

SVKM's NMIMS Deemed-to-be University
Mukesh Patel School of Technology Management and Engineering

Program: B Tech (All Program except CSBS, CSDS) /MBA Tech (All Program) & BTI (All Program)				Semester: VI/ VII / IX /X	
Course: Nutrition for Health				Code:	
Teaching Scheme				Evaluation Scheme	
Lecture (Hours per week)	Practical (Hours per week)	Tutorial (Hours per week)	Credit	Internal Continuous Assessment (ICA) (Marks - 50)	Term End Examinations (TEE) (Marks- 100)
3	0	0	3	Marks Scaled to 50	Marks Scaled to 50
Pre-requisite: Knowledge of Chemistry and Biology upto 12 th standard or equivalent					
Course Objective The course intends to familiarize students with fundamentals of food, nutrients and their relationship to health. It will further help to create awareness about deriving maximum benefit from available food resources. It will impart knowledge regarding nutritional disorders coming from nutritional deficiencies					
Course Outcomes After completion of the course, the student will be able to- <ol style="list-style-type: none"> 1. Apprehend the concept of nutrition and health in a holistic and multidimensional way 2. Evaluate the inter relation between nutrition, food, diet and related health 3. Design diet rules and plans for healthy living by realizing the ill effects of nutritional Deficiency 					
Detailed Syllabus					
Unit	Description				Duration
1.	Basic Concepts in Food and Nutrition Basic terms used in study of food and nutrition. Understanding relationship between food, nutrition and health. Functions of food and nutrients - Physiological, psychological and social.				08
2.	Nutrients from Food Groups and Methods of Cooking Nutrients: Functions, dietary sources and clinical manifestations of deficiency/ excess of the following nutrients: Carbohydrates, lipids and proteins, Fat soluble vitamins-A, D, E and K, Water soluble vitamins - thiamin, riboflavin, niacin, pyridoxine, folate, vitamin B12 and vitamin C, Minerals - calcium, iron and iodine Selection, nutritional contribution and changes during cooking of the following food groups: Cereals, Pulses, Fruits and vegetables, Milk & milk products, Eggs, Meat, poultry and fish, Fats and Oils Methods of Cooking and Preventing Nutrient Losses: Dry, moist, frying and microwave cooking. Advantages, disadvantages and the effect of various methods of cooking on nutrients. Minimizing nutrient losses				08
3.	Basic Concepts of Meal Planning Food groups and concept of balanced diet. Food exchange list. Concept of Dietary Reference Intakes. Factors effecting meal planning and food related behaviour. Dietary guidelines for Indians and food pyramid				08

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4.	Introduction to Nutritional Deficiency Diseases Causes, symptoms, treatment, prevention of the following: Protein Energy Malnutrition (PEM), Vitamin A Deficiency (VAD), Iron Deficiency Anaemia (IDA), Iodine Deficiency Disorders (IDD), Zinc Deficiency, Fluorosis. Causes and symptoms of food allergies and food intolerances.	08
5.	Nutrition and Fitness Definition of fitness, health and related terms. Assessment of fitness. Approaches for remaining fit, Role of nutrition in physical fitness and sport, Nutritional supplements. Importance and benefits of physical activity. Weight Management: Health complications of overweight and obesity. Diet and exercise for weight management. Fad diets. Principles of planning weight reducing diets. Role of gut health in fitness.	08
6.	Nutrition Standards Quantitative values that specify the amounts of the key nutrients for the age-grade groups, nutrition guidelines followed worldwide, global nutrition policy.	05
	Total	45
Text Books <ol style="list-style-type: none"> 1. Kaveri Chakrabarty, A. S. Chakrabarty, Textbook of <i>Nutrition in Health and Disease</i>, Springer Publication, 2019. 2. Goyal Shashi & Gupta Pooja, <i>Food Nutrition and Health</i>, S Chand Publication, 2012. 		
Reference Books <ol style="list-style-type: none"> 1. Wardlaw GM, Hampl JS. <i>Perspectives in Nutrition</i>, McGraw Hill. 7th Ed., 2007. 2. Srilakshmi B. <i>Nutrition Science</i>, New Age International (P) Ltd., 2012. 3. Suri S. and Malhotra A. <i>Food Science, Nutrition & Food Safety</i>, Pearson India Ltd., 2014. 		



Signature
(Head of the Department)

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