

Branch Name:	Bachelor of Pharmacy
Program Code:	PH101
Course Name:	Human Anatomy, Physiology and Pathophysiology II (Practical)
Course Code:	1BP208P

Teaching and Examination Scheme:

Teaching Scheme (Hours per week)				Evaluation Scheme (Marks)		
Lecture	Tutorial	Practical	Credit	Theory (T)		Total Marks
				Continuous Assessment	University Assessment	Theory
NA	-	3	1	20	30	50

Course Objectives:

The objectives of this course are to:

1. Provide foundational knowledge of the structure and functions of major organ systems of the human body.
2. Develop understanding of physiological mechanisms responsible for maintenance of homeostasis.
3. Explain the pathophysiology of diseases affecting different organ systems.
4. Explore causes of diseases and the body's responses to pathological conditions.
5. Build a strong base for clinical learning through the study of functional and structural changes in disease states.

Course Outcomes (CO):

CO No.	Upon successful completion of this course, the students will be able to:
1	Explain the gross morphology, structures, and functions of various organs and organ systems of the human body.
2	Demonstrate basic emergency response procedures such as cardiopulmonary resuscitation (CPR).
3	Describe the etiology and pathogenesis of selected disease states.
4	Identify signs and symptoms, risk factors, diagnostic methods, prevention, treatment strategies, and complications of diseases.
5	Understand coordinated working patterns of different organs of each system and perform experiments related to special senses and nervous system.

Subject Contents:

List of Practical
<i>(Minimum of 12 experiments must be performed)</i> Practical HAPP allows the verification of physiological processes discussed in theory classes through experiments on living tissues, simulated videos, models, and charts. 1. Study of nervous system using specimens and models. 2. Study of respiratory system using models. 3. Study of gastrointestinal system using models.

4. Study of reproductive system using models.
5. Demonstration of general neurological examination.
6. Demonstration of function of olfactory nerve.
7. Examination of different types of taste.
8. Demonstration of visual acuity.
9. Demonstration of reflex activity.
10. Recording of body temperature.
11. Determination of tidal volume and vital capacity.
12. Recording of body mass index (BMI).
13. Study of family planning devices and pregnancy diagnosis tests.
14. Understanding pathophysiology of IBD, peptic ulcer, jaundice, hepatitis, typhoid, asthma, tuberculosis, diabetes, and thyroid disorders through case files / case reports.
15. Hands-on training in cardiopulmonary resuscitation (CPR).

References:

1. Wilson, K. J. W., and Waugh, A. *Anatomy and Physiology in Health and Illness*. Churchill Livingstone, New York.
2. Best, C. H., and Taylor, N. B. *The Physiological Basis of Medical Practice*. Williams & Wilkins, Baltimore.
3. Guyton, A. C., and Hall, J. E. *Textbook of Medical Physiology*. Elsevier / W.B. Saunders, Philadelphia.
4. Tortora, G. J., and Grabowski, S. R. *Principles of Anatomy and Physiology*. John Wiley & Sons.
5. Brunton, L., Chabner, B., and Knollmann, B. *Goodman & Gilman's The Pharmacological Basis of Therapeutics*. McGraw-Hill, New York.
6. Colledge, N. R., Walker, B. R., and Ralston, S. H. *Davidson's Principles and Practice of Medicine*. Churchill Livingstone, London.

List of Open-Source Software/learning website: Nil