NURS 6902 - Advanced Pathophysiology

Fall 2026 Syllabus, Section A05, CRN 42419,

Credit hours: 3

Instructor

Cynthia Shields

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Public Instructor Information

Instructor Title: **Cynthia Shields, DNP, CNP-APRN**
Instructor Professional Qualifications:

DNP, Nursing, Case Western University. 2016
Post master's Certificate, Acute Care NP, Kent State University. 2012

Masters, Clinical Nurse Specialist, Idaho State University. 1993
Bachelor's, Nursing, Bowling Green State University. 1984

Instructor Office Location: *3303 Cushwa Hall*
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Course Description

6902. Advanced Pathophysiology. Normal physiologic functions and pathologic mechanisms are examined to prepare nurses for advanced practice roles. 3 s.h.

Course Readings

Group	Title	Author	ISBN
Required	• Sentinel U		

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
10/19	Overview of Cell Structure. Cell Division & The Cell Cycle videos. Cell Alterations PP Fluid, Sodium, Potassium, Calcium, Mag & Phos; Acid/Base (1-2) PP Genetics Video Autosomal Recessive /Dominance	Introduction to PAthophysiology	Quiz 1
10/26	Innate/Immunity/Inflammation Adaptive Immunity PP Alterations in Immunity & Inflammation PP (1-2) Infection PP Stress and Disease Cancer in Children/Adolescents Cancer PP	Innate/Immunity/Inflammation	Quiz 2 Readiness Essentials Advanced: Pathophysiology Integument: Emma Jones. CC: Melanoma Follow -up

11/2	Alterations to Cardiovascular System Diseases of the arteries Coronary Artery Disease Disorders of Heart Wall Aging of the CV System Alterations of CV Function in Children Sentinel U, Readiness Essentials: Structure & Function, CV Conditions, CV Alterations, Cardiac Rhythm Disorders, Endocarditis, Pericarditis. Alt of CV PP (Part 1-2-3-4) Alterations of Cardiovascular Function in Children	Cardiac	Quiz 3 Readiness Essentials Advanced: Pathophysiology Cardiovascular: Joseph Carter – Swollen Ankles
11/9	Alteration of Pulmonary PP (1-6) Sentinel U, Readiness Essentials: Structure & Function, Asthma patho, COPD, Common Infectious Resp Diseases, Lung CA Renal/ Urology Alterations of Renal PP Sentinel U, Readiness Essentials: Structure & Function, urinary disorders, Incontinence, Pediatric Urinary concerns, Renal Failure	Pulmonary	Quiz 4 Readiness Essentials Advanced: Pathophysiology Pulmonary: Howard Grant - Coughing Readiness Essentials Advanced: Pathophysiology Genitourinary: Sung Lee-Confusion
11/16	Gastrointestinal/Digestive Alterations of Digestive PP (Part 1-5) Sentinel U: Review Structure & Function, Biliary and Pancreatic Disorders, Liver Disorders, Inflammatory Bowel Disease, Disorders of GI Flow. Neurological: Alterations of Nervous Syst- (Part 1-2-3) Parkinsons Disease Head aches Neuromuscular Diseases Disorders of the Nervous System (Part 1-2) Sentinel U: Review Structure and Function, Vascular Flow (TIA vs Stroke), Neurogenerative Disorders, Infectious conditions, HA Disorders.	GI & Neurological	Quiz 5 Readiness Essentials Advanced: Pathophysiology Gastrointestinal: Angel Villanueva – Abdominal Pain Readiness Essentials Advanced: Pathophysiology Neurologic: Robert Mason – Recent Fall
11/23	Endocrine Alteration of Endocrine System/ Pancreas SIADH and DI Cushing's & Addisons Disease Sentinel U: Structure & Function, Thyroid Disorders, Insulin Regulating Disorders, Hormonal Disorders, Reproductive Disorders. Musculoskeletal Alterations in Muscular System (Part 1-2-3) Alterations of Musculoskeletal Function in Children Sentinel U: Structure & Function, Degenerative Conditions, Joint & Soft Tissue Injuries, Bone & Cartilaginous Cancers, Inflammatory Joint Disorders.	Endocrine & Musculoskelatal	Quiz 6 Readiness Essentials Advanced: Pathophysiology Endocrine: Isla James – Thyroid Follow up Readiness Essentials Advanced: Pathophysiology Musculoskeletal: Mareane Harris – Left Ankle Pain
11/30	Hematology Clotting Cascade Video Blood Components Alterations of Blood (Part 1-2-3-4-5-6) Skin Alterations in Integumentary (Part 1-2-3) Sentinel U: Structure & Function, Inflammatory Skin Conditions, Fungal Infections, Viral Infections, Skin Cancer	Hematology & Skin	Quiz 7

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