

PERIYAR UNIVERSITY

PERIYAR PALKALAI NAGAR

SALEM – 636 011



SYLLABUS FOR
B.Sc. – NUTRITION AND DIETETICS

CHOICE BASED CREDIT SYSTEM

OUTCOME BASED EDUCATION

(For Candidates admitted in the Colleges affiliated
to Periyar University from 2021 - 2022 onwards)

CONTENTS PAGE

Sem	Paper Code	Title of the paper	Page No
I		Major Course I Human Physiology	15
I		Major Course practical I Human Physiology	17
II		Major Course II Food Science	18
II		Major Course practical II Food Science	21
III		Major Course III Nutritional Biochemistry	23
III		Major Course practical III Nutritional Biochemistry	26
III		SBEC I Food Preservation and Processing	27
IV		Major Course IV Principle of Human Nutrition	29
IV		Major Course practical IV Food Analysis and Quality Control	31
IV		SBEC II Food Standard and quality control	32
V		Major Course V Nutrition in Life Cycle	34
V		Major Course VI Advanced Dietetics	36
V		Major Course practical V Nutrition in Life Cycle	38
V		Elective Course I Public Health Nutrition	40
V		Elective Course II Basic in Research Methodology	43
V		SBEC III Bakery Science	45
V		SBEC IV Practical I Food preservation and Bakery	47
VI		Major Course VII Institutional Training	48
VI		Major Course VIII Food Microbiology	50
VI		Major Course IX Quantity Food Service and Physical Facilities	52
VI		Major Course practical VI Dietetics	54
VI		Elective Course III Nutritional for Sports and Fitness	55
VI		SBEC V Diet Counselling	57
VI		SBEC VI Entrepreneurship Development	58
ALLIED PAPERS (NUTRITION AND DIETETICS ONLY)			
III		Allied Course II General Home Science I	61
IV		Allied Course Practical II General Home Science	63
III/IV		Allied Course II General Home Science	64
NON-MAJOR ELECTIVE COURSES(For Other Major)			
III		NMEC I Basic Food Science	66
IV		NMEC II Basic Nutrition	68

Programme Outcomes

PO1. KNOWLEDGE

Students:

- Follow the developments in the field of nutrition and dietetics.
- Have knowledge and skill of the information and communication technologies essential to follow today's technological developments and improve themselves in this field.
- Acquire the skill of understanding the basic values and culture of the society they live in, adapting to these and changing themselves positively.
- Have knowledge of the concepts of physiology, nutritional biochemistry, nutrition, dietetics and other related to human health.

PO2. SKILLS

Students:

- Acquire the ability to apply the knowledge and skills they obtain to the situations encountered in both national and international level, as well as the ability of lifelong learning.
- Aware of professional ethics.
- Apply the scientific methods and techniques, as well as quality management processes related to their field.
- Acquire the skills of designing experiments/projects and conducting and interpreting them by analysing their results.

PO3. COMPETENCES

Students:

- Use the knowledge they acquire to increase the society's level of health and quality of life.
- Have the skills of planning the work processes in the fields of professional application, being a team member, collaborating and conducting collaborative studies.

Program Specific Outcomes (PSO)

Nutrition & Dietetics students will demonstrate the following learning

Objectives upon completion of this degree program

1. Understanding, critically assessing and knowing how to use and apply information sources related to nutrition, food, lifestyle and health.
2. Being familiar with nutrients, their function in an organism, bioavailability, requirements and recommended quantities, as well as the bases of energetic and nutritional balance.
3. Interpreting a nutritional diagnosis, evaluating nutritional aspects of a clinical record and implementing a dietary treatment plan.
4. Understanding the structure of food services, nutrition departments and hospital nutritionists, identifying and developing the functions of a nutritionist-dietician in a multidisciplinary team.
5. Perform food system management and leadership functions that consider sustainability in business, healthcare, community, and institutional areas



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DEPARTMENT OF NUTRITION AND DIETETICS

PROGRAMME OUTCOMES OF UNDERGRADUATE PROGRAMMES (2019 ONWARDS)

Name of the Programme: NUTRITION AND DIETETICS	
PO1	An ability to apply knowledge of nutrients present in food.
PO2	An ability to identify, formulate and develop proper diet plan.
PO3	Understanding, critically assessing and knowing how to use and apply information sources related to nutrition, food, lifestyle and health.
PO4	Understanding the basic processes involved in the preparation, transformation and conservation of foods for both animal and vegetable origin.
PO5	Interpreting and using food composition tables and databases properly.
PO6	Understanding the microbiology, parasitology and toxicology of food.
PO7	Examining and evaluating the relationship between food and nutrition in health and/or illness.
PO8	Applying scientific knowledge of physiology, pathophysiology, nutrition and food to individual or group diet planning and counselling, both in healthy (dietetics) and ill (diet therapy) clients, at every stage of life.
PO9	Designing and carrying out health status assessment protocols and identifying nutritional risk factors.



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PROGRAMME SPECIFIC OUTCOMES OF UNDERGRADUATE PROGRAMMES (2019 ONWARDS)

Name of the Programme: B.sc NUTRITION AND DIETETICS	
PSO1	Interpreting a nutritional diagnosis, evaluating nutritional aspects of a clinical record and implementing a dietary treatment plan.
PSO2	Understanding the structure of food services, nutrition departments and hospital nutritionists, and identifying and developing the functions of a nutritionist-dietician in a multidisciplinary team.
PSO3	Being familiar with nutrients, their function in an organism, bioavailability, requirements and recommended quantities, as well as the bases of energetic and nutritional balance.
PSO4	Being able to participate in health promotion activities and in the prevention of disorders and diseases associated with nutrition and lifestyles by carrying out food and nutrition educational activities.
PSO5	Interpreting a nutritional diagnosis, evaluating nutritional aspects of a clinical record and implementing a dietary treatment plan.
PSO6	Participating in the organisation, management and implementation of various food provision regimes, hospital nutritional support services and ambulatory dietetic-nutritional treatments.
PSO7	Being familiar with national and international health organisations, as well as different health systems, and the role of the dietician-nutritionist in these systems.



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COURSE OUTCOMES OF UNDERGRADUATE PROGRAMMES (2019 ONWARDS)

Name of the Programme: B.sc NUTRITION AND DIETETICS			
Course Code	Course Title	Course Outcome	
SEMESTER - I			
19UND01	HUMAN PHYSIOLOGY	CO1	To Understand the functions of parts of human body.
		CO2	To Gain the knowledge of different parts of the body.
		CO3	To Gain the knowledge on parts of the body and its diseases and disorders.
		CO4	To Plan diet towards the therapeutic approaches of the diseases.
		CO5	To understand the signs and symptoms of diseases.
		CO6	To Explain various components of build up of body.
SEMESTER - II			
19UND02	FOOD SCIENCE	CO1	To enable the students to understand the major chemical reactions that occur during food preparation and storage.
		CO2	Able to describe the techniques that can be used to monitor quality of raw ingredients and final products.
		CO3	To know the different types of cooking methods.



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		CO4	To study the components of ingredients.
		CO5	It helps to gain knowledge about balanced diet.
SEMESTER - III			
19UND03	NUTRITIONAL BIOCHEMISTRY	CO1	To enable students to capable of describing biochemical pathways relavent in nutrient metabolism.
		CO2	Capable of using selected biochemical techniques that are relavent for the investigation of the nutrient metabolism.
		CO3	Capable of using selected biochemical techniques relavent in nutritional biochemical research.
		CO4	To Provide nutritional advice based on sound scientific findings.
		CO5	Critically evaluate and apply current scientific findings in Nutrition and Health.
SEMESTER - IV			
19UND04	PRINCIPLES OF HUMAN NUTRITION	CO1	To enable students to educate others about holistic Nutrition, life style ,wellness and healthy living.
		CO2	Design and critique evidence based nutrition intervention for prevention and control of chronic diseases.
		CO3	To understand the nutrient presents in food.
		CO4	To know the functions of nutrient presents in food.
		CO5	Increase the ability to overcome deficiency.
		CO6	It helps to know foods to be included and avoided to plan a diet.
SEMESTER - V			



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19UND05	NUTRITION IN LIFE CYCLE	CO1	To enable students to better understanding on the physiological and metabolic functions of nutrients.
		CO2	To Gain indepth knowledge of the physiological and metabolic role of macronutrients, fat soluble and water soluble vitamins, electrolytes.
		CO3	To understand the physiological changes during every stages of life.
		CO4	To know what are main nutrients needed according to their age.
		CO5	It helps to plan a proper diet.
		CO6	It helps to know the dietary habit changes during every stage of life.
19UND06	DIETETICS AND COUNSELLING	CO1	To enable the students to become a Registered dietitian.
		CO2	Individual counselling and defending a position on issues impacting the nutrition and dietetics profession.
		CO3	Recognize the disease and prevention of the disease.
		CO4	It helps to avoid deficiency diseases.
		CO5	It helps to counsil the community about nutrients.
		CO6	It helps every students to manage the disease conditions.



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SEMESTER - VI

19UND07	FOOD MICROBIOLOGY	CO1	To enable the students to understand about morphological characteristics of different microorganism associated to food.
		CO2	To know about the spoilage and factors affecting the growth of microorganisms in food.
		CO3	To Impart the knowledge about the role of micro-organisms in fermentation of foods.
		CO4	To aware about hygiene and sanitation in food industry.
		CO5	It helps to prevent food borne diseases.
		CO6	It helps to know about good and bad micro organisms.
19UND08	ADVANCED DIETETICS	CO1	To enables the students to Assess the nutritional status of the community.
		CO2	Addressing the nutrition problems in the individual through proper evaluation.
		CO3	To plan diet according to their disease conditions.
		CO4	It also helps students to start a counselling centre seperately.
		CO5	To understand the concepts of diet and planning menu.
		CO6	It helps to stop the diseases from over growing.