Department of Liberal Education
Era University, Luck now
Course Outline
Effective From: 2023-24

Name of the Program	**B.A. / B.Sc.(LIBERA LEDUCATION)**			**Year/ Semester:**	**1st / 1st**
Course Name	**Basic Human Physiology**	**Course Code:**	**NH101**	**Type:**	**Theory**
Credits	**05**			**Total Sessions Hours:**	**75 Hours**
Evaluation Spread	**Internal Continuous Assessment:**	**50 Marks**		**End Term Exam:**	**50 Marks**
Type of Course	○ Compulsory	◉ Core		○ Creative	○ Life Skill
Course Objectives	1. Recognize the essential fundamental relationships and orientation of structures in the human body. 2. Distinguish between the various components of the cardiovascular system, including the heart, major arteries and veins, and the lymphatic system. 3. List the components of the respiratory system, including the lungs, trachea, bronchi, and upper respiratory system components. 4. Recognize the components of the gastrointestinal system, beginning at the oral cavity and ending at the rectum, including the major organs associated with digestion				
Course Outcomes(CO): *After the successful course completion, learners will develop following attributes:*					
Course Outcome (CO)	**Attributes**				
CO1	Describe the structure of major human organs and explain their role in the maintenance of healthy individuals.				
CO2	Explain the interplay between different organ systems and how organs and cells interact to maintain biological equilibrium in the face of a variable and changing environment.				
CO3	Understand the functions of important physiological systems including the cardio-respiratory, renal, reproductive and metabolic systems; understand how these separate systems interact to yield integrated physiological responses to challenges such as exercise, fasting and ascent to high altitude, and how they can sometimes fail;				
CO4	Will be able to perform, analyze and report on experiments and observations in physiology.				
Pedagogy	Interactive, discussion-bases, student-centered, presentation.				
Internal Evaluation Mode	Mid-term Examination: 20 Marks Activity: 10 Marks Class test: 05 Marks Online Test/Objective Test: 05 Marks Assignments/Presentation: 05 Marks Attendance: 05 Marks				
Session Details	**Topic**			**Hours**	**Mapped CO**
Unit 1	**Circulatory and Cardiovascular system**: Blood and its composition, Blood groups, Mechanism of blood coagulation, Erythropoiesis and anemia, Structure and functions of heart, Cardiac cycle, cardiac output, blood pressure and its regulation			15	CO1 and CO3

	Activity: Determination of pulse rate in Resting condition and after exercise (30 beats/10 beats method) Determination of blood pressure by Sphygmomanometer (Auscultatory method).		
Unit 2	**Digestive System:** Structure and functions of G.I. tract, Process of digestion and absorption of food, Structure and functions of liver, gallbladder and pancreas. **Activity:**model making (group activity).	20	CO2, CO3
Unit 3	**Respiratory System**: Structure of Lungs and gaseous exchange (oxygen and carbon dioxide transport). **Musculoskeletal System**: functions of muscles, bones. Mechinism of muscle contraction, isometric and isotonic muscle contraction **Activity:**Six minute walk test.	20	CO3,CO4
Unit 4	**Excretory system**: Structure and functions of kidney in special reference to nephron, Physiology of urine formation. **Endocrine system:** Structure and functions of pituitary, thyroid, parathyroid and adrenal gland, Structure and functions of pancreas. **Activity:**Measurement of blood glucose level by glucometer.	20	CO4

CO-PO and PSO Mapping

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	2	1	1	1	1	1	1	1	3	1	1	1	2	1
CO2	1	1	1	1	2	1	1	1	2	1	1	2	1	1
CO3	1	1	2		1	1	2	1	1	2	1	1	2	1
CO4	2	1	1	1	1	1	1	1	2	1	2	2	1	1

Strongcontribution-3, Averagecontribution-2, Lowcontribution-1,

Suggested Readings:

Text- Books

Note: A reading material will be provided by the faculty member well in time.

1. B.D Chaurasia's handbook of General Anatomy
2. Atlas of Human Anatomy
3. Human Anatomy by B.D Chaurasia

Reference Books

Gray's Anatomy For Students

Para Text

Unit 1:
1https://www.youtube.com/watch?v=jVvQaqFOJpY
2. https://www.youtube.com/watch?v=ZmbKNnaUpI4
3. https://www.youtube.com/watch?v=fYYddXKxTCY

Unit 2:
1. https://www.youtube.com/watch?v=pWGhGx_mNXc
2. https://www.youtube.com/watch?v=E9zTnGxLZ_s

Unit 3:
1. https://www.youtube.com/watch?v=qI0ZJNl-2KE
2. https://www.youtube.com/watch?v=9Y-Sh5Y5olw

Unit4:
1. https://www.youtube.com/watch?v=oBoEYdWhtpM
2. https://www.youtube.com/watch?v=7QV_RElZYlw

Recapitulation & Examination Pattern		
Internal Continuous Assessment:		
Component	**Marks**	**Pattern**
Mid Semester	20	**Section A:** Contains **10** MCQs/Fill in the blanks/One Word Answer/ True-False type of questions. Each question carries **0.5 marks.** **Section B:** Contains **07** descriptive questions out of which **05** questions are to be attempted. Each question carries **03 marks**.
Activity	10	Will be decided by subject teacher.
Class Test	05	Contains **05 descriptive questions.** Each question carries **01** mark.
Online Test/ Objective Test	05	Contains **10 multiple choice questions.** Each question carries **0.5**mark.
Assignment/ Presentation	05	Assignment to be made on topics and instruction given by subject teacher.
Attendance	05	As per policy.
Total Marks	**50**	

Course created by: **Dr. Shazia Fatima** **Dr. Pooja Verma** **Signature:**	**Approved by: Prof. Afrozul Haq** **Signature:**