

HTHSCI 2PF3 A/B
Introduction to Integrated Pathophysiology for Basic Accelerated Stream
Fall & Winter

Course Description

The course combines online multi-media learning modules with integrated virtual tutorials in which students learn and apply pathophysiological concepts.

Twelve online multi-media modules; 18 integrative tutorials (one hour); two terms

Prerequisite(s): Registration in the B.Sc.N. Accelerated (F) Stream

Antirequisite(s): NURSING 2PF3 A/B

Co-requisite(s): NURSING 2I04

Course Ends-in-View

In this introductory course to pathophysiology, students will continue to build on their empiric knowledge of anatomy, physiology, biochemistry, pharmacology, and microbiology while developing an understanding of the complex pathophysiological mechanisms contributing to altered health states. Selected pathophysiological concepts will be explored through online, interactive, multimedia learning modules, while virtual integrative tutorial sessions will provide students with multiple opportunities to rehearse knowledge application and draw connections between nursing theory (ideas) and practice (experience). These learning activities will aid students in developing a deeper understanding of pathophysiological concepts and theories will help refine their noticing, interpreting, responding, and reflecting as part of the clinical reasoning process.

Overview of Approach to Teaching and Learning:

Learning Outcomes

On the completion of this course students will be able to:

1. Integrate scientific knowledge to explain patient clinical manifestations, selection of diagnostic and laboratory procedures, and collaborative management including pharmacological agents and nursing-specific interventions.
2. Build on knowledge of anatomy, physiology, biochemistry, pharmacology, microbiology, and integrate each of these when exploring selected pathophysiological concepts.
3. Provide rationale for nursing-specific interventions using scientific knowledge.
4. Integrate nursing research (evidence-informed decision-making) as the basis of practice where applicable.

Learning Activities

The instructor reserves the right to modify elements of the course and will notify students appropriately, either in class or on Avenue (McMaster Undergraduate Course Management Policy, 2020).

Online Pathophysiology Learning Modules

(12 online learning modules)

Students will engage in a series of learning modules that discuss a variety of pathophysiological concepts related to the person-based care scenarios covered in the nursing theory and professional practice courses.

These pathophysiology learning modules incorporate text, images, animation, video and audio to provide students with a multi-modal learning experience. Relevant links to journal articles, best practice guidelines and clinically relevant web pages are also included as learning supplements in the attachments section of each module.

While the pathophysiological concepts covered in these modules relates directly to the learning activities associated with the nursing theory course, students are encouraged to use these pathophysiology modules as a resource for learning in all aspects of the program.

Online Self-Assessment Quizzes

A quiz consisting of approximately 10 multiple choice questions will accompany each learning module. These quizzes are provided for self-assessment (learning purposes only, and as such, there is no time limit associated with completing them. These quizzes may be written at any time throughout the semester; with no limit as to how many times a student may choose to write a single quiz.

The self-assessment quizzes are designed to help students:

1. Assess their depth of knowledge related to pathophysiology learning module content.
2. Identify learning gaps.
3. Prepare for writing the course tests and exams.

Integrative Tutorials – Fall Term (virtual); Winter Term (in-person)

(50-minute tutorials, 9/semester)

Prior to each integrative tutorial session, students are expected to view the online learning module accessible through the course learning management system (Avenue to Learn) and complete all required readings. During the 50-minute integrative tutorial sessions, students will participate in small and/or large-group activities designed to help students understand and apply these critical pathophysiological concepts in meaningful fashion.

Learning activities will be varied and may include concept mapping, flow charts, case studies, polling questions etc. Emphasis will be on integration and application of pathophysiology content that has not been directly addressed in the person-based care scenarios covered in PBL/PBL and will be examined in a variety of contexts; i.e., infant, juvenile, adult, geriatric, and special populations.

*Never lose sight of the fact that you are responsible for your own learning.
Your goal should not be simply to memorize facts but to be able to understand and
apply those facts in a meaningful way.*

Evaluation Measures:

Fall		
Item	Description	% Final Grade
Test #1	Multiple choice questions. Content from the first 3 modules of term one, including tutorial discussions will be tested.	20%
Mid-Year Exam	Multiple choice questions. Content from all 6 modules of the first term (emphasis on the last 3 modules), including tutorial discussions will be tested. *This exam will be scheduled by the Registrar's Office.	30%
Winter		
Test #2	Multiple choice questions. Content from the first 3 modules of term two, including tutorial discussions will be tested.	20%
Final Exam	Multiple choice questions. Content from all 6 modules of term two (emphasis on the last 3 modules), including tutorial discussions will be tested. *This exam will be scheduled by the Registrar's Office.	30%
Total		100%

As per the Undergraduate Calendar, you must be available for the entire range of examination dates as listed in the Sessional Dates section.

Fall Sessional Dates: December 9 to December 22, 2021

Winter Sessional Dates: April 12 to April 28, 2022

Final grades are not official until released by the Office of the Registrar.

There will be no extra credit. Grades will not be curved.

Issues related to grades posted on Avenue must be reported to the course instructor before the final exam is written.

Please note: **this course will use proctoring software** for tests/exams. This software will require you to turn on your video camera, present identification, monitor and record your computer activities, and lock down your browser during the exam. This software will need to be installed before the exam begins. If you have questions about this software, or concerns about the use of this software, please contact your instructor.

Missed Evaluations

Students that miss an evaluation measure (test or exam) for medical or compassionate reasons must inform their academic advisor as soon as possible and provide any necessary supportive documentation as requested. Once appropriate documentation has been submitted and accepted, alternate arrangements for missed tests will be made in consultation with the course instructor. Please see the 'Procedures for Midterm Science Exams – 2PF3' posted on Avenue.

Missed mid-year and final examinations will be scheduled by the Registrar's Office as follows:

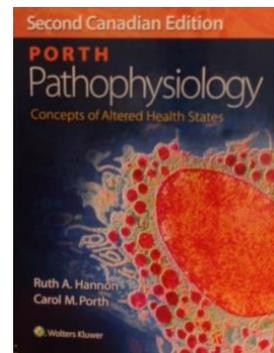
Fall semester deferred final examinations: February 22 to February 25, 2022

Winter semester deferred final examinations: June 20 to June 24, 2022

Recommended Learning Resources:

Textbooks

- Hannon, R. A., Pooler, C. & Porth, C. (2016). *Porth Pathophysiology: Concepts of altered health states (2nd Canadian ed.)*. Philadelphia: Lippincott, Williams & Wilkins.
There are many other suitable texts. If you are unsure whether your textbook is suitable for the course, please contact the instructor.
- Laboratory and Diagnostic Testing book of your choice (watch for Canadian values).
- Medical–Surgical textbook of your choice.
- Medication manual of your choice.
- Pediatric textbook of your choice.
- Review textbooks for Anatomy and Physiology, Biochemistry, Pharmacology and Microbiology of your choice.



University and BScN Program Policies and Procedures

The University has defined its expectations of students in both the academic and non-academic life of the University community. Policies that govern these practices can be found in the Undergraduate Academic Calendar or the University website <http://www.mcmaster.ca/policy>. As policies are reviewed and revised on a regular basis, students are responsible for checking the Policies, Procedures and Guidelines section of the University website for the most up-to-date information (adapted from the Undergraduate Calendar, 2020-2021).

Conduct Expectations

As a McMaster student, you have the right to experience, and the responsibility to demonstrate, respectful and dignified interactions within all our living, learning and working communities. These expectations are described in the [Code of Student Rights & Responsibilities](#) (the "Code"). All students share the responsibility of maintaining a positive environment for the academic and personal growth of all McMaster community members, **whether in person or online**.

It is essential that students be mindful of their interactions online, as the Code remains in effect in virtual learning environments. The Code applies to any interactions that adversely affect,

disrupt, or interfere with reasonable participation in University activities. Student disruptions or behaviours that interfere with university functions on online platforms (e.g. use of Avenue to Learn, WebEx or Zoom for delivery), will be taken very seriously and will be investigated. Outcomes may include restriction or removal of the involved students' access to these platforms.

Copyright and Recording

Students are advised that lectures, demonstrations, performances, and any other course material **(including course outlines and manuals)** provided by an instructor include copyright protected works. The Copyright Act and copyright law protect every original literary, dramatic, musical and artistic work, **including lectures** by University instructors

The recording of lectures, tutorials, or other methods of instruction may occur during a course. Recording may be done by either the instructor for the purpose of authorized distribution, or by a student for the purpose of personal study. Students should be aware that their voice and/or image may be recorded by others during the class. Please speak with the instructor if this is a concern for you.

Extreme Circumstances

The University reserves the right to change the dates and deadlines for any or all courses in extreme circumstances (e.g., severe weather, labour disruptions, etc.). Changes will be communicated through regular McMaster communication channels, such as McMaster Daily News, Avenue to Learn and/or McMaster email

Undergraduate Nursing Education Program Handbook

Students in the BScN program must also refer to program specific policies and procedures, which are found in the Undergraduate Nursing Education Program Handbook. This Handbook is located in A2L in the student resources section of the course. Ensure you are familiar with this document, including the following important policies:

- Academic Accommodation of Students with Disabilities Policy
- Academic Integrity Policy
- Discrimination, Harassment & Sexual Harassment: Prevention & Response
- Faculty of Health Science Professional Behaviour Code of Conduct for Learners
- Code of Student Rights and Responsibilities
- Student Appeal Procedures
- McMaster University Grading Scale
- BScN Program Viewing Final Exams Policy
- IT Communication Policy
- Turnitin.com

Course Specific Policies and Procedures:

Please refer to the following documents located in the course policies and procedures section of Avenue for information regarding the policies and procedures governing all in course-related activities.

- Procedures for Midterm Science Exams – 2PF3

Students with Academic Accommodations:

Students registered with SAS (McMaster and Mohawk sites) or Accessibility Services (Conestoga site) are required to make an appointment with the course instructor within the first 3 weeks of classes to discuss their accommodation needs throughout the term.

Accommodations, including the pre-booking of scheduled exams, must be initiated and organized by the student. If a student fails to make such arrangements, they will be required to follow the same process as all other students seeking relief from missed work or the writing of a deferred exam.