

Department:

Biology

Course Description:

An introduction to the basic concepts of pathophysiology as it relates to nursing and pre-professional students. This course is organized in a manner that brings the principles of pathophysiology to the forefront with a focus on the relatively few patterns of disease, rather than asking students to memorize extensive catalogs of specific diseases and this conceptual approach is more suited to these types of students. Laboratories will be used to support and supplement the information presented in lecture.

Course Competencies:

Upon completion of the course, the student should be able to:

1. Describe the basic concepts of pathophysiology at the cellular level related to injury, the self-defense mechanism, mutation, and cellular proliferation.
2. Outline basic pathological factors that influence the disease process.
3. Outline the various pathological processes related to the targeted body systems.
4. Describe the impact and abnormal functions upon the organ(s) associated with the disease process of targeted body systems.
5. Describe clinical manifestations associated with the diseased organ(s).
6. Develop basic critical thinking skills that correlate the abnormal functions of body systems with the disease process.

Course Content:

- A. Foundation Concepts of Pathophysiology
 1. Cell Injury
 2. Inflammation
 3. Fever
 4. Healing
 5. Diseases of Immunity
 6. Neoplasia
- B. Systemic Pathophysiology
 1. Blood Disorders
 2. Hemodynamic Disorders
 3. Vascular Disorders
 4. Cardiac Pathophysiology
 5. Circulatory Shock
 6. Respiratory Pathophysiology
 7. Gastrointestinal Pathophysiology
 8. Hepatobiliary and Pancreatic Pathophysiology
 9. Renal Pathophysiology
 10. Fluid and Electrolyte Imbalances
 11. Endocrine Pathophysiology

12. Skeletal and Muscular Pathophysiology
13. Reproductive Pathophysiology
14. Disorders of Central Nervous System Development, Vascular Support, and Protection
15. Disorders of Movement, Sensation, and Mental Function
16. Seizures and Epilepsy
17. Pain and Pain Management
18. Trauma

Learning Assessments:

The primary method of evaluation will be determined by a lecture test or tests over each subject area covered by the course content. Also, students will be given various assignments and quizzes over the material. Laboratory exercises will be completed in the labs.

Instructional Materials:

Textbook: Norris, T. & Lalchandani, R. (2018). *Porth's Pathophysiology: Concepts of Altered Health States* (10th ed.). Philadelphia, PA: Wolters Kluwer/Lippincott Williams & Wilkins.
ISBN-13: 978-1496377555

Guidelines for Requesting Accommodations Based on Documented Disability or Medical Condition

It is the intention of Highland Community College to work toward full compliance with the Americans with Disabilities Act, to make instructional programs accessible to all people, and to provide reasonable accommodations according to the law.

Students should understand that it is their responsibility to self-identify their need(s) for accommodation and that they must provide current, comprehensive diagnosis of a specific disability or medical condition from a qualified professional in order to receive services. Documentation must include specific recommendations for accommodation(s). Documentation should be provided in a timely manner prior to or early in the semester so that the requested accommodation can be considered and, if warranted, arranged.

In order to begin the process all students **must** complete the "Disabilities Self-Identification Form" on our [Disability Services website](#).

This form can also be accessed at the Highland Community College homepage under Students Services/Student Resources/Disability Service or by contacting the Disabilities Coordinator.

A Note on Harassment, Discrimination and Sexual Misconduct

Highland Community College seeks to assure all community members learn and work in a welcoming and inclusive environment. Title VII, Title IX, and College policy prohibit harassment, discrimination and sexual misconduct. Highland Community College encourages anyone experiencing harassment, discrimination or sexual misconduct to talk to report to the Vice President for Student Services, the Human Resources Director or complete an [online report](#) about what happened so that they can get the support they need and Highland Community College can respond appropriately.

There are both confidential and non-confidential resources and reporting options available to you. Highland Community College is legally obligated to respond to reports of sexual misconduct, and therefore we cannot guarantee the confidentiality of a report, unless made to a confidential resource. Responses may vary from support services to formal investigations. As a faculty member, I am required to report incidents of sexual misconduct and thus cannot guarantee confidentiality. I must provide our Title IX coordinator with relevant details such as the names of those involved in the incident. For more information about policies and resources or reporting options, please review our [Equity Grievance Policy](#).