Nutrition is an integrated and professional program. The department aims at contributing the improvement of public health status through attainment of excellence in teaching, learning and training of young minds. The department provides conductive academic environment, regular classes, continuous evaluation, library and several advanced facilities. This course of honors opens up a plethora of career opportunities ranging from dietitian, marketing, research, teaching, sports nutritionist and very upcoming field of nutrition journalism. Not only that, we help to all our students to enhance their knowledge and skills by seeking to its extent to mold them into a responsible human being. Students can avail the Degree Certificate by the completion of this 3 year Honors Course from the Department of Nutrition, Mankar College.

Course Outcome

Semester 1

Course Title: Nutritional Physiology I

- ➤ CO-1 Cooperating students to understand the generalized structural make up of human body.
- ➤ CO-2 Familiarizing the idea of different organ systems like digestive, respiratory, cardiovascular and musculoskeletal system.
- CO-3 To know the measurement processes of different clinical examinations such as pulse rate, blood pressure and bleeding & clotting time and blood grouping as well.

Course Title: Nutritional Aspect of Food Items

- ➤ CO-1 Conceptualizing the basic terms of nutrition science.
- ➤ CO-2 Understanding different cooking methods in terms of nutrient availability.
- ➤ CO-3 Detailing of different food group item's nutritional aspects and their correct use by proper preparational methods.

Semester 2

Course Title: Nutritional Physiology II

- ➤ CO-1 Discussing the other complicated organ systems like excretory, reproductive, nervous and endocrine system.
- ➤ CO-2 To learn the knowledge of some physiological tests such as total count of RBC, WBC & platelets; ESR; differential count of WBC.
- CO-3 To know the identification of tissues of mammal body like lung, liver, kidney, thyroid, pancreas, adrenal gland, testis, ovary etc.

Course Title: Physiological Aspects of Nutrition

- ➤ CO-1 Conceptualization of growth and malnutrition.
- ➤ CO-2 Helping them to know the details of all the nutrients and their activity mechanism.

Semester 3

Course Title: Nutritional Biochemistry

- ➤ CO-1Understanding the mechanism of the proximal principal foods in the body.
- CO-2 Details knowledge in classification of Carbohydrate, Protein and Fat.
- ➤ CO-3 Searching the identification and estimation processes of fuel foods.

Course Title: Life Cycle Approach

➤ Co-1 Preparation of nutritional requirement chart for different age grouped people and making the normal diet menus for them too.

Course Title: Diet Therapy I

- ➤ CO-1 Getting general ideas on diet therapy and therapeutic diets.
- ➤ CO-2 Enriching with the knowledge of etiology, symptoms and dietary management of different diseased conditions like diarrhea, constipation, IBS, peptic ulcer etc.
- ➤ CO-3 To know the dietary management of inborn error metabolism and allergic conditions.

<u>Course Title: Technology of Fruits and Vegetables / Environment Management and Public</u> Health

- ➤ CO-1 Gathering the informations on technologies on fruits and vegetables in different aspects.
- ➤ CO-2 Conceptualizing the global warming, environmental hazards and waste, pollution and vector biology.

Semester 4

Course Title: Nutritional assessment and Nutrition Program

- ➤ CO-1 Conceptualize the surveillance system and methods of nutritional status assessment and practical experience.
- ➤ CO-2 Implicational knowledge of communication system in nutrition education.
- ➤ CO-3 Information about immunization program.
- ➤ CO-4 Knowing the National Nutritional Intervention Programs to combat malnutrition of society.

Course Title: Community Nutrition and Epidemiology

- ➤ CO-1 Getting the concept of population and community and dealing with the methodologies of different community problems such as water, nutrition & disease management and some practical knowledge as well.
- ➤ CO-2 Knowledge about descriptive and analytical study of epidemiology.

Course Title: Diet Therapy II

- ➤ CO-1 Understanding the etiology, clinical features and dietary management of some chronic diseases.
- ➤ CO-2 Knowing the preparational methods of these case specific therapeutic diet charts.

Course Title: Rural Technology and Public Welfare / Immunology, Toxicology and Public Heath

- ➤ CO-1 Understanding the idea of apiculture, biodiversity, mushroom cultivation and rural sociology & welfare.
- ➤ CO-2 Familiarizing the concept of immunology, toxicology and public health.

Semester 5

Course Title: Food Microbiology and Food Borne Disease

- ➤ CO-1 Conceptualizing the history of microbiology and food contamination.
- CO-2 Intercepting the information of control, nutrition and culture media of various microorganisms and their practical knowledge also.

Course Title: Medical Microbiology and Pathology

- ➤ CO-1 Gathering the information of normal micro flora of human body and host pathogen interaction mechanism.
- ➤ CO-2 Collection of knowledge about microorganisms like bacteria and viruses and producing diseases.

- ➤ CO-3 Understanding the evaluation and mode of action of various chemotherapeutic drugs.
- ➤ CO-4 Studying the methods of preparation for different culture growth media, SWAB method and antibiotic sensitivity test.
- ➤ CO-5 Knowing the isolation of bacteria from rotten foods and detection of index microbs for water borne pathogen.

Course Title: Human Pathology / Therapeutic Nutrition and Critical Care

- ➤ CO-1 Understanding human pathology by conceptualization and determination of blood and urine samples.
- ➤ CO-2 Accessing the practical concept of an internship as dietitian.
- ➤ CO-3 Getting the facility to do training or short term course from any nutrition and dietetics or nutrition and public health department of any university or research institution.

Course Title: Molecular Biology / Biophysics and Bioinstrumentation

- CO-1 Understanding the concept of molecular biology knowing about DNA and RNA and their mechanisms in the body.
- ➤ CO-2 Getting the knowledge of biophysics and bioinstrumentation in terms of handling the colorimeter, spectrophotometer, centrifugator, HPLC and flow cytometry.

Semester 6

Course Title: Nutraceutical and Functional Food

- ➤ CO-1 Gathering knowledge about source, classification and role of nutraceutical on health.
- ➤ CO-2 Getting the concept of prebiotic, probiotic and genetically modified food.
- ➤ CO-3 Understanding the idea of functional food.
- CO-4 Practicing the preparation of review papers any nutritional topic.

Course Title: Food Safety and Food Standard

- ➤ CO-1 Persuasion about the concept, factors and laws applied for food safety and standardization of food.
- ➤ CO-2 Perception of food adulteration.
- ➤ CO-3 Knowing the homemade and clinical remedy to identify the adulterated foods in our daily consumption.

<u>Course Title: Biostatistics and Bioinformatics / Concept of Research and Heath</u> <u>Management</u>

- ➤ CO-1 Conceptualizing the biostatistics and bioinformatics and their practical applications.
- CO-2 Perception of the concept of research health management and preparation for project report of any finding practically.

<u>Course Title: Food Spoilage and Food Preservation / Entrepreneurship and Small Catering</u> Units

- ➤ CO-1 Availing the scope to visit food industry or dairy farms to better understand the preservational process Or getting the short term course to do on food processing technology or food microbiology from any home science department of any university.
- ➤ CO-2 Knowing details about the entrepreneurship and small catering organization and collecting the practical idea for management of such service unit.

Program Outcome : (Honours)

- ➤ PO-1 The completion of honours promotes further study and research in different relative areas like M.A. in food technology, food & nutrition, clinical nutrition etc; M.B.A. in hospital & hotel management and Ph.D. in particulars .
- ➤ PO-2 The degree course provide different aspects of carrier in different fields like Health Educator as teaching in different educational institutes; Health Coach as in wellness centers, fitness club, wellness startups; Nutrition Article Writer in newspaper, magazines.
- ▶ PO-3 The study provide a wide range of job aspects in the field of Dietician & Nutritionist as certified nutrition specialist, clinical dietitian, holistic nutritionist, registered dietitian, rehabilitation counselors, sports nutritionist and in different governmental agencies working for social welfare and development, public health departments.
- ➤ PO-4 It helps to create a good prospect in food technology as Food Technologist like health product companies, packaged food companies and food advisor in diabetic clinics, international food organizations such as United Nations Food and Agriculture Organizations, US AID, other non-profit organizations.
- ➤ PO-5 Further higher studies provide business oriented knowledge as in catering or cafes and food service associates.
- ➤ PO-6 Moreover the course can input job aspect in a special side of treatment as Naturopath.