

COURSE SYLLABUS



COURSE TITLE: AET 470: Pharmacology and Exercise

CLASS SECTION: 001

TERM: 2024F

COURSE CREDITS: 3

DELIVERY METHOD(S): Face to face on campus lectures and seminars

Camosun College campuses are located on the traditional territories of the Ləkʷəŋən and W̱SÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here.

Learn more about Camosun's [Territorial Acknowledgement](#).

For COVID-19 information please visit <https://legacy.camosun.ca/covid19/index.html>.

This section of AET 470-001 requires mandatory attendance for the first class meeting of the course. If you do not attend, and do not provide your instructor with a reasonable reason in advance, you will be removed from the course and the space offered to the next waitlisted student. For more information, please see the "Attendance" section under "Registration Policies for Students" [Registration Policies for Students | Camosun College](#)

INSTRUCTOR DETAILS

NAME: Jen Gow, PhD, CAT(C)

EMAIL: gowj@camosun.ca

OFFICE: PISE 212E

HOURS: Thursdays from 10 am to 12 pm and Fridays from 11 am to 12 pm or by appointment only, please.

As your course instructor, I endeavour to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me. Camosun College is committed to identifying and removing institutional and social barriers that prevent access and impede success.

CALENDAR DESCRIPTION

General terminology, concepts and principles of pharmacology in the field of athletic and exercise therapy. Topics include relevant drug categories, common dosage, ranges and routes of drug administration with an understanding of the pharmacological mechanisms of action and interaction (contraindications, side effects and implications) of various pharmacological agents.

PREREQUISITE(S):

All of: C in AET 310, C in CHEM 214 and

One of: C in BIOL 144, C in BIOL 151, C in BIOL 152 and BIOL 153

COURSE LEARNING OUTCOMES / OBJECTIVES

At the completion of this course, students will be able to:

- Discuss general concepts and principles of pharmacology and common pharmacological agents used in athletic and exercise therapy.
- Differentiate between the concepts of pharmacodynamics and pharmacokinetics.
- Explain the drug classification system including the chemical, generic and brand name of drugs.
- Critique relevant policies and legislation related to safe drug administration.
- Demonstrate an understanding of the typical drug administration routes and the general principles about how drugs are metabolized.
- Explain the common mechanisms of actions, indications, contraindications, and interactions of specific drugs and how these drugs influence exercise response.
- Interpret the component of a drug prescription and the dose response relationship curve for optimal drug therapy.
- Apply strategies for monitoring the expected effects, potential adverse effects, and therapeutic action of commonly prescribed medications.
- Explain and defend the role of an athletic/exercise therapist in drug management.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

- a) Principles of Pharmacology for Athletic Trainers, Third Edition (2016). Joel Houglum, Gary Harrelson, and Teresa Seefeldt. Slack Incorporated, NJ. (Recommended).
- b) Supplementary materials will be supplied on D2L.

Meeting Information:

Wednesdays from 12:30 to 2:20 pm in PA 103 and Fridays from 12:30 to 1:20 pm in PISE 329A.

COURSE SCHEDULE, TOPICS, AND ASSOCIATED PREPARATION / ACTIVITY / EVALUATION

The following schedule and course components are subject to change with reasonable advance notice, as deemed appropriate by the instructor.

DATE	ACTIVITY and TOPIC
Sept. 4th	Course Introduction
Sept. 6th	Introduction to Pharmacology Overview of Assignments
Sept. 11th	Basic concepts of pharmacology: Introduction to pharmacodynamics and pharmacokinetics Drug names and classification
Sept. 13 th	Interview assignment questions Topics/groups for presentations True Sport Clean 101 information

DATE	ACTIVITY and TOPIC
Sept. 18th	Understanding a prescription Drug information sources
Sept. 20th	Interview Assignment questions Guidelines for presentations
Sept. 25th	The Management of Drugs in Athletic Training Facilities- Chapter 4 Basic principles of pharmacokinetics: Drug absorption, distribution, metabolism, and excretion- Chapter 2
Sept. 27 th	Drug Development and Legislation
Oct. 2nd	Pharmacodynamics- Chapter 3
Oct. 4 th	Pharmacodynamics: Adverse drug reactions-Chapter 3 The role of an AT in drug management
Oct. 9th	Resources for athletes/clients Drugs for treating diabetes- Chapter 14
Oct. 11 th	Guest lecture- TBD
Oct. 16th	Drugs for treating diabetes- Chapter 14
Oct. 18 th	Drugs to treat infections- Chapter 5 Information and tips for presentations
Oct. 21st-25th	BAET Midterm Exam Week Midterm Exam
Oct. 30th	Drugs to treat infections- Chapter 5 Drugs to treat hypertension and heart disease- Chapter 12
Nov. 1st	Work on presentations
Nov. 6th	Drugs to treat hypertension and heart disease-Chapter 12
Nov. 8 th	Drugs to treat hypertension and heart disease- Chapter 12
Nov. 13th	Drugs to treat inflammation- Chapter 6
Nov. 15 th	Drugs to treat inflammation- Chapter 6 Use of NSAIDs in sports
Nov. 20th	Drugs to treat pain- Chapter 7
Nov. 22 nd	Drugs to treat pain- Chapter 7 PEDs-Chapter 16
Nov. 27 th	PEDs Supplements- Chapter 15
Nov. 29 th	Presentations Interview Assignment Due
Dec. 4 th	Presentations True Sport Clean Assignment Due
Dec. 6 th	Presentations Review
Dec. 9th-17th	College Final Exam Period

Students registered with the Centre for Accessible Learning (CAL) who complete quizzes, tests, and exams with academic accommodations have booking procedures and deadlines with CAL where advanced notice is required. Deadlines can be reviewed on the [CAL exams page](http://camosun.ca/services/accessible-learning/exams.html). <http://camosun.ca/services/accessible-learning/exams.html>

EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING
Assignment 1: True Sport Clean	5%
Assignment 2: Interview	10%
Presentation	20%
Midterm Exam All material (lectures and seminars) covered up to the date of the midterm will be examinable.	30%
Final Exam All material covered (lectures and seminars, including presentations and selected handouts) after the midterm will be examinable- questions on pharmacodynamics and pharmacokinetics will also be included. Further details will be provided in class.	35%
TOTAL	100%

If you have a concern about a grade you have received for an evaluation, please come and see me as soon as possible. Refer to the [Grade Review and Appeals](http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf) policy for more information. <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf>

COURSE GUIDELINES & EXPECTATIONS

This is a lecture and seminar style course. Students are expected to come prepared for discussion and/or presentation of material. Students are responsible for catching up on any missed material by asking a peer for notes before contacting the instructor.

Attendance, Exams, and Assignments

An excused absence includes a bonafide intercollegiate trip, permission of the instructor prior to absence, and compassionate reasons.

Exams: Midterm and final examinations must be written on the date scheduled. Final examinations may be scheduled at any time during the examination period; therefore, students should avoid making prior travel, employment, or other commitments for this period. **All students are expected to write the final exam at the time, date, and location set by the Office of the Registrar.** If a student is unable to write an exam through no fault of his, her, or their own, valid documentation must be provided and it must be discussed with the instructor well in advance of the exam date. If the student is absent for an exam or presentation and has not made arrangements with the instructor in advance, a zero grade will be applied.

Late Assignments: Assignments handed in after the due date will not be evaluated. Students who miss assignments for legitimate reasons, such as an illness may be allowed to hand the assignment in late. All other reasons are unexcused and will not be accommodated.

Papers and / or assignments that are deemed unacceptable by the faculty will be returned and receive an automatic 10% deduction on the grading of said item. Papers and / or assignments will receive a 10% per day deduction thereafter. After the 5th day, the assignment will receive a grade of 0%. Failure to turn in an assignment may result in an incomplete final grade being assigned for the course. Reasons that a faculty may deem an item unacceptable include, but are not limited to the following: grammar, spelling, content, punctuation, and inappropriate referencing/citations.

Additional Information

Use of Calculators: Calculators will be permitted during tests. Permission is restricted to nonprogrammable calculators only. Cell phone and watch calculators cannot be used.

Use of Cell Phones, Laptops, Tablets, and other Electronic Devices: Cell phones are not to be used during scheduled class times. Please remove ear buds, headphones, etc. prior to entering the classroom. Please be advised that audio/video recordings and photos of lectures and seminars are prohibited, unless valid documentation for accommodations are provided by CAL (Centre for Accessible Learning).

STUDENT RESPONSIBILITY

Enrolment at Camosun assumes that the student will become a responsible member of the College community. As such, each student will display a positive work ethic, assist in the preservation of College property, and assume responsibility for their education by researching academic requirements and policies; demonstrating courtesy and respect toward others; and respecting expectations concerning attendance, assignments, deadlines, and appointments.

SUPPORTS AND SERVICES FOR STUDENTS

Camosun College offers a number of services to help you succeed in and out of the classroom. For a detailed overview of the supports and services visit <http://camosun.ca/students/>.

Support Service	Website
Academic Advising	http://camosun.ca/advising
Accessible Learning	http://camosun.ca/accessible-learning
Counselling	http://camosun.ca/counselling
Career Services	http://camosun.ca/coop
Financial Aid and Awards	http://camosun.ca/financialaid
Help Centres (Math/English/Science)	http://camosun.ca/help-centres
Indigenous Student Support	http://camosun.ca/indigenous
International Student Support	http://camosun.ca/international/
Learning Skills	http://camosun.ca/learningskills

Support Service	Website
Library	http://camosun.ca/services/library/
Office of Student Support	http://camosun.ca/oss
Ombudsperson	http://camosun.ca/ombuds
Registration	http://camosun.ca/registration
Technology Support	http://camosun.ca/its
Writing Centre	http://camosun.ca/writing-centre

If you have a mental health concern, please contact Counselling to arrange an appointment as soon as possible. Counselling sessions are available at both campuses during business hours. If you need urgent support after-hours, please contact the Vancouver Island Crisis Line at 1-888-494-3888 or call 911.

COLLEGE-WIDE POLICIES, PROCEDURES, REQUIREMENTS, AND STANDARDS

Academic Accommodations for Students with Disabilities

The College is committed to providing appropriate and reasonable academic accommodations to students with disabilities (i.e. physical, depression, learning, etc). If you have a disability, the [Centre for Accessible Learning](#) (CAL) can help you document your needs, and where disability-related barriers to access in your courses exist, create an accommodation plan. By making a plan through CAL, you can ensure you have the appropriate academic accommodations you need without disclosing your diagnosis or condition to course instructors. Please visit the CAL website for contacts and to learn how to get started: <http://camosun.ca/services/accessible-learning/>

Academic Integrity

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf> for policy regarding academic expectations and details for addressing and resolving matters of academic misconduct.

Academic Progress

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf> for further details on how Camosun College monitors students' academic progress and what steps can be taken if a student is at risk of not meeting the College's academic progress standards.

Course Withdrawals Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <http://camosun.ca/learn/fees/#deadlines>.

Grading Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf> for further details about grading.

Grade Review and Appeals

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf> for policy relating to requests for review and appeal of grades.

Mandatory Attendance for First Class Meeting of Each Course

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable reason in advance, you will be removed from the course and the space offered to the next waitlisted student. For more information, please see the “Attendance” section under “Registration Policies and Procedures” (<http://camosun.ca/learn/calendar/current/procedures.html>) and the Grading Policy at <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf>.

Medical / Compassionate Withdrawals

Students who are incapacitated and unable to complete or succeed in their studies by virtue of serious and demonstrated exceptional circumstances may be eligible for a medical/compassionate withdrawal. Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf> to learn more about the process involved in a medical/compassionate withdrawal.

Sexual Violence and Misconduct

Camosun is committed to creating a campus culture of safety, respect, and consent. Camosun’s Office of Student Support is responsible for offering support to students impacted by sexual violence. Regardless of when or where the sexual violence or misconduct occurred, students can access support at Camosun. The Office of Student Support will make sure students have a safe and private place to talk and will help them understand what supports are available and their options for next steps. The Office of Student Support respects a student’s right to choose what is right for them. For more information see Camosun’s Sexualized Violence and Misconduct Policy: <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.9.pdf> and camosun.ca/sexual-violence. To contact the Office of Student Support: oss@camosun.ca or by phone: 250-370-3046 or 250-3703841

Student Misconduct (Non-Academic)

Camosun College is committed to building the academic competency of all students, seeks to empower students to become agents of their own learning, and promotes academic belonging for everyone. Camosun also expects that all students to conduct themselves in a manner that contributes to a positive, supportive, and safe learning environment. Please review Camosun College’s Student Misconduct Policy at <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf> to understand the College’s expectations of academic integrity and student behavioural conduct.

Changes to this Syllabus: Every effort has been made to ensure that information in this syllabus is accurate at the time of publication. The College reserves the right to change courses if it becomes necessary so that course content remains relevant. In such cases, the instructor will give the students clear and timely notice of the changes.