



CLUSTER UNIVERSITY SRINAGAR

SYLLABUS (FYUP UNDER NEP 2020)

Offered By Department Of HOME SCIENCE

Semester 2nd (Major Course)

Course Title: Basics of Food & Nutrition

Course Code: UGHSC22J201

Credits: 4 (Theory: 3, Practical: 1)

Contact Hrs: 75 (Theory: 45, Practical: 30)

Max. Marks 100

Theory External: 60; Min Marks: 24

Theory Internal (Continuous Assessment): 15 Marks, Min Marks: 06

Practical Experimental Basis= 15, Min. Marks: 06

Practical Experimental (Continuous assessment) = 10, Min. Marks: 04

OBJECTIVES

1. To familiarize students with fundamentals of food, nutrients, and their relationship to Health.
2. To create awareness with respect to deriving maximum benefit from available food resources.

LEARNING OUTCOME:

1. Enabling the students to understanding the basic concepts of nutrition science.
2. The students will acquire thorough knowledge about the various food groups.
3. The students will understand the role of both macro and micro nutrients in the body.

Unit 1.

Basic concepts in Food and Nutrition

(15 Hrs)

Definition of Food, Nutrition and Nutrients.

Functions of food.

Concept of Food Plate, Food Pyramid.

Nutritional requirements and RDA, Dietary Guidelines, Reference Man, Reference Women.

Unit 2.

Basic Five Food Groups

(15 Hrs)

Nutritional contribution and changes during cooking of:

- a. Cereals
- b. Pulses and Legumes.
- c. Milk, Meat Products and Eggs.
- d. Fruits and vegetables.
- e. Fats and Sugars.

Unit 3.

Macro and Micronutrients

(15 Hrs)

Functions, Dietary sources, and deficiency of:

- a. Carbohydrates.
- b. Fats
- c. Proteins
- d. Fat Soluble Vitamins (A, D, E, K)
- e. Water Soluble Vitamins (Thiamine, Riboflavin, Niacin, Pyridoxin, B12 and Vitamin C.)
- f. Minerals (Calcium, Iron, Iodine, Zinc.)

PRACTICALS

(30 Hrs)

1. Demonstration of Weights and measures and MY PLATE concept.
2. Observing and reporting the following:
 - a) Dextrinization and oxidative browning.
 - b) Rancidity.
3. Case study of the following:
 - a) PEM.
 - b) Rickets.
 - c) Scurvy.
 - d) Anaemia.

RECOMMENDED READINGS

- Mudambi, SR and Rajagopal, MV. Fundamentals of Foods, Nutrition and Diet Therapy; Fifth Ed; 2012; New Age International Publishers.
- Mudambi, SR, Rao SM and Rajagopal, MV. Food Science; Second Ed; 2006; New Age International Publishers.
- Srilakshmi B. Nutrition Science; 2012; New Age International (P) Ltd.
- Srilakshmi B. Food Science; Fourth Ed; 2010; New Age International (P) Ltd.
- Swaminathan M. Handbook of Foods and Nutrition; Fifth Ed; 1986; BAPPCO.
- Bamji MS, Rao NP, and Reddy V. Text Book of Human Nutrition; 2009; Oxford & IBH Publishing Co. Pvt Ltd.
- Wardlaw GM, Hampel JS. Perspectives in Nutrition; Seventh Ed; 2007; McGraw Hill.
- Lakra P, Singh MD. Textbook of Nutrition and Health; First Ed; 2008; Academic Excellence.
- Manay MS, Shadaksharaswamy. Food-Facts and Principles; 2004; New Age International (P) Ltd.