

Course Outline

Programme	ADP Home Economics	Course Code	HEFN-103	Credit Hours	2(2+0)
Course Title	FUNDAMENTALS OF FOOD AND NUTRITION				
Course Introduction					
This subject will equip students with basic nutrition concepts, including the role of nutrients in the body and the foods sources of those nutrients. They will learn to identify factors which influence food choice, and how they influence nutritional status. Students will also learn to apply the concepts to the planning and preparation of meals.					
Learning Outcomes					
On the completion of the course, the students will: 1. Understand the basic principles of human nutrition and dietary needs. 2. Assimilate the functions and sources of basic nutrients. 3. Explain the impact of nutrition on health and well-being.					
Course Content			Assignments/Readings		
Week 1	Introduction to Nutrition Definition of key terms: food, nutrition, dietetics, health, nutrients.		Understanding Nutrition Ch#1, pg 3, 6		
	Definition of key terms: Nutritional status, and malnutrition etc.		Understanding Nutrition Ch#1,pg 22		
Week 2	Introduction to Nutrition Functions of foods: physiological.		Normal and therapeutic nutrition Ch#1, pg. 3,4.		
	Functions of foods: psychological and social functions		Ch#1, pg. 3,4.		
Week 3	Balanced Diet: Definition and characteristics of balanced diet.		Normal and therapeutic nutrition Ch#1, pg 10,11		
	Importance of balanced diet in relation to health.		Normal and therapeutic nutrition Ch#1, pg 10,11		
Week 4	Use of daily food guide : Food Groups		Understanding Nutrition Ch#2, pg 42, 43		
	Use of daily food guide : Food Guide Pyramid, My Plate		Fundamentals of Meal Management Pg. 20 Understanding Nutrition Ch#2, pg. 46		

Week 5	Food composition tables Dietary Reference Intakes (DRI)	Normal and Therapeutic Nutrition Ch#4, pg.35 Understanding Nutrition Ch#1, pg.17-22
	Quiz	Topics covered in week 3 and 4 Normal and Therapeutic Nutrition Understanding Nutrition
Week 6	Introduction to carbohydrates Study of Carbohydrates; classification, functions	Understanding Nutrition Ch#4, pg. 92-98,
	Study of Carbohydrates ;excess, deficiency and sources	Understanding Nutrition Ch#4,pg. 107, 118
Week 7	Introduction to Proteins Study of Proteins ; classification, functions	Understanding Nutrition Ch#6, pg. 167-170, 175-178
	Study of Proteins ; excess, deficiency and sources	Understanding Nutrition Ch#6, pg.180-184
Week 8	Introduction to Fats Study of Fats ;classification, functions.	Understanding Nutrition Ch#5, pg. 127-135, 142-144,
	Study of Fats ; excess, deficiency and sources	Understanding Nutrition Ch#5, 145-151 Assignment: What are the negative effects of excessive fat intake in the diet.
Week 9	Mid Term Exam	
Week 10	Introduction to Vitamins Study of Fat Soluble Vitamins A and D; functions, excess, deficiency and sources	Understanding Nutrition Ch#11, pg. 329-341
	Study of Fat Soluble Vitamins E and K; functions, excess, deficiency and sources	Understanding Nutrition Ch#11, pg. 341-345
Week 11	Study of Water Soluble Vitamins B1,B2,B3,B5 and B6 ; functions, excess, deficiency and sources	Understanding Nutrition Ch#10, pg. 292-302
	Study of Water Soluble Vitamins B7, B9, B12, folic acid, vitamin C; functions, excess, deficiency and sources	Understanding Nutrition Ch#10, pg.303-319
Week 12	Introduction to Minerals Study of Major Minerals; sodium, potassium; functions, excess, deficiency and sources	Understanding Nutrition Ch#12, pg. 364-369
	Study of Major Minerals;calcium, phosphorus, sulfur; functions, excess, deficiency and sources	Understanding Nutrition Ch#12, pg. 370-378
Week 13	Study of Trace Minerals ; iron, zinc; functions, excess, deficiency and sources	Understanding Nutrition Ch#13, pg. 389-400
	Study of Trace Minerals ;copper, iodine, flouride; functions, excess, deficiency and sources	Understanding Nutrition Ch#13 pg. 401-405
Week 14	Introduction to Food Cookery	Understanding Food: Principles and Preparation

		Ch#5, pg. 91
	Types of cooking methods	Understanding Food: Principles and Preparation Ch#5, pg. 92-95
Week 15	Cereal Cookery	Understanding Food: Principles and Preparation Ch#16, pg. 338-339
	Milk and Meat Cookery	Understanding Food: Principles and Preparation Ch#16, pg.212-214, Ch#7,pg. 153-159
Week 16	Fruit and Vegetable	Understanding Food: Principles and Preparation Ch#13, pg.275-279 Ch#14, pg 302-306
	Sugar Cookery	Understanding Food: Principles and Preparation Ch#25, pg.490-496
Week 17	Revision	Understanding Food: Principles and Preparation Understanding Nutrition
	Revision	Understanding Food: Principles and Preparation Understanding Nutrition Normal and Therapeutic Nutrition
Week 18	Final Term Exam	
Textbooks and Reading Material		
1. USA Geissler, C. A., & Powers, H. J. (2010). Human nutrition (12th ed.). Churchill Livingstone. 2. Mudambi, Sumati, R. and Rajagopal, M.V. (2013). Fundamentals of Food, Nutrition, and diet therapy. New Age International. 3. Srilakshmi, B. (2023). Food science (8th ed., Multi-Colour Edition). New Age International Publishers 4. Whitney, E. N., & Rolfes, S. R. (2022). Understanding nutrition (16th ed.). Cengage Learning 5. Robinson, C. H., Lawler, M. R., Chenoweth, W. L., & Garwick, A. E. (1986). Normal and therapeutic nutrition (17th ed.). Macmillan Publishing Company.		
Teaching Learning Strategies		
Lecture-based learning through lectures and presentations. Group learning through group assignments discussion and laboratory work. Individual learning through practical work and application of theory principles.		
Assignments: Types and Number with Calendar		
Quiz (Week 5): including topics covered in week 3 and 4. Assignment (Week 8): What are the negative effects of excessive fat intake in the diet.		