

No.AC.2(S)/785/19-20

NOTIFICATION

Sub: Minor changes in the syllabus of V & VI Semester of Food Science & Nutrition subject of B.Sc. Home Science course from the Academic Year 2019-20.

- Ref:** 1. Decision of Board of Studies in Home Science (UG) meeting held on 15.12.2018.
2. Decision of the Faculty of Science & Technology Meeting held on 01.04.2019.
3. Decision of the Academic Council meeting held on 07.06.2019.

The Board of Studies in Home Science (UG) which met on 15.12.2018 has recommended to make minor changes in the syllabus V & VI Semester of Food Science & Nutrition subject B.Sc. Home Science course as follows from the Academic Year 2019-20.

- a. Changed the nomenclature of SEC 1 from **Culinary Science** to **Culinary Science – Principle and techniques** along with the minor changes in the content.
- b. SEC- 4 - **Consumer Education** is replaced by new course **Nutraceuticals and Health Foods**.

Semester	Skilled Enhancement Course	Existing Course Title	Modified course Title
V	SEC-1	Culinary Science	Culinary Science-Principle and techniques
VI	SEC-4	Consumer Education	Nutraceuticals and Health Foods.

Note: Since the above two papers are the open elective papers offered as a common paper from both disciplines of Food Science and Nutrition & Clinical Nutrition and Dietetics, the above changes are applicable to **Clinical Nutrition and Dietetics** too.

The Faculty of Science and Technology and Academic Council meeting held on 01.04.2019 and 07.06.2019 respectively have approved the above said proposal and the same is hereby notified.

Contents may be downloaded from the University Website i.e., www.uni-mysore.ac.in.

Draft approved by the Registrar

Sd/-
Deputy Registrar (Academic),

To:

1. The Registrar (Evaluation), University of Mysore, Mysore.
2. The Dean, Faculty of Science & Technology, DOS in Zoology, Manasagangotri, Mysore.
3. The Chairperson, BOS in Home Science, DOS in Home Science, Manasagangotri, Mysore.
4. The Chairperson, Department of Studies in Home Science, Manasagangotri, Mysore.
5. The Director, College Development Council, Moulya Bhavan, Manasagangotri, Mysore.
6. The Deputy/Assistant Registrar/Superintendent, AB and EB, UOM, Mysore.
7. The P.A. to the Vice-Chancellor/Registrar/Registrar (Evaluation), UOM, Mysore.
8. Office file.

SEC-I: CULINARY SCIENCE - PRINCIPLES & TECHNIQUES

1+1+0=2 credits/week

1+2+0=3 hrs/week

- UNIT1:** Introduction to cookery, Culinary history, aims and objectives of cooking 2
- UNIT 2:** Food ingredients and their nutritional value - Bulk/staple foods, (cereals, legumes, fruits and vegetables, eggs, fish and marine foods, milk and milk products) fats and oils, spices, flavoring agents, additives, beverages. 5
- UNIT 3:** Methods of cooking - Pre-processing of foods, cooking, roasting, frying, grilling, baking, boiling, microwaving, solar, infra-red cooking. 3
- UNIT 4:** Principles of cooking and role of food components - using specific examples for different types of foods such as Cereal and legume based dishes. Preparation of gravies and curries. Spices and flavouring ingredients. Baked products, Egg cookery, meat and fish Indian sweets and snacks Preserved products. 6

SEC-IV: NEUTRACEUTICALS AND HEALTH FOODS

1+1+0=2credits/week

1+2+0=3hrs/week

- UNIT1: Nutraceuticals:** 5
- Use of nutraceuticals in traditional health sciences. Their role in preventing /controlling diseases.
 - Definition, Classification, food and non food sources, mechanism of action. Role of omega-3, fatty acids, carotenoids, dietary fiber, phytoestrogens; glucosinates; organo-sulphur compounds as nutraceuticals.
- UNIT 2: Prebiotics and probiotics:** Usefulness of probiotics and prebiotics in gastro intestinal health and other benefits. Beneficiary microbes; prebiotic ingredients in foods; types of prebiotics and their effects on gut microbes. 3
- UNIT 3: Functional foods:** Definition, development of functional foods, benefits and sources of functional foods in Indian diet. Effects of processing conditions and storage; Development of biomarkers to indicate efficacy of functional ingredients; Research frontiers in functional foods. 5
- UNIT 4: Development of nutraceutical and functional foods:** Standards for health claims. Process of developing - preclinical & clinical studies, Marketing and Regulatory issues, Regulatory bodies in India. 3

UNIVERSITY OF MYSORE

Choice based credit system of Bachelor's Degree Programme in Clinical Nutrition and Dietetics as one option

Semester	Sl. No.	Code No.	Type of the Paper	Title of the paper	Credit pattern in L:T:P	Credit Value	Hours/Week L:T:P	Total Hours
I	1.	CND	DSC -I	Applied Physiology	3:1:2	6	3:2:4	9
II	2.	CND	DSC -II	Fundamentals of Nutrition	3:1:2	6	3:2:4	9
III	3.	CND	DSC -III	Elementary Food Science	3:1:2	6	3:2:4	9
IV	4.	CND	DSC -IV	Nutrition during Life Cycle	3:1:2	6	3:2:4	9
V	5.	CND	DSE -V	Dietetics-I	2:1:1	4	2:2:2	6
	6.	CND	DSE -VI	Food Service Management	2:1:1	4	2:2:2	6
	7.	CND	DSE-VII	Behavioral Nutrition	1:1:0	2	1:2:0	3
	8.	CND	DSE-VIII	Nutritional Biochemistry	1:1:0	2	1:2:0	3
	9.	CND	SEC - I	Culinary Science- Principles & Techniques	1:1:0	2	1:2:0	3
	10.	CND	SEC-II	Entrepreneurship	1:1:0	2	1:2:0	3
VI	11.	CND	DSE -IX	Dietetics- II	2:1:1	4	2:2:2	6
	12.	CND	DSE -X	Project Work/Placement	2:1:1	4	2:2:2	6
	13.	CND	DSE-XI	Dietetic Techniques and Patient Counseling	1:1:0	2	1:2:0	3
	14.	CND	DSE-XII	Public Health	1:1:0	2	1:2:0	3
	15.	CND	SEC-III	Nutrition and Fitness	1:1:0	2	1:2:0	3
	16.	CND	SEC-IV	Neutraceuticals and health foods	1:1:0	2	1:2:0	3

DSC-I:APPLIED PHYSIOLOGY**3+1+2=6 credits/week****3+2+4=9 hrs/week****UNIT 1: Introduction to human body****A. Skeletal system** - Functions and types of bones.**B. Blood** -Composition, RBC, WBC, Platelets – Structure and functions, erythropoiesis, coagulation of blood,blood groups and Rh factor.**C. Heart** - Structure, cardiac cycle, ECG and its significance, blood pressure and Factors affecting blood pressure.

14

UNIT 2:A. Digestive system

a. Structure and functions of the digestive organs and the accessory organs.

b. Process of digestion and absorption of Carbohydrates, Proteins and Fats.

B. Renal system

Structure and functions of the organs in the urinary system and nephron, composition of urine, maintaining fluid and electrolyte balance, and abnormal constituents in urine.

14

UNIT 3: A Respiratory system

Structure and function of the respiratory organs.

B. Organs of Special senses -

Tongue, Nose, Ear, Eye and skin- Structure and function.

C.Nervous system

Structure and function of a neuron, central nervous system, peripheral and autonomic nervous system.

14

UNIT 4: A. Endocrine system

Structure and functions - Hypo and hyper secretory effect of pituitary,pineal, thyroid, parathyroid, thymus, islets of Langerhans and the adrenal glands.

B. Reproductive system

Male and female organs of reproduction - Structure and function, puberty, menarche, and menopause.

Mammary glands -Structure and physiology of milk production. 14

APPLIED PHYSIOLOGY- PRACTICAL 4hrs/week

1.Identification of -Tissue slides, bone tissue,neuron,spinal cord, lung, blood, artery, kidney, nephron, ovary, testis, spermatozoa, mammary and endocrine glands.

2. Bleeding and clotting time (both methods).

3. Blood groups and Rh factor.

4. Estimation of hemoglobin (Sahli's method).

5. Enumeration of RBC, WBC, preparation of blood smear, differential count of WBC.

6. Determination of blood pressure by Palpatory and Auscultatory method - Demonstration.

7. Urine analysis - microscope observation, Ph, glucose and albumin.

8. Spotters-Instruments, reagents and Cellular component of Blood.

9. Visit to anatomy and pathology units.