



Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore

Shri Vaishnav Institute of Home Science

Choice Based Credit System (CBCS) in Light of NEP-2020

B.Sc. Food and Nutrition Sem II (2023 - 2026)

Subject Code	Category	Subject Name	Teaching and Evaluation Scheme								
			Theory			Practical		L	T	P	Credit
			End Sem University Exam (60%)	Two Term Exam (20%)	Teacher Assessment (20%)	End Sem University Exam (60%)	Teacher Assessment (20%)				
FSN 201	Major	Concepts of 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 Educational Objectives (CEOs): The students will

CEO1: discuss key considerations in developing and managing a foodservice establishment menu.

CEO2: illustrate the importance of accurate and complete product descriptions as it relates to menu design.

CEO3: examine the impact of nutrition and nutrition standards as it relates to menu preparation.

CEO4: exploration of various menus and foodservice establishments.

CEO5: identify the relationship between the menu and marketing.

Course Outcomes (COs): Student should be able to:

CO1: plan and produce various types of menus for varied purposes.

CO2: identify key aspects of menu design.

CO3: appraise a menu for any changes based on the requirement.

CO4: develop the ability to plan nutritious, appealing food combinations and menu patterns that meet the requirements.

CO5: comprehend the ethics of food purchasing with especial emphasis on buying and storing.

CO6: understand various cooking methods, standardization of recipes and principles of various cookeries.

Syllabus

UNIT I

- Meal and Menu Planning: definitions considerations, factors affecting meal planning patterns and types,
- Mechanics of menu planning, menu format, menu design and display, computers in menu planning.

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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

- Quantity Food Production: 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.
- Microwave cooking.

UNIT IV

- Quantity Food preparation: standardization of recipes,
- Principles of cookery- Meat, vegetable and fruit, cereal and cereal products, baked goods and desserts, salads and salad dressing preparations.

UNIT V

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

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Suggested Readings:

- Kariya, P. (2016). *Meal Planner. India:* Kahootie Co.
- Terrel, M.E. and Haigu, V.F. (2016). *Professional Food preparation.* New York: John Wiley and sons.
- Marzia M. Canty, Mc, and Brighton, R. (2010). *Introduction to Catering.* London: Oxford Blackwell, Scientific Publications.
- Khanna, K. (2007). *Textbook of Nutrition and Dietetics.* New Delhi: Elite publishing house.

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FSN 202 (P)	Major	Nutrition Lab	0	0	0	30	20	0	0	4	2

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

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Course Educational Objectives (CEOs): The students will

CEO1: Exploration of various menus and foodservice establishments.

CEO2: Identify the relationship between the menu and marketing.

Course Outcomes (COs): Student should be able to

CO1: Plan and produce various types of menus for varied purposes.

CO2: Appraise a menu for any changes based on the requirement.

CO3: Develop the ability to plan nutritious, appealing food combinations and menu patterns that meet the requirements.

CO4: Develop and write meal planning based case studies.

FSN 202: Nutrition Lab

- Understand Food Exchange System.
- Recommended Dietary Allowances ICMR 2022
- Planning and preparing meal plans for Children.
- Planning and preparing meal plan for an adult.
- Cycle for purchasing perishable items.
- Cycle for purchasing nonperishable items.
- Planning and preparing menu planning for Birthday/Anniversary Celebrations
- Planning and preparing menu planning for Marriage/Reception Celebrations.
- Planning and preparing 7 days cyclic menu plan for Hostels.
- Two Case Studies Harvard Step test
- Identification with reason histological slides Lung, Liver, Kidney, Small intestine, stomach, Thyroid, Adrenal, Pancreas, Testis, Ovary and Muscle of mammals.
- Qualitative determination of glucose acetone in urine.
- Blood film staining and identification of different types of blood cells.

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FSN 203	Minor II	Human Physiology II	60	20	20	0	0	3	0	0	3

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 Educational Objectives (CEOs): The Student will:

CEO1: gain knowledge physiology of different important systems of the body.

CEO 2: discriminate cells and structures based on morphology.

CEO3: acquired knowledge about immunity and immunology.

Course Outcomes (COs): Student should be able to:

CO1: learn in detail about structures of body systems and their importance.

CO2: gain knowledge about specific functions of the different systems of the body.

CO3: gain knowledge about collective functions of the different systems of the body.

CO4: understand immunity concept and processing.

Syllabus

UNIT I

- Endocrine system: Structure and functions of pituitary, thyroid, parathyroid and adrenal gland, Structure and functions of pancreas.

UNIT II

- Nervous System: Concept on sympathetic and parasympathetic nervous system.
- Anatomy and functions of cerebrum, cerebellum, hypothalamus and neuron.
- Concept on synapse and synaptic transmission, Reflexes, Special senses.

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UNIT III

- Excretory system: Structure and function of skin, regulation of temperature of the body.
- Structure and functions of kidney in special reference to nephron.
- Physiology of urine formation.

UNIT IV

- Reproductive system: Structure and functions of gonads, conception menstrual cycle.
- Brief idea of pregnancy, parturition, lactation and menopause.
- Brief concept on spermatogenesis and oogenesis process

UNIT V

- Immunology: General principles, types of IG, general structure of Ig, T-Cells, B-Cells, Structure & function.
- Cancer: Basic principles, DNA duplication, replication, genetic mode of transmission

Suggested readings:

1. G.K. Pal (2021). *Textbook of Medical Physiology, 4th edition*. Elsevier.
2. Gyton A.C., Hall , J.E. (2020). *Textbook of medical physiology*, Bangalore: Prism Books(Pvt) ltd.
3. Pears, E.C. (2017) *Anatomy and Physiology for nurses*, Delhi: Oxford University.
4. Chaterzee (2018). *Human Physiology*, Calcutta: Medical agency.

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Course Educational Objectives (CEOs): The Student will:

CEO1: distinguish different food groups, their classifications, nutritive value, and importance in daily diet.

CEO2: gain knowledge about enzymes present in different food groups and their use in food processing.

CEO3: understand storage, spoilage, and effective methods of cooking of different food groups.

Course Outcomes (COs): Student should be able to:

CO1: gain knowledge about macro and micronutrient and super food as spices and condiments.

CO2: utilize the knowledge about nutritional importance of Fats, Proteins, mineral and vitamins in planning and counseling.

CO3: familiarize with sources and classification of different food groups.

CO4: evaluate the quality of the food by understanding factors affecting quality.

CO5: learn the important facts associated with storage and cooking of food groups.

CO6: acquainted with enzymes and their role in food and its processing.

Syllabus

UNIT I

- Fats and Oils: Types and sources (animal and vegetable), processing, uses in different preparations, storage and nutritional aspects.

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UNIT II

- Meat, fish and poultry - Classification, structure and composition, identification of meat cuts, factors affecting quality, tenderization of meat, cooking methods, gelatin – composition, properties and uses.
- Eggs: Production, grade, quality selection, storage and spoilage, nutritional aspects and use in different preparations.

UNIT III

- Fruits and Vegetables: classification, names and sources of pigments, effects of cooking, canning, freezing, enzymes and flavor components in vegetables and fruits, nutritional loss during cooking, enzymatic browning.

UNIT IV

- Condiments and spices: composition and importance of spices.
- Beverages: Tea, Coffee, Chocolate and Cocoa Powder-Processing, nutritional aspects, other beverages-Aerated beverages and juices.

UNIT V

- Enzymes in food: introduction, general characteristics, specificity of enzymes, sources of enzymes.
- Enzyme technology and immobilized enzymes, Application of enzymes in food processing.

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- Sharma, Avantina, (2018). *Textbook of Food Science and Technology*. Tamil Nadu: CBS publication and Distributors Pvt. Ltd.
- Srilakshmi, B. (2017), *Nutrition Science*. Delhi: New Age International Publishers.
- Potter, N. N., & Hotchkiss, J. H. (2012). *Food science*. Germany: Springer Science & BusinessMedia.
- Raina U, Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S (2010). *Basic Food Preparation: A Complete Manual*. Fourth Edition. Orient Black Swan Ltd.
- Many, N. S. O. (2001). *Food: facts and principles*. Delhi: New Age International.

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