



Sh. L. N. Hindu College, Rohtak (Haryana)

Course Plan

Department of Home Science

Program: Home Science

Semester : Vth

SCHEME

Course Name	Foods and Nutrition	Course Type	Theory/Practical
Course Code	HS-05	Class	B.A Vth Sem
Instruction Delivery	6 Hours/Week Theory-3, Practicals-3		
Course Coordinator	Dr. Mamta	Course Instructors	Theory: Dr. Mamta Practical : Dr. Mamta

COURSE OVERVIEW

- Food composition: Understanding the composition of food
- Food quality and safety: Learning about the quality and safety of food
- Metabolism: Understanding metabolism relationships
- Nutrients: Learning about the use of nutrients in food by the human body
- Exercise: Understanding the influence of exercise
- Food significance: Learning about the significance of food for human health
- Food security: Learning about food security
- Cooking: Learning about cooking and preparing food
- Food preservation: Learning about the science behind food preservation, storage, and safety
- Food choices: Learning about the impact of food choices on health and well-being

PREREQUISITE

The prerequisite of Food and Nutrition to learn about basic knowledge of Food and Nutrition, Health and balanced diet.



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COURSE OBJECTIVE

- Understanding the relationship between food and health: Students learn about the importance of a balanced diet and how it can help promote and preserve good health.
- Learning about nutrients: Students learn about the different types of nutrients, including carbohydrates, proteins, fats, minerals, and vitamins, and their functions in the body.
- Learning about food preparation: Students learn how to prepare and apply different foods, and how cooking and processing affect the nutritional quality of food.
- Learning about meal planning: Students learn how to plan meals for different stages of life.
- Learning about nutritional needs: Students learn about the nutritional needs of different age groups, and how to improve dietary patterns to ensure nutritional well-being.
- Learning about food classification: Students learn how to classify food based on its nutrients and functions.
- Learning about the structure of the human body: Students learn about the structure and functioning of the human body, and biochemical functions and metabolism.

COURSE OUTCOMES (COs)

After the completion of the course, the student will be able to:

CO No.	Course Outcomes
1	Students will be able to interpret and apply nutrition concepts to evaluate and improve the nutritional health of communities.
2	Students will be able to identify and apply food principles to food and nutrition system.
3	Students can utilize knowledge from foundational sciences as a basis for understanding the role of food and nutrients in health and diseases
4	Understand the importance of a well balanced diet, including the importance of fluids
5	To encourage an awareness of social, economic and cultural aspects of food choice



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COURSE CONTENT

Content	
UNIT – I	
Food classification & functions of food groups	
Essential food constituents:	
Carbohydrates, Protein, Fats, Water: source, functions, recommended daily allowances, effect of deficiency and excess of these food constituents	
Vitamins A, D, C, B, Niacin	
Minerals Calcium, Phosphorus & Iodine.	
Food source, functions, recommended daily allowances, effects of deficiency & excess of the above.	
UNIT-II	
Importance and methods of cooking. Effects of cooking on different nutrients.	
Methods of cooking, their advantages and disadvantages:	
Moist heat-Boiling, Stewing, steaming.	
Dry heat-Roasting, grilling, baking.	
Frying-Shallow and deep	
Microwave cooking in brief	
UNIT-III	
Methods of enhancing nutritive value of food stuffs : -	



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- (a) Importance of enhancing nutritive value of food stuffs.
- (b) Methods of enhancing nutritive value of food stuffs, sprouting, fermentation, combination and supplementation.
- Food Preservation:
- (a) Importance of food preservation.
- (b) Causes of food spoilage in brief
- (c) Methods of food preservation with special emphasis on house hold methods.

UNIT-IV

Meal Planning:

- (a) Concept of Balanced diet.
- (b) Principles of Meal Planning, factors affecting it.
- (c) Planning meals of: Children-school going child, Adolescents, Adults, Pregnant women and lactating mother.

LESSON PLAN (THEORY AND TUTORIAL CLASSES)

SR. No	Topic to be Delivered	Tutorial Plan	Unit
1.	Food classification & functions of food groups	Practice questions on Foods and food group	Unit - I
2.	Essential food constituents Carbohydrates, Protein		
3.	Fats, Water: source, functions		
4.	Recommended daily allowances,		



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5.	Effect of deficiency and excess of these food constituents		
6.	Vitamins A, D, C, B, Niacin		
7.	Minerals Calcium		
8.	Phosphorus & Iodine		
9.	Food source, functions,		
10.	Recommended daily allowances		
11.	Effects of deficiency & excess of the above		
12.	Importance and methods of cooking	Practice questions on Vitamins and Minerals	Unit - II
13.	Effects of cooking on different nutrients		
14.	Methods of cooking		
15.	Advantages and disadvantages of Cooking		
16.	Moist heat-Boiling, Stewing, steaming		
17.	Dry heat-Roasting, grilling, baking		
18.	Frying-Shallow and deep		
19.	Microwave cooking in brief		
20.	Methods of enhancing nutritive value of food stuffs		
21.	Importance of enhancing nutritive value of food stuffs		
22.	Methods of enhancing nutritive value of food stuffs, sprouting, fermentation,	Practice questions on Food combination	Unit - III
23.	combination and supplementation.		



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24.	Food Preservation: Importance of food preservation.		
25.	Causes of food spoilage		
26.	Methods of food preservation with special emphasis on house hold methods.		
27.	Meal Planning:	Practice questions on Balance Diet	Unit - IV
28.	Concept of Balanced diet.		
29.	Principles of Meal Planning, factors affecting it.		
30.	Planning meals of: Children-,		
31.	school going child, Adolescents		
32.	Adults, Pregnant women and lactating mother.		
33.	Preparation of Hot and Cold Beverages		
34.	Preparation of Soups (Vegetable and Tomato soup)		
35.	Salad Decoration		
36.	Breakfast dishes preparation		
37.	Main Meal Course		
38.	Therapeutic Diet		
39.	Deserts Making		
40.	Snacks Making		

Reference Books

1. Sweera Relhan : Foods and Nutrition
2. Ritu Kapoor ; Food and Nutrition
3. Modern Publication : Foods and Nutrition



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Web/Links for e-content

<https://targetstudy.com/courses/bsc-hsc-food-nutrition.html>

<https://www.instacart.com/company/ideas/what-is-meal-planning/#:~:text=In%20its%20simplest%20form%2C%20meal,need%20to%20prepare%20your%20meals.>

https://www.brainkart.com/article/Methods-of-Cooking_33466/

PRACTICE QUESTIONS (QUESTION BANK)

S No	Problem
1	Define Food classification & functions of food groups
2	What is Essential food constituents Carbohydrates, Protein
3	Explain Fats, Water: source, functions
4	Explain Recommended daily allowances,
5	Define Effect of deficiency and excess of these food constituents
6	What is Importance and methods of cooking
7	Explain Effects of cooking on different nutrients
8	Explain Methods of cooking
9	What is Advantages and disadvantages of Cooking
10	Define Moist heat-Boiling, Stewing, steaming
11	Define Methods of enhancing nutritive value of food stuffs, sprouting, fermentation,
12	What is combination and supplementation.
13	Explain Food Preservation: Importance of food preservation.
14	Explain Causes of food spoilage
15	Define Methods of food preservation with special emphasis on house hold methods.
16	What is Meal Planning:
17	Concept of Balanced diet.
18	Explain Principles of Meal Planning, factors affecting it.
19	Define Planning meals of: Children-,



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20	Explain school going child, Adolescents
21.	Define Adults, Pregnant women and lactating mother.