### **ASANSOL GIRLS' COLLEGE**

#### **Department of Nutrition**

## Programme Specific Outcome (PSO) and Course Outcome (CO)

### **Programme Specific Outcome (PSO):**

PSO1: Able to provide nutrition counseling and education to individuals, groups, and communities throughout the lifespan using a variety of communication strategies.

PSO2: Able to apply technical skills, knowledge of health behavior, clinical judgment, and decision-making skills when assessing and evaluating the nutritional status of individuals and communities and their response to nutrition intervention.

PSO3: Students can implement strategies for food access, procurement, preparation, and safety for individuals, families, and communities.

PSO4: Apply food science knowledge to describe functions of ingredients in food.

# **Course Outcome (CO)**

Semester	Course name and Topic	Module specific CO
	FUNDAMENTALS OF NUTRITION I	
	a) UNIT 1: Food and Nutrition: Basic Concepts	CO1: To help students recognize that food is a basic requirement of life and also describe basic food preparation techniques.
	b) UNIT 2: Digestive system: A major system of nutrition	
	c) UNIT 3: Nutrition through the Life Cycle	CO2: Identify the physical, chemical, and/or microbiological changes in food caused by heat, enzymes, changes in pH, freezing, incorporation of air, and mechanical manipulation.
	d) UNIT 4: Nutrition awareness & Public Health: Basic Concept	
Semester – I	e) UNIT 5: Undernutrition management from intrauterine life to adulthood:	CO3: Understand the importance of food quality assessment.
Ser	Community Nutrition &	
	Epidemiology a) UNIT 1:CommunityNutrition	CO4: Acquire knowledge in epidemiological aspects
	b) UNIT 2: Epidemiology	CO5: Become professionals in public health Nutrition
		CO6: Excel in assessment of nutritional status on the community
		CO7: Develop comprehensive skills in public health nutrition
		CO8: Opportunities in government and NGOs as public health nutritionist

	FUNDAMENTALS OF	
	NUTRITION II	
	<ul><li>a) UNIT 1: Mother child health care</li><li>b) UNIT 2: Diet in health and disease</li></ul>	CO1: To help students recognize that food is a basic requirement of life.
	c) UNIT 3: Food safety and quality control	CO2: Learn fundamentals of modifying recipes to meet current nutrition recommendations for fat, cholesterol, fibre, etc. without sacrificing flavour or appearance.
	d) UNIT 4: Nutrition education, communication and behaviour change	CO3: Describe basic food preparation technique.
	e) UNIT 5: Health care system	CO4: Learn to find credible source of information.
	FOOD SCIENCE AND FOOD COMMODITIES	CO 1. Gain knowledge on food groups, food pyramid and understand cooking methods with
	UNIT 1: Food Science	the application in balanced menu planning.
	UNIT 2: Food Commodities	CO2. Apply the knowledge of nutritional classification, understand the changes in pigments
п		and acquire skills in preserving nutrients and pigments in the processing and storage of
Semester – I		vegetables and fruits.  CO3. Collect knowledge on nutritive value, understand the cooking quality factors and
		develop skills in the preparation and storage of milk and egg products.
		CO4. Gather knowledge on the structure and nutritive value, understand the processing
		factors and acquire skills in processing and storage of flesh foods.
		CO5. Gain skills to process and store cereals, pulses, nuts and oilseeds.

	NUTRITIONAL PHYSIOLOGY	CO 1. Understand the Structure and Functions of the various organ systems of the body
		CO 2. Relate the Structure with Functions of the tissues and organs CO 3. Comprehend the Mechanism of
		Action of Organs CO 4. Relate the Physiology of the human body with Food and Nutritional requirements
		CO 5.Recognize the Clinical Symptoms of Nutritional Deficiencies based on anatomical
		considerations
	PHYSIOLOGY AND NUTRITIONAL ASPECT OF FOOD	CO 1. Acquire knowledge on applications of technology in food processing.
		CO 2. Define the basic concepts of human physiology
		CO 3. Describe the homeostasis mechanism in human body
		CO 4. Demonstrate the basic concepts of food chemistry
	SKILL ENHANCEMENT COURSE- Child Development Skills	CO 1. Define the developmental stages of a child.
	UNIT 1: Introduction to child development	CO 2. Describe the steps of language development.
	UNIT 2: Physical and motor development	CO 3. Demonstrate need of social development.
r – III	UNIT 3: Intelligence and cognitive development	CO 4. Analyse the problems associated with the developmental failures.
Semester –	UNIT 4: Social and emotional development	
S	NUTRITION PROGRAMMING AND EMERGENCY NUTRITION MANAGEMENT	CO 5. Learn the nutritional assessment methods during disaster condition
	UNIT 1: Nutrition Programming	CO 6. Communicate the need of the nutrition programmes.
	UNIT 2: Emergency Nutrition Management	C O7. Analyse the logical flaws of present national nutrition programmes.

		CO 8. Develop problem solving skills
		during emergency/ disaster condition.
		CO 9. Acquire the skills to formulate team during emergency condition.
	HUMAN NUTRITION AND GROWTH AND DEVELOPMENT	CO 10. Define the term nutritional status.
	UNIT 1: Human Nutrition	CO 11. Demonstrate the different methods of measurement of body composition method
	UNIT 2: Growth and development	CO 12. Formulate dietary guidelines for the individuals.
		CO 13. Critically analyse the physiological determinants while formulating dietary
	-	guidelines
	DIET THEORY- FUNDAMENTAL	CO 14. Translate theoretical knowledge in the practical context.
	UNIT 1: Basic Concept of Therapy	
	UNIT 2: Food Groups	CO 15. Define the terminologies associated with therapeutic diets.
	UNIT 3: Food Exchange list system	C 16. Demonstrate the working principles of different food groups.
	UNIT 4: Vegetarian Aid	CO 17. Conceptualize the food exchange system
	NUTRITION PROGRAMMING (GE)	CO 18. Acquire knowledge of basics of diet therapy
	UNIT 1: Emergency Nutrition Management	
		CO 19. Define the concept of nutrition programs
		CO 20. Describe the steps of planning a nutrition program
		CO 21. Demonstrate the assessment protocols of growth and development
-IV	FOOD MICROBIOLOGY	CO 1. Define the concepts of food microbiology
Semester –		CO 2. Advocate the importance of sanitation & hygiene
Se		CO 3. Analyse the quality of food sample

	CO 4. Formulate the appropriate research question.
DIET THERAPY- PHYSIOLOGICAL STATES	CO 5. Develop dietary guidelines for different stages of life cycle.
	CO 6. Critically formulate the dietary guidelines based on economical context.
	CO 7. Advocate the need of the supplementary foods.
	CO 8. Demonstrate different forms of diet.
FOOD PRESERVATION AND PROCESSING	CO 9. Define the different food preservation process.
	CO 10. Collaborate with the experts to develop new approaches for food preservation.
	CO 11. Describe the adverse effects of adulteration.
	CO 12. Analyse the necessary steps for establishing food processing units.
FOOD MICROBIOLOGY, PRESERVATION AND PROCESSING(GE)	CO 13. Gain knowledge on applications of food microbiology.
	CO 14. Define the basic concepts of food microbiology.
	CO 15. Describe the morphological characteristics of microbes.
	CO 16. Acquire basic skills to preserve food.
NUTRIENT ANALYSIS QUANTITATIVE	CO 17. Describe the concept of food composition table.
	C O18. Demonstrate the various techniques of anthropometric measurements.
	CO 19. Analyse the large sample data. CO 20. Collaborate with the local stake holders.

	DIET THERAPY -NON-COMMUNICABLE DISEASES	CO 1. Gain knowledge on the etiological factors and complications, assessment parameters and dietary modifications in obesity and underweight.  CO 2. Understand the concept, purpose and principles of diet therapy and role and types of dietitians.  CO 3. Learn about the causes, types, biochemical changes, diagnostic tests, glycaemic index, acuteand chronic complications and dietary management of diabetes mellitus.  CO 4. Enumerate on theaetiology, complications and dietary modifications of various cardiovascular
Semester – V	RESEARCH METHODOLOGY	CO 5. Acquire problem solving quality.  CO 6. Acquire analytical quality.  CO 7. Collaborate with the different stakeholders.  CO 8. Demonstrate the designing the of research methodology.
	HOSPITAL INTERNSHIP	<ul><li>C O9. Gain knowledge from bed side teaching.</li><li>CO 10. Formulate Hospital based diet.</li><li>C O11. Provide dietarycounselling.</li><li>CO 12. Work as support system of a medical unit.</li></ul>
	CHILD IMMUNIZATION	CO 13. Gain the knowledge of scientific reasoning.  CO 14. Define the concept of immunization.  CO15. Describe the importance of hygiene.  CO 16. Reflect new research problem in childdevelopment.

	DIET THERAPY- COMMUNICABLE DISEASES	CO1. Define the concept of communicable disease.
		CO2. Demonstrate the nutritional management protocol for communicable diseases.
		CO3. Describe the concept of HIV/AIDS
		CO4. Learn problem solving capacity in an integrated manner.
	HEALTH STATISTICS	CO 5. Gain the knowledge in applications statistical tests.
		CO 6. Define the concept of statistics. C O7. Describe the application of statistics in health research.
		CO 8. Analyse the data using statistical tools.
er – VI	DIETARY COUNSELLING	CO 9. Gain knowledge on traditional and alternate methods to manage disorders.
Semester –		CO 10. Understand the importance of communication in managing nutrition related
		problems  CO 11. Draw out a complete counselling plan for individuals based on their physiological
		conditions using the appropriate tools CO 12. Understand how best to maintain adherence to changed dietary practices for
		specific physiological conditions.
	PATIENT EDUCATION	CO 13. Utilize the available different communication tools for patient education.
		CO 14. Identify the right method of communication, media and aid for conducting patient
		Education.

CO 15. Expertise in organizing a patient/nutrition education programme employing the
audio visual aids. C O16. Acquire appropriate skills in preparation of patient education materials.