

# COURSE SYLLABUS



COURSE TITLE:	MIDS 267 – Musculoskeletal Sonography Procedures
CLASS SECTION:	BX01AB
TERM:	F2024
COURSE CREDITS:	3
DELIVERY METHOD(S):	Blended

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

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## INSTRUCTOR DETAILS

NAME:	Stephan Tuomi & Dustin Pendergast
EMAIL:	<a href="mailto:TuomiS@camosun.ca">TuomiS@camosun.ca</a>   <a href="mailto:Pendergastdustin@camosun.ca">Pendergastdustin@camosun.ca</a>
OFFICE:	CHW 317
HOURS:	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.*

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## CALENDAR DESCRIPTION

Students enhance their understanding of the clinical applications of sonography as a diagnostic investigation tool. Students analyze anatomic relationships of the musculoskeletal system while learning to recognize the normal and abnormal sonographic appearances of the tendons, ligaments, muscle, nerves, bursa, and joint capsules of the elbow, foot, ankle, hand, wrist, knee, and shoulder. Students learn to select appropriate scanning protocols based on patient history, physiologic data, laboratory values, and complementary imaging studies. Students will apply research methodology to examining the expanded use of sonography for musculoskeletal imaging.

PREREQUISITE(S):	All of: C+ in MIDS 227; C+ in MIDS 231
CO-REQUISITE(S):	n/a
EQUIVALENCIES:	n/a

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## COURSE OBJECTIVES AND MAPPED PROFESSIONAL COMPETENCIES

Upon successful completion of this course a student will be able to:

- explain the significance of therapeutic ultrasound and complementary imaging on the approach to musculoskeletal sonography and discuss the selection of protocols, transducers, and impact on resultant sonographic image quality.

- b) explain how the normal and abnormal sonographic appearance of tendons, ligaments, muscle, nerves, bursa, and joint capsules of the elbow, foot, ankle, hand, wrist, knee, and shoulder are differentiated across gender, age, and habitus.
- c) define and apply the components of a diagnostic examination to musculoskeletal sonography.
- d) discuss the common pathologies of the musculoskeletal system and determine how to diagnose them
- e) include visual location references, all images, and measurements necessary to create a summary of the superficial structure examination within the recommended Sonography Canada guidelines for scheduling and time allotments while scanning simulated patients, live subjects, or laboratory partners.

**\*Sonography Canada Competencies:** No MSK Specific Applicable Competencies

## REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

### Required Texts

Jacobson, J. A. (2017). Fundamentals of Musculoskeletal Ultrasound (3rd ed.). Elsevier Health Sciences (US)

## 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.

WEEK or DATE RANGE	ACTIVITY or TOPIC	OTHER NOTES
Week 1 September 2	<i>Sept 2 Labour Day – no in-person lecture</i>	
	Lecture 1 (during lab) Intro to MSK Concepts	Jacobson, J, 2018 Chap. 1
	Lab: Rotator Cuff Imaging Anterior Shoulder	
Week 2 September 9	Lecture 2- Shoulder Anatomy Shoulder Anatomy	Jacobson, J, 2018 Chap. 3
	Lab: Rotator Cuff Imaging Posterior / Lateral Shoulder	
Week 3 September 16	Lecture 3- Shoulder Pathology	Jacobson, J, 2018 Chap. 3
	Lab: Rotator Cuff Imaging Pulling it all together!	
Week 4 September 23	Lecture 4 Elbow Anatomy & Imaging	Jacobson, J, 2018 Chap. 4
	Lab: Shoulder Skills Assessment	
Week 5 September 30	<i>Sept 30 Truth &amp; Reconciliation Day - no in-person lecture</i>	
	Asynchronous Learning Module 4 MSK Pathologies	Jacobson, J, 2018 Chap. 2
	Lab: Elbow Imaging	
Week 6	<i>Oct 9 Thanksgiving - no in-person lecture</i>	

WEEK or DATE RANGE	ACTIVITY or TOPIC	OTHER NOTES
October 7	Asynchronous Learning Module 5 MSK Interventional	Jacobson, J, 2018 Chap. 9
	Lab: Elbow Lab #2	
Week 7 October 14	Lecture 5 Wrist Anatomy	Jacobson, J, 2018 Chap. 5
	Lab: Wrist/Carpal Tunnel Imaging	
Week 8 October 21	Lecture 6 Wrist Pathology	Jacobson, 2018 Chap. 5
	Lab schedule TBD: Elbow & Wrist Skills Assessment	
Week 9 October 28	Midterm	
	Lab: Ankle Introduction	
Week 10 November 4	Lecture 7 Ankle Anatomy	Jacobson, J, 2018 Chap. 8
	Lab: Ankle Imaging & Knee Introduction	
Week 11 November 11	Nov 11 Remembrance Day - no in-person lecture	
	Asynchronous Learning Module 7 Knee Anatomy & Pathology Webinar series	
	Lab: Knee Imaging	
Week 12 November 18	Lecture 8 Knee	Jacobson, J, 2018 Chap. 7
	Lab: Ankle and Knee Assessment	
Week 13 November 25	Lecture 9 Hip Imaging	Jacobson, J, 2018 Chap. 6
	Lab: Additional shoulder views	
Week 14 December 2	Lecture 10 Final Review Session	
	Lab: Final Shoulder Assessment	
Week 15 December 9	Cumulative Final*	

*\*Do not book travel or flights until the final examination schedule has been published by the registrar.*

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

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DESCRIPTION	WEIGHTING
Workbook Assignment 1	2%
Workbook Assignment 2	2%
Scan Assessments (Right Shoulder, Left Shoulder, Elbow / Wrist, Knee / Ankle)	46%
Midterm	20%
Cumulative Final Exam	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](#) policy for more information.  
<https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf>

## CLASS GUIDELINES & EXPECTATIONS

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Refer to the [Diagnostic Medical Sonography \(SONO\) Program Handbook](#) for classroom and lab etiquette as well as professional behaviour expectations.

### Skills Assessments

Students must successfully complete all critical criteria in the Professional Performance section and achieve a minimum grade of 65% on the Interrogation and Image Quality section (and each subsection) of all Skills Assessments in this course to be eligible to use this course as a pre or co-requisite. Students who are unsuccessful at meeting these requirements may receive a “NC” grade and may also risk suspension or removal from the Diagnostic Medical Sonography Program.

Final Skills Assessments are not eligible for repeat assessment.

Students must also achieve a minimum of 65% for their final grade to pass the course and to use this course as a pre or co-requisite.

## SCHOOL OR DEPARTMENTAL INFORMATION

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Health & Human Services Student Handbook: <http://camosun.ca/learn/school/health-human-services/student-info/index.html>

General Practicum Information: <http://camosun.ca/learn/school/health-human-services/student-info/practicum-info.html>

Allied Health & Technologies Department Handbooks:

- Certified Medical Laboratory Assistant: <http://camosun.ca/learn/school/health-human-services/student-info/program-info/cmla.html>
- Diagnostic Medical Sonography: <http://camosun.ca/learn/school/health-human-services/student-info/program-info/sono.html>
- Medical Radiography: <http://camosun.ca/learn/school/health-human-services/student-info/program-info/mrad.html>

Students enrolled in Allied Health & Technologies Programs must achieve a minimum of 65% or a “COM” in each of their courses in order to use their course as a pre-requisite and progress in their program.

Students enrolled in Allied Health & Technologies Programs must participate in learning activities that include intimate and direct personal contact with their classmates during supervised practice. Students are training to perform the duties of a healthcare professional. These duties usually require constant, close physical contact with patients and clients. Students may be required to simulate and perform these activities on one another during this course. Students may also be required to use special hygiene practices and protective gear to protect themselves from the transmission of communicable diseases (like COVID-19). Risks associated with learning and performing the physical duties of a healthcare profession cannot be entirely eliminated by any amount of caution or protection. Students who refuse or are incapable of participating and performing these activities due to personal or medical limitations may only continue to participate in their course work when supported by officially registered accommodations or temporary medical advisory.

## STUDENT RESPONSIBILITY

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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

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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>

Support Service	Website
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.

## COLLEGE-WIDE POLICIES, PROCEDURES, REQUIREMENTS, AND STANDARDS

### 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.