As Per NEP 2020

University of Mumbai



Syllabus for		
Basket of OE		
Board of Studies in Home Science		
UG First Year Programme		
Semester	I	
Title of Paper	Credits	
I) Basic Principles of Human	2	
Physiology (Theory)		
From the Academic Year	2024-2025	

Sr. No.	Heading	Particulars
1	Description the course :	Basic Principles of Human Physiology (Theory)
	Including but Not limited to :	1. To impart knowledge and facilitate the development of skills and techniques in the basic area of Home Science required for personal, professional and community advancement.
		2. To inculcate in students, values and attitudes that enhance personal, life skills and family growth and to sensitize them to various social issues for the development of a humane society.
		3. To promote in students a scientific temper and competencies in research to enable contributions to the national and international knowledge base in Home Science and allied fields.4. In sum, to empower our students such that they can effect
		positive changes at multiple levels.
2	Vertical :	Major/Minor/√ Open Elective /Skill Enhancement / Ability Enhancement/Indian Knowledge System
3	Type:	Theory
4	Credit:	2 credits (1 credit = 15 Hours for Theory)
5	Hours Allotted :	30 Hours
6	Marks Allotted:	50 Marks
7	various organs of the body. 2. Comprehend newer and applied	e of the course objectives) In anatomy and physiology; and the structure and functions of Id concepts of human physiology. In of the principles of physiology in health and disease

8 Course Outcomes: (List some of the course outcomes)

- **1.** Gain the basic knowledge of human anatomy and physiology.
- **2.** Understand the various interactions between physiological processes in the body.
- **3.** Be able to define, explain and relate the structure and functions of cells, tissues and organ systems of the human body.
- 4. Have the skills to apply the concepts of physiology to health.

9 Modules:- Per credit One module can be created

Module 1:

Introduction to Human Body

· Organs, tissue and cells, cell structure, organelles and their functions.

Cardiovascular System

- · Blood Composition, functions, blood groups
- · Heart Structure, blood vessels, cardiac cycle
- Circulation of blood, blood pressure, hypertension and heart attack.

Lymphatic System

- · Structure and function of lymph, lymph vessels and nodes.
- Role of lymphatic system in disease and immunity.

Digestive System

- Structure and functions of parts of digestive system stomach, liver, gall bladder, pancreas
- · Digestion and absorption of proteins, fats and carbohydrates.
- · Endocrine System
- Overview of endocrine glands and their functions

Module 2:

Nervous System

- Structure and function of neurons, brain and spinal cord.
- · Hypothalamus and its functions.

Skeletal System

Structure, formation and types of bones.

Respiratory System

- · Structure and functions of respiratory organs.
- · Role of lungs in exchange of gases.

Renal and Urinary System

- · Structure and function of kidney
- · Factors affecting urine formation and excretion.

Reproductive System

· Overview of structure and function of male and female reproductive system.

10 **Text Books:** 1. 2. 3. 4. 11 **Reference Books:** Vaz, M., Raj, T. (2016). Guyton & Hall Textbook of Medical Physiology - E-Book: A South Asian Edition. India: Elsevier Health Sciences. Hall, J. E. (2015). Guyton and Hall Textbook of Medical Physiology E-Book. United Kingdom: Elsevier Health Sciences Makari, H. K., Gurumurthy, H., Sowmya, S. V. (2009). A Textbook of Human Physiology. India: I.K. International Publishing House Pvt. Limited. Basics of Medical Physiology for Nursing Students. (2019). India: Repro India Limited. Fundamentals of Anatomy and Physiology: For Nursing and Healthcare Students. (2020). United Kingdom: Wiley. Shankar, N. D., Vaz, M. (2017). Textbook of Anatomy and Physiology for Nurses - E-Book. India: Elsevier Health Sciences 12 **Internal Continuous External, Semester End Examination 60% Individual Passing in Internal and External** Assessment: 40% **Examination** 13 **Continuous Evaluation through:** Quizzes, Class Tests, presentation, project, role play, CONTINUOUS INTERNAL Marks **EVALUATION** creative writing, assignment etc.((planned as per the need of the course) at least 3) Class participation/Quiz/Review of literature 20 and guided discussions/Q&A sessions Class tests/PPT Presentations and relevant 20 planned assignments **Total Marks for Internal Assessment** 40 SEMESTER-END THEORY EXAMINATION All questions are compulsory with internal choice. Question 1 – Unit 1 12 Question 2 – Unit 2 12 Question 3 – Unit 3 12 Question 4 – Unit 4 12 Question 5 – From Multiple Units 12 **Total Marks for Semester End Examination** 60 **Evaluation for Theory (2 Credits for 50 Marks)**

CONTINUOUS INTERNAL

EVALUATION

Marks

(planned as per the need of the course)	
Class participation/Quiz/Review of literature and guided discussions/Q&A sessions	10
Class tests/PPT Presentations and relevant planned assignments	10
Total Marks for Internal Assessment	20
SEMESTER-END THEORY EXAMINATION	
All questions are compulsory with internal choice.	
Question 1 – Unit 1	10
Question 2 – Unit 2	10
Question 3 – From Multiple Units	10
Total Marks for Semester End Examination	30

Evaluation for Practical (2 Credits for 50 Marks)

CONTINUOUS INTERNAL	Marks
EVALUATION	
(planned as per the need of the course)	
Class Participation/Internal Assessment during	10
laboratory work/experiments/practical tasks	
Journal/Portfolio/Presentation/Reports/Case	10
papers/Assignments	
Total Marks for Internal Assessment	20
SEMESTER-END PRACTICAL EXAMINA	TION
All questions are compulsory with internal ch	oice.
Question 1 - Unit 1	10
Question 2 - Unit 2	10
Journal/Portfolio/Report/Viva-Voce	10
Total Marks for Semester End Examination	30

14 Format of Question Paper: for the final examination

THEORY EXAMINATION

Marks: 30		1 Hour
Upto 50% choice to be	e given within each Ques	stion.
Questions may be divi	ded into sub questions a	s a, b, c
Allocation of marks depends on the weightage of the topics in the units; no sub-question		
should be of 1 mark or less		
Q1 Unit 1		10 marks
Q2 Unit 2		10 marks

Q3 Mix of Unit 1 and 2	10 marks
TOTAL	30 Marks

Marks: 60	2 Hours	
Up to 50% choice to be given within each Question.		
Questions may be divided into sub questions as a, b, c		
Allocation of marks depends on the weightage of the topics in the units; no sub-question		
should be of 2 marks or less		
Q1 Unit 1	12 marks	
Q2 Unit 2	12 marks	
Q3 Unit 3	12 marks	
Q4 Unit 4	12 marks	
Q5 Mix of all units	12 marks	
TOTAL	60 Marks	

PRACTICAL EXAMINATION

Marks: 30	2 Hours
Q1 Unit 1	10 Marks
Q2 Unit 2	10 Marks
Journal/Portfolio/Report/Viva-Voce	10 Marks
TOTAL	30 Marks

Sign of the BOS Chairman Name of the Chairman Name of the BOS Sign of the Offg. Associate Dean Name of the Associate Dean Name of the Faculty Sign of the Offg. Dean Name of the Offg. Dean Name of the Faculty