allied Agency: VolI, II. 3. Textbook of Biology for 10+2 Students (NCERT) 4. Sumati R Mudambi, "Fundamentals of Food Nutrition and Diet Therapy", New Age International Pvt. Ltd, New Delhi, 6th Ed. (2018) 5. Punita Sethi and Poonam Lakda, "Aahar Vigyan, Suraksha evam Poshan"; Elite Publishing House, New Delhi; 2015 6. Dr. Anita Singh, Aahar Evam Poshan Vigyan, star Publication, Agra 7. Dr. Devina Sahai, Aahar Vigyan, New Age International Publishers, New Delhi 8. Berk, L. E. Child Development New Delhi: Prentice Hall (2005) (5th ed.).		

SEC 01

Housekeeping

Credit 02

Programme - B.A. / Diploma	Year- 01	Semester 01
Subject- Home Science		
Course- SEC 01		
Course Title- Housekeeping		
Credit Hours- 02 (01+01)		Total No. of hours = 15+30
Distribution of Marks- As per University norms		
Course Outcome- The student at the completion of the course will be able to: • To learn about the fundamentals and scope of housekeeping in various sectors.		
Theory		
Unit	Topics	No. of lectures

1.	Housekeeping Department Role of housekeeping in the hospitality industry; Layout of Housekeeping department, Planning, organization & communication of Housekeeping activities; Coordination with other departments; Roles/responsibilities of personnel in the housekeeping department.	03
2.	Cleaning Activity and Pest Control Cleaning agents- selection and use for different surface; Cleaning Equipment- selection, care and maintenance; Cleaning techniques- Daily, weekly, yearly procedure for cleaning of guest room and public area; types of common pests and effective methods to control	04
3.	House accidents, fire safety and First Aid- Types of accidents commonly occur in hospitality institutions, methods to avoid and/or reduce, fire safety measures in the institution, first aid for commonly occurring health problems.	04
4.	Laundry Types of Laundry systems in House, contracted out and linen on hire, Layout plan and physical features of a Laundry; Laundry procedure: Collection, sorting & making, stain removal & Prepare washing, extractions & drying, ironing & folding, inspection, packaging, storage delivery; Laundry supplies and materials: Water, Soaps, Detergents, Bleaches, Laundry Blues, Stiffening agents & Iron; Dry cleaning procedure	04
5.	Practical ● Visit to establishment to get familiar with the role of housekeeping ● Make a list of activities which house keeper must look after in an establishment ● Prepare a report on job specification and description of various housekeeping personnel ● List the requirements for cleaning unit or laundry unit attached to and establishment ● Visit hospital /clinic and list the disease caused due to neglect of personal hygiene	30

	● Prepare a first aid box learn to operate fire extinguishers and report any emergency ● Practice various means of eradication of pests like cockroaches, mosquitoes, white ants etc.	
Suggested Reading 1. Asler, (1970). Management of Hospitality Operations, Bobbs Merrill, London. 2. Andrew Sudhir (1985). Hotel Housekeeping- Training Manual. Tata McGraw-Hill Publishing Co. Ltd., New Delhi. 3. Charavarti, B.K. (1991). A technical guide to Hotel Operation, Metropolitan Book Co. Pvt. Ltd., and New Delhi. 4. David, M.Allen. (1983). Accommodation and cleaning service, Vol. 1 & 2. Hutchinson Publishing Group, London. 5. Gladwell Derek: Practical Maintenance of equipment for hoteliers, Licenses and caterers, (1963). Barrie & Rockliff, London. 6. Hurst Rosemary (1984). Accommodation Management for Hostel and residential establishment. Heinemann publisher, London, U.K. 7. Hurst Rosemary (1971). Service and Maintenance for Hotel and Residential establishment. William Heinemann Ltd., London, U.K. 8. Rajeew Kumar. (2023). Fundamentals of Housekeeping. Notion Press, Chennai. 9. Shirke Gajanan. (2014). Housekeeping Management. Shroff Publishers & Distributors Pvt Ltd. Mumbai.		

GE 01

Techniques of Food Preservation

Credit 04 (Theory)

Programme - B.A. / Certificate	Year- 01	Semester 01
Subject- Home Science		
Course- GE 01		
Course Title- Techniques of Food Preservation		
Credit Hours- 04		Total No. of hours = 60
Distribution of Marks- As per University norms		
Course Outcome- The student at the completion of the course will be able to: ● Understand the principles and importance of Food Preservation. ● Demonstrate knowledge of traditional and modern Food Preservation methods. ● Apply appropriate food preservation techniques for various food commodities based on their nature.		

- prepare value added preserved products at small-scale.

THEORY (04 Credit)

Unit	Topics	No. of lectures
1.	Introductory Food Microbiology- Principles of Food Preservation, microorganisms associated with foods- bacteria, yeast and mold, Importance of bacteria, yeast and molds in foods. Classification of microorganisms based on temperature, pH, nutrient and oxygen requirements. Classification of food based on pH, Food infection, food intoxication, definition of shelf life, perishable foods, semi perishable foods, and shelf stable foods.	12
2.	Food Preservation by Low temperature Freezing and Refrigeration: Introduction to refrigeration, cold storage and freezing, definition, principle of freezing, changes occurring during freezing, types of freezing i.e., slow freezing, quick freezing, introduction to thawing, changes during thawing and its effect on food. Food Preservation by high temperature- Sterilization, Pasteurization, and blanching.	10
3.	Food Preservation by Moisture control- Drying and Dehydration - Definition, drying as a means of preservation, differences between sun drying and dehydration (i.e. mechanical drying), heat and mass transfer, factors affecting rate of drying, types of driers used in the food industry.	08
4.	Food Preservation by Irradiation Introduction, units of radiation, kinds of ionizing radiations used in food irradiation, mechanism of action, uses of radiation processing in the food industry.	08
5.	Traditional Methods of Food Preservation a) Smoking b) Sun drying c) Pickling/ Salting d) Fermentation Modern Emerging Technologies in food preservation-	08
6.	Project – Preparation of value added product samples using food preservation techniques;	14

	Visit to food processing unit (such as fruit and vegetable processing unit, milk processing unit, cold storage plant etc.) to observe various production processes, quality control processes and report writing	
Suggested Reading 1. B. Srilakshmi, Food Science, New Age Publishers, 2002 2. Meyer, Food Chemistry, New Age, 2004 3. A.S. Bawa, P.S. Raju and O.P. Chauhan. 2020. Food Science. New India Publishing agency, New Delhi. 4. Frazier WC and Westhoff DC, Food Microbiology, TMH Publication, New Delhi, 2004 5. B. Sivasankar. (2004). Food Processing and Preservation. Prentice-Hall of India Pvt. Ltd, New Delhi. 6. Desrosier, N.W. (1963). The Technology of Food Preservation, AVI Publications. 7. Gustavo V. Barbosa-Canovas (Ed), Grahame W. Gould (Ed). (2000). Innovations in Food Processing (Food Preservation Technology Series) : CRC Publishers 8. Ramaswamy, H.S. & Michele Marcott. (2005). Food Processing – Principles & Applications; CRC Publications		