

Tripura University

(A Central University)
Suryamaninagar
West Tripura

Syllabus for
Four Years Undergraduate Programme Subject:
Human Physiology
(As per NEP-2020)

1st Semester (Interdisciplinary)

Revised as on October, 2025

HP-1st Semester IDC HP-101ID Total Marks-100 (IA=40+ESE=60) Credit-4

Unit-I The Unit of life

- 1. Basic concept of cell>Tissue>Organ>System.
- 2. Description of cell and its components, functional morphology of cell
- 3. Ion channels, receptors, carriers, and intercellular communication
- 4. Human muscular and skeletal system
- 5. Basic concept of homeostasis and homeostatic control

Unit -II Blood and Cardiovascular system

- 1. Blood- its components and function
- 2. Components of circulatory system: heart-structure and function, blood vessels,
- 3. Cardiac cycle and Cardiac Output
- 4. Blood Pressure-its regulation, Hypertension

Unit-III- Respiratory System

- 1. Respiratory System-its components, structure of lungs
- 2. Mechanism of Respiration
- 3. Regulation of Respiration
- 4. Lung Volumes and Capacity

Unit-IV- Neurophysiology-

- 1. Nerve, Muscle and Neuro-Muscle Physiology
- 2. Organization of nervous system-receptors and synapse
- 3. Sensory and motor nervous systems
- 4. Fundamental physiology of vision
- 5. Fundamental physiology of audition