



## FATIMACOLLEGE(AUTONOMOUS),MADURAI-625018

### COURSE OUTCOMES

**NAME OF THE PROGRAMME: M.Sc HUMAN NUTRITION AND NUTRACEUTICALS**

**PROGRAMMECODE: PSNN**

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>COURSE OUTCOMES</b>
19PG1N1	Advanced Human Nutrition	CO1: Recall the functions of nutrients in human body. CO2: Explain the digestion, absorption, sources & requirements of different nutrients CO3: Compare the energy value of foods by using different calorimetry CO4: Build the knowledge of nutrient and drug interrelationship CO5: Summarize the importance of fluid and electrolyte balance in human body

19PG1N2	Advanced Dietetics	CO1: Describe nutritional care process CO2: Recognize the nutritional needs of different stages of life cycle CO3: Explain medical nutritional management. CO4: Plan therapeutic interventions for traumatic conditions. CO5: Categorize meal planning for sports, sea and air travel
19PG1N3	Applied Physiology	CO1: Identify and recall the aspects of human physiology CO2: Illustrate the anatomy of the various organ systems of the body CO3: Categorize the functions of all the systems CO4: Describe the interrelationship of nutrition and physiology CO5: Compare the alterations in organ systems during disease conditions

19PG1N4	Advanced Dietetics Lab	<p>CO1: Plan and prepare menu for normal life cycle.</p> <p>CO2: Choose appropriate supplementary foods for infants.</p> <p>CO3: Solve problems of nutritional deficiency disorders with modified diets.</p> <p>CO4: Differentiate the various hospital diets.</p> <p>CO5: Construct diets for sports, burns and weight management.</p>
19PG1N5	Clinical Laboratory Techniques Lab	<p>CO1: Identify organic, inorganic and abnormal constituents of urine</p> <p>CO2: Explain the quantitative analysis of urine</p> <p>CO3: Describe the haematological examination</p> <p>CO4: Organize the examination of blood glucose and lipid profile</p> <p>CO5: Recognize the serum constituents</p>

19PGNEDC1	Nutrition & Dietetics	<p>CO1: Define the different terms in nutrition and food.</p> <p>CO2: Classify the food and nutrients</p> <p>CO3: Describe the functions of macro and micro nutrients.</p> <p>CO4: Choose the food sources of micro and macronutrients</p> <p>CO5: Illustrate food pyramid and explain the food groups.</p>
19PG2N6	Clinical Nutrition & Diet Therapy	<p>The students will be able to</p> <p>CO1: Identify the characteristics of various disease conditions.</p> <p>CO2: Describe the medical nutritional management of different disease.</p> <p>CO3: Plan diets for degenerative diseases.</p> <p>CO4: Categorize the foods used in the treatment of diseases.</p> <p>CO4: Summarize the treatment strategies for food allergy and food intolerance.</p>

19PG2N7	Functional Foods and Nutraceuticals	<p>CO1: Define and understand the concepts of functional foods.</p> <p>CO2: Categorize the bioactive components of functional foods.</p> <p>CO3: Distinguish the role of prebiotics, probiotics &amp; synbiotics as functional ingredients.</p> <p>CO4: Explain the efficacy of herbs and flowers as functional foods</p> <p>CO5: Build knowledge on the role of Nutraceuticals in treating diseases</p>
19PG2N8	Research Methodology	<p>CO1: Classify the types of research based on intent and methods</p> <p>CO2: Restate in own words the significance and formulation of research</p> <p>CO3: Categorize methods of data collection</p> <p>CO4: Distinguish the sampling techniques</p> <p>CO5: Summarize the steps in formulation of hypothesis and tabulation</p>

19PG2N9	Clinical Nutrition and Diet Therapy Lab	<p>CO1: Recall the dietary principles for the planning and preparation of diet for metabolic disorders.</p> <p>CO2: Demonstrate therapeutic diet for cardiovascular disorders.</p> <p>CO3: Demonstrate therapeutic diet for cardiovascular disorders.</p> <p>CO4: Focus on the aspects of planning and preparation of diet for kidney disorders</p> <p>CO5: Indicate the dietary principles in the preparation of diet for cancer and AIDS.</p>
9PG2N10	Functional Foods and Nutraceutical Lab	<p>CO1: Identify the various nutraceutical components present in functional foods.</p> <p>CO2: Choose the appropriate methods to analyze the specific nutraceutical component.</p> <p>CO3: Construct the experimental research with the knowledge of the analytical methods.</p> <p>CO4: Draw conclusions on the therapeutic availability of nutraceuticals.</p>

19PGNEDC2	Nutrition & Dietetics	<p>CO1: Define the different terms in nutrition and food.</p> <p>CO2: Classify the food and nutrients</p> <p>CO3: Describe the functions of macro and micro nutrients.</p> <p>CO4: Choose the food sources of micro and macronutrients</p> <p>CO5: Illustrate food pyramid and explain the food groups.</p>
19PG3N11	Functional Foods & Nutraceuticals in Preventive Dietetics	<p>CO1: Identify the role of functional foods and nutraceuticals in oral, gut and renal health.</p> <p>CO2: Describe the importance of functional foods in weight management and CVD</p> <p>CO3: Categorize the functional foods for bone health and diabetes</p> <p>CO4: Summarize the effect of functional foods and Nutraceuticals in cancer</p> <p>CO5: Choose the functional foods for the management of nervous and respiratory disorders</p>

19PG3N12	Community Nutrition	<p>CO1: Identify National Nutritional problems</p> <p>CO2: Recognize the relation of nutrition in national development</p> <p>CO3: Explain the strategies to overcome malnutrition</p> <p>CO4: Categorize nutrition intervention programmes and organization</p> <p>CO5: Describe national nutrition policy and nutrition surveillance system</p>
19 PG3N13	Analytical Instrumentation	<p>CO1: Explain the principles of analytical instrumentation techniques.</p> <p>CO2: Choose the relevant analytical techniques for food.</p> <p>CO3: List the applications of different analytical instruments.</p> <p>CO4: Categorize the different types of isotopes and its application</p> <p>CO5: Describe the principles and application of microbial assays.</p>



19PG3NE1	Food Product Development And Sensory Evaluation	<p>CO1: Identify the food needs and consumer demands in the society</p> <p>CO2: Explain the classification, characteristics and future trends in food product development</p> <p>CO3: Choose the different sensory tests employed for food evaluation</p> <p>CO4: Build knowledge on the marketing and evaluation of food products</p> <p>CO5: Categorize the food products according to the product cost</p>
19 PG3NE2	Institutional Management	<p>CO1: Recognize the key areas of food service institutions.</p> <p>CO2: Identify the theories and concepts of institutional management.</p> <p>CO3: Analyse the scope and theories of personnel management.</p> <p>CO4: Explain the aspects of food cost management.</p> <p>CO5: Categorize the different laws governing food service establishment.</p>

19PG3N14	Community Nutrition Lab	<p>CO1: Identify the nutritional status of various age groups</p> <p>CO2: Classify and construct audio visual aids</p> <p>CO3: Organize nutrition awareness programmes for community</p> <p>CO4: Categorize and plan supplementary foods for the vulnerable groups in the community</p>
19PG3N15	Techniques for Experimental Nutrition Lab	<p>CO1: Recall the principles of analytical techniques</p> <p>CO2: Identify the amount of ascorbic acid in foods</p> <p>CO3: Explain the procedure for the estimation of <math>\beta</math>-carotene</p> <p>CO4: Compare the amount of free fatty acid and peroxide values in fats and oil</p> <p>CO5: Choose the method of analyzing amount of antioxidant present in foods</p>

19PG4N16	Food Microbiology	CO1: Recall the basic concepts of food microbiology CO2: Describe the principles of food preservation CO3: Distinguish the contamination and spoilage of foods CO4: Choose the appropriate method of food preservation CO5: Explain the food and water borne diseases and enumerate the microbes in the food.
19PG4N17	Nutritional Biochemistry	CO1: Identify the structure of biomolecules CO2: Explain cellular respiration CO3: Construct the metabolic pathways of biomolecules CO4: Categorize the inborn errors of metabolism of biomolecules CO5: Compute the energetic of metabolism of biomolecules

19PG4N18	Advanced Food Science and Processing Techniques	<p>CO1: Illustrate the structure and milling of cereals.</p> <p>CO2: Explain the processing methods of pulses and oilseeds.</p> <p>CO3: Choose the methods of harvesting &amp; storage of vegetables and fruits</p> <p>CO4: Classify the processing &amp; preservation methods of flesh foods</p> <p>CO5: Identify the processing &amp; preparation of milk &amp; egg products</p>
19PG4NE3	Food Safety And Quality Control	<p>CO1: Define the concept of food safety and food laws.</p> <p>CO2: Explain the toxicants in animal and plant foods.</p> <p>CO3: Classify the food additives.</p> <p>CO4: Plan the various quality assurance systems in food industries.</p> <p>CO5: Categorize the packaging materials and properties.</p>

19PG4NE4	Nutrition In Critical Care And Disasters	<p>CO1: Identify nutritional screening and nutritional status assessment.</p> <p>CO2: Recognize nutritional support system for critically ill.</p> <p>CO3: Summarize the role of immune enhancers, suppressants and special diets in critical care</p> <p>CO4: Classify rehabilitation diets</p> <p>CO5: Describe the patho-physiology in critical illnesses</p>
19PG4N19	Food Microbiology Lab	<p>CO1: Describe the working principle of compound microscope</p> <p>CO2: Compare the culturing techniques</p> <p>CO3: Choose the appropriate method of media preparation</p> <p>CO4: Identify and enumerate the microbes in food.</p>

19PG4N20	Nutrient Analysis Lab	CO1: Identify the calorific value of foods. CO2: Explain the protein estimation procedure CO3: Choose the analytical methods of minerals CO4: Build knowledge on the estimation of moisture content in foods CO5: Compare the amount of crude fibre present in foods.
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