

# SNDT Women's University

## P.G. Department of Food Science and Nutrition

### Name of Program: Master of Clinical Nutrition and Dietetics

#### Program Outcomes

1. To impart knowledge and develop capacities of the students through state of the art higher education in the area of Clinical Nutrition and Dietetics, Medical Nutrition Management
2. To develop students to become health care professionals for services in various fields of clinical nutrition and medical nutrition management and related areas such as hospitals academics, research, industry, clinical nutrition department, training, extension and community service.
3. To develop capacities and abilities and enable them to pursue higher education and research in Clinical Nutrition and Dietetics.

Course Outcomes		
Clinical Nutrition and Dietetics Semester I		
Course Code	Course Name	Course Outcome
17101	Nutritional Biochemistry	<ol style="list-style-type: none"><li>1. Augment the knowledge of biochemistry acquired at the undergraduate level</li><li>2. Understand the mechanisms adopted by the human body for regulation of metabolic pathways</li><li>3. Develop an insight into interrelationships between various metabolic pathways</li><li>4. Understand integration of cellular level metabolic events to nutritional disorders and Imbalances.</li><li>5. Become proficient for specialization in nutrition</li></ol>
17102	Macronutrients	<ol style="list-style-type: none"><li>1. Gain in-depth knowledge of the physiological and metabolic role of macronutrients, fat soluble vitamins and electrolytes and their importance in human nutrition.</li><li>2. Enable the understanding of basis of human nutritional requirements and recommendations through the life cycle and translate the knowledge into practical guidelines for dietary needs.</li></ol>

		3. Familiarize with the recent advances in nutrition and apply this knowledge in planning for public health programmes.
17103	Medical Nutrition Therapy I Th	<ol style="list-style-type: none"> <li>1. Understand the promotive and therapeutic role of diet and nutritional care With reference to weight management, fevers&amp; infections and diseases of the gastro-intestinal tract and hepatobiliary system</li> <li>2. Understand the etiology, physiologic and metabolic anomalies of acute and chronic diseases and patient needs</li> <li>3. Know the effect of the various diseases on nutritional status and nutritional and dietary requirements.</li> <li>4. Able to recommend and provide appropriate nutritional care based on pathophysiology, prevention/ and treatment of the various diet-related disorders/ diseases.</li> <li>5. Be able to use different nutritional support systems to nourish the patient</li> </ol>
17104	Medical Nutrition Therapy I Pr	<ol style="list-style-type: none"> <li>1. Understand the promotive and therapeutic role of diet and nutritional care With reference to weight management, fevers&amp; infections and diseases of the gastro-intestinal tract and hepatobiliary system</li> <li>2. Understand the etiology, physiologic and metabolic anomalies of acute and chronic diseases and patient needs</li> <li>3. Know the effect of the various diseases on nutritional status and nutritional and dietary requirements.</li> <li>4. Able to recommend and provide appropriate nutritional care based on pathophysiology, prevention/ and treatment of the various diet-related disorders/diseases.</li> <li>5. Be able to use different nutritional support systems to nourish the patient</li> </ol>
17105	Pathophysiology and Metabolism in Disease	<ol style="list-style-type: none"> <li>1. to understand the pathophysiological changes in different organs, tissues and systems in different disease conditions across the lifespan</li> <li>2. to understand the metabolic changes occurring in disease conditions</li> <li>3. Comprehend the implications of functional interrelationships in a diseased body</li> <li>4. to know and interpret the various diagnostic indicators/parameters</li> </ol>

		5. to apply this knowledge for planning nutritional care of individuals
17191	Advanced Nutrition Practicals	This course will enable students to use, apply and interpret various methods for assessment of nutritional status, assessment of dietary/nutrient intakes, physical activity and energy expenditure, and interpret tests used for lipid profile and glycemic control.
<b>SEMESTER-II</b>		
00201	Research Methodology	<ol style="list-style-type: none"> <li>1. develop a scientific approach and know the processes of research</li> <li>2. develop the competence for selecting methods and tools appropriate for research topics</li> <li>3. understand concepts of statistical measures of central tendency, dispersion, variability and probability</li> </ol>
17201	Applied Food Science and Product Modification	<ol style="list-style-type: none"> <li>1. Understand and apply various aspects of food science for dietary management and product development.</li> <li>2. Develop products, which meet nutritional needs of consumers.</li> <li>3. Understand theoretical concepts about sensory evaluation of food.</li> <li>4. Use different sensory methods for evaluating variety of foods.</li> <li>5. Analyse and interpret sensory evaluation data.</li> </ol>
17202	Vitamins	<ol style="list-style-type: none"> <li>1. Gain in-depth knowledge of the physiological and metabolic role of vitamins and their role in human nutrition.</li> <li>2. Understand the basis of human nutritional requirements and recommendations through the life cycle and translate the knowledge into practical guidelines for dietary needs.</li> <li>3. Be familiar with the recent advances in nutrition and apply this knowledge in planning for public health programmes.</li> <li>4. Understand the pharmacological actions of various vitamins and their implications.</li> </ol>
17203	Medical Nutrition Therapy II Th	<ol style="list-style-type: none"> <li>1. Understand the promotive and therapeutic role of diet and nutritional care With reference to Endocrine disorders, renal disorders, cardiovascular system, musculoskeletal system</li> </ol>

		<p>2. Understand the etiology, physiologic and metabolic anomalies of acute and chronic diseases and patient needs</p> <p>3. Know the effect of the various diseases on nutritional status and nutritional and dietary requirements.</p> <p>4. Able to recommend and provide appropriate nutritional care based on pathophysiology, prevention/ and treatment of the various diet-related disorders/ diseases</p>
17204	Medical Nutrition Therapy II Pr	<p>1. Market survey of commercial nutritional supplements and nutritional support substrates</p> <p>2. Commonly used tests for diagnosis of various diseases- system wise</p> <p>Interpretation of patient data and diagnostic tests of drawing up of patient diet prescription, using a case study approach.</p> <p>Follow up – acceptability of diet prescription, compliance, discharge diet plan for each of the diseases</p>
17291	Clinical Nutrition	<p>1. Understand the etiology, physiologic and metabolic anomalies of acute and chronic diseases and patient needs.</p> <p>2. To assess nutritional status of patients.</p> <p>3. Be familiar with recent advances in the medical nutritional management of various diseases.</p>
17292	Nutrition for Sports and Exercise	<p>1. Understand the special nutritional requirements for physical activities related to sports and exercise</p> <p>2. Apply the knowledge to improve the performance of sportspersons</p>
<b>SEMESTER-III</b>		
17301	Minerals	<p>1. Gain in-depth knowledge of the physiological and metabolic role of vitamins and minerals and their role in human nutrition.</p> <p>2. Understand the basis of human nutritional requirements and recommendations through the life cycle and translate the knowledge into practical guidelines for dietary needs.</p> <p>3. Be familiar with the recent advances in nutrition and apply this knowledge in planning for public health programmes.</p> <p>4. Understand the pharmacological actions of various vitamins and their implications.</p>

17302	Public Nutrition and Health	<ol style="list-style-type: none"> <li>1. Develop a holistic knowledge base and understanding of the nature of important nutritional problems and their prevention and control for the disadvantaged and upper socio-economic strata in society</li> <li>2. Understand the causes /determinants and consequences of nutritional problems in society</li> <li>3. Be familiar with various approaches to nutrition and health interventions, programmes and policies.</li> </ol>
17303	Maternal and Child Nutrition	<ol style="list-style-type: none"> <li>1. Be familiar with physiological changes in pregnancy and lactation.</li> <li>2. Be familiar with growth and developmental changes from conception till adolescence.</li> <li>3. Understand the inter-relationship between nutrition and growth and development during life cycle.</li> <li>4. Apply their knowledge in community and public nutrition/health programmes.</li> </ol>
17305	Nutrition in Cancer and Critical Care	<ol style="list-style-type: none"> <li>1. Understand the physiology, metabolism and special requirements of the critically ill.</li> <li>2. Be familiar with the special nutritional support techniques and feeding formulations to meet their nutritional needs.</li> </ol>
00301	Statistical Applications in Research	<ol style="list-style-type: none"> <li>1. Discriminate between parametric and non-parametric tests</li> <li>2. Learn to apply statistical tests for data analysis for both large and small samples</li> <li>3. Know how to interpret the results of statistical analysis of data</li> <li>4. Be able to summarize data and present it using tables and graphs</li> <li>5. Develop skills for preparation of research proposals</li> <li>6. Understand the components of a research report</li> </ol>
17391	Functional Foods, Biodynamic Principles, Nutraceuticals	<ol style="list-style-type: none"> <li>1. Gain knowledge about functional foods, biodynamic principles and nutraceuticals</li> <li>2. Have thorough understanding about the health effects</li> <li>3. Be familiar with applications in industry.</li> </ol>
17392	Geriatric Nutrition	<ol style="list-style-type: none"> <li>1. Understand the multifaceted aspects of aging</li> <li>2. Understand the specific needs of elderly and the effects of various diseases on nutritional status and nutritional requirements at these stages of the life cycle</li> </ol>

		3. Be competent to recommend / provide appropriate nutritional care based on pathophysiology, prevention/ and treatment of the various diet-related disorders/ diseases
<b>SEMESTER-IV</b>		
17491	Scientific Writing	<ol style="list-style-type: none"> <li>1. Appreciate and understand the importance of different types of scientific writing /Documentation.</li> <li>2. Develop competence in writing and abstracting skills.</li> </ol>
17492	Dietetic Techniques and Patient Counseling	<ol style="list-style-type: none"> <li>1. Understand the principles and procedures of nutrition counseling and the role of the counselor.</li> <li>2. Develop an understanding how: (a) lifestyles influence health and well-being; (b) acute and chronic disease affects the emotional and psychological state and the behavior of the individuals.</li> <li>3. Be familiar with various techniques used in counseling.</li> <li>4. Be able to use various types and techniques of counseling to motivate patients to achieve well-being.</li> </ol>