

# COURSE SYLLABUS



COURSE TITLE: AET 440 – Anatomy of the Spine

CLASS SECTION: X01A

TERM: Fall 2024

COURSE CREDITS: 3

DELIVERY METHOD(S): Lecture, Lab

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](#).

---

## INSTRUCTOR DETAILS

NAME: Dr. Johanna Hurtubise

EMAIL: [hurtubisej@camosun.ca](mailto:hurtubisej@camosun.ca)

OFFICE: PISE 212D

HOURS: Monday 11:30-2:00, Thursday 1:00-2:00, or by appointment

*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.*

## INSTRUCTIONAL ASSISTANT DETAILS

NAME: Mike Davies

EMAIL: [daviesM@camosun.ca](mailto:daviesM@camosun.ca)

## CALENDAR DESCRIPTION

Advanced anatomical and mechanical aspects of the vertebral column. Focus is on palpation and the ability to investigate possible pathologies of the vertebral column through assessment and testing of the structure and function of the articular, muscular, and supporting tissues.

PREREQUISITE(S): COM in AET302; "C" in AET341; "C" in AET381

CO-REQUISITE(S): AET401, AET482

## COURSE LEARNING OUTCOMES / OBJECTIVES

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

- a) Identify, palpate, and approximate the structure and describe the function of the bones and bony prominences of the vertebral column.
- b) Identify, palpate, approximate and explain the significance of the ligaments and inert tissues of the vertebral column.
- c) Identify, palpate, approximate and describe the function of muscle groups in the neck and back.
- d) Explain the surfaces and movement of the joints of the vertebral column.
- e) Demonstrate the ability to palpate, assess and test the muscle groups and ligaments in the back and the neck to determine if pathology exists.
- f) Demonstrate an understanding of vertebral column differences across populations.
- g) Interpret test results accurately and explain these results concisely in a functional assessment form.

## REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

### Required Texts:

1. Moore, K.L., Dalley, A.F, Agur, A.M.R. (2018). *Clinically Oriented Anatomy (8th edition)*. Baltimore, MD: Lippincott Williams & Wilkins
2. Kendall, F. P., McCreary, E. K., Provance, P. G., Crosby, R. W., Andrews, P. J., & Krause, C. (2005). *Muscles, Testing and Function: With Posture and Pain (5th Edition)*. Baltimore, MD: Lippincott Williams & Wilkins
3. Biel, A. (2019). *Trail Guide to the Body (6th Edition)*. Boulder, Colorado: Books of Discovery
4. Biel, A. (2019). *Student Workbook – Trail Guide to the Body (6th Edition)*. Boulder, Colorado: Books of Discovery.

### Referenced Texts:

- Drake, R., Vogl, A. W., Mitchell, A. W. M., Tibbits, R. M., & Richardson, P. E. (2008). *Gray's Atlas of Anatomy*. Philadelphia, PA: Churchill Livingstone.
- Magee, D.J. (2008). *Orthopedic Physical Assessment (5<sup>th</sup> ed)*. St. Louis, MI: Saunders Elsevier.
- Martini, F., & Nath, J. L. (2009). *Fundamentals of Anatomy & Physiology*. San Francisco: Pearson/Benjamin Cummings.
- Netter, Frank. (2006). *Atlas of Human Anatomy (4th Edition)* Philadelphia, PA: Saunders Elsevier.
- Tortora, G., & Derrickson, B. (2014). *Principles of Anatomy & Physiology (14<sup>th</sup> edition)*. John Wiley & Sons.

## 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.

Lecture: Friday 8:30-10:20 CHW 340  
 Lab: Friday 8:30-10:20 LACC 104

DATE	TOPIC	TEXTBOOK READINGS (Moore)	LAB DATE	LAB TOPIC
Friday Sept 6	Introduction to the Vertebral Column The Cervical Spine	<i>Ch 2: pg. 70-95, 102-103</i> <i>Ch. 9: pg. 989-994</i>	Thurs Sept 5	Lab 1: Course Introduction & The Vertebral Column
Friday Sept 13	The Thoracic Spine The Lumbar Spine Bones of the Thorax	<i>Ch 2: pg. 70-95, 102-103</i> <i>Ch. 9: pg. 989-994</i> <i>Ch. 4: pg. 290-298</i>	Thurs Sept 12	Lab 2: The Cervical, Thoracic & Lumbar Spine <b>Lab Assignment Due</b>
Friday Sept 20	Muscles of the Vertebral Column	<i>Ch 2: pg. 115-124</i>	Thurs Sept 19	Lab 3: The Thorax <b>Lab Assignment Due</b>
Friday Sept 27	Muscles of the Neck	<i>Ch 2: pg. 24-127</i> <i>Ch. 9: pg. 994-1023</i>	Thurs Sept 26	Lab 4: Muscles of the Vertebral Column <b>Lab Assignment Due</b>
Friday Oct 4	Muscles of the Trunk & Thorax	<i>Ch. 4: pg. 305-313</i>	Thurs Oct 3	Lab 5: Muscles of the Neck <b>Lab Assignment Due</b>
Friday Oct 11	Muscles of the Trunk & Thorax Joints of the Vertebral Column	<i>Ch 2: pg. 95-98, 101</i>	Thurs Oct 10	Lab 6: Muscles of the Trunk & Thorax <b>Lab Assignment Due</b>
Friday Oct 18	Joints of the Vertebral Column: Lumbar, Thoracic & Thorax	<i>Ch. 4: pg. 98-304</i>	Thurs Oct 17	Lab 7: Review <b>Lab Quiz #1</b>
<b>Oct 21-25</b>	<b>MIDTERM WEEK</b>			

Friday Nov 1	Joints of the Vertebral Column: Cervical	<i>Ch 2: pg. 98-101</i>	Thurs Oct 31	Lab 8: Joints of the Thorax, Thoracic & Lumbar Spine <b>Lab Assignment Due</b>
Friday Nov 8	The Skull	<i>Ch. 8: pg. 829-851, 924-929</i>	Thurs Nov 7	Lab 9: Joints of the Cervical Spine <b>Lab Assignment Due</b>
Friday Nov 15	The Skull Cranial Nerves	<i>Ch. 10</i>	Thurs Nov 14	Lab 10: The Skull <b>Lab Assignment Due</b>
Friday Nov 22	Muscles of the Head & Face	<i>Ch. 8: pg. 851-857</i>	Thurs Nov 21	Lab 11: Cranial Nerves, Myotomes/Dermatomes/Reflexes <b>Lab Assignment Due</b>
Friday Nov 29	Neurovascular Supply	<i>Ch. 2: pg. 103-107, 128-139</i> <i>Ch. 4: pg. 313-316</i> <i>Ch. 8: pg. 889-896</i>	Thurs Nov 28	Lab 12: Muscles of the Head/Face <b>Lab Assignment Due</b>
Friday Dec 6	Catch up & Review		Thurs Dec 5	Lab 13: Review <b>Lab Quiz #2</b>

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. https://camosun.ca/services/academic-supports/accessible-learning/academic-accommodations-exams](https://camosun.ca/services/academic-supports/accessible-learning/academic-accommodations-exams)

## EVALUATION OF LEARNING

DESCRIPTION	DUE DATE	WEIGHTING
Pre-Lab Assignments (x10 @ 1% each)	See Lab Schedule	10%
Midterm Written	Week of Oct 21-Oct 25 (date TBD)	25%
Lab Quizzes (x2 @ 5% each)	Thursday October 17 <sup>th</sup> Thursday December 5 <sup>th</sup>	10%
Final Written Exam	TBD	25%
Final Practical	TBD	30%
	<b>TOTAL</b>	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](https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf) policy for more information. <https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf>

### Pre-Lab Assignments: (LO: a-c)

Students will complete a short assignment corresponding to upcoming lab content to prepare for each week's practical lab. Pre-lab assignments must be submitted at the start of each student's scheduled lab time. Late assignments will not be accepted.

### Lab Quizzes: (LO: a-c)

These written tests will be in a 'bell ringer' format and will cover material from labs to date. These quizzes will take place during scheduled lab time (see schedule), for a total of 2 quizzes, worth a total of 10% of the final grade.

### Midterm & Final Written Examinations: (LO: a-d, f, and g)

Written test questions will cover class lectures and assigned readings. Test format will include multiple choice, true/false, matching, diagrams, short answer, and long answer.

### Final Practical Examination: (LO: a-c, e)

Practical exams consist of students identifying, palpating and testing several selected anatomical structures on a class partner.

## COURSE GUIDELINES & EXPECTATIONS

---

Professional standards for students:

- Students are expected to exhibit polite, mature, and respectful behaviour in class (lectures, labs, seminars, or practicums) and actively participate as needed.
- Students are expected to conduct themselves in a manner that maximizes the learning of all students.
- 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.
- Students are expected to dress appropriately for class/lab activities. Please bring clothing and footwear that will allow you to participate fully. Students must change for every lab unless informed in advance. Students who do not come prepared to actively participate in labs may be asked to leave.
- Students will be practicing skills involving direct physical contact (such as palpation, muscle testing, exercise assistance, etc.). Students must refrain from any inappropriate touching. Students with concerns are to speak to the instructor prior to the beginning of the course, or as concerns arise during the semester. There can be no exception to this participation.

### Policy on Cell Phones, PDAs, other Electronic Devices:

Cell phones, PDAs, and other electronic devices are not to be used during scheduled class and lab 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 is provided by CAL (Centre for Accessible Learning). YOU MAY NOT RECORD ANY PERSON WITHOUT THEIR CONSENT (VIDEO OR AUDIO/PHOTO CAPTURE ETC.)

### Attendance Policy:

Research shows a strong correlation between class attendance and academic success. Given the practical nature of this course, and the need to understand the theory utilized during the labs, lab attendance will be taken. An excused absence includes:

- a) Bonafide intercollegiate trip with supporting documentation.
- b) Permission of instructor prior to absence.
- c) Compassionate reasons.

### Exams & Assignments:

The course exams and assignments are pre-scheduled by the instructor and due as outlined in this course outline or as posted on D2L. The final exam will be scheduled by the Registrar's office.

*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.

*Assignments:* Papers and/or assignments that are handed in after the due date/time will receive a 10% per day deduction. After the 5th day the assignment will receive a grade of 0%. 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, and will receive a 10% per day deduction thereafter. 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.

## 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 [camosun.ca/services](https://camosun.ca/services).

Support Service	Website
Academic Advising	<a href="https://camosun.ca/services/academic-supports/academic-advising">camosun.ca/services/academic-supports/academic-advising</a>
Accessible Learning	<a href="https://camosun.ca/services/academic-supports/accessible-learning">camosun.ca/services/academic-supports/accessible-learning</a>
Counselling	<a href="https://camosun.ca/services/health-and-wellness/counselling-centre">camosun.ca/services/health-and-wellness/counselling-centre</a>
Career Services	<a href="https://camosun.ca/services/co-operative-education-and-career-services">camosun.ca/services/co-operative-education-and-career-services</a>
Financial Aid and Awards	<a href="https://camosun.ca/registration-records/financial-aid-awards">camosun.ca/registration-records/financial-aid-awards</a>
Help Centres (Math/English/Science)	<a href="https://camosun.ca/services/academic-supports/help-centres">camosun.ca/services/academic-supports/help-centres</a>
Indigenous Student Support	<a href="https://camosun.ca/programs-courses/iecc/indigenous-student-services">camosun.ca/programs-courses/iecc/indigenous-student-services</a>
International Student Support	<a href="https://camosun.ca/international">camosun.ca/international</a>
Learning Skills	<a href="https://camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills">camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills</a>
Library	<a href="https://camosun.ca/services/library">camosun.ca/services/library</a>
Office of Student Support	<a href="https://camosun.ca/services/office-student-support">camosun.ca/services/office-student-support</a>
Ombudsperson	<a href="https://camosun.ca/services/ombudsperson">camosun.ca/services/ombudsperson</a>
Registration	<a href="https://camosun.ca/registration-records/registration">camosun.ca/registration-records/registration</a>
Technology Support	<a href="https://camosun.ca/services/its">camosun.ca/services/its</a>
Writing Centre	<a href="https://camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills">camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills</a>

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.

### Academic Integrity

Students are expected to comply with all College policy regarding academic integrity; which is about honest and ethical behaviour in your education journey. The following guide is designed to help you understand your responsibilities: <https://camosun.libguides.com/academicintegrity/welcome>  
Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.13.pdf> for Camosun's Academic Integrity policy and details for addressing and resolving matters of academic misconduct.

### 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:  
<https://camosun.ca/services/academic-supports/accessible-learning>

### Academic Progress

Please visit <https://camosun.ca/sites/default/files/2023-02/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 <https://camosun.ca/sites/default/files/2021-05/e-2.2.pdf> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <https://camosun.ca/registration-records/tuition-fees#deadlines>.

### Grading Policy

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.5.pdf> for further details about grading.

### Grade Review and Appeals

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf> for policy relating to requests for review and appeal of grades.

### 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 <https://camosun.ca/sites/default/files/2021-07/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: <https://camosun.ca/sites/default/files/2021-05/e-2.9.pdf> and [camosun.ca/services/sexual-violence-support-and-education](https://camosun.ca/services/sexual-violence-support-and-education). To contact the Office of Student Support: [oss@camosun.ca](mailto:oss@camosun.ca) or by phone: 250-370-3046 or 250-370-3841

### 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 <https://camosun.ca/sites/default/files/2021-05/e-2.5.pdf> to understand the College's expectations of academic integrity and student behavioural conduct.

### Looking for other policies?

The full suite of College policies and directives can be found here: <https://camosun.ca/about/camosun-college-policies-and-directives>

**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.