



**Pathophysiology  
N2440**

**Class time: Asynchronous Format**  
**(NOTE: In-Person Final Exam TBA)**  
**Course Location: Asynchronous Online**

**A: Calendar Description**

Students will analyze the development of human disease by exploring common health related problems including the age-related, genetic, environmental, and behavioural influences on disease development. While further developing critical thinking in nursing care, changes to the structure and function of tissue and organs and resultant clinical manifestations will be examined.

Antirequisite(s): *Pathology 2420A/B*

Prerequisite(s): *One of Nursing 1330A/B, Kinesiology 1060A/B, Kinesiology 2222A/B, Health Sciences 2300A/B, Anatomy, and Cell Biology 2200A/B; AND one of Physiology 1020, Physiology 1021, Physiology 2130, Physiology and Pharmacology 2000. OR Enrolment in the Western the Compressed Time Frame BScN Program.*

Extra Information: *3 lecture hours*

Course weight *0.50*

**B: Expanded description**

The objectives of this course are to provide you with the background of disease and disease processes and mechanisms to prepare you for patients you may encounter in clinical practice. Understanding pathophysiology equips nurses with the knowledge to assess and interpret signs and symptoms accurately and timely intervene to provide safe client care. The content of this course forms the basis for clinical reasoning and decision-making, empowering nurses to anticipate potential complications, devise appropriate care plans, and evaluate patient responses to treatment. Knowledge of pathophysiological processes enhances nurses' ability to educate clients and families about their conditions, promoting health literacy. As such, this course will analyze common manifestations of normal body functioning resulting from genetic, environmental, behavioural, or stress-related maladaptations. Students will learn about the etiology of common health conditions, their pathogenesis, and the resulting morphological changes at a cellular and organ level. This course will have a particular focus on the clinical significance or the functional consequences of these morphological changes, focusing on assessment findings, laboratory investigations, diagnostic testing, and pharmacological treatments.

**Course Goals**

1. Identify the etiology of common health conditions, including genetic, environmental, behavioral, and stress-related factors.
2. Explain the pathogenesis of common health conditions, detailing the sequence of events leading to disease development.
3. Analyze the morphological changes occurring at cellular and organ levels in response to pathological processes.

4. Utilize clinical reasoning skills to anticipate potential complications associated with specific pathophysiological conditions.
5. Evaluate laboratory investigations and diagnostic testing results to inform nursing interpretations of health conditions.
6. Assess the clinical significance of morphological changes and their impact on client assessment findings.
7. Develop client education strategies to promote health literacy and enhance clients' understanding of their conditions.

National Nursing Entry-to-Practice Competencies (College of Nurses of Ontario, 2019)  
Addressed in the Course

*Clinician* – 1.1, 1.4, 1.7, 1.21 & 1.23

*Professional* – 2.2 & 2.8

*Communicator* – 3.3 & 3.6

*Coordinator* – 5.7 & 5.8

*Leader* – 6.6

*Educator* – 8.2 & 8.3

*Scholar* – 9.1, 9.2 & 9.4

### **C: Course Communication & Course Process**

**If you have questions about course content or course assignments, please post them in the Discussions.** A whole-class discussion, where you can post questions about the course content, is in Brightspace (Communications & Discussions) labeled **Course Content Q&A**. Additionally, a whole-class discussion where you can post questions about assignments is in Brightspace (Communications & Discussions) labeled **Assignments Q&A**. We would also encourage you to read the Discussions, as the answers to questions you might have may be there. Please do your best to keep the Discussions organized by topic. For example, post your questions about week 1 content in the Course Content Q&A labeled week 1.

There is no Messaging function in Brightspace. **For individual issues, you will need to contact your instructor.**

## Required Course Textbook

Power-Kean K, Zettel S, El-Hussein MT, Huether SR, McCance KL. (2023). *Huether and McCance's Understanding Pathophysiology, Canadian Edition - Elsevier eBook on VitalSource, 2nd Edition*. Elsevier.

NOTE: The e-book version is available at the [UWO Bookstore](#). The maximum number of readings have been requested for *free* through Western libraries, and these will be linked to course content.

## E: Weekly Schedule

Week (Lecture Dates)	Topic of Focus	Evaluations
Week 1 (Sept. 9 <sup>th</sup> to 15 <sup>th</sup> )	Structural Alterations & Morphologic Changes: Cellular Stress & Repair	

Week

<b>Week 10</b> (Nov. 18 <sup>th</sup> to 24 <sup>th</sup> )	Clinical Significance: Gastrointestinal Disequilibrium	
<b>Week 11</b> (Nov. 25 <sup>th</sup> to Dec. 1 <sup>st</sup> )	Clinical Significance: Endocrine & Hepatic Disequilibrium	
<b>Week 12</b> (Dec. 2 <sup>nd</sup> to 6 <sup>th</sup> )	Clinical Significance: Neurological Disequilibrium	

### I: Methods of Evaluation

<b>Assignment</b>	<b>Percentage of Course Grade</b>	<b>Due Date</b>
1. Proctortrack Onboarding	<b>5%</b>	Sept 20 <sup>th</sup> at 8:00 am
2. Midterm 1 x Includes Week1 to Week 4	<b>20%</b>	<b>Opens:</b> Oct. 1 <sup>st</sup> at 8:00 am <b>Closes:</b> Oct. 11 <sup>th</sup> at <b>6:00 pm</b>
3. Social Media Health Teaching Assignment	<b>10%</b>	Oct. 21 <sup>st</sup> at <b>9:00 am</b>











Registration, in accordance with information presented in this course syllabus. Supporting

Please speak with your instructor about the date on which the Special Examination for this course will be held.

### **Academic Offences**

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following website:  
[http://www.uwo.ca/univsec/pdf/academic\\_policies/appeals/scholastic\\_discipline\\_undergrad.pdf](http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf).

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### **Correspondence Statement**

The centrally administered e-mail account provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at their official university address is attended to in a timely manner. Students are further expected to attend to announcements presented through Brightspace, and to read emails generated in this way.

### **Use of Electronic Devices**

During Exams, unless you have medical accommodations that require you to do so, or explicit permission from the instructor of the course, you may not use any electronic devices (e.g., cell phones, tablets, cameras, smart glass, smart watches, or iPods) during ANY tests, quizzes, midterms, examinations, or other in-class evaluations. **These devices MUST either be left at home or with your belongings at the front of the room. They MUST NOT be at your test/exam desk or in your pocket. Any student found with a prohibited device will receive an automatic grade of zero on the test or exam.**

### **Brightspace**

All course material will be posted to OWL Brightspace: <https://westernu.brc gr0.00det@onh>

**Social Media**

Students who post information on social media related to their clients and/or laboratory experiences will be reported to the Associate Dean of Health Sciences as this demonstrates a breach of client privacy and confidentiality and violates the Student Code of Conduct. Such behavior may compromise a student's standing in the program.