PCP 400, Essentials Course

6 credits, 22.5 hours per week

Course Description

An introduction to the theory necessary for a Primary Care Paramedic and informs clinical decision-making during practical components, progressing to the PCP scope of practice. The PCP 400, Essential's course includes theoretical knowledge, laboratory skills and scenario practice. Students will be introduced to professionalism, develop critical-thinking skills using simulated exercises, and become comfortable with scene control and delegation. Topics include pharmacology, communication, legal and ethical issues, essentials (medical & trauma emergencies, special populations, and aeromedical), mental health and the basis of all medicine – Anatomy and Physiology.

Instructor

Name
Office number
Phone number
Email

Office Hours

xxxxxx

Hours of Instruction

270 hours

Required Resources

xxxxxxxx

Module One: Basic Anatomy and Physiology

Module Description

A PCP must have a fundamental understanding of how the Human Body functions. Students in this course will study human Anatomy and Physiology using a body systems approach. This course will introduce the student to the standard functioning components of the Human Body. The topics include basic anatomical and directional terminology; fundamental concepts and principles of cell biology; histology; the nervous system, the respiratory system; cardiovascular system; the integumentary system; the skeletal and muscular system; the lymphatic and immune systems; the digestive and metabolism systems; the urinary system; fluid/electrolyte and acid-base balance; the reproductive systems; special senses; the endocrine system. The students will apply their knowledge of Anatomy and Physiology to their assessment and treatment skills. Understanding Anatomy and Physiology provides the PCP with the knowledge to make prehospital assessments and treatment decisions in medical and trauma patients.

Learning Outcomes

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

1. Relate anatomy and physiology knowledge to PCP clinical judgement.

2. Describe the organization of the human body.

3. Explain the functions of specific body systems.

4. Describe the concept of homeostasis and relate it to normality.

5. Describe and relate how the human body works as a whole.

6. Explain the relationship between cells, tissues, organs, and systems.

7. Use appropriate anatomical terms when describing the human body and function.

8. Explain the functions of major organs found in each body system and how they relate to clinical medicine in the pre-hospital setting.

Module Two: Introduction to Pharmacology

Module Description

The pharmacology module provides the knowledge required for the safe administration of medication. The responsibility of administering medications requires a PCP to exercise skill, knowledge, and good judgment. Students will be introduced to pharmacodynamics, pharmacodynamics, and safe administration techniques to each of the drugs within the PCP's scope of practice.

Students will participate in labs to develop necessary skills for safe medication administration and apply pharmacological knowledge to manage the patient.

Learning Outcomes

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

1. Demonstrate an understanding of the basic concepts related to the pharmacodynamic principles underlying drug action in the human body.

2. Demonstrate an understanding of the basic pharmacokinetic principles related to movement of drugs within the human body; including various routes of administration.

3. Demonstrate an understanding of the classification, nature, properties, and effects of drugs.

4. Demonstrate sufficient knowledge of various classes of medications including but not limited to: Sympathomimetics, opiates, nitrates, analgesics, anti-inflammatories

5. Demonstrate an understanding of various toxidromes.

6. Demonstrate an understanding of the role of the PCP in ethical drug administration

7. Understand and perform safe medication administration and incorporate the rights to administration.

Module Three: Communications

Module Description

A PCP is responsible for communication when providing patient care. The medical information obtained from a patient may be shared with other members of the health care team. Accurate and timely sharing of this information promotes continuity of care for the patient. In this module, the student will practice techniques used to obtain patient information, communicate effectively, and communicate patient information in various methods to other healthcare team members. Confidentiality and protecting this information are a crucial aspect of communication.

Learning Outcomes

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

1. Collect relevant and accurate patient information.

2. Understand and demonstrate the ability to adapt communication techniques based on patient history and current incident.

3. Document patient information in an organized manner.

4. Verbalize and demonstrate behaviors that maintain patient confidentiality and protect patient information.

5. Demonstrate the ability to deliver organized, accurate, and relevant patient information via a radio report.

6. Demonstrate the ability to deliver organized, accurate, and relevant patient information via a verbal report.

7. Use technical vocabulary and medical terminology appropriately and accurately in written and verbal communication.

8. Demonstrate professional behaviors related to therapeutic communication, establishing trust and rapport, diplomacy, tack, and discretion with patients and other members of the health care team.

9. Demonstrate effective conflict resolution and defusing skills.

Module Four: Legal and Ethical Issues

Module Description

Understanding the legalities and the ethical issues that face PCPs is a critical area of importance. Before practicing as a PCP, students need to consider how Canadian and Alberta legislation affects patient care. In this module, the student will have an opportunity to relate legal and ethical issues to his/her future practice in EMS.

Learning Outcomes

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

1. Understand and undertake the role of a professional PCP.

2. Understand and utilize provincial and federal legislation as it relates to practice.

3. Understand and implement appropriate scope of practice for an PCP.

4. Demonstrate knowledge of professional development activities and currency of practice.

5. Understand and discuss patient's rights and PCP responsibilities of patient advocacy.

6. Explain and demonstrate ethical behavior.

7. Work collaboratively and cooperatively with other members of the health care team.

Module Five: Essentials – Medical & Traumatic Emergencies, Special Populations, and Aeromedical

Module Description

In this module, the student will learn the essential theoretical knowledge required of a PCP practitioner. Demonstrate knowledge of assessment techniques related to medical and trauma patients across the life span. Analyze assessment findings, infer differential diagnosis, develop a treatment plan, and provide appropriate care to the patient. Students will gain an understanding of triaging a multi-casualty situation. Students will participate in applying their knowledge to skills practice in the classroom, lab, and scenario setting. Students will participate in lectures, group discussions, and independent learning practices.

The expectation is that students will work together and independently outside of class time to complete the learning activities found in each lesson. This module has a significant reading component. It is expected that the student will manage their time to complete the required readings and any additional material assigned by the instructors.

Learning Outcomes

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

1. Demonstrate knowledge of appropriate techniques (inspection, palpation, percussion, and auscultation) related to objective assessments of all body systems.

2. Demonstrate knowledge of the specialized assessment techniques related to the pregnant, neonatal, pediatric and geriatric patient

3. Demonstrate knowledge of the specialized assessment techniques related to the psychiatric patient experiencing crisis and patients experiencing drug overdose.

4. Demonstrate ability to consider assessment findings and infer a differential diagnosis.

5. Demonstrate a sound understanding and competence in obtaining & evaluating vital signs.

6. Based on the interpretation of assessment findings and the differential diagnosis, demonstrate decision making skills and knowledge to provide care to a variety of clients across the lifespan.

7. Provide basic care for soft tissue injuries.

8. Demonstrate knowledge, clinical decision-making skills, and ability to provide care for patients experiencing a variety of medical condition at a basic life support level

9. Demonstrate ability to distinguish between urgent and non-urgent illnesses and injuries and explain the approach to each patient

10. Demonstrate an understanding and ability to justify approach, assessment, care, and transportation decisions related to patients experiencing traumatic injury.

11. Demonstrate an understanding of relationship of mechanism of injury to patient condition and care provided.

12. Demonstrate knowledge and ability to protect self and others from communicable disease transmission.

13. Demonstrate knowledge and ability to protect self and others from exposure to environmental hazards

14. Demonstrate knowledge, clinical decision-making skills, and understanding of how to triage multiple casualty situations and situations where there is only one patient.

15. Demonstrate understanding of safety and knowledge specific to fixed wing and rotary wing aircraft specific to patient transportation.

16. Demonstrate knowledge of specific illnesses, injuries and complications related to all body systems, across the lifespan.

Module Six: Mental Health

Module Description

Mental health is an essential part of the PCP's wellbeing. Paramedic practitioners are no less vulnerable to diseases and injuries than their patients and can be exhausted by the stress of attending to the immediate and inflexible needs. Understanding the components of healthy behaviours and factors that influence mental health is crucial in the paramedic profession. This module will give students the skills and abilities to recognize health behaviours and resources they can access to continue a healthy career.

Learning Outcomes

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

1. Understands the culture of mental health.

2. Recognize an awareness of mental health issues.

3. Explain the signs and symptoms of mental health problems.

4. Demonstrate resiliency awareness.

5. Initiate training in self-awareness.

6. Recognize stress indicators, coping strategies and an understanding of the Critical incident Stress Management System (CISM).

7. Identify counselling types and access to resources.

8. Discuss shiftwork and its effects.

9. Comprehend nutrition.

10. Acknowledges healthy and unhealthy coping strategies.

11. Examine suicide in paramedicine.

12. Define the types of mental disorders.

Evaluation

Assignment & module		Grading = overall grade
A & P:	Module Exam	10%
Pharmacology:	Research Paper	10% 5%
	Exam	10 %
	Medication Calculation	5%
Communications:	Patch Assignment	5%
	Debate	5%
	PCR Assignment	5%
Essentials:	Patch (voice mail)	5%
	Case Studies	10% 5%
	Mid Term Exam 1	7.5%
	Mid Term Exam 2	7.5%
	Final Exam	20%
Mental Health:		10%
TOTAL:		100%

A grade of B+ is required for progression.

The minimum standard for passing this course is a grade of B+ (80%).

Students must achieve an average of 80% on the midterm and the final exam in order to pass the course and an overall average in the course of 80% (B+).

Grading System

Please include the grading system for your department

Proposed Schedule
See the class schedule, topics, and readings as attached.

Please Note:

Date and time allotted to each topic is subject to change.

Performance Requirements and Student Services

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, you must successfully complete the online tutorial found on ilearn.keyano.ca. Then print the certificate, sign it, and show it to each of your instructors. 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 in-person 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.

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

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 throughout the semester. For a detailed list of library supports and services, go to www.keyano.ca/library. For any inquiries, please email askthelibrary@keyano.ca.

Begin your research with the Library's FIND page. Search for sources using OneSearch, the Library's Catalogue, or by searching in a specific database selected from the A-Z Database List.

Individual support with the Information Librarian is available virtually. Appointments can be requested by using the Book A Librarian online form.

Research and Subject Guides are helpful resources when beginning your research or addressing other information needs. To view a subject or course specific guide, go to the Subject Guide webpage here.

To access additional research resourc Mental health is an essential part of the PCP's wellbeing. Paramedic practitioners are no less vulnerable to diseases and injuries than their patients and can be exhausted by the stress of attending to the immediate and inflexible needs. Understanding the components of healthy behaviours and factors that influence mental health is crucial in the paramedic profession. This module will give students the skills and abilities to recognize health behaviours and resources they can access to continue a healthy career.es, including Citation Guides (APA, MLA, Chicago, or IEEE), go to the Research Help Library page.

The Loanable Technology collection is available to support students in their online learning pursuits. Items available for borrowing include mobile projectors, webcams, noise cancelling headphones, Chromebooks, and laptops. For an up-to-date list of technology available for borrowing, go to the Library's Loanable Technology webpage.

Skill Centre: Provides academic support services to students registered in credit programs at Keyano College in the form of tutoring, assignment/lab support, writing support groups, facilitated study groups, workshops, and study space. This service is free and is available for all Math, Sciences, Humanities and Trades courses offered at Keyano.

While most courses are being offered online, the Skill Centre will be offering mostly virtual services and in-person sessions as requested. Please email Skill@keyano.ca to get in contact with our Academic Content Specialists. The Skill Centre is located in CC-119 at the Clearwater Campus.

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

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. The Academic Success Coach is located in the Skill Centre in CC-119 at the Clearwater Campus.

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.

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: A Windows 10 **computer/laptop** · Minimum 4GB of RAM. · 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. · Microphone, webcam and speakers. A headset with a microphone is recommended. · System updates must be regularly installed. · Anti-Virus / Anti-Malware software	**Minimum Requirements:** A Macintosh (V10.14 and above) **computer/laptop** · Minimum 4GB of RAM. · 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. · Microphone, webcam and speakers. A headset with a microphone is recommended. · System updates must be regularly installed. · Anti-Virus / Anti-Malware software.

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 MS Office using your Keyano email for free.	**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 MS Office using your Keyano email for free.

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 clicking here.

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 share, distribute, or 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 share, distribute, publish or sell course related content (instructor, or students) without permission. It is important to recognize that the Canadian Copyright Act contains provisions for intellectual property. The Academic Integrity Policy provides additional information on Keyano College's expectations from students as members of the intellectual community.

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.