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| **Suggested Form No. (2) Course Description** |

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| **Faculty** | **Princess Aisha Bint Al-Hussein College for Nursing and Health Sciences** | | | | |
| **Department** | **Nursing** | | | **Level in Framework** | 6 |
| **Course Name** | Principle of Physiology | **Number** | 0901215 | **Prerequisite** |  |
| **Credit Hours** | 3 | **Theoretical** | 3 | **Practical** | **-** |
| **Course Coordinator** |  | **Email** |  | | |
| **Teachers Educators** |  | **Email** |  | | |
| **Lecture Time** |  | **Place** |  | **Attendance Type** | Hybrid |
| **Semester** | 1st | **Preparation Date** | 1/10/2024 | **Modification Date** | 12/12/2024 |

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| Abridged Course Description |
| This course provides an introduction to human physiology, focusing on the principles and processes that control the body’s systems and their interactions to maintain health. Key topics include circulation, respiration, digestion, nervous system function, homeostasis, cell physiology, osmosis, transport mechanisms, nerve and synaptic physiology, muscle physiology, and vascular regulation. Through interactive lectures and practical activities, students will develop a foundational understanding of normal body functions and adaptations to internal and external stressors, preparing them for further studies or careers in health-related fields. |
| Course Objectives |
| 1. Enable students to describe the basic functions and roles of major body systems. 2. Assist students to explain how different physiological systems work together to maintain health and homeostasis. 3. Identify common physiological responses to environmental or internal changes, such as exercise or stress. 4. Apply knowledge of physiology to simple real-life scenarios, such as understanding common illnesses or lifestyle effects on the body. |

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| **CILOs (Learning Outcomes)** |
| **Knowledge** |
| a1. Describe the structure and function of the major human body systems, including the cardiovascular, respiratory, digestive, and nervous systems.  a2. Identify the key physiological processes that maintain homeostasis in the human body.  a3. Outline the physiological responses to changes in the internal and external environment |
| **Skills** |
| b1.Analyze relationships between different physiological systems to understand their interdependence in maintaining homeostasis.  b2. Evaluate how physiological processes adapt to changes such as physical activity, stress, or environmental conditions.  b3. Compare the mechanisms of various regulatory processes, such as hormonal versus neural regulation, in maintaining homeostasis. |
| **Competences** |
| **c1.** Collaborate effectively in groups to discuss, analyze, and present case-based physiological scenarios. |
| **Teaching & Learning Methods** |
| 1. Lecture-based learning 2. Class discussion 3. Concept maps 4. Flipped classroom 5. Case-based learning 6. Group discussion |
| **Assessment Tools** |
| 1.Quizzes and exercises  2.Written examinations  3.Written Assignments: issues related to human physiology  4.Case studies |

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| **Course Content** | | | | | |
| **Week** | **Hours** | **CILOs (Learning Outcomes)** | **Subjects** | **Teaching & Learning Methods** | **Assessment Tools** |
| **1** | 3 | a 1 | Organization of the Body: Tissues, Organs, and Organ System | * Lecture-based learning * Class discussion * Group discussion | Written examination  Quizzes and exercises |
| **2** | 3 | a1, a 3,b1, b2 | Neurons, impulses and classification | * Lecture-based learning * Class discussion   Group discussion | Written examination  Quizzes and exercises |
| **3+4** | 6 | a1, a 3,b1, b2 | The Autonomic nervous system  sensory system  motor system  Entric nervous system | * Lecture-based learning * Class discussion * Group discussion | Written examination  Quizzes and exercises |
| **5+6** | 6 | a1, a2,,a 3,b1, b2,b3,c1 | Cardio-vascular system | * + Lecture based learning * Class discussion * Concept maps * Flipped classroom * Case-based learning | Written examination  Quizzes and exercises |
| **7** | 6 | a1, a2,a3,b1, b2,b3,c1 | The Respiratory System | * Lecture-based learning * Class discussion * Concept maps * Flipped classroom | Written examinations  Written Assignments |
| **8+9** | 6 | a1, a2,,a 3,b1, b2,b3,c1 | Hemodynamics | * + Lecture based learning * Class discussion * Concept maps * Flipped classroom * Case-based learning | Written examinations  Written Assignments  Case study |
| **10** | 3 | a1, a2,,a 3,b1, b2,b3,c1 | The urinary system | * + Lecture based learning * Class discussion * Concept maps * Flipped classroom   Case-based learning | Written examinations  Written Assignments  Case study |
| **11** | 3 | a1, a2, a3, b1, b2, b3, c1 | Digestive system | * + Lecture based learning * Class discussion * Concept maps * Flipped classroom   Case-based learning | Written examinations  Written Assignments  Case study |
| **12** | 3 | a1, a2, a3, b1, b2, b3, c1 | Endocrine system | * + Lecture based learning * Class discussion * Concept maps * Flipped classroom   Case-based learning | Written examinations  Written Assignments  Case study |
| **13** | 3 | a1, a2, a3, b1, b2, b3, c1 | Muscle-skeletal system | * + Lecture based learning * Class discussion * Concept maps * Flipped classroom | Written examinations  Written Assignments |
| **14** |  | a1, a2, a3, b1, b2, b3, c1 | Reproductive system | * + Lecture based learning * Class discussion * Concept maps * Flipped classroom | Written examinations  Written Assignments |
| **15** | 3 | a1,a2,a3  b1.b2,b3 | revision | Class discussion | Written examination |
| **16** | 1.5 | a1,a2,a3  b1.b2,b3 | Final exam |  | Written examination |

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| Constituents Components | |
| **Tortora, G. J., Derrickson, B. H., & Champe, P. C.** (2014). *Principles of anatomy and physiology* (13th ed.). Wiley. | Textbook |
| **Tortora, G. J., Derrickson, B. H., & Champe, P. C.** (2014). *Principles of anatomy and physiology* (13th ed.). Wiley. | References |
| **Peate, I., & Nair, M.** (2011). *Fundamentals of anatomy and physiology for student nurses* (1st ed.). Wiley-Blackwell.  **Hall, J. E.** (2011). *Guyton & Hall physiology review* (2nd ed.). Saunders/Elsevier. | Recommended for reading |
| AHU electronic library: <https://ahulibrary-coe.app.deepknowledge.io/>  <https://www.khanacademy.org/> | Electronic material |
| https://www.youtube.com/@PhysocTV | Other sites |

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| **Course Assessment Plan** | | | | | | | | | | |
| **Assessment tools** | | **Grade** |  | **Outcomes** | | | | | | |
|  | | a1. | a2. | a3. | b1. | b2. | b3 | c1. |  |
| First examination (Mid) | | 30 |  | 6 | 6 | 6 | 6 | 6 |  |  |
| Second examination (If any) | | ---- | | | | | | | | |
| Final examination | | 50 | 10 | 8 | 8 | 8 | 8 | 8 |  |  |
| Semester works | |  |  |  |  |  |  |  |  |  |
| **Semester Work Assessment** | Written assignment | 5 |  |  |  |  |  |  | 5 |  |
| Case study | 5 |  |  |  |  |  |  | 5 |  |
| Quizzes | 10 | 4 | 3 | 3 |  |  |  |  |  |
| Total | 100 | 14 | 17 | 17 | 14 | 14 | 14 | 10 |  |