



Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore

DUAL DEGREE PROGRAM (B.Sc- M.Sc. Food and Nutrition) 2020-2023

B. Sc. Food and Nutrition Sem V

Subject Code	Category	Subject Name	Teaching and Evaluation Scheme								
			Theory			Practical		L	T	P	CREDITS
			End Sem University Exam	Two Term Exam	Teachers Assessment	End Sem University Exam	Teachers Assessment				
FSN 501	V	Diet therapy I	60	20	20	0	0	4	0	0	4

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit;

***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Objective

- To understand the therapeutic dietetic practice, the principles of disease prevention and health promotion.
- To understand the organization, management and provision of healthcare both in the hospital and in primary care centers.

Course Outcome

- Students able to understand the transition of diet from clear liquid to full-liquid to soft and then normal diet and its principles.
- Students able to understand and identify three routes used to deliver nutrients to clients and potential complications.

FSN 501: Diet therapy I

Unit I

Basic concepts of diet therapy: definition of MNT, nutritional assessment (ABCD), nutritional diagnosis, nutrition intervention, monitoring & evaluation of nutritional care. Modifications of the normal diet, general or regular, adequate or house diet, soft diet and liquid diets and its types.

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Unit II

Types of Feeding: oral route, enteral ,tube feeding, parenteral: peripheral vein feeding and total parental nutrition (TPN). Nutrition during Febrile Disorders: Fever and its classification with their general dietary considerations.

Unit III

Nutrition for weight management: Assessment of obesity – BMI, waist hip-ratios, skin fold thickness. Underweight: health hazards and treatments.

Unit IV

Nutrition in gastro intestinal Disorders: healthy gut, peptic ulcer disease, irritable bowel syndrome (IBS), constipation, diarrhea Diseases of the small intestine , lactose intolerance and inflammatory bowel disease.

Unit V

Nutrition in cardiovascular disorders: atherosclerosis, acute cardiovascular disease, dietary management chronic coronary heart disease. hypertension: classification, risk factors, symptoms and dietary management.

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FSNP 505	V	Diet therapy I Practical	0	0	0	30	20	0	0	4	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit;

***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

FSNP 505: Diet Therapy I Practicals.

1. Planning and preparing diets for diarrhea and constipation.
2. Planning and preparing diets for febrile conditions -Typhoid and Tuberculosis.
3. Planning and preparing diets for obese and underweight patients.
4. Planning and preparing diet for Peptic Ulcer patients.
5. Planning and preparing diets for viral hepatitis and cirrhosis of liver.
6. Planning and preparing diets for hyper cholestrolemia.
7. Planning and preparing diets for hypertensive patients.

Reference Books:

- Antia, F.P. (2005). Clinical Nutrition and Dietetics, Oxford University Press. Delhi.
- Arlin, M.T. (2000). Krause's Food, Nutrition and Diet therapy. W.B.Saunders Company.London.
- Joshi S. (2002). Nutrition and Dietetics. Tata Mc Graw-Hill Publishing Company Limited. New Delhi.
- Srilakshmi,B. (2005). Dietetics. New Age International(P) Limited Publishers. New Delhi.

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FSN 502	V	Food Service Management	60	20	20	0	0	4	0	0	4

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit;

***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Objective

- Students able to understand the basic principles of management in food services units.
- Students able to develop skills in setting up food service units.

Course Outcome

- Students understand the concept and principles of resource management.
- Students create an awareness of the renewable source of energy.

FSN 502: Food Service Management

UNIT I

Types of catering: Hotel, Motel, Restaurant, Cafeteria and Chain hotels. Hospital, School lunch, Residential establishment and Industrial catering. Transport: Air, Rail, Sea and Space, Miscellaneous - Contract and outdoor.

UNIT II

Objectives of Interior design. Design elements, types of design, principles of design harmony, proportion, balance rhythm and emphasis.

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FSN 502	V	Food Service Management	60	20	20	0	0	4	0	0	4

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit;

***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

UNIT III

Standards for selection of fresh food and quantity food preparation. Quantity Food Service, styles of service, waitress service, counter service, snack bar, buffet service, banquet and vending.

UNIT IV

Management Process - planning, controlling evaluating goals, values and standards. Decision making and Resource Management. Management of time, energy and money. Work simplification. Personal management, recruitment and selection.

UNIT V

Money management: Types of income, cost control, food cost, labor overheads and projects. The computer in catering: Use of computer for the control of stock, recipes and menus.

Reference Books:

- Bennion, M. and Hughes D. (1975). Introductory foods, Macmillan Publishing Co. Inc- New York.
- Brich, C.G. Spencer, M. and Cameron, A.G.(1977). Food Science. Pergamon press, New York.
- Pechkam, G.C. 1979 - Foundations of food preparation the Macmillan Publishing Co., New York.

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FSN 503	V	Meal Planning	60	20	20	0	0	4	0	0	4

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit;

***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks

Course Objective

- Students able to identify quantity food production techniques, terminology, and equipment used for: soups, sauces, meat, poultry, fish, egg and dairy foods, vegetables, fruits, salads, sandwiches, and baked goods.
- Students able to quantify recipes and calculate recipe costs.

Course Outcome

- The students will demonstrate the ability to plan nutritious, appealing food combinations and menu patterns that meet the needs of the defined client.
- The students will learn the biological, physical, and chemical changes which occur when food is cooked and stored.

FSN 503: Meal Planning

UNIT I

Meal and Menu Planning: definitions considerations, patterns and types, mechanics of menu planning, menu format, menu design and display, computers in menu planning.

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FSN 503	V	Meal Planning	60	20	20	0	0	4	0	0	4

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit;

***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks

UNIT II

Food Purchasing: importance, planning, management decisions. Buying methods and specifications, regulatory measures, ethics in buying. Food Receiving and Storage: mechanism of receiving, storage areas and issuing supplies.

UNIT III

Methods of cooking: application of cookery principles for quantity food production for various food groups. Methods of cooking- Moist, Dry heat (using air as a medium) and Using fat as a medium, Micro wave cooking conservation of fuel.

UNIT III

Methods of cooking: application of cookery principles for quantity food production for various food groups. Methods of cooking- Moist, Dry heat (using air as a medium) and using fat as a medium.

UNIT IV

Quantity Food preparation: standardized recipes, Principles of meat cookery, soup preparation, vegetable and fruit cookery, cereal and cereal product cookery, baked goods and desserts, salads and salad dressing preparations.

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FSN 503	V	Meal Planning	60	20	20	0	0	4	0	0	4

Unit V

Equipment for food service. Types of service: formal and informal service. Food and beverage service for special catering functions for birthday, like wedding Receptions, wedding anniversary outdoor catering parties. Style of service: Indian, far east and continental menus

Reference Books:

- Casady M.S. (1973) Food preparation Handbook' published, Home Science Association of India.
- Terrel M.E. and Haigu V.F. (1966) Professional Food preparation, John Wiley And Sons, New York.
- Marzia Magris, Canty Mc Crary and Richard Brighton(2001), Introduction to catering Oxford Blackwell, Scientific Publications, London.

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FSN 504	V	Functional Foods and Nutraceuticals	60	20	20	0	0	4	0	0	4

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit;

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Course Objectives

- To develop comprehensive understanding of different nutraceuticals and functional foods.
- To understand phytochemical components and its management on health and diseases.

Course outcomes

- Students able to formulate functional foods.
- To understand the potentials of various functional foods in promoting human health.

FSN 504: FUNCTIONAL FOODS AND NUTRACEUTICALS

Unit I

Functional foods and Nutraceuticals : definitions, sources, health benefits, bioactive components of functional foods. Dietary supplements and fortified foods.

UNIT II

Functional foods of animal origin: Dairy products, sea foods, egg. Functional foods of plant origin: fruits, vegetables, nuts, spices, cereals, beverages. Probiotics, prebiotics and synbiotics as functional foods, Effects of probiotics on health.

Unit III

Types of functional foods: whole foods, enriched foods, enhanced foods, fortified foods, modified foods.

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FSN 504	V	Functional Foods and Nutraceuticals	60	20	20	0	0	4	0	0	4

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit;

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Unit IV

Diet and disease relationship – nutrition and health claims, Food component – approved health claims, labeling considerations for functional ingredients, Permissible and impermissible functional claims, Role of biotechnology in the development of functional foods.

Unit V

Market of functional foods, challenges for Functional food delivery and factors affecting consumer interest in functional foods.

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FSNP 506	V	Functional Foods and Nutraceuticals Practicals	0	0	0	30	20	0	0	4	2

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit;

***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks

FSNP 506: Functional Foods and Nutraceuticals Practicals.

- Market research analysis of functional foods.
- Market survey of locally available functional foods.
- Formulation of the functional foods and assessment of its nutritional value.
- Shelf life studies of developed functional foods.

Reference Books:

- N. Shakuntala manay and Shadaksharaswam K.(2008), Food Facts and Principles, New Age International.
- L. Branen, P. M. Davidson and S. Salminen (2001).Food Additives.Marcel Dekker,.
- A. B. Gerorge. Fenaroli's Handbook of Flavor Ingredients. CRC Press, 2004.
- D. L. Madhavi, S. S. Deshpande and D. K. Salunkhe, (2005).Food Antioxidants: Technological, Toxicological and Health Perspective. CRC press.

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FSNP 507	III	Project I & Presentations	0	0	0	30	20	0	0	0	3

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit;

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Note: Power point presentation based on Project I.

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