



Nagindas Khandwala College (Autonomous)

Name of the Programme: B.Sc (Hons.) in Integrative Nutrition & Dietetics Programme
Programme Code : UHSIND

PROGRAMME OBJECTIVES

PO-1: To provide intensive theoretical & practical knowledge.

PO-2: To provide an integrated perspective of nutrition & dietetics along with a good amount of exposure to real life cases / technical knowhow.

PO-3: To effectively communicate to people- health and industry professionals, and the media.

PO-4: To know the chemical, biochemical, and biological principles of nutrition and dietetics.

PO-5: To design, develop, and assess individual training methods related to nutrition and dietetics that meet patients' needs.

PO-6: To identify and classify food and food products. To analyse and establish their composition, qualities, nutritional value, nutrients' bioavailability, organoleptic properties, and the alterations experienced as a result of technological and culinary processes.

PO-7: To know the basic processes of production, transformation, and preservation of animal and vegetable-based food.

PO-8: To identify nutrients, their function in the human body, their bioavailability, the requirements and recommendations, and the basis of nutritional balance.



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PROGRAMME OUTCOMES

After completion of the three years Integrative Nutrition & Dietetics Programme, the learner will:

PO-1: Demonstrate comprehensive knowledge of food nutrition, nutrition science, community nutrition, physiology, food planning, processing & preservation, nutrition across lifecycle, biochemistry, clinical nutrition, lifestyle pillars, yoga and exercise. This programme helps students in building a strong base for advanced studies in Integrative Nutrition & Lifestyle

PO-2: Demonstrate competencies relevant to the industry, in the areas of communication, critical thinking, decision making, problem solving, reasoning, presentation, technology, research related and inter-personal skills.

PO-3: Perceive the importance of social, environmental, ethics and other critical issues faced by humanity at the local, national and international level.

PO-4: Acquire job-oriented skills and entrepreneurial skills through a steady progression of internships and industry engagements.



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Semester 1

2011UHNDFN: Food Nutrition - I

Course Objectives:

1. To acquire knowledge of the food composition and chemistry of different food products.
2. To understand various food processing techniques, nutritional and physicochemical changes that occur during processing of foods.
3. To gain knowledge of various food additives and its application in food processing.

Course Outcome:

1. **CO1:** Define and list down functions of food and water. (Level: Remember)
2. **CO2:** Explain the concepts of cereals and pulses, nuts and seeds and its relevance in food. (Level: Understand)
3. **CO3:** List down the general properties of vegetables and fruits. (Level: Remember)

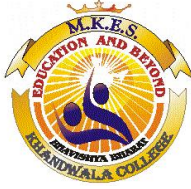
2012UHNDNS: Nutrition Science - I

Course Objectives:

1. To understand the Composition and structure of carbs, proteins & fats
2. To relate the Physiology of the human body with Food and Nutritional requirements

Course Outcome:

1. **CO1:** State the structure, composition, function and sources of Carbohydrates and Proteins (Level: Remember)
2. **CO2:** Identify the general properties of fats and its nutritional value in food. (Level - Understand)



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3. **CO3:** Explain the basic concepts of energy balance in relation to nutritional intake. (Level: Understand)

2013UHNDCN:Community Nutrition - I

Course Objectives:

1. To get acquainted with special cultural and political characteristics of various communities.
2. To understand the status and health problems in rural areas.

Course Outcome:

1. **CO1:** Explain the concept of assessment of health status and its relevance in community nutrition. (Level: Remember)
2. **CO2:** Discuss about different nutritional intervention programmes. (Level - Understand)
3. **CO3:** Identify and state role of various International Organizations and Voluntary services. (Level: Remember)
4. **CO4:** Discuss the role of education in nutrition and methods of socio-economic analysis. (Level: Understand)

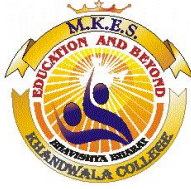
2014UHNDFNP: Food Nutrition - I (Practicals)

Course Objectives:

1. To acquire knowledge of the food composition and chemistry of different food products.
2. To understand various food processing techniques, nutritional and physicochemical changes that occur during processing of foods.
3. To gain knowledge of various food additives and its application in food processing.

Course Outcome:

1. **CO1:** Identify various types of foods and food groups. (Level: Remember)



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2. **CO2:** Demonstrate different cooking techniques to help them understand cooking practices. (Level: Understand)
3. **CO3:** Apply scientific thinking in the analysis, synthesis and evaluation of knowledge within the discipline of food nutrition. (Level: Apply)

2015UHNDNSP: Nutrition Science - I (Practicals)

Course Objectives:

1. To understand the Composition and structure of carbs, proteins & fats
2. To relate the Physiology of the human body with Food and Nutritional requirements

Course Outcome:

1. **CO1:** Describe critical understanding of principal aspects in nutrition, health, and well-being. (Level - Remember)
2. **CO2:** Define qualitative analysis of oils and fats in different food groups. (Level - Understand)
3. **CO3:** Demonstrate measurements of BMR, RMR, and use of calipers. (Level - Apply)

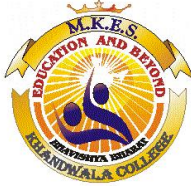
2016UHNDNCP: Community Nutrition - I (Practicals)

Course Objectives:

1. To get acquainted with special cultural and political characteristics of various communities.
2. To understand the status and health problems in rural areas.

Course Outcome:

1. **CO1:** Prepare & develop different types of visual aids suitable to a community nutrition programmes. (Level- Apply)
2. **CO2:** Organize different techniques for imparting the knowledge of nutrition to the Community (Level- Apply)



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2017UHNDCS: Communication & Counselling Skills - I

Course Objectives:

1. To understand the concept of personality and its development
2. To identify the basic principles of communication
3. To develop written communication skills for everyday and professional communication
4. To develop oral communication skills to participate independently in conversations and discussions conducted in English at medical forums.

Course Outcome:

1. **CO1:** Define attitude, goals, and values. (Level: Remember)
2. **CO2:** Explain the key concepts of transactional analysis. (Level: Understand)
3. **CO3:** Explain the basics of Personality development. (Level: Understand)
4. **CO4:** Demonstrate a better understanding of the communication process by using communication skills. (Level: Apply)

2018UHNDHC: Healthy Cooking

Course Objectives:

1. To acquire knowledge on different methods of cooking
2. To apply process of different foods
3. To use a combination of foods in the development of food products.

Course Outcome:

1. **CO1:** List down the various cooking methods and use of different utensils and materials while cooking. (Level: Remember)
2. **CO2:** State the objectives, techniques, and facts of cooking. (Level: Understand)
3. **CO3:** Define importance of healthy baking, micro greens and organic foods. (Level-Remember)



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Semester II

2021UHNDFN: Food Nutrition - II

Course Objectives:

1. To acquire knowledge on nutritive value, understand the cooking quality factors and develop skills in the preparation and storage of milk and egg products.
2. To acquire knowledge on the structure and nutritive value, understand the processing factors and acquire skills in processing and storage of flesh foods.
3. To acquire knowledge on the myths & ill-effects of sugar

Course Outcome:

1. **CO1:** Define the importance of milk, fish, and meat. (Level: Remember)
2. **CO2:** Identify the emerging trends in food technology- bio tech, bio-fortification, organic foods, genetically modified food. (Level: Understand)
3. **CO3:** Explore the general properties of sugar and its effect on health. (Level: Understand)

2022UHNDNS: Nutrition Science - II

Course Objectives:

1. To gain in depth knowledge on the physiological and metabolic role of Vitamins
2. To acquire in depth knowledge of macro and micro minerals

Course Outcome:

1. **CO1:** Identify and list down the compositions, functions and structure of fat-soluble vitamins and water soluble. (Level: Remember)
2. **CO2:** Describe the general properties of minerals. (Level: Understand)
3. **CO3:** List down the types of antioxidants and anti-inflammatories. (Level: Understand)

2023UHNDCN: Community Nutrition - II



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Course Objectives:

1. To address issues related to waste management and find solutions
2. To acquire knowledge and analyze the challenges faced by women

Course Outcome:

1. **CO1:** Explain the concept of Community Water and Waste Management. (Level: Remember)
2. **CO2:** Define the importance of Epidemiology of communicable diseases and its control. (Level: Remember)
3. **CO3:** Identify and list down the challenges faced by women. (Level: Understand)
4. **CO4:** Explain the basic concepts of White and Green revolution. (Level: Understand)

2024UHNFP: Food Nutrition - II (Practicals)

Course Objectives:

1. To acquire knowledge of the food composition and chemistry of different food products.
2. To understand various food processing techniques, nutritional and physicochemical changes that occur during processing of foods
3. To gain knowledge of various food additives and its application in food processing.

Course Outcome:

1. **CO1:** Explain scientific thinking in the analysis, synthesis and evaluation of knowledge within the discipline of food science. (Level: Understand)
2. **CO2:** Apply ethical reasoning within the discipline of food nutrition. (Level: Apply)

2025UHNDNSP: Nutrition Science - II (Practicals)

Course Objectives:

1. To understand the Composition and structure of carbs, proteins & fats
2. To relate the Physiology of the human body with Food and Nutritional requirements



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Course Outcome:

1. **CO1:** Demonstrate an understanding of different nutrients in food. (Level: Apply)
2. **CO2:** Demonstrate an understanding of the principal aspects in nutrition, health, and well-being. (Level: Apply)

2026UHNDPH: Physiology - I

Course Objectives:

1. To understand the basic tenets of human physiology
2. To understand the basics of cells & tissue
3. To provide students insight into normal physiology of the Cardiovascular System

Course Outcome:

1. **CO1:** Outline the basic concepts of Human Physiology. (Level: Remember)
2. **CO2:** Interpret an understanding of the basic concepts related to cells and tissues, blood and heart. (Level: Understand)

2027UHNDPHP: Physiology - I (Practicals)

Course Objectives:

1. To understand the basic tenets of human physiology
2. To understand the basics of cells & tissue
3. To provide students insight into normal physiology of the Cardiovascular System

Course Outcome:

1. **CO1:** Demonstrate an understanding of the complex and diverse nature of life processes. (Level: Apply)

2028UHNDDES: Environmental Studies

Course Objectives:



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1. To create awareness among the students about the environment with respect to its processes, damages and effects of human intervention. It also aims at explaining the ways in which the environment can be managed so that it can be saved from the wrath of human beings.

Course Outcome:

1. CO1: Define the basic concepts of Environmental Science (Level: Remember)
2. CO2: Describe the types of Resources and Pollution. (Level: Understand)
3. CO3: Associate health risks with climate change. (Level: Understand)

2028UHNDTT: Introduction to Travel & Tourism

Course Objectives:

1. To get thorough understanding of the components of the tourism industry.
2. To acquire knowledge and information pertaining to tourism industry

Course Outcome:

1. **CO1:** Explain the basic concepts related to Tourism (Level: Remember)
2. **CO2:** Recognise the role that marketing can play in managing the multiple dimensions of tourism. (Level: Understand)
3. **CO3:** Explain the roles and responsibilities of a travel agencies and tourism organisations (Level: Understand)

2028UHNDFS: Basics of Financial Services

Course Objectives:

1. To get acquainted with the basics of financial system and financial markets
2. To provide the basic objectives of Regulating Agencies.



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3. To understand and acquire knowledge of basic concepts of Insurance and Mutual funds

Course Outcome:

1. CO1: Outline the structure of the financial system. (Level: Remember)
2. CO2: Explain the basic concepts of banks and mutual funds. (Level: Understand)
3. CO3: Interpret the key terminologies and functioning of Mutual funds (Level: Understand)

2028UHNDID: Introduction to Design

Course Objectives:

1. To understand elements & principles of design such as point, lines, shapes, colour, texture & forms, volume, spaces etc.
2. To get acquainted with the overview of various design courses

Course Outcome:

1. CO1: Identify the elements and principles of design and their applications in the design process. (Level: Remember)
2. CO2: Explain colour concepts & theories (Level: Understand)

2028UHNDSM: Overview of Sports Management

Course Objectives:

1. To understand and apply the fundamental concepts of Sports Management.
2. To understand the basics of Sports Administration
3. To understand the role and functions of various Sports Organisations.

Course Outcome:



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1. CO1: Explain the basic concept of history of sports organisation. (Level: Remember)
2. CO2: Describe the management of a sports organization (Level: Remember)
3. CO3: Identify various funding sources for Sport (Level: Remember)
4. CO4: Remember the role of various International and National Sports Organisations (Level: Understand)

Semester III

2031UHNDFP: Introduction to Food Planning

Course Objectives:

1. To develop skills in preparation of various food items using five food groups for a day
2. To understand the basic concept of meal management, meal planning for all age groups

Course Outcome:

1. **CO1:** Identify the steps in meal planning. (Level: Remember)
2. **CO2:** Discuss the practical application of food exchange list in planning. (Level: Understand)
3. **CO3:** Interpret the requirement of RDA across different stages of life including sources for the same. (Level: Understand)
4. **CO4:** Prepare a proper meal plan for adults. (Level: Apply)

2032UHNDFC: Food Chemistry

Course Objectives:

1. To describe the basic principles and properties of starch proteins, fats and oils, pectic substances and spices and condiments.
2. To gain sufficient knowledge about chemistry of starch proteins, fats and oils, pectic substances



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3. To develop products with minimum nutritional loss based on the knowledge of food chemistry

Course Outcome:

1. **CO1:** State the physico-chemical properties of foods. (Level: Remember)
2. **CO2:** Demonstrate an understanding on the chemistry pertaining to starch, sugars, and proteins. (Level: Understand)
3. **CO3:** List down the general properties of fat & oil and the factors affecting fat absorption in food. (Level: Understand)

2033UHNDFPP: Food Processing & Preservation - I

Course Objectives:

1. To gain knowledge in food processing and food conservation
2. To understand the principles of food processing
3. To understand the food processing techniques of various food groups
4. To learn the suitable methods of preservation with special reference to our country.

Course Outcome:

1. **CO1:** Explain the basic concept of food processing & preservation. (Level: Remember)
2. **CO2:** Identify the types and principles of food spoilage. (Level: Understand)
3. **CO3:** Discuss the production and processing technology of different foods and milk products. (Level: Understand)

2034UHNDPH: Physiology - II

Course Objectives:

1. To understand the various systems in the human body and their functioning
2. To understand the mechanism and complications in various systems.

Course Outcome:



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1. **CO1:** List down the functions of respiratory, reproductive, urinary and Endocrine & Exocrine Systems. (Level: Remember)
2. **CO2:** Classify the physiological processes and functions as applicable to human nutrition. (Level: Understand)

2035UHNDCS: Communication & Counselling Skills - II

Course Objectives:

1. To understand the influence of counseling on disease management and identify components of counselling skills and to provide skills of counselling for specific disease conditions.
2. To be able to provide nutrition counseling and education to individuals and groups using a variety of communication strategies.

Course Outcome:

1. **CO1:** Define the concept of Nutritional Counseling. (Level: Remember)
2. **CO2:** Discuss the process of dietary counseling. (Level: Understand)
3. **CO3:** List down the considerations for counselling plans (Level: Apply)
4. **CO4:** Draw out a complete counselling plan for personal and diet counselling. (Level: Apply)

2036UHNDICT: Information Communication & Technology

Course Objectives:

1. To analyze the importance of use of technology as a professional
2. To understand the utility of Ms Office, Email, Internet and its applications

Course Outcome:

1. **CO1:** State the utility and application of functions in MS Office I & II. (Level: Remember)
2. **CO2:** Explain basic concepts of Internet, Intranet and Extranet. (Level: Understand)
3. **CO3:** Draft an Email (Level: Apply)



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2037UHNDIE: Industry Engagement I (Training/ Internship)

Course Objectives:

1. To provide basic and hands-on understanding of the industry.
2. To understand the professional setting and work culture of nutrition related organizations.
3. To get first-hand experience of the career opportunities in the Food and Nutrition industry.
4. To get on the job training and skill enhancement in the Health and Nutrition sector.

Course Outcome:

1. **CO1:** Demonstrate the application of knowledge and skill sets acquired from the course and workplace in the assigned job function. (Level: Understand)
2. **CO2:** Demonstrate appreciation and respect for diverse groups of professionals by engaging harmoniously with different company stakeholders. (Level: Understand)
3. **CO3:** Prepare a training report based on their learning. (Level: Apply)

Semester IV

2041UHNDFB: Fundamentals of Biochemistry

Course Objectives:

1. To understand the basic concepts of biochemistry
2. To gain knowledge on the metabolism of carbohydrate protein and lipids

Course Outcome:

1. **CO1:** Identify different types of Carbohydrates. (Level: Understand)
2. **CO2:** State the classification, structure and properties of Amino Acids, Fats, Nucleotides. (Level: Understand)
3. **CO3:** Explain the concepts of Purine and pyrimidine nucleotides. (Level: Understand)

2042UHND CB: Clinical Biochemistry



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Course Objectives:

1. To study different tests for diseases.
2. To know the biochemical composition of blood and different parts of the body.

Course Outcome:

1. **CO1:** State the principles of biochemistry. (Level: Remember)
2. **CO2:** Explain the biological processes and systems applicable to human nutrition. (Level: Understand)
3. **CO3:** Describe the analysis, diagnosis, and the methods to control the gastric disorders. (Level: Understand)
4. **CO4:** Explain the importance of urine examination in terms of health. (Level: Understand)

2043UHNDFPP: Food Processing & Preservation – II

Course Objectives:

1. To examine the different preservation techniques used in the industry
2. To understand food adulteration and international standards
3. To understand different forms of food packaging

Course Outcome:

1. **CO1:** State the importance of food processing & preservation. (Level: Remember)
2. **CO2:** Describe the process that helps to preserve food by using sugar concentrates, preservatives, and fermentation. (Level: Understand)
3. **CO3:** Explain the concept of Food Adulteration and packaging. (Level: Remember)
4. **CO4:** Discuss the usage of Food Additives and fortification. (Level: Understand)

2044UHNDNL: Nutrition across Lifecycle

Course Objectives:

1. To understand growth and development and nutritional requirements during pregnancy and lactation to promote healthy living in the community



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2. To know about growth and development and nutritional requirement of school going children and adolescents
3. To acquire the knowledge on growth and development and nutritional requirement during infancy and preschool age
4. To understand the basics of Geriatrics, Physical and physiological changes

Course Outcome:

1. **CO1:** Define the nutritional requirements of females during preconception and pregnancy. (Level: Remember)
2. **CO2:** Explain the nutritional needs and physiological changes of infants during infancy and childhood. (Level: Understand)
3. **CO3:** Demonstrate understanding of theoretical perspectives of adolescent development. (Level: Apply)
4. **CO4:** Identify the effects of ageing and life expectancy. (Level: Understand)

2045UHNDFPR: Food Processing & Preservation - II (Practicals)

Course Objectives:

1. To examine the different preservation techniques used in the industry
2. To understand food adulteration and international standards
3. To understand different forms of food packaging

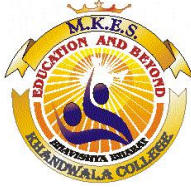
Course Outcome:

1. **CO1:** Apply the basic principles of food processing and food preservation. (Level: Apply)

2046UHNDNLP: Nutrition across Lifecycle (Practicals)

Course Objectives:

1. To understand growth and development and nutritional requirements during pregnancy and lactation to promote healthy living in the community



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2. To know about growth and development and nutritional requirement of school going children and adolescents
3. To acquire the knowledge on growth and development and nutritional requirement during infancy and preschool age
4. To understand the basics of Geriatrics, Physical and physiological changes

Course Outcome:

1. **CO1:** Apply the principles of meal planning for different health conditions. (Level: Apply)

2047UHNDPH: Physiology - III

Course Objectives:

1. To understand the various organ systems and their roles in the human body
2. To understand the disorders and the cause in various body parts.

Course Outcome:

1. **CO1:** Explain the concept of sensory organs & sensory system. (Level: Remember)
2. **CO2:** Explain the role and functions of important systems in the human body. (Level: Understand)
3. **CO3:** Demonstrate an understanding of the major structures and function of nervous system. (Level: Apply)
4. **CO4:** Discuss source of balancing fluid electrolytes and its regulation. (Level: Understand)
5. **CO5:** Explain the anatomy of spinal cord and functional organisation of cerebral cortex. (Level: Understand)

2048UHNDDEM: Entrepreneurship & Management



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Course Objectives:

1. To understand the concepts of entrepreneurship development.
2. To recognize the theories of entrepreneurship.

Course Outcome:

1. **CO1:** Outline the concept of Entrepreneurship Development. (Level: Remember)
2. **CO2:** Classify the types of Entrepreneurs. (Level: Understand)
3. **CO3:** Identify stakeholders, and team members through networks to prioritize market in real-world projects (Level: Understand)
4. **CO4:** Identify the steps involved in starting a venture. (Level: Understand)

Semester V

2051UHNDCN: Clinical Nutrition - I

Course Objectives:

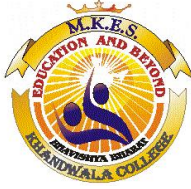
1. To understand the changes in nutritional requirements in various disease states.
2. To understand the evidence linking foods, nutrients and dietary patterns to the aetiology of major diet-related diseases.

Course Outcome:

1. **CO1:** Outline the clinical features and basis diagnosis of Type 1 and Type 2 Diabetes Mellitus. (Level: Remember)
2. **CO2:** Explain the causes and symptoms of heart and respiratory diseases. (Level: Understand)
3. **CO3:** Explain the basic concepts of Thyroid gland. (Level: Understand)

2052UHNDDT: Diet Therapy - I

Course Objectives:



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1. To gain knowledge about causative factors and metabolic changes in various diseases/disorders and the associated principles of diet therapy.
2. To learn the principles of dietary counseling.

Course Outcome:

1. **CO1:** List down the principles of nutrition care (Level: Remember)
2. **CO2:** Explain Etiology, clinical features and nutritional management of Infections and Fevers. (Level: Understand)
3. **CO3:** Explain Etiology, clinical features and nutritional management of Weight Imbalances. (Level: Understand)
4. **CO4:** Explain Etiology, clinical features and nutritional management of food allergies and intolerance. (Level: Understand)

2053UHNDNEF: Nutrition, Exercise and Fitness - I

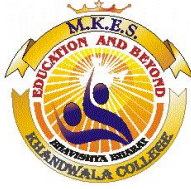
Course Objectives:

1. To understand the knowledge related to physical fitness, health and nutrition
2. To develop the skill in practicing aerobics and anaerobic power to enhance the energy capacity

Course Outcome:

1. **CO1:** Explain the concept of nutrition and its relevance. (Level: Remember)
2. **CO2:** Interpret the diagnostic techniques associated with exercise physiology. (Level: Understand)
3. **CO3:** Identify the following terms - hydration and electrolytes and the role of water in energy metabolism. (Level: Understand)
4. **CO4:** Discuss methods of Fitness assessment and relevance of subcutaneous and visceral fat (Level: Understand)

2054UHNDCN: Clinical Nutrition - I (Practicals)



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Course Objectives:

1. To understand the changes in nutritional requirements in various disease states.
2. To understand the evidence linking foods, nutrients and dietary patterns to the aetiology of major diet-related diseases.

Course Outcome:

1. **CO1:** Apply Meal planning principles for different diets. (Level: Apply)
2. **CO2:** Assess food plans with Meal planning for Asthma, TB, COPD, Bronchitis (Level: Apply)

2055UHNDDTP: Diet Therapy - I (Practicals)

Course Objectives:

1. To gain knowledge about causative factors and metabolic changes in various diseases/disorders and the associated principles of diet therapy.
2. To learn the principles of dietary counseling.

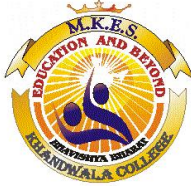
Course Outcome:

1. **CO1:** Apply Meal planning principles for clear fluid, full fluids, soft food, and full diet. (Level: Apply)
2. **CO2:** Assess food plans with meal planning of allergies and food intolerance. (Level: Apply)
3. **CO3:** Assess food plans with Meal planning for ever and typhoid (Level: Apply)

2056UHNDPH: Physiology - IV

Course Objectives:

1. To understand the advance muscle and the disorders associated with it.
2. To understand the basic functions of the lower and upper GI



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Course Outcome:

1. **CO1:** Describe the structure and function of immunity and lymphatic system. (Level: Remember)
2. **CO2:** State the basic concepts of lower and upper Gastrointestinal System. (Level: Understand)
3. **CO3:** Explain the role and functions of different tissues and systems in the human body. (Level: Understand)

2057UHNDIE: Industry Engagement II (Training/ Internship)

Course Objectives:

1. To provide basic and hands-on understanding of the industry.
2. To understand the professional setting and work culture of nutrition related organizations.
3. To get first-hand experience of the career opportunities in the Food and Nutrition industry.
4. To get on the job training and skill enhancement in the Health and Nutrition sector.

Course Outcome:

1. **CO1:** Demonstrate the application of knowledge and skill sets acquired from the course and workplace in the assigned job function. (Level: Understand)
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3. **CO3:** Prepare a training report based on their learning. (Level: Apply)

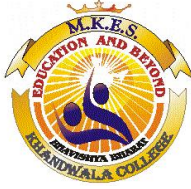
Semester VI

2061UHNDLP: Lifestyle Pillars

Course Objectives:

1. To understand the basic lifestyle changes in a human body
2. To understand the benefits and need for exercise in a human body

Course Outcome:



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1. **CO1:** Define the basic concepts of sleep. (Level: Remember)
2. **CO2:** Discuss the basics of hydration and maintaining a healthy life. (Level: Understand)
3. **CO3:** Explain the basic concept of 'stress' and mention the ways to handle it. (Level: Understand)
4. **CO4:** Demonstrate an understanding of exercise and its relevance in today's life. (Level: Apply)

2062UHNDCN: Clinical Nutrition - II

Course Objectives:

1. To understand the importance of nutritional assessment in the care of patients.
2. To understand basic nutritional problems.

Course Outcome:

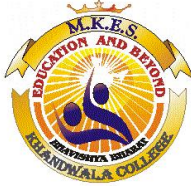
1. **CO1:** Define the changes in nutritional requirements in PCOD, Pre menopause/ Menopause. (Level: Remember)
2. **CO2:** Explain the term Osteopenia, Osteoporosis, Osteoarthritis and nutrition application to disease prevention and management. (Level: Understand)
3. **CO3:** Apply meal planning principles for different diets (Level: Apply)
4. **CO4:** Discuss the nutritional care given to the children with special needs. (Level: Understand)

2063UHNDDT: Diet Therapy - II

Course Objectives:

1. To comprehend the feeding techniques
2. To know the corrective measures in malnutrition.
3. To develop skills and techniques in the planning and preparation of therapeutic diets for febrile conditions and gastrointestinal disorders, liver and pancreas

Course Outcome:



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1. **CO1:** Explain the concepts of diet therapy and role of dieticians in today's life. (Level: Remember)
2. **CO2:** Relate the disease conditions and disorders of the liver, gallbladder, and pancreas and nutrition care (Level: Remember)
3. **CO3:** Apply meal planning principles for Special Feeding methods (Level: Apply)

2064UHNDEF: Nutrition, Exercise and Fitness - II

Course Objectives:

1. To gain knowledge on the classification of antioxidants and their role in combating diseases
2. To update knowledge on advanced techniques and concept of diet planning for athletes

Course Outcome:

1. **CO1:** State the importance of intake of supplements & antioxidants. (Level: Remember)
2. **CO2:** Explain the importance and basics of diet planning in sports. (Level: Understand)
3. **CO3:** Identify and elaborate the supplements to be taken and avoided before an event. (Level: Understand)
4. **CO4:** Discuss the impact of exercise of physiology related to injury management. (Level: Understand)

2065UHNDDTP: Diet Therapy - II (Practicals)

Course Objectives:

1. To gain knowledge about causative factors and metabolic changes in various diseases/disorders and the associated principles of diet therapy.
2. To learn the principles of dietary counseling.



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Course Outcome:

1. **CO1:** Apply Meal planning principles for diseases of gastrointestinal tract, liver, gall bladder and exocrine pancreas. (Level: Apply)

PO CO Mapping Matrix



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Semester	Subject	Course Code	PO1	PO2	PO3	PO 4
Semester 1	Food Nutrition - I	2011UHNDFN	*			
	Nutrition Science - I	2012UHNDNS	*			
	Community Nutrition - I	2013UHNDCN	*		*	
	Food Nutrition - I (Practicals)	2014UHNDFN P	*	*		
	Nutrition Science - I (Practicals)	2015UHNDNS P		*		
	Community Nutrition - I (Practicals)	2016UHNDCN P		*		
	Communication & Counselling Skills - I	2017UHNDCS	*	*	*	
	Healthy Cooking	2018UHNDHC	*		*	
Semester 2	Food Nutrition - II	2021UHNDFN	*			
	Nutrition Science - II	2022UHNDNS	*			
	Community Nutrition - II	2023UHNDCN	*		*	
	Food Nutrition - II (Practicals)	2024UHNDFN P		*		
	Nutrition Science - II (Practicals)	2025UHNDNS P		*		
	Physiology - I	2026UHNDPH	*			
	Physiology - I (Practicals)	2027UHNDPH P		*		



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	Environmental Studies	2028UHNDDES		*	*	
Semester 3	Introduction to Food Planning	2031UHNDFP	*			
	Food Chemistry	2032UHNDFC	*			
	Food Processing & Preservation - I	2033UHNDFP P	*			
	Physiology - II	2034UHNDPH	*			*
	Communication & Counselling Skills - II	2035UHNDCS		*		
	Information Communication & Technology	2036UHNDICT		*		
	Industry Engagement I (Training/ Internship)	2037UHNDIE		*		*
Semester 4	Fundamentals of Biochemistry	2041UHNDFB	*			
	Clinical Biochemistry	2042UHNDCEB	*			
	Food Processing & Preservation – II	2043UHNDFP P	*			
	Nutrition across Lifecycle	2044UHNDNL	*			
	Food Processing & Preservation - II (Practicals)	2045UHNDFP R		*		
	Nutrition across Lifecycle (Practicals)	2046UHNDNL P		*		
	Physiology - III	2047UHNDPH	*			
	Entrepreneurship & Management	2048UHNDDEM		*		
Semester 5	Clinical Nutrition - I	2051UHNDCEB	*			
	Diet Therapy - I	2052UHNDDEB	*		*	



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	Nutrition, Exercise and Fitness - I	2053UHNDNE F	*			
	Clinical Nutrition - I (Practicals)	2054UHNDN		*		
	Diet Therapy - I (Practicals)	2055UHND DTP		*		
	Physiology - IV	2056UHND PH	*			
	Industry Engagement II (Training/ Internship)	2057UHND IE		*		*
Semester 6	Lifestyle Pillars	2061UHND LP	*			
	Clinical Nutrition - II	2062UHND CN	*			
	Diet Therapy - II	2063UHND DTP	*		*	
	Nutrition, Exercise and Fitness - II	2064UHND EF	*			
	Diet Therapy - II (Practicals)	2065UHND DTP		*		
	Yoga and Exercise	2066UHND YE	*			
	Project Work	2067UHND PW		*		*