

SWAMI VIVEKANAND SUBHARTI UNIVERSITY

Department of Home Science

M.Sc. FOOD & NUTRITION

SEMESTER I
RESEARCH METHODOLOGY (M.Sc.-HS-101)

Course objectives

- ❖ To understand the significance of statistics & research methodology in Home Science research.
- ❖ To understand the types, tools & methods of research & develop the ability to construct data gathering instruments appropriate with the research design
- ❖ To understand & apply the appropriate statistical technique for the measurement & design.

Course Outcomes

- ❖ To understand the concept of the field
- ❖ To enable the students to learn the methods of assessment and plan the diet
- ❖ To apply the theoretical concepts in laboratory setting
- ❖ To understand the applications of nutritional sciences in clinical interventions, communication for health promotion, food service management, food science and processing
- ❖ To acquire skills to undertake systematic research in the area of food science and nutrition

ADVANCED NUTRITIONAL BIOCHEMISTRY (M.Sc.-FN-102)

Course Objectives

- ❖ To enhance the biochemistry knowledge
- ❖ To understand the mechanisms adopted by the human body for regulation of metabolic pathways.
- ❖ To understand the mechanisms adopted by the human body for regulation of metabolic pathways.
- ❖ To understand the principles and use of Instruments used for biochemical analysis.

Course Outcomes

- ❖ To impart the understanding of the concepts of biochemistry, food chemistry and food microbiology
- ❖ To enable the students to learn the methods of assessing human nutritional requirements, nutritional assessment and diet planning
- ❖ To understand the applications of nutritional sciences in clinical interventions, communication for health promotion, food service management, food science and processing
- ❖ To acquire skills to undertake systematic research in the area of food science and nutrition

M.Sc. FOOD & NUTRITION HUMAN PHYSIOLOGY M.Sc.-FN-103

Course Objectives

- ❖ Understand the physiology of the human body.
- ❖ Develop insight of normal functioning of all the organ systems of the body and their interactions.
- ❖ Comprehend the path physiology of commonly occurring diseases.

Course Outcomes

- ❖ To gain knowledge about the human body and assess the normal functioning of all the organ systems of the body and their interactions.
- ❖ To know the proper working of specific organ and related their hormone
- ❖ Apply the knowledge of physiology of body in their life routine.
- ❖ To acquires the skill to undertake systematic area of bio-chemistry.

M.Sc. FOOD & NUTRITION
ADVANCES IN FOOD MICROBIOLOGY
M.Sc.-FN-104

Course Objective

- ❖ Understand the microbial flora associated with food
- ❖ Acquire knowledge on beneficial role of microorganism and relevance of microbiological safety of food
- ❖ Understand the conventional and rapid methods for detection of food borne pathogens and their toxins.
- ❖ Understand the role of microbes in microbial contamination of food.

Course Outcomes

- ❖ To impart the understanding of the concepts of food microbiology and enable the students to learn the methods of assessing microorganism in food industry.
- ❖ To apply theoretical concepts in laboratory setting as per standard methods of food Microbiology
- ❖ To understand the applications of microorganism in food science and processing
- ❖ To acquire skills to undertake systematic research in the area of food microbiology, food science and nutrition

M.Sc. FOOD & NUTRITION
METHODS OF INVESTIGATION
M.Sc.-FN-105

Course Objectives

- ❖ To familiarize with the applications of the above techniques.
- ❖ To understand the principles of various analytical techniques available for nutrition research.
- ❖ To apply the principles of various analytical techniques available for nutrition research.

Course Outcomes

- ❖ To enable the students to learn the methods of assessment and plan the diet
- ❖ Applications of nutritional sciences in clinical interventions, communication for health promotion, food service management, food science and processing
- ❖ To acquire skills to undertake systematic research in the area of food science and nutrition

SEMESTER III
DISSERTATION
M.Sc.-FN-301

Course Objectives

1. Know the practical aspects of, collecting data/ project work
2. Evaluate, select and use appropriate strategies for reduction, analysis and presentation of data collected during research process/ project work
3. Suitably illustrate data/ insights using various graphical and other methods
4. Prepare a dissertation document/ project report based on research process/ project work done.

Course Outcomes

1. Know the practical aspects of, collecting data/ project work
2. Evaluate, select and use appropriate strategies for reduction, analysis and presentation of data collected during research process/ project work
3. Suitably illustrate data/ insights using various graphical and other methods.
4. Prepare a dissertation document/ project report based on research process/ project work done.

NUTRITION IN EMERGENCIES AND DISASTER
M.Sc.-FN-302

Course Outcomes

1. This course will make the students familiar with the process of planning and management of public health nutrition programmes.
2. It will help them understand the concept of monitoring of programmes and nutritional surveillance.
3. The students will also learn about nutrition in emergency and disaster situations.

Course Outcomes

1. Get acquainted with the nutritional problems during emergencies/ disasters and the strategies to tackle them.
2. To familiarize students with various natural and manmade emergencies and disasters having an impact on nutrition and health status.
3. Understand strategies for nutritional rehabilitation management of the health of emergency affected populations

INSTITUTIONAL FOOD MANAGEMENT

M.Sc.-FN-304A

Course Objectives

1. To develop a knowledge base about the facilities required for different types of food service units.
2. To equip individuals in understanding and managing resources in a food service institution.
3. Develop specific skills to apply the most widely used methods in different food production units.

Course Outcomes

- 1 Develop knowledge in managing various food service systems
2. Understand and manage resources in a food service institution.
3. Provide practical experience in managing food material for food service management

ASSESSMENT OF NUTRITIONAL STATUS

M.Sc.-FN-305A

Course Objectives

1. Understand the concept and purpose of nutritional status assessment in community setting.
2. Explain nutritional concerns among vulnerable sections of the community and strategies to combat them.
3. Gain knowledge with regard to standard methods and techniques for assessing nutritional status.
4. Be familiar with the use of indices and indicators for screening and consequent identification of malnutrition in the community

Course Outcomes

1. The purpose of this course is to enable the students to understand the concept and methods of nutritional status assessment of a community.
2. This will help them to comprehend the nutrition concerns among communities, the correct screening criteria for malnutrition, along with strategies to combat and prevent them.

FOOD PROCESSING & TECHNOLOGY

M.Sc.-FN- 303C

Course Objectives

1. To understand concepts of unit operations in processing.
2. To Acquire the knowledge of principles of food preservation and its application
3. To acquaint with properties of foods and basic principle of Food Engineering.
4. To understand the food Processes, along with the unit operations.

Course Outcomes

1. To understand nature of various food products constituents, additives and adulterants.
2. Gain the knowledge of food packaging and its interaction with food products.
3. Understand the basic concepts of properties of foods and basic food engineering concepts.
4. Acquire the knowledge of various unit operations in food processing and Gain the knowledge of food packaging and its interaction with food products.

ADVANCE FOOD SCIENCE

M.Sc.-FN- 304C

Course Objectives

1. The course aims to enable students to acquaint with fundamentals of food processing technology and its process and to understand concepts of various engineering principles and processing methods
2. To impart systematic knowledge of basic and applied aspects in food processing and technology
3. To enable the student to understand food composition and its physico-chemical, nutritional and sensory aspects.
4. To gain in depth knowledge about processing and preservation techniques of cereal and cereal products and meat and meat products.

Course Outcomes

1. Gain knowledge of principles of Unit operations involved in food processing industry.
2. Learn fundamentals of food processing technology and its process.

3. Understand concepts of various engineering principles and processing and preservation methods and their application.
4. Understand various post processing operations important from industrial point of view

FOOD SAFETY AND QUALITY CONTROL

M.Sc.-FN-305C

Course Objectives: To develop a knowledge base about the facilities required for different types of food service units

1. To equip individuals in understanding and managing resources in a food service institution.
2. Understand microbial safety in various foods operations and comprehend principles of various preservation and control techniques.
3. Know the importance of quality assurance in food industry.

Course Outcomes

1. Gain expertise to function as a food service manager.
2. Develop knowledge in managing various food service systems.
3. Understand and manage resources in a food service institution.
4. Provide practical experience in managing food material for food service management

CLINICAL AND THERAPEUTIC NUTRITION

M.Sc.-FN-303A

Course objective

1. To understand the nutrition assessment and planning, implementation.
2. To monitoring and follow up in nutrition care process.
3. To know the causative factors and metabolic changes in various diseases/disorders and acquire the knowledge on the principles of diet therapy.

Course Outcomes

1. Gain knowledge about causative factors and metabolic changes in various diseases/disorders and the associated principles of diet therapy.
2. Comprehend the rationale of prevention of various diseases/disorders.
3. Understand the comprehend principles of dietary counselling and the rationale of prevention of various diseases/disorders.

