Course Title: NSG 214: Pathophysiology for the Professional Nurse

Credits: Fall 3 credits

Course Description: This course focuses on altered cell functioning resulting in deviations from homeostasis. Topics of study include principles of homeostasis and the immune, cardiopulmonary, renal, nervous, gastrointestinal, hematological, musculoskeletal, and endocrine systems. The student’s ability to relate this to the individual’s need for care is emphasized. Pathological alterations in health at the systems level and implications for nursing care are emphasized. Requirement: Sophomore standing in the Nursing program.

Pre-Requisite Courses: BIO’s 113, 115, 116; CHM 111, ENG 101, PSY 101

Co-Requisite Courses: NSG 200

Placement: Fall semester

Faculty: Joyce Victor, PhD, RN-BC, CHSE, joyce.chmil@wilkes.edu

Class: Monday & Wednesday


Recommended Textbooks/Materials: N/A

Course Outcomes: At the end of this course, the student will be able to:
   1) Relate pathophysiologic changes in the individual client
   2) Apply knowledge of pathological alterations in body systems level as they apply to nursing care
Teaching Strategies: The following teaching strategies may be utilized: Slides, lecture/discussion, student presentations, group assignments, reading, concept maps, written exams and quizzes, online videos.

Description: University Mission: To continue the Wilkes tradition of liberally educating our students for lifelong learning and success in a constantly evolving and multicultural world through a commitment to individualized attention, exceptional teaching, scholarship and academic excellence, while continuing the University's commitment to community engagement.

Passan School of Nursing Mission: The mission of the Passan School of Nursing is to promote interprofessional practitioners of nursing, who provide quality health care in a constantly evolving multicultural world, engage in lifelong learning, and expand nursing science through scholarship, technology, and academic excellence, while engaging in community service.

Requirements and Evaluation Components: Assessment of the student’s progress is an ongoing process involving the student and instructor. The final grade is the composite of the theoretical.

The stated course outcomes serve as the basis of evaluation. Course evaluation tools vary and may include unit quizzes, unit exams, a final exam, term project, and written assignments.

Tests will be objective and/or subjective. Tests will include materials from lectures, readings, and CNSC assignments (Specific to Physical Assessment). If a discrepancy exists among resources, the required textbook is considered the final authority on the subject.

Unannounced quizzes and assignments may be given at any time and additional readings may be assigned.

All unit and final exams must be taken on the scheduled dates. Test dates are subject to change with adequate notification by faculty. If a student is unable to be present for an exam, the student must contact the instructor prior to the exam for permission to miss the exam. If this is not done, a makeup examination will not be given and the test score will result in a “0”.
Equivalence of grades:
The theory grade is determined by the following:

4.0 = 92 – 100%
3.5 = 88 – 91%
3.0 = 84 – 87%
2.5 = 79 – 83%
2.0 = 75 – 78%
1.5 = 70 – 74%
1.0 = 65 – 69%
0.0 = less than 65%

PROGRESSION POLICY
In order to progress INTO clinical nursing courses, students must:

- Complete the ATI/TEAS test exam
  - Wilkes University’s Passan School of Nursing requires that the student score 58.7 or higher, including the Accelerated Baccalaureate students.
- Earn a 2.5 or better in all prerequisite nursing courses:
  - BIO 113 (Microbiology); BIO 115, and 116 (Anatomy and Physiology I and II); CHM 111 (Fundamentals of Chemistry); and ENG 101 (Composition).
- Maintain an overall Grade Point Average (GPA) of 2.5 or greater.

In order to progress THROUGH the nursing curriculum, all nursing majors must:

- Earn a 2.5 or better in all nursing courses.
- Earn a 2.5 or better in all required science courses.
- Meet expected outcomes in all nursing courses.
  - A nursing student who earns less than a 2.5 in a nursing course may repeat that course once.
    - A nursing student who earns less than a 2.5 in a second nursing course is ineligible to continue in the nursing program.
- Maintain an overall Grade Point Average (GPA) of 2.5 or greater.
The theory grade will be determined as follows:
9 unit quizzes (10% each)........................90%
group presentation.............................5%
participation........................................5%

**Course Policies:**

**The link for the Passan School of Nursing Handbook is:**

All students are required to read and submit an attestation document at the beginning of each academic year. Students must adhere to all policies in the Passan School of Nursing Handbook.

**Professionalism:**
Please see policy in the Passan School of Nursing Student Handbook.

**Attendance:**
The faculty and staff of the Passan School of Nursing understand that the student is an adult learner. Attendance is required at all classes.

**Dress Policy:**
Please see policy in the Passan School of Nursing Student Handbook.

**Academic Honesty:**
At Wilkes the faculty and the entire University community share a deep commitment to academic honesty and integrity. The following are considered to be serious violations and will not be tolerated:

1. Plagiarism: the use of another’s ideas, programs, or words without proper acknowledgement.
2. Collusion: improper collaboration with another in preparing assignments, computer programs, or in taking examinations.
3. Cheating: giving improper aid to another, or receiving such aid from another, or from some other source.

Any student who violates the Intellectual Responsibility and Plagiarism Policy will fail the course.
Communication Policy:
Please see policy in the Passan School of Nursing Student Handbook.

Taping:
The School of Nursing adheres to all university policies on academics published in the Wilkes University Student Handbook. In addition, the student is advised to read and comply with the policies of the School of Nursing published in the Nursing Student Handbook as noted online. Students are not permitted to tape lectures without specific permission from the instructor.

Completion of Required Clinical Nursing Simulation (CNSC) Requirements:
Please see policy in the Passan School of Nursing Student Handbook.

Examination Policy & Procedure:
Please see policy in the Passan School of Nursing Student Handbook.

Medication Proficiency Policy:
Please see policy in the Passan School of Nursing Student Handbook.

Assignment Due Dates:
Please see policy in the Passan School of Nursing Student Handbook.

Academic Support:
If a student earns a grade of less than 79% on any exam, the student is expected to meet with the course instructor. The student may also be asked to meet with the Retention and Remediation Coordinator. At the time of midterm, the student is strongly advised to discuss their academic concerns, if any, with their nursing advisor, course instructor, and Retention & Remediation Coordinator. The student may be referred to University College, located in Conyngham Hall, for academic support services (i.e. peer tutoring, test taking support, time management, note taking, and study skills).

Clinical Requirements and Evaluations of Components:
Attendance at all clinical experiences is required. Refer to School of Nursing Student handbook Guidelines Governing Attendance at the Clinical Experience.
All written assignments must be satisfactorily completed in order to pass the clinical component of the course. Students who do not satisfactorily complete assignments at the appropriate time will jeopardize their satisfactory completion of the clinical component of the course.

**Clinical Skill Checklist:**
Each student will receive his/her clinical skills checklist during the first day of class for all incoming students. The nursing student is responsible for bringing the checklist to each clinical experience throughout the nursing program. The clinical instructor will be responsible for initialing and dating the skills when first accomplished and at the point of proficiency. The clinical instructor and student will review the form for completeness and accuracy at the time of each clinical evaluation. The student is responsible for maintaining the hard copy of the clinical skills checklist throughout the program. A scanned copy will be submitted to an electronic drop box at the completion of the clinical rotation.

**Student Community Service Requirement:**
Please see policy in the Passan School of Nursing Student Handbook.

**Policy on Integrated Testing Program:**
All students are required to complete the Integrated Testing Program administered by the School of Nursing.
Please see policy in the Passan School of Nursing Student Handbook.

**Course Examinations:**
Please see policy in the Passan School of Nursing Student Handbook.

**Advisement:**
Every nursing major is assigned a faculty advisor within the Passan School of Nursing. Students must check the roster as posted in the Passan School of Nursing.

Please see policy in the Passan School of Nursing Student Handbook.
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<tr>
<th>Unit or Module</th>
<th>Topic/Content</th>
<th>Student Learning Outcomes</th>
<th>Resources</th>
<th>Assessment Activities</th>
<th>Course Outcomes</th>
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<tr>
<td>Introduction</td>
<td>Course objectives, materials, and assignments</td>
<td>The student will be able to describe basic cellular responses and adaptation to injury and aging. The student will be able to explain the genetic basis of congenital abnormalities.</td>
<td>D2L</td>
<td>Syllabus review</td>
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<td>Homeostasis</td>
<td>Cell structure and function</td>
<td>The student will be able to describe the pathogenesis, manifestations, and outcomes of blood dyscrasias and lymphatic disorders.</td>
<td>D2L</td>
<td>Read text: Introduction</td>
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<td>Inflammatory response</td>
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<td>Slides</td>
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<td>Tissue regeneration</td>
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<td>Discussion board</td>
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<td>Genetics</td>
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<td>Oncology</td>
<td>Cancer &amp; Neoplasms</td>
<td>The student will be able to describe the causes, pathophysiologic processes,</td>
<td>D2L</td>
<td>Read text: Chapters 7-8, 10-11, &amp; 13-16</td>
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<td>Lymphatics</td>
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<td>Slides</td>
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<td>Infection and immunity</td>
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<td>Discussion board</td>
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<td>Red blood cells</td>
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<td>worksheet</td>
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<td>Fluid and Electrolyte balance and imbalance</td>
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<td>Nutrition</td>
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<tr>
<td>Topic</td>
<td>Subtopics</td>
<td>Student Objectives</td>
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<td>Acid-Base balance</td>
<td>and clinical manifestations associated with fluid and electrolyte imbalances</td>
<td>The student will be able to demonstrate knowledge of acid-base imbalances through interpretation of ABGs</td>
<td>D2L, Test: Essentials of Pathophysiology, 4th ed. By Porth Slides, Discussion board, worksheet</td>
<td>2</td>
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<tr>
<td>Cardiovascular</td>
<td>Cardiovascular System Electrical pathways and depolarization-repolarization cycle Tissue perfusion and oxygenation Injury, ischemia &amp; infarct Heart failure</td>
<td>The student will be able to 1. determine the relationship of EKG waveforms to their physiological cardiac event 2. describe the determinants of oxygen consumption and cardiac output. 3. discuss the major determinants of myocardial injury, ischemia, and infarction. describe the pathogenesis, manifestations, and outcomes of right and left heart failure</td>
<td>D2L, Test: Essentials of Pathophysiology, 4th ed. By Porth Slides, Discussion board, worksheet</td>
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<tr>
<td>Respiratory</td>
<td>Respiratory System Mechanisms of breathing and oxygenation infections Respiratory infections Disorders of gas exchange</td>
<td>The student will be able to describe the pathogenesis, manifestations, and outcomes of oxygen deficit and pulmonary disorders.</td>
<td>D2L, Test: Essentials of Pathophysiology, 4th ed. By Porth Slides, video, Discussion board</td>
<td>2</td>
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<tr>
<td>Renal</td>
<td>Renal System Function of the kidneys Alterations in renal function Renal failure Urinary System</td>
<td>The student will be able to describe the pathogenesis, manifestations, and outcomes of renal dysfunction and failure.</td>
<td>D2L, Test: Essentials of Pathophysiology, 4th ed. By Porth Slides</td>
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<tr>
<td>System</td>
<td>Function</td>
<td>Student Outcomes</td>
<td>Activities</td>
<td>Resources</td>
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<td>GI</td>
<td>Gastrointestinal System &amp; Hepatobiliary System &amp; Pancreatic function</td>
<td>The student will be able to describe the pathogenesis, manifestations, and outcomes of gastrointestinal inflammation, infection, and obstruction; and liver dysfunction and failure.</td>
<td>D2L, video, worksheet, Discussion board</td>
<td>Read text: Chapters 28, 29 &amp; 30, Test: Essentials of Pathophysiology, 4th ed. By Porth, Slides, NCLEX-style review questions</td>
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<td>Endocrine</td>
<td>Endocrine Control, Growth disorders, Diabetes Mellitus, DKA &amp; HHNS</td>
<td>The student will be able to describe the pathogenesis, manifestations, and outcomes of hormone imbalances.</td>
<td>D2L, video, Discussion board</td>
<td>Read text: Chapters 31, 32 &amp; 33, Test: Essentials of Pathophysiology, 4th ed. By Porth, Slides, NCLEX-style review questions</td>
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<td>Neurological</td>
<td>Neurological Function of the central and peripheral nervous systems, Neuromuscular disorders, ICP, Sensory function and dysfunction</td>
<td>The student will be able to describe the pathogenesis, manifestations, and outcomes of altered neurological function and increased intracranial pressure.</td>
<td>D2L, video, Discussion board</td>
<td>Read text: Chapters 34, 35, 36, 37 &amp; 38, Test: Essentials of Pathophysiology, 4th ed. By Porth, Slides, NCLEX-style review questions</td>
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<td>Reproductive</td>
<td>Reproductive systems</td>
<td>The student will be able to describe the pathogenesis,</td>
<td>D2L</td>
<td>Read text: Chapters 39-41</td>
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<tr>
<td>Musculoskeletal</td>
<td>Male vs. female STDs</td>
<td>Musculoskeletal System</td>
<td>Integumentary System</td>
<td>Patho Plays</td>
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Patho Play Criteria

- The students will work in groups to present a “Patho Play” on the assigned body system.

- Group Assignment – Patho Play Rubric

1, 2