

ADVANCED CARE PARAMEDIC

KEYANO COLLEGE

COURSE SYLLABUS

ACP 508

Advanced Pharmacology

Fall 2020

Instructor: Adam Hiscock



ADVANCED CARE PARAMEDIC DIPLOMA 2019-2020

INSTRUCTOR: Adam Hiscock

HOURS OF INSTRUCTION:

Timetable will be distributed the first day of class.

COURSE DESCRIPTION:

ACP 508 – Advanced Pharmacology 3 credit 45 hours

The Advanced Pharmacology course will utilize the principles of pharmacology to teach paramedic students advanced concepts and principles of Prehospital drug administration. The student will come to realize the importance of pharmacology and drug therapy as a complex role that sets the advanced life support (ALS) provider. As you will soon learn, no drug is without side effects. We must be very good at knowing when to establish and initiate all medications in the pre-hospital care setting. We also are expected to administer infusions and medications that are initiated both in the field and by the sending hospital.

The paramedic is always reassessing the patient in order to see if interventions are appropriate. The paramedic student will find that the cardiovascular and respiratory systems are always a priority in any patient care. The paramedic student will need to be aggressive in locating and treating the current medical or traumatic condition as they present anywhere, anytime and to any patient.

The Advanced Pharmacology course encompasses knowledge of drug actions, interactions, administration routes, and specific dosages applied to medical and traumatic situations. It will be up to the practitioner to decide if a certain medication is warranted and if the benefits outweigh the negative side effects.

COURSE OUTCOMES:

Upon completion of the ACP 508 Advanced Pharmacology course the student will be able to:

- Value the role of medication administration in providing advanced life support in the prehospital care setting.
- Be responsive and organized in their approach as a sole rescuer in charge of medication administration in an advanced life support service.



- Use effective analytical skills in assessing drug therapy intervention options while maintaining a 'Do no harm' philosophy in all medication administration.
- Compare and analyze the routes and absorption rates of all emergency medications used in the paramedic unit when providing advanced life support.
- Analyze and apply pharmacology administration knowledge to treat all acute illnesses or injuries found in Prehospital care.
- Be confident in treating toxicology and behavioral emergencies with the appropriate pharmacology as required.
- Provide accurate and precise drug calculations for any medication calculation on any occasion.
- Understand the importance, and process, of updating pharmacology knowledge to standard-of-care changes on a continual base throughout your career.

COURSE EVALUATION:

Module Quizzes (15%)	15%
Module Group Learning Activities x 2	
1. Thrombolytic Essay	10%
2. Rapid Sequence Induction Research Project	10%
Midterm x 2 (Multiple Choice Exam) (15% Each)	30%
Final Exam (Multiple Choice Exam)	35%

COURSE TEXTBOOKS:

Textbook of Adult Emergency Medicine 5th Edition

Nancy Caroline's Emergency Care in the Streets, Seventh Edition Canadian, (2016)

Advanced Cardiac Life Support (ACLS). 2015, American Heart Association.

Pediatric Advanced Cardiac Life Support (PALS). 2015, American Heart Association.



Performance Requirements

Student Responsibilities

It is your responsibility as a student to contact the Office of the Registrar to complete the forms for Withdrawal or Change of Registration, and any other forms. Please refer to the list of important dates as noted in the Academic Schedule in the Keyano College credit calendar. The Keyano College credit calendar also has information about Student Rights and Code of Conduct. It is the responsibility of each student to be aware of the guidelines outlined in the Student Rights and Code of Conduct Policies.

Student Attendance

Class attendance is useful for two reasons. First, class attendance maximizes a student's learning experience. Second, attending class is a good way to keep informed of matters relating to the administration of the course (e.g., the timing of assignments and exams). Ultimately, you are responsible for your own learning and performance in this course.

It is the responsibility of each student to be prepared for all classes. Students who miss classes are responsible for the material covered in those classes and for ensuring that they are prepared for the next class, including the completion of any assignments and notes that may be due.

Academic Misconduct

Students are considered to be responsible adults and should adhere to principles of intellectual integrity. Intellectual dishonesty may take many forms, such as:

- Plagiarism or the submission of another person's work as one's 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;
- Handing in the same unchanged work as submitted 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.

In order to ensure your understanding of the concept of plagiarism, <u>you must successfully complete the online tutorial found on ilearn.keyano.ca.</u> Then print the certificate, sign it, and <u>show it to each of your instructors.</u> Your course work may not be graded until you show this signed certificate.

Specialized Supports

The Student Services department is committed to Keyano students and their academic success. There are a variety of student supports available at Keyano College. Due to the continuing situation with the Covid-19 pandemic, the offered support services will be implemented differently this semester by being provided mostly virtually. In-person service can be requested as needed. All Alberta Health Services guidelines will be followed for inperson appointments—wear a mask, maintain two meters of physical distance, use hand sanitizer, and stay home if you are unwell.

All student services are available during Keyano business hours: Monday to Friday, 8h30-16h30.

The Library has evening and weekend hours. Please check <u>keyano.ca/library</u> for current hours.

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

Accessibility Services also provides individual and group learning strategy instruction for all students, as well as technology training and supports to enhance learning. Meet with a Learning Strategist to learn studying and test-taking strategies for online classes. Schedule an



appointment with the Assistive Technology Specialist to explore technology tools for learning. Book an appointment today by emailing accessibility.services@keyano.ca

Academic Success Coaching: offers you support and access to resources for your academic success to help you to find the Keys to your Success. The Academic Success Coach will work with you to develop an academic success plan, develop your study and time management skills, and connect you with the right resources here at Keyano.

Academic.success@keyano.ca is the best way to access resources during virtual service delivery.

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 offer a safe and confidential environment to seek help with personal concerns. All individual appointments will continue virtually.

Wellness Services welcomes students to participate in any of the virtual group sessions offered throughout the academic year addressing topics including mindfulness and test anxiety.

Individual virtual appointments can be made by emailing wellness.services@keyano.ca

Library Services: provides students with research and information supports as they engage in their studies. Library staff are available to support you both virtually and in person during the fall semester. For library service supports and inquiries, please email askthelibrary@keyano.ca.

Individual support with the Information Librarian will be provided virtually. Appointments can be requested by email or by placing a <u>Book a Librarian</u> request using the online form found here.

Research and Subject Guides are helpful resources when conducting research or addressing your information needs. To view a subject or course specific guide, use the following <u>Subject Guides link</u>

To access additional research resources, including Citation Guides (APA, MLA, Chicago, or IEEE), go to the <u>Research Help Library page</u>.



Skill Centre: provides academic support services to students registered in credit programs at Keyano College in the form of tutoring, writing support groups, facilitated study groups, workshops and study space. Tutoring services are **free** to Keyano students. Tutoring is available for Math, Writing, English, and Science subject areas.

While most courses are being offered online, the Skill Center will be offering mostly virtual tutoring services and in-person sessions as requested. Please email Skill.centre@keyano.ca to get in contact with our tutoring staff.

For the most up to date information on how to book a tutoring session, please view the Keyano Skill Centre homepage.

E-Learning

Technology and internet will impact your online learning experience. It's important that you are able to watch an online video and other course materials, take online quizzes, and participant in a live class with your instructor and other students.

Keyano College operates in a Windows based environment and having the correct tools for online learning is important. Here's a list of recommended system requirements for Fall 2020.

Internet Speed

Minimum Internet speeds of 5 Mbps.

Recommended Internet speeds of 25 Mbps (especially if you are sharing your internet at home). Check your internet speed with Fast.com.



System requirements:

Microsoft Windows	Apple	
Minimum Requirements:	Minimum Requirements:	
A Windows 10 computer/laptop · Minimum 4GB of RAM.	A Macintosh (V10.14 and above) computer/laptop · Minimum 4GB of RAM.	
· 10GB+ available hard drive storage.	· 10GB+ available hard drive storage.	
Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). Microsoft Office software is free to all Keyano students and employees.	Enough available hard drive space to install the Microsoft Office suite (approximately 3GB). Microsoft Office software is free to all Keyano students and employees.	
· Microphone, webcam and speakers. A headset with a microphone is recommended.	· Microphone, webcam and speakers. A headset with a microphone is recommended.	
· System updates must be regularly installed.	· System updates must be regularly installed.	
· Anti-Virus / Anti-Malware software	· Anti-Virus / Anti-Malware software.	
Recommended Requirements - 8GB of RAM	Recommended Requirements · 8GB of RAM	
A method of backing up/synchronizing to local or cloud-based storage such as OneDrive is highly recommended. This is included if you complete the setup of KeyanoMail and download	· A method of backing up/synchronizing to local or cloud-based storage such as OneDrive is highly recommended. This is included if you complete the setup of KeyanoMail and download MS Office	

Chromebooks are **not** recommended as they are not compatible with testing lockdown browsers.

A Microsoft Surface or iPad or iPad Pro may be possible alternatives in some program areas.

Specific department requirements:

Business and OA programs require Windows 10.

Other programs may utilize Windows based tools as well.

Computer Software

Students will be able to get access to Microsoft Office 365 for Free using Keyano Credentials by <u>clicking here</u>.



Recording of lectures and Intellectual Property

Students may only record a lecture if explicit permission is provided by the instructor or by Accessibility Services. Even if students have permission to record a lecture or lecture materials, students may not publish any of the lectures or lecture materials, this includes any recordings, slides, instructor notes, etc. on any platform. Thus no student is allowed to publish or sell instructor notes without formal written permission. It is important to recognize that the Canadian Copyright Act contains provisions for intellectual property.

ITS Helpdesk

If you are having issues with your student account, you can contact the ITS Helpdesk by emailing its.helpdesk@keyano.ca or calling 780-791-4965.