

# **MOHAN BABU UNIVERSITY**

Sree Sainath Nagar, Tirupati – 517 102



**MBU**  
**MOHAN BABU**  
**UNIVERSITY**

DREAM. BELIEVE. ACHIEVE

## **SCHOOL OF PARAMEDICAL AND HEALTH SCIENCES**

### **Bachelor of Physiotherapy**

#### **CURRICULUM AND SYLLABUS**

*(For 2022-23 Admitted Students)*

**FULLY FLEXIBLE CHOICE BASED CREDIT SYSTEM (FFCBCS)**



# **MOHAN BABU UNIVERSITY**

## **Vision**

To be a globally respected institution with an innovative and entrepreneurial culture that offers transformative education to advance sustainability and societal good.

## **Mission**

- ❖ Develop industry-focused professionals with a global perspective.
- ❖ Offer academic programs that provide transformative learning experience founded on the spirit of curiosity, innovation, and integrity.
- ❖ Create confluence of research, innovation, and ideation to bring about sustainable and socially relevant enterprises.
- ❖ Uphold high standards of professional ethics leading to harmonious relationship with environment and society.

## **SCHOOL OF PARAMEDICAL AND HEALTH SCIENCES**

### **Vision**

To be the global center of excellence for paramedical and allied health science education, research, innovation, incubation, consultancy and public service.

### **Mission**

- ❖ Inspire the experts of paramedical and allied health sciences of tomorrow to take on the public health challenges of our society.
- ❖ Train the students with fundamental knowledge of paramedical and allied health sciences, skills set and positive attitude for creating innovative solutions to serve industry and community through congenial learning environment with contemporary academic programs, state of the art infrastructure facilities and community health programs.
- ❖ Facilitate budding paramedical and allied health science experts with the best research-innovation-incubation-start-up ecosystem to realize their fullest potential for sustainable businesses.
- ❖ Encourage faculty and staff to excel in their respective domains of expertise and demonstrate the best of their abilities by way of continuing education, research support and consultancy.

## Bachelor of Physiotherapy

### PROGRAM EDUCATIONAL OBJECTIVES

After few years of graduation, the graduates of BPT will:

- PEO1.** Evolve as entrepreneur or be employed by acquiring skills in patient care handling including communication skills, confidence, Clinical reasons, Counseling and research.
- PEO2.** Demonstrate professional autonomy in physiotherapy practice at organization and community level and core competencies in medical subjects to address various medical surgical conditions of patients and for pursuing advanced studies in the field of Physiotherapy and its allied areas.
- PEO3.** Exhibit the core concepts of clinical ethics and law through lifelong learning to their practice as physiotherapists.

### PROGRAM OUTCOMES

On successful completion of the Program, the graduates of BPT Program will be able to:

- PO1. Knowledge:** Study and apply concepts theories and practices of paramedical and Allied health sciences to gain the essential knowledge.
- PO2. Analysis:** To identify, analyze and evaluate various experiences and perspectives using knowledge of paramedical & Allied Health sciences for substantiated conclusions.
- PO3. Tools & Techniques:** To create, select, and apply appropriate techniques, resources and modern tools with an understanding of the limitations in Health care system.
- PO4. Environment and Sustainability:** Understand the impact of Health care professionals in environmental contexts and demonstrate the knowledge for sustainable development.
- PO5. Ethics and Society:** Apply the ethical principles of health care practices for sustainable development of society
- PO6. Individual and teamwork:** Function effectively as an individual, and as a member or leader in diverse teams, and multidisciplinary settings.
- PO7. Effective Communication:** Communicate effectively on Paramedical & allied Health care activities with the treating patient, community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- PO8. Project and Finance Management:** Demonstrate knowledge and understanding the management principles and apply these to one's own work to manage projects in multidisciplinary health care system.
- PO9. Entrepreneurship:** Entrepreneur and leadership skills to practice independently as well as in collaboration with the interdisciplinary healthcare team.
- PO10. Life-long learning:** Adapt to the changes and advancements in technology and engage in independent and lifelong learning

## **PROGRAM SPECIFIC OUTCOMES**

On successful completion of the Program, the graduates of BPT program will be able to:

- PSO1.** Apply Evidence Based Physiotherapy Practice with appropriate critical and clinical reasoning in design, development and implementation of application-oriented physiotherapy solutions
- PSO2.** Develop the ability to collect history, perform relevant clinical assessment and frame appropriate electrotherapeutic and exercise therapy management for the patients.
- PSO3.** Comprehend the fundamentals of physiotherapy skills and undertake advanced level of knowledge to analyze and create techniques to solve real life problems.
- PSO4.** Apply practice-based research to assess a patient with impairments, functional disabilities and conclude based on his or her medical problems.
- PSO5.** Develop the knowledge in technical or professional careers in various pharmaceutical industry or Health care system through excellent real time exposure to rigorous education

## Bachelor of Physiotherapy

### Basket Wise - Credit Distribution

S. No.	Basket	Credits (Min. - Max.)
1	SCHOOL CORE	60-75
2	PROGRAM CORE	85-95
3	PROGRAM ELECTIVE	36-54
4	UNIVERSITY ELECTIVE	9-12
<b>TOTAL CREDITS</b>		<b>Min. 226</b>

**SCHOOL CORE (60-75 Credits)**

Course Code.	Title of the Course	Lecture	Tutorial	Practical	Project based Learning	Credits	Pre-requisite
		L	T	P	S	C	
22PT102001	Anatomy-1	6	-	4	-	8	-
22PT102002	Physiology-1	5	-	2	-	6	-
22PT101001	General and Health Psychology	3	-	-	-	3	-
22LG101406	Professional English	2	-	-	-	2	-
22PT102003	Sociology	3	-	2	-	4	-

**PROGRAM CORE (85-95 Credits)**

Course Code.	Title of the Course	Lecture	Tutorial	Practical	Project based Learning	Credits	Pre-requisite
		L	T	P	S	C	
22PT101002	Introduction to Health Care System and Physiotherapy Role	2	-	-	-	2	-
22PT101003	Basic Ethics and Regulation of Physiotherapy	2	-	-	-	2	-

## SCHOOL CORE

<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>S</b>	<b>C</b>
<b>22PT102001</b>	<b>ANATOMY -1</b>	6	-	4	-	8
<b>Pre-Requisite</b>	-					
<b>Anti-Requisite</b>	-					
<b>Co-Requisite</b>	-					

**COURSE DESCRIPTION:** This course provides a detailed discussion on the structure of human body which is essential for clinical studies.

**COURSE OUTCOMES:** After successful completion of the course, students will be able to:

- CO1.** Understand the basics of anatomy.
- CO2.** Study and Apply the Clinical knowledge on the Upper and Lower Extremity.
- CO3.** Demonstrate the features of Thorax & Vertebral column
- CO4.** Understand the basics of general histology
- CO5.** Demonstrate the concepts of anatomy in embryology.
- CO6.** Work independently or in team to solve problems with effective communication.

### CO-PO Mapping Table:

Course Outcomes	Program Outcomes									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
<b>CO1</b>	3	1	-	-	-	2	-	-	-	-
<b>CO2</b>	3	2	2	-	-	1	-	-	-	-
<b>CO3</b>	3	3	-	-	-	-	-	-	-	-
<b>CO4</b>	3	2	-	-	-	-	-	-	-	-
<b>CO5</b>	3	3		-	-	3	3	-	-	2
<b>CO6</b>	-	-	-	-	-	3	3	-	-	3
<b>Course Correlation Mapping</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>2</b>

*Correlation Levels: 3: High; 2: Medium; 1: Low*

## **COURSE CONTENT**

### **Module 1: Introduction**

**(10 Periods)**

**Introduction of Anatomy:** Medical terminology, Anatomical positions, Axis and Planes, Skeleton - Axial and Appendicular skeleton, Joints, Muscles, Nerves and its Clinical importance.

**Systemic** - Nervous system, Digestive system, Urinary system, Reproductive system, Respiratory system.

### **Module 2: Upper Extremity**

**(20 Periods)**

**Bones:** Clavicle, Scapula, Humerus, Radius, Ulna, Carpals, Metacarpals, Phalanges.

**Muscles:** Pectoral muscles, scapular muscles, Deltoid muscle, muscles of arm, muscles of forearm and hand

**Nerves:** Brachial plexus, Radial nerve, median nerve, Ulnar nerve, axillary nerve and musculocutaneous

**Blood vessels:** subclavian artery, axillary artery, brachial artery, radial artery, ulnar artery, and arterial arches of hand. Venous drainage of upper limb, lymphatic drainage of upper limb.

**Joints:** Shoulder joint, elbow joints, radio ulnar joint, wrist joint and joints of the hand.

**Regional:** Breast, pectoral region, axilla, front of arm, back of arm, cubital fossa, front of fore arm, back of fore arm, palm and dorsum of hand.

### **Module 3: Lower Extremity**

**(20 Periods)**

**Bones:** Hip bone, femur, tibia, fibula, patella, tarsals, metatarsals and Phalanges, & arches of foot.

**Muscles:** Gluteal muscles, muscles of thigh, muscles of leg and foot.

**Nerves:** Lumbosacral plexus, coccygeal plexus, sciatic nerve, common peroneal nerve, tibial nerve, femoral nerve, saphenous nerve, obturator nerve and sural nerve.

**Blood vessels:** femoral artery, popliteal artery, tibial artery, and arterial arches of foot. Venous drainage of the lower limb and lymphatic drainage of lower limb

**Joints:** Hip Joint, Knee joint, Ankle joint, joints of the foot

**Regional:** Gluteal region, inguinal region, front and back of the thigh, Femoral triangle, medial side of the thigh (Adductor canal), lateral side of the thigh, popliteal fossa, anterior and posterior compartment of leg, sole of the foot.

### **Module 4: Thorax & Vertebral column**

**(20 Periods)**

- i. **Bones:** Cervical, thoracic, lumbar, sacral and coccygeal vertebrae (typical & atypical), ribs (typical & atypical), and sternum.
- ii. **Muscles:** Intercostals, serratus anterior muscle, latissimus dorsi muscle, and diaphragm.
- iii. **Nerves:** intercostal nerve.
- iv. **Blood vessels:** intercostal vessels, azygous system of veins, aorta, and pulmonary trunk.
- v. **Joints:** joints of thorax and its movements.
- vi. **Soft parts:** mediastinum & its contents, pleura & lungs, pericardium & heart, trachea, oesophagus, & thoracic duct.

### **Module 5: General Histology**

**(10 Periods)**

Microscope, Cell, common objects, study of the basic tissues of the body; Epithelium, Connective Tissue, Cartilage; Bone; Muscular tissue; Nervous Tissue; Blood vessels, lymphoid tissue, Glands, Teeth, Skin and its appendages.



## **Module 6: General Embryology**

**(10 Periods)**

**Cell division, Gametes**, gametogenesis, fertilization and formation of the Germ layers and their derivations, pharyngeal arches & its derivatives.

Development of skin, Fascia, blood vessels, lymphatic.

Development of bones, axial and appendicular skeleton and muscles.

**Total Periods: 90**

## **EXPERIENTIAL LEARNING**

### **LIST OF EXPERIMENTS:**

1. Upper Extremity including surface anatomy.
2. Lower Extremity including surface anatomy.
3. Demonstration of thoracic viscera and vertebral column.
4. Demonstration of general histology slides.
5. Demonstration of general embryology charts.

## **RESOURCES**

### **BOOKS:**

1. B.D Chaurasia's Human Anatomy-Regional and applied; CBS publishers, vol 1,2,3,4 Edition 9(2022).
2. Snell[Richard S],Clinical Anatomy for medical students; 6<sup>th</sup> Edition , 2021
3. Inderbir Singh's book of Anatomy; vol 1,2,3, 3<sup>rd</sup> Edition,2020
4. Inderbir Singh's Text book of Human Histology, Jaypee Publishers, 10<sup>th</sup> Edition, 2022
5. Inderbir Singh's Text book of Human Embryology, Jaypee Publishers, 12<sup>th</sup> Edition, 2022
6. A.k. Datta, Essentials of human anatomy; Current books international publishers; Volume: 1,2,3,4; 10<sup>th</sup> Edition 2019.
7. Richard Tunstall and Susan standing, Gray's Anatomy - The anatomical basis of clinical practice, Elsevier publishers, 42<sup>nd</sup> Edition 2020.
8. Rachel koshi, Cunningham's manual of practical Anatomy, Oxford University Press publishers, Volume - 1,2,3; 16<sup>th</sup> Edition 2017.

### **VIDEO LECTURES:**

1. <https://www.youtube.com/watch?v=f6rZw7QkGLw>
2. [https://www.youtube.com/watch?v=15k5fajCN\\_w](https://www.youtube.com/watch?v=15k5fajCN_w)
3. <https://www.youtube.com/watch?v=UMTDmP81mG4>
4. <https://www.youtube.com/watch?v=WPjqgaMmOTE>
5. <https://www.youtube.com/watch?v=0GSRbmcNh3A>
6. <https://www.youtube.com/watch?v=4YKvVeVMmEE>

### **WEB RESOURCES:**

1. <https://byjus.com/biology/anatomy-and-physiology/>
2. <https://www.histologyguide.com/about-us/sorenson-atlas-of-human-histology-chapters-1-and-14.pdf>

## SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22PT102002	PHYSIOLOGY-1	5	-	2	-	6
Pre-Requisite	-					
Anti-Requisite	-					
Co-Requisite	-					

**COURSE DESCRIPTION:** This course provides a detailed in-depth discussion on fundamental reactions of living organisms specific to human body. It emphasizes the concepts of cell, primary tissue, connective tissue, skin, muscle, nervous tissue, blood, lymphoid tissues, respiration, blood vessels, circulation, cardiac cycle, systemic circulation, gastrointestinal tract, kidneys, uterus, urinary tract, pregnancy and endocrine system.

**COURSE OUTCOMES:** After successful completion of the course, students will be able to:

- CO1** Understand the basic concepts of General physiology of cell and body fluids
- CO2** Apply various techniques for estimation of blood cells.
- CO3** Understand the classification and mechanism of nerve muscle physiology.
- CO4** Analyze the mechanism of cardiovascular system and its effects during exercises
- CO5** Demonstrate the various mechanisms of respiration with appropriate technique.
- CO6** Work independently or in team to solve problems with effective communication.

### CO-PO Mapping Table:

Course Outcomes	Program Outcomes									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
<b>CO1</b>	3	2	3	-	-	-	-	-	-	-
<b>CO2</b>	3	3	2	-	-	-	-	-	-	-
<b>CO3</b>	3	3	2	-	-	-	-	-	-	-
<b>CO4</b>	3	3	2	-	-	1	-	-	-	-
<b>CO5</b>	3	3	-	-	-	1	-	-	-	-
<b>CO6</b>	-	-	-	-	-	3	3	-	-	2
<b>Course Correlation Mapping</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>2</b>

*Correlation Levels: 3: High; 2: Medium; 1: Low*

## **COURSE CONTENT**

### **Module 1: General Physiology (10 Periods)**

**General Physiology:** Cell structure and functions, cell junction, Transport across the cell membrane, Homeostasis, fluid & electrolyte balance, acid – base balance.

### **Module 2: Blood & Body fluids (20 Periods)**

**Introduction:** Composition and functions of blood, body fluids, Plasma: Composition, Plasma proteins, Haemopoiesis-Erythropoiesis, Leukopoiesis and Thrombopoiesis.

**RBC:** Count and its variations, Haemoglobin –structure, function and derivatives, Anemia, types of Jaundice, PCV, ESR.

**Blood indices:** MCV, MCHC and MCH

**WBC:** Classification, Morphology, functions, count, its variation of each, Immunity.

**Platelets:** Morphology, functions, count, its variations

**Blood Groups:** Landsteiner's law, Types, significance, determination, Erythroblastosis foetalis.

**Lymph:** Composition, formation, circulation and functions.

#### **Reticulo-endothelial system**

**Others :** Hemostatic mechanisms, Blood coagulation–factors, mechanisms, disorders, Anticoagulants, Blood Transfusion: Cross matching, Indications and complications.

### **Module 3: Nerve Muscle Physiology (15 Periods)**

**Introduction: Muscle**–Classification, structure of skeletal muscle, properties of skeletal muscle, changes during muscle contraction- Resting membrane potential, Action potential, smooth muscle. **Nerve**–Structure and functions of neurons, Classification, Neuroglia, Properties of nerve, transmission of impulse through nerve fiber, Nerve injury – degeneration and regeneration.

**Neuromuscular junction:** Structure, Neuromuscular transmission, myasthenia gravis. Excitation- Contraction coupling.

**Electromyogram & Disorders of skeletal muscle.**

**Endurance of a muscle.**

### **Module 4: Cardiovascular System (15 Periods)**

Cardiac muscle & its properties, types of circulation - systemic and pulmonary. Cardiac cycle- atrial events, ventricular events, pressure changes, volume changes; Heart sounds, Cardiac murmur, Electrocardiogram, Arrhythmia, Artificial pacemaker, Cardiac output – stroke volume, minute volume, cardiac index, ejection fraction, variations in cardiac output, factors maintaining cardiac output, measurement of cardiac output, cardiac catheterization; Heart rate – normal values, regulation of heart rate, factors affecting heart rate; Blood pressure – arterial pressure, venous pressure, variations, determinants, regulation, measurement, applied physiology; Coronary circulation, foetal circulation, cerebral circulation, hemorrhage, circulatory shock, Heart failure, Windkessel effect, and Autoregulation.

**Cardiovascular changes during exercise.**

## **Module 5: Respiratory system**

**(15 Periods)**

Physiological anatomy of respiratory tract, pulmonary circulation.

Mechanics of respiration- muscles, movements, respiratory pressures, compliance; Ventilation-pulmonary and alveolar ventilation, dead space, ventilation-perfusion ratio; Pulmonary function tests - lung volumes & capacities and its measurements, vital capacity; Transport of respiratory gases - oxygen and carbon dioxide transport, dissociation curves, respiratory quotient; Regulation of respiration - Nervous and chemical mechanism; Disturbances of respiration - Apnea, hyperventilation, hypoventilation, hypoxia, oxygen toxicity, hypercapnea, hypocapnea, asphyxia, dyspnea, periodic breathing, cyanosis, CO poisoning, atelectasis, pneumothorax, pneumonia, asthma, tuberculosis, emphysema, pleural effusion, pulmonary oedema; High altitude & space physiology, Deep sea physiology, effects of exposure to heat and cold.

**Reflexes:** Cough reflex, sneezing reflex.

**Artificial respiration.**

**Effects of exercise on respiration**

**Total Periods: 75**

### **EXPERIENTIAL LEARNING**

#### **LIST OF EXPERIMENTS:**

1. Study of Microscope and its uses
2. Determination of RBC count
3. Determination of WBC count
4. Differential leukocyte count
5. Estimation of haemoglobin
6. Calculation of blood indices
7. Determination of blood groups
8. Determination of bleeding time
9. Examination of Radial pulse.
10. Recording of blood pressure
11. Examination of chest for lungs
12. Determination of vital capacity & lung volumes by spirometer
13. Examination of chest for heart
14. Recording of blood pressure

### **RESOURCES**

#### **BOOKS:**

1. Guyton and hall-Text book of medical physiology-Elsevier publisher, 14<sup>th</sup> Edition, 2020
2. Chaudhuri -Concise Medical Physiology-Central Publishers of books, 2019
3. K.Sembulingam -Text book of Physiology, JP publishers-9<sup>th</sup> Edition, 2022
4. Anil baransinghamahapatra, gargisingha Mahapatra, Essentials of Medical Physiology, Current Books International Publishers, 5<sup>th</sup> Edition, 2021
5. G K Pal, Text book of medical physiology, Elsevier Publishers, 4<sup>th</sup> Edition, 2021
6. A K Jain, text book of physiology, Avichal Publishing Company, Vol – 1 & 2, 9<sup>th</sup> Edition
7. D Venkatesh, H Sudhakar, Text book of medical physiology, Wolters Kluwer India publishers, 3<sup>rd</sup> Edition, 2015

**VIDEO LECTURES:**

1. [https://youtu.be/It\\_cv56Dxtk](https://youtu.be/It_cv56Dxtk)
2. [https://youtu.be/VIrdH\\_3RKKk](https://youtu.be/VIrdH_3RKKk)

**WEB RESOURCES:**

1. <https://library.medschl.cam.ac.uk/e-books/>
2. <https://www.ncbi.nlm.nih.gov/>

## SCHOOL CORE

Course Code	Course Title	L	T	P	S	C
22PT101001	GENERAL AND HEALTH PSYCHOLOGY	3	-	-	-	3
<b>Pre-Requisite</b>	-					
<b>Anti-Requisite</b>	-					
<b>Co-Requisite</b>	-					

**COURSE DESCRIPTION:** This course provides a detailed discussion on various behavioural patterns of individuals, theories of development, normal and abnormal aspects of motor, social, emotional and language development, communication and interaction skills appropriate to various age groups.

**COURSE OUTCOMES:** After successful completion of the course, students will be able to:

- CO1.** Understand the fundamental concepts of psychology and its branches.
- CO2.** Acquire knowledge on basic concepts of growth and development of personality.
- CO3.** Apply the concepts of Attention, Perception and Sensation to assess the psychology of humans.
- CO4.** Understand the fundamental concepts of conflicts, frustration and its type.
- CO5.** Analyse the theoretical concepts of Intelligence and Emotions.
- CO6.** Acquire knowledge on basic theories of learning and types of personality.

### CO-PO Mapping Table:

Course Outcomes	Program Outcomes									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
<b>CO1</b>	3	2	2	-	-	1	-	-	-	-
<b>CO2</b>	3	3	-	-	-	-	-	-	-	-
<b>CO3</b>	2	3	1	-	-	1	-	-	-	-
<b>CO4</b>	3	2	2	-	-	-	-	-	-	-
<b>CO5</b>	3	2	2	-	-	-	-	-	-	-
<b>CO6</b>	2	2	-	-	-	2	-	-	-	-
<b>Course Correlation Mapping</b>	<b>3</b>	<b>2</b>	<b>2</b>	-	-	<b>1</b>	-	-	-	-

*Correlation Levels: 3: High; 2: Medium; 1: Low*

## **COURSE CONTENT**

### **Module 1: Introduction to Psychology**

**(07 Periods)**

**Schools:** Structuralism, functionalism, behaviourism, Psychoanalysis.

**Methods:** Introspection, observation, inventory and experimental method.

**Branches:** pure psychology and applied psychology; Psychology and physiotherapy

### **Module 2: Growth and Development**

**(08 Periods)**

**Life span:** Different stages of development (Infancy, childhood, adolescence, adulthood, middle age, old age).

**Heredity and environment:** Role of heredity and environment in physical and psychological development, "Nature v/s Nurture controversy

### **Module 3: Attention, Perception and Sensation**

**(08 Periods)**

**Sensation:** Vision, Hearing, Olfactory, Gustatory and Cutaneous sensation, movement, equilibrium and visceral sense.

**Attention:** Types of attention, Determinants of attention (subjective determinants and objective determinants).

**Perception:** Gestalt principles of organization of perception (principle of figure ground and principles of grouping), factors influencing perception (past experience and context).

**Illusion and hallucination:** Different types.

### **Module 4: Motivation, Frustration and Conflict**

**(08 Periods)**

**Motivation:** Motivation cycle (need, drive, incentive, reward), Classification of motives, Abraham Maslow's theory of need hierarchy

**Frustration:** sources of frustration

**Conflict:** types of conflict, Management of frustration and conflict

### **Module 5: Intelligence and Emotions**

**(08 Periods)**

Three levels of analysis of emotion (physiological level, subjective state, and overt behaviour).

Theories of emotion

Stress and management of stress.

**Intelligence:** Theories of intelligence, Distribution of intelligence, Assessment of intelligence

**Reasoning:** Deductive and inductive reasoning.

**Problem solving:** Rules in problem solving (algorithm and heuristic)

**Creative thinking:** Steps in creative thinking, traits of creative people.

## **Module 6: Personality and Learning**

**(06 Periods)**

### **Factors effecting learning.**

**Theories of learning:** trial and error learning, classical conditioning, Operant conditioning, insight learning, social learning theory.

**The effective ways to learn:** Massed/Spaced, Whole/Part, Recitation/Reading, Serial/Free recall, Incidental/Intentional learning, Knowledge of results, association, organization, and mnemonic methods.

### **Personality**

**Approaches to Personality:** type & trait, behaviouristic, psychoanalytic and humanistic approach.

**Personality Assessment:** observation, situational test, questionnaire, rating scale, interview, and projective techniques.

**Defence Mechanisms:** denial of reality, rationalization, projection, reaction formation, identification, repression, regression, intellectualization, undoing, introjection, acting out.

**Total Periods: 45**

## **EXPERIENTIAL LEARNING**

1. Demonstration of various behavioral patterns and disorders.
2. Illustration on psychosocial disorders.
3. Demonstration of different personalities and disorders.
4. Analysis of intelligence quotient.
5. A clinical study on counselling the patient.
6. Demonstrating the concepts of problem solving in psychosocial problems.

*(Note: It's an indicative one. The course instructor may change the activities and the same shall be reflected in CHO.)*

## **RESOURCES**

### **BOOKS:**

1. Robert A Baron -Text Book Psychology, Jaypee Publishers, 2020
2. T.Ramalingam, Psychology for Physiotherapist – Jaypee Publishers 2<sup>nd</sup> Edition, 2019
3. Niraj Ahuja-Text Book of Psychiatry-Jaypee Publishers, 4<sup>th</sup> Edition, 2019

### **VIDEO LECTURES:**

1. [www.britannica.com](http://www.britannica.com)
2. [www.alliant.edu](http://www.alliant.edu)

### **WEB RESOURCES:**

1. [www.psychology.com](http://www.psychology.com)
2. <http://www.guides.lib.uw.edu>



## SCHOOL CORE

<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>S</b>	<b>C</b>
<b>22LG101406</b>	<b>PROFESSIONAL ENGLISH</b>	2	-	-	-	2
<b>Pre-Requisite</b>	-					
<b>Anti-Requisite</b>	-					
<b>Co-Requisite</b>	-					

**COURSE DESCRIPTION:** This course deals with selected literary works of eminent writers, exercises on speaking, reading comprehension skimming and scanning, vocabulary, grammar, pronunciation, and conversation practice.

**COURSE OUTCOMES:** After successful completion of the course, students will be able to:

- CO1.** Demonstrate knowledge of literary works of various pieces of eminent writers.
- CO2.** Adapt general and technical vocabulary in communication.
- CO3.** Apply grammatically correct English in writing.
- CO4.** Analyze texts using reading techniques.
- CO5.** Apply different communication styles in various situations.

### CO-PO Mapping Table:

Course Outcomes	Program Outcomes									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
<b>CO1</b>	3	-	-	-	-	-	3	-	-	-
<b>CO2</b>	2	2	-	-	-	-	3	-	3	-
<b>CO3</b>	2	2	-	-	3	-	3	-	3	-
<b>CO4</b>	2	3	2	-	2	-	3	-	3	-
<b>CO5</b>	2	2	-	-	3	-	3	-	3	-
<b>Course Correlation Mapping</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>3</b>	<b>-</b>	<b>3</b>	<b>-</b>	<b>3</b>	<b>-</b>

*Correlation Levels: 3: High; 2: Medium; 1: Low*

## **COURSE CONTENT**

**Module 1: Be the Best of Whatever You Are by Douglas Malloch (06 Periods)**

Be the Best of Whatever You Are– A motivational poem, Reading Comprehension, Grammar, Vocabulary, Pronunciation, Language Games, and Conversation Practice, Letter writing.

**Module 2: 'On saying Please' short essay by A. G. Gardiner (06 Periods)**

On Saying Please – A Short Essay, Reading Comprehension, Grammar Vocabulary, Pronunciation, Language Games, and Conversation Practice, Email writing.

**Module 3: 'If You Forget Me' poem by Pablo Neruda (06 Periods)**

If you Forget Me - A Poem, Reading Comprehension, Grammar, Pronunciation, Language Games and Conversation Practice, essay writing.

**Module 4: 'After the Sunset' short story by Bhoopal (06 Periods)**

After the Sunset–A Short Story, Reading Comprehension, Grammar, Pronunciation, Language Games, and Conversation Practice, case studies.

**Module 5: 'Man's Peril' essay by Bertrand Russell (06 Periods)**

Man's Peril - An Essay, Reading Comprehension, Vocabulary, Grammar, Pronunciation, Language Games, and Conversation Practice, report writing.

**Total Periods: 30**

## **EXPERIENTIAL LEARNING**

1. Discuss the role of Health care in nation-building?
2. List out the important vocabulary used most in Health care.
3. Small courtesies play a major role in creating an impression on other people. List out a few examples.
4. Prepare a PowerPoint presentation on the present scenario in higher education and jobs in India.
5. Being a shopkeeper and persuading a customer to buy a product which is introduced newly in the market. Prepare a conversation.
6. The English language has a rich vocabulary. List out the homophones and homonyms and write down the pronunciation and meaning of those words.
7. Describe a situation in your college where teamwork is needed and explain the strategies to manage the team effectively.
8. Write about the importance of IELTS and TOEFL exams.
9. Prepare a report on the medical camp conducted on your campus.
10. Write a letter to the concerned asking permission to attend clinical classes.
11. Prepare a E mail to justify the need of new medical equipment to your hospital.

## RESOURCES

### TEXT BOOKS:

1. G. Damodar "English Language for Undergraduate Students", Cambridge University-2019.

### REFERENCE BOOKS:

1. Meenakshi Raman & Sangeetha Sharma, *Technical Communication*, Oxford University Press, New Delhi, 2012.
2. Ashraf Rizvi, *Effective Technical Communication*, McGraw-Hill Education (India) Pvt. Ltd., New Delhi, 2018

### VIDEO LECTURES:

1. <https://www.youtube.com/watch?v=WnOOKO0CdaM>
2. <https://www.youtube.com/watch?v=H6Nlz8qmcFc>
3. <https://www.youtube.com/watch?v=-ITliZO85YM>
4. <https://www.youtube.com/watch?v=048YjXwgHWE>
5. <https://www.youtube.com/watch?v=XLLQm7Grmcc>

### WEB RESOURCES:

1. [https://www.researchgate.net/publication/331773456\\_RK\\_Narayan's\\_A\\_Snake\\_in\\_the\\_Grass\\_and\\_Stephen\\_Leacock's\\_With\\_the\\_Photographer\\_-\\_A\\_Comparative\\_Study](https://www.researchgate.net/publication/331773456_RK_Narayan's_A_Snake_in_the_Grass_and_Stephen_Leacock's_With_the_Photographer_-_A_Comparative_Study)
2. [https://www.researchgate.net/publication/331773456\\_RK\\_Narayan's\\_A\\_Snake\\_in\\_the\\_Grass\\_and\\_Stephen\\_Leacock's\\_With\\_the\\_Photographer\\_-\\_A\\_Comparative\\_Study](https://www.researchgate.net/publication/331773456_RK_Narayan's_A_Snake_in_the_Grass_and_Stephen_Leacock's_With_the_Photographer_-_A_Comparative_Study)
3. <https://smartenglishnotes.com/2020/07/17/on-saying-please-summary-analysis-and-questions-and-answers/>
4. [http://www.emcp.com/product\\_catalog/school/litLink/Grade09/U09-04forgetme/](http://www.emcp.com/product_catalog/school/litLink/Grade09/U09-04forgetme/)
5. <https://englishlanguage-lit.blogspot.com/2021/05/after-sunset-short-story-by-bhoopal.html>
6. <https://www.taylorfrancis.com/chapters/mono/10.4324/9781003090359-31/man-peril-bertrand-russell?context=ubx&refId=1d767e2d-ceb1-4537-9de5-6417eab47d1e>

## SCHOOL CORE

<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>S</b>	<b>C</b>
<b>22PT102003</b>	<b>SOCIOLOGY</b>	3	-	2	-	4
<b>Pre-Requisite</b>	-					
<b>Anti-Requisite</b>	-					
<b>Co-Requisite</b>	-					

**COURSE DESCRIPTION:** Sociology will introduce student to the basic sociology concepts, principles and social process, social institutions in relation to the individual, family and community and the various social factors affecting the family in rural and urban communities in India will be studied.

**COURSE OUTCOMES:** After successful completion of the course, students will be able to:

- CO1.** Understand concepts and relation to anthropology and psychology.
- CO2.** Identify and understand basics of nature of socialization, Social Groups and Family with clinical aspects.
- CO3.** Analyse the concepts of Health hazards to Community and culture.
- CO4.** Understand the social problems of disabled & Social Security.
- CO5.** Work independently or in team to solve problems with effective communication.

### CO-PO Mapping Table:

Course Outcomes	Program Outcomes									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
<b>CO1</b>	3	2	-	-	-	-	-	-	-	-
<b>CO2</b>	3	2	-	-	-	1	-	-	-	-
<b>CO3</b>	3	2	-	-	-	1	-	-	-	-
<b>CO4</b>	3	2	-	-	-	1	-	-	-	-
<b>CO5</b>	-	-	-	-	-	3	3	-	-	1
Course Correlation Mapping	3	2	1	-	-	2	3	-	-	1

*Correlation Levels: 3: High; 2: Medium; 1: Low*

## **COURSE CONTENT**

### **Module 1: Introduction to Sociology**

**(10 Periods)**

**Introduction:** Meaning, Definition and scope of sociology, Its relation to Anthropology, Psychology, Social Psychology. Methods of Sociological investigations- Case study, social survey, questionnaire, Interview and opinion poll methods. Importance of sociology with special reference to Health Care Professionals.

**Social Factors in Health and disease situations:** Meaning of social factors, Role of social factors in health and illness.

### **Module 2: Socialization and Social groups**

**(12 Periods)**

**Socialization:** Meaning and nature of socialization, Primary, Secondary and Anticipatory socialization, Agencies of socialization.

**Social Groups:** Concepts of social groups, influence of formal and informal groups on health and sickness. The role of primary groups and secondary groups in the hospital rehabilitation setup.

**Family:** The family, meaning and definitions, Functions of types of family, Changing family patterns, Influence of family on the individuals health, family and nutrition, the effects of sickness in the family and psychosomatic disease and their importance to physiotherapy.

### **Module 3: Community and Culture**

**(11 periods)**

**Community:** Rural community, Meaning and characteristics, Health hazards in rural areas, health hazards among tribal communities

**Urban community:** Meaning and characteristics, Health hazards in urban areas.

**Culture and Health:** Concept of Health, Concept of Culture

### **Module 4: Social problems of disabled and Social Security**

**(12 Periods)**

**Social Problems of disabled:** Consequences with reference to sickness and disability, remedies; Population explosion, Poverty and unemployment, Beggary, Juvenile delinquency, Prostitution, Alcoholism, Problems of women in employment, Geriatric problems, Problems of underprivileged, social welfare programs.

**Social Security:** Social security and social legislation in relation to the disabled.

**Social worker:** Meaning of Social Work, The role of a Medical Social Worker.

**Total Periods: 45**

## **EXPERIENTIAL LEARNING**

### **LIST OF EXERCISES:**

1. Survey on Social Economic Status of Rural areas
2. Field work on Life style and Social Groups in Rural areas
3. Awareness Programs on Hygienic and Disease in Community

*(Note: It's an indicative one. The course instructor may change the activities and the same shall be reflected in CHO.)*

### **REFERENCE BOOKS**

1. P. Ganesh, Textbook of Sociology, EMMESS Publisher, 1<sup>st</sup> Edition, 2021
2. K.P. Neeraja, Textbook of Sociology for Physiotherapy, Jaypee Publishers, 2<sup>nd</sup> Edition, 2021
3. Neelam Kumari, Sociology for Physiotherapy, Jaypee Publishers, 2<sup>nd</sup> Edition, 2021
4. Özkaya, N., Leger, D. L. Fundamentals of Biomechanics: Equilibrium, Motion, and Deformation, India: 4<sup>th</sup> Edition, 2019

### **VIDEO LECTURES:**

1. <https://youtu.be/Hom9MUgy-Vc>
2. <https://youtu.be/tqPTvnXXzKs>

### **WEB RESOURCES:**

1. <https://www.asanet.org/wp-content/uploads/savvy/introtosociology/Documents/Field%20of%20sociology033108.htm>
2. <https://pressbooks.bccampus.ca/socialprocesses/chapter/chapter-1-an-introduction-to-sociology/>

## PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
<b>22PT101002</b>	<b>INTRODUCTION TO HEALTH CARE SYSTEM AND PHYSIOTHERAPY ROLE</b>	2	-	-	-	2
<b>Pre-Requisite</b>	-					
<b>Anti-Requisite</b>	-					
<b>Co-Requisite</b>	-					

**COURSE DESCRIPTION:** This course deals with the main features of Indian health care delivery system and its comparing with the other systems of the world.

**COURSE OUTCOMES:** After successful completion of the course, students will be able to:

- CO1** Understand the basic concepts in health care delivery system.
- CO2** Acquire knowledge on various AYUSH systems.
- CO3** Identify the Vital events of life and its impact on demography.
- CO4** Understand the principles and methods of epidemiology.
- CO5** Identify the role of Physiotherapy Profession in health care community.

### CO-PO Mapping Table:

Course Outcomes	Program Outcomes									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
<b>CO1</b>	3	-	-	-	1	-		-	-	-
<b>CO2</b>	3	1	-	-	2	-	1	-	-	-
<b>CO3</b>	3	2	-	-	1	-	1	-	-	-
<b>CO4</b>	3	-	-	-	1	-		-	-	-
<b>CO5</b>	3	-	-		1	-	1	-	-	2
<b>Course Correlation Mapping</b>	<b>3</b>	<b>1</b>	-	-	<b>1</b>	-	<b>1</b>	-	-	<b>2</b>

*Correlation Levels: 3: High; 2: Medium; 1: Low*

## **COURSE CONTENT**

### **Module 1: Introduction to healthcare delivery system (05 periods)**

Healthcare delivery system in India at primary, secondary and tertiary care Community participation in healthcare delivery system , Health system in developed countries, Private Sector, National Health Mission , National Health Policy Issues in Health Care Delivery System in India

**National Health Programme-** Background objectives, action plan, targets, operations, achievements and constraints in various National Health Programme

### **Module 2: Introduction to AYUSH system of medicine (06 periods)**

Introduction to Ayurveda, Naturopathy, Unani, Siddha, Homeopathy, Need for integration of various system of medicine.

### **Module 3: Demography and Vital Statistics (06 periods)**

Demography & its concept , Vital events of life & its impact on demography, Significance and recording of vital statistics, Census & its impact on health policy

### **Module 4: Epidemiology (05 Periods)**

Principles of Epidemiology, Natural History of disease, Methods of Epidemiological studies, Epidemiology of communicable & non-communicable diseases, disease transmission, host defence immunizing agents, cold chain, immunization, disease monitoring and surveillance.

### **Module 5: Components of Physiotherapy Profession (08 Periods)**

History of medical therapeutics, Introduction and history of physiotherapy

1.Role of physiotherapy in meeting health care needs in India

- a. Needs versus Demands
- b. Physiotherapist as Educator
- c. Typical job settings
- d. Common problems and solutions

2.Rehabilitation

- a. Introduction to Rehabilitation, Definitions of Rehabilitation, Principles of Rehabilitation, its aim and objectives
- b. Concept of disability (including mental illness), definitions and classification.
- c. Difference between incidence and prevalence, prevalence and incidence of disability
- d. History of disability rehabilitation
- e. Introduction to locomotor disability, disability and general medical conditions.
- f. Global ,National, State and local legislations concerning disability and development Poverty, disability and development programs
- g. Schemes and concessions for persons with disabilities, Advocacy and rights of persons with disabilities.
- h. Role of community in the prevention of disabilities

**Total Periods: 30**



## **EXPERIENTIAL LEARNING**

1. Demonstration of various levels of health care system.
2. Presentation of health care programs.
3. Illustration on ayush system of medicine and it's practice.
4. A clinical overview on demography and vital statistics.
5. A clinical based epidemiological study and survey of communicable and non-communicable diseases.
6. Demonstration of physiotherapy role in health care system and rehabilitation.
7. A case study on physiotherapy role and responsibilities.

*(Note: It's an indicative one. The course instructor may change the activities and the same shall be reflected in CHO.)*

## **RESOURCES**

### **BOOKS:**

1. Francis, Hospital Care Management, 4<sup>th</sup> Edition, 2019
2. Sharon B .Buchbinder, Introduction to Health Care Management, 2<sup>nd</sup> Edition, 2011
3. Fandis S, Health Service Management, Analysis& Management, Wasworth publishing, 3<sup>rd</sup> Edition, 2019

### **VIDEO LECTURES:**

1. [https://youtu.be/It\\_cv56Dxtk](https://youtu.be/It_cv56Dxtk)
2. [https://youtu.be/VIrdH\\_3RKKk](https://youtu.be/VIrdH_3RKKk)

### **WEB RESOURCES:**

1. <https://library.medschl.cam.ac.uk/e-books/>
2. <https://www.ncbi.nlm.nih.gov/>

## PROGRAM CORE

Course Code	Course Title	L	T	P	S	C
<b>22PT101003</b>	<b>BASIC ETHICS AND REGULATIONS OF PHYSIOTHERAPY</b>	2	-	-	-	2
<b>Pre-Requisite</b>	-					
<b>Anti-Requisite</b>	-					
<b>Co-Requisite</b>	-					

**COURSE DESCRIPTION:** This course provides a detailed discussion on principles of ethics in clinical practice, academics, research scope and challenges for health care professionals.

**COURSE OUTCOMES:** After successful completion of the course, students will be able to:

- CO1.** Acquire knowledge on the ethical principles for governing practices in physiotherapy
- CO2.** Understand the guidelines laid by statutory/ governing bodies for the practice of physiotherapy
- CO3.** Identify the attributes of a good leader and relate in context of physiotherapy
- CO4.** Analyse the ethical dilemmas arising out of patient evaluation and management

### CO-PO Mapping Table:

Course Outcomes	Program Outcomes									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
<b>CO1</b>	3	1	-	-	3	-	-	-	-	2
<b>CO2</b>	3	1	-	-	3	-	-	-	-	2
<b>CO3</b>	3	2	-	-	2	-	2	-	-	2
<b>CO4</b>	3	3	-	-	2	-	-	2	-	-
<b>Course Correlation Mapping</b>	<b>3</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>-</b>	<b>2</b>

*Correlation Levels: 3: High; 2: Medium; 1: Low*

## **COURSE CONTENT**

### **Module 1: Bioethics of physiotherapy**

**(10 Periods)**

The historical background pertaining to ethics in health profession, the four principles of bioethics, List the guidelines pertaining to ethical practice of physiotherapy profession. the constitution and guiding principles of World Confederation of Physical Therapy (WCPT)/World Physiotherapy Outline the roles and responsibilities of physiotherapists laid down by WCPT / World Physiotherapy Outline the guidelines for ethical practice envisioned by WCPT / World Physiotherapy Outline the organizational structure and practice guidelines laid down by Indian Association of Physiotherapists (IAP)

### **Module 2: Legal aspects in clinical practice**

**(05 Periods)**

The legal complexities in medico legal cases (MLC) including onus of proof and patient confidentiality, Outline the legal aspects pertaining to medical negligence, liability, reportage of abuse and management of disgruntled/ difficult patients ethical aspects in private practice, the legal aspects in private practice.

### **Module 3: Leadership in physiotherapy**

**(05 Periods)**

Outline the characteristics of leadership required in physiotherapy profession, Outline the role of emotional intelligence in physiotherapy practice, Explain mentorship program and Outline the need for mentioning in physiotherapy profession.

### **Module 4: Ethical issues in treating vulnerable population**

**(10 Periods)**

The characteristics of leadership required in physiotherapy profession , Outline the role of emotional intelligence in physiotherapy practice , mentorship program and Outline the need for mentioning in physiotherapy profession

**Total Periods: 30**

## **EXPERIENTIAL LEARNING**

1. Demonstration of ethics to be practiced by a health care professional
2. Demonstration of guidelines for ethical practice of physiotherapy profession.
3. Demonstration of guidelines of WCPT.
4. Demonstration of guidelines framed by IAP.
5. Complexities of medico-legal cases (MLC)
6. Demonstrating the characteristics of leadership in physiotherapy practice.
7. A clinical review on ethical issues in treating vulnerable population.

*(Note: It's an indicative one. The course instructor may change the activities and the same shall be reflected in CHO.)*

## **RESOURCES**

### **BOOKS:**

1. Kavitha Raja, Sivakumar T, Ethical issues : perspectives for the physiotherapists, 2<sup>nd</sup> Edition, 2019

### **VIDEO LECTURES:**

1. [https://youtu.be/It\\_cv56Dxtk](https://youtu.be/It_cv56Dxtk)
2. [https://youtu.be/VIrdH\\_3RKKk](https://youtu.be/VIrdH_3RKKk)

### **WEB RESOURCES:**

1. <https://library.medschl.cam.ac.uk/e-books/>
2. <https://www.ncbi.nlm.nih.gov/>