Republic of Iraq
Ministry of Higher Education and
Scientific Research
University of Wirth Al anbiya'a
College of Nursing

وزارة التـعليم العالي والبحث العلمي
جامعــة وارث الأنبــياء
كلية التمريض

# Course Specifications

**Course name : Patho physiology Second Stage / Second Semester**

**Credit Hours (4) Course Calendar: Total ( 2 ) hours Weekly.**
**Teacher name Msc. Zahraa A. Althabet**

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| **Course Description:**<br>**This course is designed to provide the nursing students with a comprehensive knowledge of the basic concepts and principles in path physiology including cell injury, etiology of cell injury, stress-adaptation and coping, inflammation and immunity, neoplasia, lymphoproliferative disorders, infectious processes. The course also focuses on physiological alternations associated with various pathological conditions such as alterations in oxygen transport, homeostasis-blood flow-blood pressure and cardiac function, heart failure, and alteration in respiratory function.** | **Course Goals:**<br>**At the end of the course the student will be able to:**<br>**Understand concepts related to path physiology (complex nature of disease)**<br>**Recognize types of stressors, injuries and infectious agent.**<br>**Understand the mechanism of disease (mechanism of body response) which includes: Stress, Inflammation and Neoplasia.**<br>**Identify disorders related to major human body functions.** |
| **Teaching/Learning Strategies:**<br>**Lecture and Group Discussion.** | **Learning Resources:**<br>**Overhead Projector and Posters.** |
| **1st theory exam 25 %**<br>**2nd theory exam 25 %**<br>**Final exam 50%**<br>**----------**<br>**Total 100 %** | **References.**<br>Copstead, L.E.C., Perspective on Pathophysiology, Philadelphia, W.B.Saunders company, 1995.<br>McCance, K.L.,and S.E. Huether, Pathophysiology, 3rd ed., London, Mosby, 1998.<br>Porth, C.M., Pathophysiology, 5th ed., New York, Lippincott, 1998.<br>Price, S.A. and L.M. Wilson, Pathophysiology. 6th ed., London, Mosby, 1997. |

# List of contents:

| Week number | Main Contents | Expected Date/ |
|---|---|---|
| 1. | **Unit 1: Introduction and Definitions**<br>**Etiology classification.**<br>**Pathogenesis.**<br>**Clinical manifestation.**<br>**Implication for treatment** | **(2) hrs.** |
| 2. | **Unit 2: Cell injury**<br>**Reversible cell injury.**<br>**Adaptation.**<br>**Irreversible cell injury.** | **(2) hrs.** |
| 3. | **Unit 3: Etiology of cellular injury**<br>**Hypoxic injury.**<br>**Nutritional injury.**<br>**Infectious injury.**<br>**Chemical injury.**<br>**Physical injury.**<br>**Cellular injury.** | **(4) hrs.** |
| 4. | **Unit 4: Stress, adaptation and coping**<br>**Definitions.**<br>**General adaptation syndrome.**<br>**Local adaptation syndrome.**<br>**Coping.** | **(4) hrs.** |
| 5. | **Unit 5: Inflammation and immunity.**<br>**Definitions.**<br>**Component of immune system.**<br>**Non specific immunity of immune system.**<br>**Inflammatory process.**<br>**Inflammatory responses.**<br>**Specific immunity.**<br>**Change in the immune system during aging.**<br>**Disorder of immune system** | **(4) hrs.** |
| 6. | **Unit 6: Neoplasia**<br>**Definitions.**<br>**Principles of cancer biology.**<br>**Cancer host interaction.**<br>**Cancer therapy.**<br>**Cancer risk factors.** | **(4) hrs.** |
| 7. | **Unit 7: Lymphoproliferative disorders** | **(6) hrs.** |

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| | **Leukemia.**<br>**Hodgkin's disease.**<br>**Non Hodgkin's disease.**<br>**Multiple myeloma.** | |
| **8.** | **Unit 8: Infectious processes**<br>**Definitions.**<br>**Types of microorganisms.**<br>**Host-parasite relationship.**<br>**Manifestation of infection.**<br>**Host factors that decrease resistant of infection.** | **(4) hrs.** |
| **9.** | **Unit 9: Alternation in oxygen transport, alternation in Homeostasis-blood flow- blood pressure**<br>**Alteration in oxygen transport.**<br>**Gas transport and acid-base balance.**<br>**Anemia.**<br>**Polycythemia.** | **(6) hrs.** |
| **10.** | **Unit 10: Alteration in homeostasis and blood coagulation**<br>**Process of homeostasis.**<br>**Evaluation of homeostasis and coagulation.**<br>**Disorders of homeostasis.** | **(4) hrs.** |
| **11.** | **Unit 11: Alteration of blood flow**<br>**Control of flow.**<br>**Altered flow-general mechanisms.**<br>**Alternation in arterial flow.**<br>**Alternation in venous flow.**<br>**Alternation in lymphatic flow.** | **(4) hrs.** |
| **12.** | **Unit 12: Alteration in blood pressure**<br>**Functions of arterial and pulmonary systems.**<br>**Measurement of arterial blood pressure.**<br>**Hypertension.**<br>**Orthostatic hypotension.** | **(4) hrs.** |
| **13.** | **Unit 13: Alteration in cardiac function**<br>**Coronary circulation.**<br>**Cardiac electrophysiology.**<br>**Electrocardiograph.**<br>**Endocrine function of the heart.**<br>**Test of cardiac function.**<br>**Ischemic heart disease.**<br>**Myocardial disease.** | **(4) hrs.** |
| **14.** | **Unit 14: Heart failure and dysrhythmias**<br>**Heart failure.** | **(4) hrs.** |

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| | **Cardiac dysrhythmias.** | |
| **15.** | **Unit 15: Alteration in respiratory function**<br>**Obstructive pulmonary disorders.**<br>**Restrictive pulmonary disorders.**<br>**Ventilation and respiratory failure.**<br>**Other respiratory disorders.**<br><br>**Unit 16:**<br>**Alteration in gastrointestinal function**<br>**Manifestations of gastrointestinal tract disorders.**<br>**Alteration in integrity of the gastrointestinal tract wall.**<br>**Alteration in motility of the gastrointestinal tract.**<br>**Other respiratory disorders.** | **(4) hrs.** |