# **CLASS SYLLABUS**



COURSE TITLE: MIDS 227: Superficial Structures

CLASS SECTION: BX01A - BX01D

TERM: S2023

COURSE CREDITS: 3

DELIVERY METHOD(S): Blended Learning

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

Learn more about Camosun's Territorial Acknowledgement.

# https://camosun.ca/about/covid-19-updates

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: Breanna Delgaty

EMAIL: DelgatyB@camosun.ca
OFFICE: CHW 317, 289-788-6827

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.

#### CALENDAR DESCRIPTION

Students enhance their understanding of the clinical applications of sonography as a diagnostic investigation tool. Students analyze anatomic relationships of small and superficial structures and while learning to recognize the normal and abnormal sonographic appearances of the breast, lymph nodes, groin, parathyroid, neck, salivary glands, superficial tissues, bursae, and thyroid. Students learn to select appropriate scanning protocols based on patient history, physiologic data, laboratory values, and complementary imaging studies.

PREREQUISITE(S): C+ in both MIDS 181 and MIDS 197

CO-REQUISITE(S): n/a PRE/CO-REQUISITE(S): n/a

### **COURSE DELIVERY**

ACTIVITY HOURS / WEEK # OF WEEKS ACTIVITY HOURS

Lecture
Seminar
Lab / Collaborative Learning
Supervised Field Practice
Workplace Integrated Learning
Online

3	15	
2	15	

TOTAL HOURS

75

#### **COURSE LEARNING OUTCOMES**

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

- a) explain the significance of screening studies and complementary imaging on the approach to small and superficial structure 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 the breast, lymph nodes, groin, parathyroid, neck, salivary glands, superficial tissues, bursae, and thyroid are differentiated across gender, age, and habitus.
- c) define and apply the components of a diagnostic examination to superficial structure sonography.
- d) perform ultrasound examinations, including 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.

# COURSE OBJECTIVES AND MAPPED PROFESSIONAL COMPETENCIES

(also known as "sub-outcomes" or "learning objectives")

## Sonography Canada Competencies:

3.3c Perform palpation of areas of interest.

## Appendix B: Abdomen

- 1 Abdominal aorta
- 2 Abdominal wall
- 3 Adrenal glands
- 5 Chest and Thorax
- 8 Inferior vena cava
- 9 Liver
- 10 Pancreas
- 11 Peritoneal, retroperitoneal cavities/spaces
- 12 Spleen
- 14 Superior mesenteric artery
- 15 Gallbladder
- 16 Common hepatic duct
- 17 Common bile duct
- 18 Cystic duct
- 19 Intrahepatic duct
- 20 Appendix
- 21 Small bowel
- 22 Large bowel
- 23 Stomach

- 24 Kidneys
- 27 Ureters
- 28 Bladder
- 31 Hepatic Veins
- 33 Portal Veins

# Appendix C: Superficial Structures

- 1 Breast
- 2 Inguinal region
- 3 Superficial tissues
- 5 Lymph nodes
- 6 Popliteal fossa
- 8 Salivary glands
- 9 Parathyroid
- 10 Thyroid

## REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

## Required

Kawamura, D. M., & Nolan, T. D. (2018). Abdomen and superficial structures (4th ed.). Philadelphia, PA: LWW.

Kawamura, D. M., & Nolan, T. D. (2018). Workbook for diagnostic medical sonography: a guide to clinical practice, abdomen and superficial structures (4th ed.). Philadelphia, PA: LWW.

# Optional

Hagen-Ansert, S. L. (2018). Textbook of diagnostic sonography (8th ed.). St. Louis, MO: Elsevier.

Hagen-Ansert, S. L. (2018). Workbook for textbook of diagnostic sonography. St. Louis, MO: Elsevier/Mosby.

Henningsen, C., Kuntz, K., & Youngs, D. J. (2014). Clinical guide to sonography: exercises for critical thinking (2nd ed.). St. Louis, MO: Mosby.

## 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.

# Expanded Learning Outcome(s)

- **c-1)** define and apply the following key components of an ultrasound exam: professional conduct, interpret the request, plan the procedure, establish the patient relationship, execute the procedure and conclude the procedure in relation to superficial structure sonography.
- e) Explain the significance of screening studies and complementary imaging on the approach to pediatric sonography and discuss the selection of protocols, transducers, and impact on resultant sonographic image quality.
- f) Describe the normal and abnormal sonographic appearances of the pediatric abdomen, neonatal spine, neonatal brain, and pediatric hip joint.

WEEK	DATE	LESSON	READINGS	LEARNING OUTCOMES	LEARNING OBJECTIVES	SONOGRAPHY CANADA COMPETENCY
	May 1	Introduction to course     Review course     syllabus     Lesson 1:     Clinical uses of     ultrasound in     superficial imaging     Sonography of the     superficial structures     Anatomy of the neck     overview (including     the thyroid,     parathyroid glands,     salivary glands and     lymph nodes)	Abdomen and Superficial Structures Ch.15 p. 421- 425	а	1.0-1.1	Appendix C: 5, 8, 9, 10
1	Asynchronous	Lesson 2:  • Anatomy and physiology of the thyroid		a, b	2.0-2.5	Appendix C: 10
	May 3, 5	Lesson 3: LAB:  • Transducer selection for small part imaging • Neck imaging protocol • Identifying structures, landmarks and regions of the neck • Ultrasound examination of the salivary glands		a, c-1	3.0-3.5	Appendix C: 8
	May 8	Lesson 4:  • Pathology of the thyroid  • Anatomy and physiology of the parathyroid	Abdomen and Superficial Structures	b	4.0-4.17	Appendix C: 9,10
2	Asynchronous	Lesson 5:  • Pathology of the parathyroid  • The thymus gland	Ch.15 p. 427- 444, 445-454		5.0-5.15	Appendix C: 9
	May 10, 12	Lesson 6: LAB: Thyroid protocol review Thyroid imaging	Abdomen and Superficial Structures Ch.15 p. 426- 427	c-1	6.0-6.6	Appendix C: 10
3	May 15	Lesson 7:  • TIRADS and thyroid biopsies  • Anatomy and pathology of the salivary glands	D2L Readings	b	7.0-7.19	Appendix C: 8, 10

WEEK	DATE	LESSON	READINGS	LEARNING OUTCOMES	LEARNING OBJECTIVES	SONOGRAPHY CANADA COMPETENCY
	Asynchronous	Lesson 8:  • Miscellaneous neck masses  • Lymph nodes of the neck (normal and abnormal)			8.0-8.6	Appendix C: 5
	May 17, 19	Lesson 9: LAB: Thyroid Mock Assessment (timed)		c-1, d	9.0-9.3	Appendix C: 10
	May 22	No lecture due to holiday (Victoria Day)				
4	Asynchronous	Lesson 10:  Introduction to breast ultrasound Breast screening programs in North America Breast screening utilizing ultrasound and mammography Anatomy of the breast	Abdomen and Superficial Structures Ch.16 p. 455- 457	а	10.0-10.4	Appendix C: 1
	May 24, 26	Lesson 11: LAB: Assessment #1: Thyroid (timed)		c-1, d	11.0-11.3	Appendix C: 10
	May 29	<ul> <li>Lesson 12:</li> <li>QUIZ #1</li> <li>Breast physiology</li> <li>Breast sonography (orientation, imaging planes and annotations)</li> </ul>	Abdomen and Superficial Structures Ch.16 p. 457-	a, b	12.0-12.6	Appendix C: 1
5	Asynchronous	Lesson 13: • Correlating with mammography	468		13.0-13.4	
	May 31, June 2	Lesson 14: LAB: • Breast simulated scanning • Palpating areas of interest		c-1	14.0-14.7	Area 3: 3.3c Appendix C: 1
	June 5	Lesson 15: • Pathology of the breast • BIRADS and breast biopsies	Abdomen and Superficial Structures	a, b	15.0-15.28	
6	Asynchronous	Lesson 16:  • Breast pathology cont'd  • Breast implants & augmentation	Ch.16 p. 468- 510	ч, Б	16.0-16.19	Appendix C: 1
	June 7, 9	Lesson 17:		a, b,	17.0-17.6	Appendix C: 1

WEEK	DATE	LESSON	READINGS	LEARNING OUTCOMES	LEARNING OBJECTIVES	SONOGRAPHY CANADA COMPETENCY
		• Breast simulated scanning cont'd		c-1		
7	June 12	Lesson 18:  • Midterm review Session  • Lymph nodes of the groin & axilla (normal & abnormal)  • Anatomy and pathology of the popliteal fossa  • Anatomy and pathology of superficial tissues	Abdomen and Superficial Structures Ch.2 p. 13-23	b	18.0-18.10	Appendix C: 3, 5, 6
	Asynchronous	Lesson 19:  • Anatomy of the abdominal wall/chest			19.0-19.18	Appendix B: 2, 5
	June 14, 16	Lesson 20: LAB: • Breast simulated scanning Assignment #1 Due		c-1, d	20.0-20.5	Appendix C: 1
	June 19	MIDTERM				
	Asynchronous	Lesson 21: • Pathology of the abdominal wall, inguinal canal and chest	Abdomen and Superficial Structures Ch.2 p.23-40	b	21.0-21.17	Appendix B: 2, 5 Appendix C: 2
8	June 21, 23	Lesson 22: LAB: • Scanning the inguinal region, abdominal wall, chest and thorax • Hernia detection techniques • Evaluation of the lymph nodes in the groin, axilla, popliteal fossa • Palpating areas of interest		c-1, d	22.0-22.11	Area 3: 3.3c  Appendix B: 2, 5  Appendix C: 2, 5
9	June 26	Lesson 23:  Introduction to pediatric ultrasound  Scanning the pediatric patient  Anatomy of the neonatal brain  Sonography of the neonatal brain	Abdomen and Superficial Structures Ch.21 p. 687- 695, 695-713	e, f	23.0-23.32	

WEEK	DATE	LESSON	READINGS	LEARNING OUTCOMES	LEARNING OBJECTIVES	SONOGRAPHY CANADA COMPETENCY
	Asynchronous	Lesson 24:  • Variants and pathology of the neonatal brain			24.0-24.14	
	June 28, 30	Lesson 25: LAB:  • Asynchronous material on imaging foreign bodies with Xray and Ultrasound • Imaging the superficial tissues	Abdomen and Superficial Structures Ch.26 p. 779- 793		25.0-25.10	
	July 3rd	No lecture due to holiday (Canada day)				
10	Asynchronous	Lesson 26:  • Neonatal brain cont'd		f	26.0-26.5	
	July 5, 7	LAB: TBD				
	July 10	Lesson 27: • QUIZ #2 • Anatomy & Sonography of the neonatal spine	Abdomen and Superficial Structures Ch.22 p. 715- 727	f	27.0-27.8	
11	Asynchronous	Lesson 28: • Pathology and variants of the neonatal spine			28.0-28.9	
	July 12, 14	LAB: TBD				
	July 17	Lesson 29: • Pediatric GI tract	Abdomen and		29.0-29.19	
12	Asynchronous	Lesson 30: • Pediatric urinary system, adrenal glands and retroperitoneum	Superficial Structures Ch.19 p. 612, 640-653, 647- 650 Ch.20 p. 655- 685	f	30.0-30.38	Appendix B: 3, 11, 20, 21, 22, 23, 24, 27, 28
	July 19, 21	LAB: TBD				
13	July 24	Lesson 31: • Pediatric upper abdomen	Abdomen and Superficial Structures	f	31.0-31.25	Appendix B: 1,2, 8, 9,10, 11, 12,
	Asynchronous	Lesson 32: • Pediatric upper abdomen cont'd	Ch.19 p. 613- 640	'	32.0-32.19	14
	July 26, 28	Lesson 33: LAB: Review Session (Thyroid) & open scan practice Assignment #2 Due			33.0	Appendix C: 10

WEEK	DATE	LESSON	READINGS	LEARNING OUTCOMES	LEARNING OBJECTIVES	SONOGRAPHY CANADA COMPETENCY
	July 31	Lesson 34: • Review session!	Abdomen and Superficial		34.0	
14	Asynchronous	Lesson 35: • Pediatric hips	Structures Ch.23 p.729- 737	f	35.0-35.5	
	Aug 2, 4	Lesson 36: LAB: TBD		c-1, d		
15	TBD	Cumulative Final*				

<sup>\*</sup>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 noticed is required. Deadlines scan be reviewed on the <a href="CAL exams page">CAL exams page</a>. <a href="http://camosun.ca/services/accessible-learning/exams.html">http://camosun.ca/services/accessible-learning/exams.html</a>

#### STUDENT EVALUATION

DESCRIPTION	WEIGHTING
Assignments	10%
Quizzes	15%
Skills Assessments	15%
Midterm	25%
Cumulative Final Exam	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 <u>Grade Review and Appeals</u> policy for more information. <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf</a>

#### **COURSE GUIDELINES & EXPECATIONS**

Refer to the <u>Diagnostic Medical Sonography (SONO) Program Handbook</u> for classroom and lab etiquette as well as professional behaviour expectations.

All assignments are to be completed and submitted by the due date. Assignments that are not submitted by the due date will receive a grade of zero (0) and the assignment will not be marked.

Note: this also includes the submission of any documents requiring submission relating to skills assessments.

Extensions to assignment due dates may be granted on a case-by-case basis for significant, or unforeseen circumstances. Extensions will only be considered if adequate notice is received prior to the due date.

## SCHOOL OR DEPARTMENTAL INFORMATION

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

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

Allied Health & Technologies Department Handbooks:

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

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

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

Support Service	Website
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 <a href="Centre for Accessible">Centre for Accessible</a> 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 <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf</a> for policy regarding academic expectations and details for addressing and resolving matters of academic misconduct.

## Academic Progress

Please visit <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf</a> 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 <a href="http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf">http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf</a> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <a href="http://camosun.ca/learn/fees/#deadlines">http://camosun.ca/learn/fees/#deadlines</a>.

## **Grading Policy**

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

# **Grade Review and Appeals**

Please visit <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf</a> 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"

(<a href="http://camosun.ca/learn/calendar/current/procedures.html">http://camosun.ca/learn/calendar/current/procedures.html</a>) and the Grading Policy at <a href="http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf">http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf</a>.

# 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 <a href="http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf">http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf</a> 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 250-370-3841

## 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 <a href="http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf">http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf</a> 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.