

COURSE SYLLABUS



COURSE TITLE: AET 340 – Anatomy of the Lower Extremity

CLASS SECTION: X01 A&B

TERM: Fall 2022

COURSE CREDITS: 3

DELIVERY METHOD(S):

Lecture and Lab

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

Camosun College campuses are located on the traditional territories of the Łək'wəḡən and Ƴᑦᑲᑦᑲᑦ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here. Learn more about Camosun's [Territorial Acknowledgement](#).

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 explanation in advance, you will be removed from the course and the space offered to the next waitlisted student.

INSTRUCTOR DETAILS

NAME: Jamie Johnson

EMAIL: johnsonja@camosun.bc.ca

OFFICE: PISE 212A

HOURS: By appointment (250) 370-4725

As your course instructor, I endeavor to provide an inclusive learning environment. However, if you experience barriers to learning on 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

Advanced structure and function of the musculoskeletal system with emphasis on the lower extremity. Focus is on anatomy vocabulary and palpation to investigate musculoskeletal system construction and the relationships between the bones, muscles, joints, ligaments, nerves and blood vessels with respect to performance, injury, disease and rehabilitation. Open to Athletic & Exercise Therapy students only.

PRE-REQUISITES: COM in AET 202 and C in all of AET 261, AET 273, and SPEX 210

CO-REQUISITES: AET 310

COURSE LEARNING OUTCOMES / OBJECTIVES

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

- a) Identify and palpate the origin, insertion, blood supply, nerve innervations, action, and describe the function of the muscles of the lower extremity.
- b) Identify and explain the attachments, and the function of all inert tissues that comprise each peripheral joint in the lower extremity and surrounding tissue.
- c) Demonstrate the ability to palpate and approximate all the muscle attachments and all bony projections, roughenings, or depressions on each bone of the lower extremity and the surrounding tissue.
- d) Demonstrate the ability to palpate and approximate selected landmarks in surface anatomy of the lower extremity.
- e) Demonstrate an understanding of lower extremity differences across populations.
- f) Demonstrate an understanding of the limits of the athletic/exercise therapists' knowledge and how this can influence professional image.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

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:

- Agur, A.M. R., & Dalley, A. F. (2017). *Grant's Atlas of Anatomy* (14th edition) Baltimore, MD: Lippincott Williams & Wilkins
- Drake, R. L., Vogl, A. W., Mitchell, A. W. M., Tibbitts, R. M., & Richardson, P. E. (2008). *Gray's Atlas of Anatomy*. Philadelphia, PA: Churchill Livingstone Elsevier
- Hamill, J., Knutzen, K. M., & Derrick, T.R (2015). *Biomechanical Basis of Human Movement (4th Edition)* Philadelphia, PA: Lippincott Williams & Wilkins
- Lippert, L. S. (2006). *Clinical Kinesiology and Anatomy* (4th Edition). Philadelphia: PA: F.A. Davis Company.
- 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 (14th 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.

Lectures:

Tuesdays 9:30am-10:50am CBA 120

Thursdays 1:00pm-2:20pm Portable A 101

Labs:

X01A – Mondays 8:30am-11:30am LACC 104

X01B – Wednesdays 11:30am-2:20pm LACC 104

Date	Lecture – both X01 A & B	Lab
Monday Sept 5 th Lab X01A ONLY	N/A	College Closed Labour Day
Tuesday Sept 6 th	Introduction to Anatomy	N/A
Wednesday Sept 7 th Lab X01B ONLY	N/A	Lab 1 – Introduction & Anatomical Terminology
Thursday Sept 8 th	Bones of the Pelvic Girdle & Thigh	N/A
Monday Sept 12 th Lab X01A ONLY	N/A	Lab 1 – Introduction & Anatomical Terminology Lab 2: Bony Landmarks of the Pelvic Girdle
Tuesday Sept 13 th	Bones of the Pelvic Girdle & Thigh	N/A
Wednesday Sept 14 th Lab X01B ONLY	N/A	Lab 2: Bony Landmarks of the Pelvic Girdle
Thursday Sept 15 th	Joints of the Pelvic Girdle & Thigh	N/A
Monday Sept 19 th Lab X01A ONLY	N/A	Class Cancelled
Tuesday Sept 20 th	Joints of the Pelvic Girdle & Thigh	N/A
Wednesday Sept 21 st Lab X01B ONLY	N/A	Review
Thursday Sept 22 nd	Muscles and Neurovascular Structures of the Pelvic Girdle/Gluteal Region	N/A
Monday Sept 26 th Lab X01A ONLY	N/A	Lab 3: Bony Landmarks of the Femur & Joints of the Pelvic Girdle Quiz #1
Tuesday Sept 27 th	Muscles and Neurovascular Structures of the Pelvic Girdle/Gluteal Region	N/A
Wednesday Sept 28 th Lab X01B ONLY	N/A	Lab 3: Bony Landmarks of the Femur & Joints of the Pelvic Girdle Quiz #1
Thursday Sept 29 th	Muscles and neurovascular structures of the thigh	N/A
Monday Oct 3 rd Lab X01A ONLY	N/A	Lab 4: Muscles of the Gluteal Region & Posterior Thigh Quiz #2
Tuesday Oct 4 th	Bones of the Lower Leg	N/A
Wednesday Oct 5 th Lab X01B ONLY	N/A	Lab 4: Muscles of the Gluteal Region & Posterior Thigh Quiz #2
Thursday Oct 6 th	Bones of the Lower Leg	N/A
Monday Oct 10 th Lab X01A ONLY	N/A	College Closed Thanksgiving Day
Tuesday Oct 11 th	Joints of the Knee and Lower Leg	N/A
Wednesday Oct 12 th Lab X01B ONLY	N/A	Lab 5: Muscles of the Anterior and Medial Thigh
Thursday Oct 13 th	Joints of the Knee and Lower Leg	N/A
Monday Oct 17 th Lab X01A ONLY	N/A	Lab 5: Muscles of the Anterior and Medial Thigh

Tuesday Oct 18 th	Bones of the Ankle and Foot	N/A
Wednesday Oct 19 th Lab X01B ONLY	N/A	Lab 6: Bony Landmarks of the Lower Leg
Thursday Oct 20 th	Bones of the Ankle and Foot	N/A
Monday Oct 24 th Lab X01A ONLY	N/A	No Lab Midterm Week
Tuesday Oct 25 th	No Lecture Midterm Week	N/A
Wednesday Oct 26 th Lab X01B ONLY	N/A	No Lab Midterm Week
Thursday Oct 27 th	No Lecture Midterm Week	N/A
Monday Oct 31 st Lab X01A ONLY	N/A	Lab 6: Bony Landmarks of the Lower Leg
Tuesday Nov 1 st	Muscles and Neurovascular Structures of the Lower Leg	N/A
Wednesday Nov 2 nd Lab X01B ONLY	N/A	Lab 7: Joints of the Lower Leg Quiz #3
Thursday Nov 3 rd	Muscles and Neurovascular Structures of the Lower Leg	N/A
Monday Nov 7 th Lab X01A ONLY	N/A	Lab 7: Joints of the Lower Leg Quiz #3
Tuesday Nov 8 th	Muscles and Neurovascular Structures of the Lower Leg	N/A
Wednesday Nov 9 th Lab X01B ONLY	N/A	Lab 8: Bony Landmarks of the Ankle & Foot
Thursday Nov 10 th	Joints of the Ankle and Foot	N/A
Monday Nov 14 th Lab X01A ONLY	N/A	Lab 8: Bony Landmarks of the Ankle & Foot
Tuesday Nov 15 th	Joints of the Ankle and Foot	N/A
Wednesday Nov 16 th Lab X01B ONLY	N/A	Lab 9: Muscles of the lower Leg Quiz #4
Thursday Nov 17 th	Joints of the Ankle and Foot	N/A
Monday Nov 21 st Lab X01A ONLY	N/A	Lab 9: Muscles of the Lower Leg Quiz #4
Tuesday Nov 22 nd	Muscles and Neurovascular structures of the Foot	N/A
Wednesday Nov 23 rd Lab X01B ONLY	N/A	Lab 10: Joints of Ankle and Foot
Thursday Nov 24 th	Muscles and Neurovascular structures of the Foot	N/A
Monday Nov 28 th Lab X01A ONLY	N/A	Lab 10: Joints of the Ankle & Foot
Tuesday Nov 29 th	Lumbosacral Plexus	N/A
Wednesday Nov 30 th Lab X01B ONLY	N/A	Lab 11: Muscles of the Foot Quiz #5
Thursday Dec 1 st	Lumbosacral Plexus	N/A
Monday Dec 5 th Lab X01A ONLY	N/A	Lab 11: Muscles of the Foot Quiz #5
Tuesday Dec 6 th	Arteries & Veins of the Lower Limb Neuroplexus Assignment Due!	N/A
Wednesday Dec 7 th Lab X01B ONLY	N/A	Review

Thursday Dec 8 th	Arteries & Veins of the Lower Limb	N/A
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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 noticed 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
Lab Quizzes (5 x 2% each) – as seen in schedule	10%
Neuroplexus assignment Due Dec 6 th @ 11:59pm	5%
Exam Reflections (2 x 2.5%) - TBD	5%
Midterm practical Week 8 - TBD	20%
Midterm written Week 8 - TBD	20%
Final practical Final exam period	20%
Final written Final exam period	20%
TOTAL	100%

Laboratory Quizzes

Lab quizzes include anatomical model identification, diagrams, fill in the blank, and short answer. Quizzes are based on the previous week's lab material (see attached schedule). There are a total of 5 quizzes.

Midterm & Final Written Examinations

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.

Exam Reflections

Written reflection on performance of the written and practical examinations in order to determine goals and plans for achievement. See D2L for further information.

Plexus Assignment

Written assignment outlining the neurological structures of the lower extremity. See D2L for further information.

Practical Examinations

Practical exams consist of students identifying, palpating and testing a number of selected anatomical structures on a model.

Grading System

(If any changes are made to this part, then the Approved Course description must also be changed and sent through the approval process.)

(Mark with "X" in box below to show appropriate approved grading system – see last page of this template.)

Standard Grading System (GPA)

Competency Based Grading System

Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C	Minimum grade required for courses within the BAET program	2
50-59	D	Minimum level of achievement for which credit is granted at Camosun College; Please note that a course with a "D" grade cannot be used as a pre-requisite grade or for graduation in the BAET program	1
0-49	F	Minimum level has not been achieved.	0

Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy at <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf> for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress:</i> A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
CW	<i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.

COURSE GUIDELINES & EXPECTATIONS

Students will maintain optimum levels of safe behavior (personal hygiene, decontamination of personal protective equipment, use of proper body mechanics, etc.) with minimizing potential for disease transmission.

Due Dates: There will be a zero-tolerance policy in effect for missing due dates. All due dates are clearly listed in the schedule above. Students who might miss a deadline for legitimate reasons are to contact the instructor immediately in advance of the due date.

Any assignments/quizzes that are submitted past the due date are subject to a 10% deduction per day to a maximum of 3 days or 30%. After 3 days any submissions will receive a grade of zero.

Students will be practicing palpation skills on each other. 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 it arises during the semester. There can be no exception to this participation. Students are expected to respect their peers at all times.

Students must come prepared with “**appropriate dress**” (loose shorts, T-shirt, socks and shoes). Students must change for every lab unless informed in advance. Students that do not come prepared to actively participate (appropriate dress) in labs may be asked to leave.

Cell phones will not be permitted in class or lab.

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
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](http://camosun.ca/services/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.