

Winter, 2023

Pathophysiology 105

Number of credits: 3, Number of hours: 45

Course Description

Pathophysiology is a theory course in the basic sciences. This pathophysiology course examines the pathological processes underlying disease and focuses on common disorders in each body system. Disorders related to the systems of the body will be discussed in terms of manifestations, etiology and complications. The diagnosis and medical management of common disorders in each body system is also introduced.

Instructor

Name: Julie Lyon Office location: CC205O Phone number: 780-791-4819 Email: julie.lyon@keyano.ca

Name: Kayla Hayter Office location: CC187B Phone number: 780-791-8908 Email: <u>kayla.hayter@keyano.ca</u>

Office Hours

By appointment

Hours of Instruction

Monday-Friday 9am-5pm

Required Resources

Textbook title

- Primary Text VanMeter, K.C., & Hubert, R.J. (2019).Gould's pathophysiology for the health professions. (6th ed.). St. Louis, MO: Saunders.
- VanMeter, K.C., & Hubert, R.J. (2019). Study guide for Gould's pathophysiology for the health professions. (6th ed.). St. Louis, MO: Saunders.

Supplemental Resources

• Potter, P. A., Perry, A.G., Stockert, P.A., & Hall, A.M. (Eds.). (2019). Canadian fundamentals of nursing. (6th Cdn. ed.) (B. J., Astle & W. Duggleby, Cdn. Adapt.). Milton, ON: Elsevier Canada.

Course Outcomes

Upon successful completion of the course, the student shall be able to:

1. Describe common pathologic processes resulting in alteration of the structure and function of the body.

2. Correlate alterations in the physiologic function of the body to clinical presentation of signs and symptoms.

3. Describe common disorders in each body system.

4. Identify common methods of diagnosing, treating and medically managing common disorders in each body system and their complications.

Evaluation

The list below contains all graded evaluations and assessments for this course along with due dates and the value of each item towards your final grade.

| Assessments/Evaluations | Due Date | Value |
|-------------------------|----------|-------|
| Quiz 1 | ТВА | 15% |
| Quiz 2 | ТВА | 10% |
| Quiz 3 | ТВА | 15% |
| Quiz 4 | ТВА | 15% |
| Quiz 5 | ТВА | 15% |
| Final Exam | ТВА | 30% |

**Please note: Students will be notified by the Instructor of any adjustments to the schedule. Assessment Details:

Quiz 1 Multiple-choice exam that covers the learning outcomes in Units 1 - 3

Quiz 2 Multiple-choice exam that covers the learning outcomes in Units 4-5

Quiz 3 Multiple-choice exam that covers the learning outcomes in Units 6 – 7

Quiz 4

Multiple-choice exam that covers the learning outcomes in Units 8 - 10

Quiz 5

Multiple-choice exam that covers the learning outcomes in Units 11 – 14

Final Examination

Comprehensive multiple-choice written exam that covers all learning outcomes in this course.

Grading System

This is a combined theory and lab course. A student cannot pass this course by being proficient in theory but not proficient in the integration of nursing theory and application of nursing skills in a laboratory setting.

Students must successfully demonstrate nursing skills learned in this course in the lab setting during guided practice. They will also practise giving feedback and participating in reflective practice during the lab sessions. Lab participation is mandatory in order to pass the course and commence the clinical.

To receive credit for Nursing Foundations III: Medical/Surgical Nursing, a student must achieve each of the following:

• A minimum overall grade of **60% GPA (1.7)**

- A **Pass** in the guided lab component
- A **Pass** in the Clinical Integration Assessment

| Descriptor | Alpha Scale | 4.0 | Percentage |
|--------------|-------------|---------------|------------|
| | | Numeric Scale | |
| Excellent | A+ | 4.0 | 96-100 |
| | А | 4.0 | 90-95 |
| | A- | 3.7 | 85-89 |
| Good | B+ | 3.3 | 80-84 |
| | В | 3.0 | 76-79 |
| | B- | 2.7 | 72-75 |
| Satisfactory | C+ | 2.3 | 68-71 |
| | С | 2.0 | 64-67 |
| | C- | 1.7 | 60-63 |
| Poor | D | 1.3 | 55-59 |
| Minimum | D+ | 1.0 | 50-54 |
| Pass | | | |
| Failure | F | 0 | 0-49 |

Proposed Schedule

Refer to Self-serve for full schedule.

| Week | Date | Topics |
|---------|--------------------------|--|
| Week 1 | No Class | No Topic |
| Week 2 | January 11 th | Unit 1 Basic Concepts of Pathophysiology |
| Week 3 | January 18 th | Unit 2 Genetics & Aging |
| Week 4 | January 25 th | Unit 3 Neoplasms |
| | | Quiz #1 |
| Week 5 | February 1st | Unit 4 Fluids & Electrolytes Unit 5 Integumentary Disorders |
| | | Quiz #2 |
| Week 6 | February 8th | Unit 6 Blood Lymphatic Disorders |
| Week 7 | February 15th | Unit 7 Cardiovascular Disorders |
| | | Quiz #3 |
| Week 8 | No Class | No Topic |
| Week 9 | March 1 st | Unit 8 Respiratory Disorders |
| Week 10 | March 8th | Unit 9 Gastrointestinal Disorders |
| Week 11 | March 15th | Unit 10 Urinary System Disorders |
| | | Quiz #4 |
| Week 12 | March 22nd | Unit 11 Reproductive Disorders Unit 12 Sensory & Pain Disorders |

| Week 13 | March 29th | Unit 13 Nervous System Disorders Unit 14 Musculoskeletal System |
|---------|------------|---|
| | | Quiz #5 |
| Week 14 | April 5th | Unit15 Endocrine Disorders |
| Week 15 | No Class | No Topic |
| Week 16 | ТВА | Final Exam |

Please Note:

The date and time allotted to each topic are subject to change.

Hyflex information that may be added to course outline:

We are using the HyFlex course delivery mode. HyFlex is short for "hybrid-flexible." What this means is that, as the student, **you** have a **choice about how you participate in class on a daily/weekly basis.** The options for attending/participating this class are below:

Options for Attending/Participating Class (choice can be made daily/weekly): (Instructor to pick the options available in your class)

- a) Face-to-face in our classroom on campus at our regular class time (depends on your section).
- b) **Online virtually via Zoom (Synchronously)** at our regular class time (see details below in the "Expectations" section).
- c) **Online Asynchronously** on a flexible schedule, you will complete online activities during the scheduled week adhering to activities and assignment due dates. The mode may require you to review class recordings.

Please note that you may asked to indicate your intended participation mode on a weekly basis using a poll tool in Moodle.

Attending Online Virtually via Zoom:

- 1. Enter our Moodle course, go to Course Information section, and click on the Online Virtual Session Zoom link to join the class.
- 2. Once you click on "Online Virtual Session Zoom link," a dialog box will appear, click the Join Meeting button.

Expectations of Students with Respect to Technology: (All students)

- 1. Log in to Moodle at least three times a week to check announcements and the schedule (it's good to get into the habit of checking Moodle daily for each of your courses).
- 2. Participate in class regardless of whether you attend face-to-face, virtually via Zoom (synchronously), or asynchronously.
- 3. If you choose to attend class virtually via Zoom or Teams:
 - a. make sure that your technology is updated and ready for each class (log in 5-10 minutes early to check updates and connections).
 - i. Note: Public Wi-Fi connections sometimes may not support the bandwidth necessary for Zoom.

- ii. Headphones are recommended.
- iii. Cameras on preferred.
- b. once you enter the Zoom room, all you need to do is wait for the session to begin.
 - i. There may be second difference between the virtually and "real life," so you will experience the lecture with a little bit of lag. However, this will not be noticeable unless you are attending in person and also have Zoom/Microsoft Teams open.
 - ii. You instructor will monitor all questions that come in, so don't worry about any lag.
- 4. If you choose to attend class in person, it is recommended that you bring a device to class to login to Zoom session for group work.
- 5. Be respectful of your peers and the instructor regardless of whether you attend face-to-face or virtually.
- 6. Having non-course-content-related technology issues?
 - a. If you ever have a problem, first try using a different browser.
 - b. For Zoom related issues, you might find your answer at Getting Started with Zoom
 - c. For Moodle related issues, visit <u>Learning to use Moodle</u>
 - d. For general issues, you can contact thel or call 780-791-4965

Performance Requirements and Student Services

Student Responsibilities

As a student, it is your responsibility to contact the Office of the Registrar to complete the required forms, including the Withdraw Course or Program or a Change of Registration form. Please refer to the important dates listed in the Academic Schedule in the Keyano College credit calendar. The Keyano College credit calendar also has information about Student Rights and the Code of Conduct. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and the Code of Conduct Policies.

Student Attendance

Class attendance is helpful for two reasons: First, class attendance maximizes a student's learning experience. Second, attending class is an excellent way to keep informed of matters relating to the course administration (e.g., the timing of assignments and exams). Ultimately, you are responsible for your learning and performance in this course. It is the responsibility of each student to be prepared for all classes. Absent students are responsible for the material covered in those classes, and students must ensure they are ready for their next class, including completing any missed assignments and notes.

Academic Misconduct

Students are considered responsible adults and should adhere to the principles of intellectual integrity. Intellectual dishonesty takes many forms:

- Plagiarism or the submission of another person's work as their own,
- The use of unauthorized aids in assignments or examinations (cheating),
- Collusion or the unauthorized collaboration with others in preparing work,
- The deliberate misrepresentation of qualifications,
- The willful distortion of results or data,
- Substitution in an examination by another person,
- Submitting unchanged work for another assignment, and
- Breach of confidentiality.

The consequences for academic misconduct range from a verbal reprimand to expulsion from the College. More specific descriptions and details are found in the Student Rights and Code of Conduct section of the Keyano College credit calendar. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Code of Conduct Policies. To ensure your understanding of

Apple (Mac)

plagiarism, you may be required to complete the online <u>Understanding Plagiarism tutorial</u> and submit the certificate of completion.

Online Learning

Technology and internet connectivity will impact your online learning experience. You may be required to watch online videos, take online quizzes, or participate in live online classes. Live/virtual courses will be hosted in Microsoft Teams or Zoom. For all course delivery types, you will access your course resources on Keyano's learning management system: Moodle (iLearn). Login in using your Keyano username and password. Keyano College operates in a Windows-based environment and having access to the correct tools for online learning is essential. Here's a list of recommended system requirements.

Internet Speed

Minimum download and upload speeds of 10 Mbps. Recommended download speeds of 25 Mbps and upload speeds of 10 Mbps (if you are sharing your internet at home). You can check your internet speed with <u>Speedtest by Ookla</u>.

| Microsoft Windows | A |
|---|-------------------------|
| Minimum Requirements: | Minimum Requirements: |
| 1. Windows 10 Operating System or above | 1. Mac Operating System |

Computer System Requirements

| 1. Windows 10 Operating System or above | 1. Mac Operating System 10.14 (Monterey) or above |
|--|--|
| 2. 4GB of RAM | 2. 4GB of RAM |
| 3. 10GB available hard drive storage space | 3. 10GB available hard drive storage space |
| a. Install the Microsoft Office 365 suite (~3GB) * | a. Install the Microsoft Office 365 suite (~3GB) * |
| Microphone, webcam, and speakers (All modern laptops have these three accessories built-in.) | Microphone, webcam, and speakers (All modern laptops have these three accessories built-in.) |
| Windows has built-in anti-virus/malware software. It is essential to install system updates to keep your device secured regularly. | Mac has built-in anti-virus/malware software. It is important to install system updates to keep your device secured regularly. |
| *Microsoft Office 365 is free to Keyano students. | * <u>Microsoft office 365</u> is free to Keyano students. |
| | |
| Recommended Upgrades | Recommended Upgrades |
| Recommended Upgrades 8GB of RAM | Recommended Upgrades 8GB of RAM |
| Recommended Upgrades 8GB of RAM Regularly back up or synchronize your files, locally or with a cloud-based storage option. | |
| 8GB of RAM Regularly back up or synchronize your files, locally or | 8GB of RAM Regularly back up or synchronize your files locally or |

and Microsoft Office 365.

Specific Department Requirements

Business and OA programs require Windows 10. Other programs may utilize Windows-based tools as well.

Computer Software

Students have access to Microsoft Office 365 and Read&Write for free using Keyano credentials.

Recording of Lectures and Intellectual Property

Students may only record a lecture if explicit permission is provided by the instructor or Accessibility Services. Even if students have permission to record a lecture or lecture materials, students may not share, distribute, or publish any of the lectures or course materials; this includes any recordings, slides, instructor notes, etc., on any platform. Thus, no student is allowed to share, distribute, publish or sell course-related content without permission. It is important to recognize that the Canadian Copyright Act contains provisions for intellectual property. The <u>Academic Integrity Policy</u> provides additional information on Keyano College's expectations from students as members of the intellectual community.

ITS Helpdesk

If you have issues with your student account, you can contact the ITS Helpdesk by emailing <u>its.helpdesk@keyano.ca</u> or calling 780-791-4965.

COVID-19 We are subject to provincial, and municipal bylaws, and policies. These decisions may change pending further direction from the Alberta Chief Medical Officer, Alberta Health Services, and other provincial guidelines. To protect yourself and others, get immunized, wash your hands, wear a mask, keep your distance (2m/6 ft) and remain home when feeling unwell. For the most recent COVID-19 information, please refer to <u>albertahealthservices.ca/COVID</u>.

Specialized Supports The Student Services Department is committed to Keyano students and their academic success. There is a variety of student support available at Keyano. All student services are available during Keyano business hours: Monday to Friday, 8:30 a.m. to 4:30 p.m. The College is closed on statutory holidays. If you require support outside of regular business hours, please inform the support service team, and they will do their best to accommodate your needs.

Accessibility Services provides accommodations for students living with disabilities. Students with documented disabilities or who suspect a disability can meet with an Access Strategist to discuss their current learning barriers and possible accommodations. Students who have accessed accommodations in the past are encouraged to contact the department to request accommodations for the following semester. Please note that requesting accommodations is a process and requires time to arrange. Contact the department as soon as you know you may require accommodations. For accessibility supports and disability-based funding, please book an appointment by emailing us at: accessibility.services@keyano.ca.

Accessibility Services also provides individual and group learning strategy instruction for all students and technology training and support to enhance learning. You can meet with an Access Strategist to learn studying and test-taking strategies. In addition, you can schedule an appointment with the Assistive Technology Specialist to explore technology tools for learning. Book an appointment today by emailing: accessibility.services@keyano.ca

Wellness Services offers a caring, inclusive, and respectful environment where students can access free group and individual support to meet academic and life challenges. Mental Health Coordinators provide a safe and confidential environment for you to seek help with personal concerns. Our Wellness Navigator offers support with basic needs such as housing, financial and nutritional support, and outside referrals when needed. Wellness Services welcomes students to participate in group sessions that address topics including mindfulness and test anxiety throughout the academic year. Individual appointments can be made by emailing wellness.services@keyano.ca.

Library Services: provides students with research, information, and education technology supports as they engage in their studies. Library staff are available to help you online and in person throughout the semester. Librarians offer individual and small group appointments booked using the online <u>Book A</u> <u>Librarian calendar</u>. The Library also provides research and subject guides to help you with your studies. To view a subject or course-specific guide, check out the complete list of online <u>Subject Guides</u>. To start your research and access citation guides (APA, MLA, Chicago, or IEEE), visit the <u>Research Help page</u>. The Library's collections (including print and online materials) are searchable using <u>OneSearch</u>. The Library offers a Loanable Technology collection to support students accessing and using technology. For an up-to-date list of technology available for borrowing, visit the Library's <u>Loanable Technology webpage</u>. For a detailed list of library resources and services, go to <u>www.keyano.ca/library</u>. For all inquiries, please email <u>askthelibrary@keyano.ca</u> or <u>chat with us online</u>.

Academic Success Centre: The Academic Success Centre at Keyano College (CC-119) provides free academic support services to registered students, such as tutoring, writing support, facilitated study groups, workshops, and study space. Academic Content Specialists are available in Mathematics, Science, Trades, Power Engineering, Upgrading/College Prep, Human Services, English, Humanities, and more. Students are encouraged to visit the Academic Success Centre to discuss study strategies and academic concerns. For additional information, please email <u>Academic.Success@keyano.ca</u>.

Academic Success Coach: The Academic Success Coach is located in the Academic Success Centre and works with students to develop academic success plans, time management skills, study strategies, and homework plans. For additional information, please email <u>Academic.Success@keyano.ca</u>.

Authorization

This course outline has been reviewed and approved by the Program Chair.

[First Name, Last Name], Instructor

[First Name, Last Name], Chair

Date Authorized

[First Name, Last Name], Dean

Date Authorized

Signed copies to be delivered to: Instructor Registrar's Office