



# Course Syllabus

**Course title:** Intermediate Sonography Scanning Skills 3

**Class section:** MIDS - 231 - BX01C

**Term:** 2025S

**Course credits:** 3

**Total hours:** 90

**Delivery method:** Blended

## **Territorial acknowledgment**

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Camosun College respectfully acknowledges that our campuses are situated on the territories of the Lək̓ʷəŋən (Songhees and Kosapsum) and W̱SÁNEĆ peoples. We honour their knowledge and welcome to all students who seek education here.

## **Instructional hours**

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**Lab hours:** 6 per W

W = Week

T = Term

## Instructor details

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**Name:** Kendal Adam

**Email:** AdamK@camosun.ca

**Name:** Stephan Tuomi

**Email:** TuomiS@camosun.ca

## Course description

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### Course Description:

Students demonstrate enhanced workplace and scanning skills by completing technically accurate routine ultrasound examinations under direct supervision. Students focus on learning to produce accurate technical documentation of live anatomy under outpatient clinic conditions. Students use critical thinking and problem solving to interpret and integrate relevant, available diagnostic data required to produce quality ultrasound examinations.

### Prerequisites:

All of:

- C+ in MIDS 181
- C+ in MIDS 199

### Pre or Co-requisites:

All of:

- C+ in MIDS 227

## Learning outcomes

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

1. Demonstrate ability to interpret requisitions, assess patient capabilities, and evaluate relevant information influencing selection of scanning protocols in outpatient settings by obtaining diagnostically acceptable studies under direct supervision.

2. Demonstrate the ability to evaluate exams for completeness, technical accuracy, and image quality by submitting diagnostically acceptable studies for review under routine outpatient clinic conditions.
3. Demonstrate the ability to create accurate technical reports and provide complete oral summaries of live examinations performed using outpatient clinic workflow and conditions.
4. Use knowledge of anatomy, pathology, scientific principles, patient condition, communication skills, and professional behaviours to formulate impressions based on live studies encountered in outpatient clinic settings.
5. Produce all diagnostic quality images required for complete ultrasound examinations within the recommended Sonography Canada guidelines for scheduling and time allotments while under outpatient clinic conditions.

## Competency mapping

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### **Sonography Canada Competencies:**

6.1b Recognize hazardous conditions in the work area and respond.

6.1c Maintain awareness of fire and disaster plans.

6.1d Locate emergency equipment.

### Appendix C:

4 Scrotum

5 Lymph nodes

6 Popliteal fossa

10 Thyroid

### Appendix D:

14 Iliac veins

15 Common femoral vein

16 Femoral vein

17 Popliteal vein

18 Sapheno-Femoral Junction

19 Sapheno-Popliteal Junction

#### Appendix F:

1 Aorta

2 Celiac trunk

3 Hepatic artery

4 Superior mesenteric artery

5 Superior mesenteric vein

6 Inferior mesenteric artery

7 Inferior mesenteric vein

8 Renal artery

9 Renal veins

10 Hepatic veins

11 Portal veins

12 Splenic artery

13 Splenic vein

14 Inferior vena cava

15 Common carotid artery

16 Internal carotid artery

17 External carotid artery

18 Vertebral artery

19 Subclavian artery

20 Innominate (brachiocephalic) artery

22 Innominate (brachiocephalic) artery

23 Subclavian artery

24 Axillary artery

25 Brachial artery

26 Forearm arteries

27 Iliac arteries

28 Common femoral artery

29 Femoral artery

30 Popliteal artery

31 Calf arteries

32 Jugular vein

33 Innominate vein

34 Subclavian vein

35 Axillary vein

36 Brachial vein

37 Forearm veins

38 Basilic vein

39 Cephalic vein

40 Iliac veins

41 Common femoral vein

42 Femoral vein

43 Popliteal vein

44 Calf veins

45 Saphenous veins

46 Grafts and stents

Previously Assessed Sonography Canada Competencies for Intermediate Scanning Skills 181 may be encountered in this course:

Appendix A:

16	2nd, 3rd	Abdominal circumference
17	2nd, 3rd	Biparietal diameter
18	2nd, 3rd	Femur length
19	2nd, 3rd	Head circumference
20	2nd, 3rd	Anterior horn lateral ventricles
21	2nd, 3rd	Atria of lateral ventricles
22	2nd, 3rd	Cavum septi pellucidi
23	2nd, 3rd	Cerebellum
25	2nd, 3rd	Choroid plexus
26	2nd, 3rd	Cisterna magna
27	2nd, 3rd	Falx cerebri
28	2nd, 3rd	Skull
29	2nd, 3rd	Thalamus
30	2nd, 3rd	Third ventricle
32	2nd, 3rd	Cervical spine
33	2nd, 3rd	Lumbo-sacral spine
34	2nd, 3rd	Thoracic spine
35	2nd, 3rd	Facial profile
37	2nd, 3rd	Mouth / lips
38	1st, 2nd, 3rd	Nasal bones
39	2nd, 3rd	Orbits
41	2nd, 3rd	Nuchal fold
42	2nd, 3rd	Diaphragm
43	2nd, 3rd	Lungs
44	2nd, 3rd	Thoracic shape
45	1st, 2nd, 3rd	Fetal heart rate
46	2nd, 3rd	Situs

47	2nd, 3rd	Size
48	2nd, 3rd	Axis
49	2nd, 3rd	4 Chamber fetal heart
50	2nd, 3rd	Aortic arch
52	2nd, 3rd	Outflow tracts
53	2nd, 3rd	Three vessel view
54	2nd, 3rd	Adrenals
55	2nd, 3rd	Aorta
56	2nd, 3rd	Bowel
57	2nd, 3rd	Gallbladder
58	2nd, 3rd	Kidneys
59	2nd, 3rd	Liver
60	2nd, 3rd	Renal pelvis
61	2nd, 3rd	Spleen
62	1st, 2nd, 3rd	Stomach
63	1st, 2nd, 3rd	Umbilical cord
64	2nd, 3rd	Fetal insertion
65	2nd, 3rd	Placental insertion
66	2nd, 3rd	Vessels
67	1st, 2nd, 3rd	Urinary bladder
68	2nd, 3rd	Genitalia

#### Appendix E:

1 Abdominal situs

2 Cardiac position

3 Chest & thorax (adjacent, extra-cardiac)

5 Hepatic veins

6 Outflow tracts

7 Pulmonary veins

8 Wall layers (endo, myo, pericardium)

- 9 Wall segments
- 10 Arch & branches
- 11 Ascending
- 12 Descending
- 13 Root
- 14 Left
- 15 Right
- 16 Left Atrial Appendage
- 18 Main pulmonary artery
- 19 Bifurcation
- 20 Atrial
- 21 Ventricular
- 22 Aortic
- 23 Mitral
- 24 Mitral (annulus)
- 25 Pulmonic
- 26 Tricuspid
- 27 Tricuspid annulus
- 28 Inferior
- 30 Left
- 31 Right

## Course materials

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Please ensure you have access to a computing device that meets the requirements necessary for utilizing D2L (Desire2Learn) and CompTracker.



# Course schedule

## Schedule and Course Components

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

Week	Date	Lesson	Assignments	Learning Outcomes	Sonography Canada Competencies
1	05-May	Week 1		1,2,3,4,5	6.1b, 6.1c, 6.1d
2	12-May	Week 2	No Clinical	1,2,3,4,5	5.4g
3	19-May	Week 3		1,2,3,4,5	<b>Appendix C:</b>
4	26-May	Week 4	Self Reflection	1,2,3,4,5	6.1b, 6.1c, 6.1d
5	02-Jun	Week 5	Self Reflection	1,2,3,4,5	<b>Appendix D</b>
6	09-Jun	Week 6	Formative Self Reflection	1,2,3,4,5	14, 15, 16, 18, 19, 20
7	16-Jun	Week 7	Self Reflection	1,2,3,4,5	<b>Appendix E</b>
8	23-Jun	Week 8	Formative Self Reflection	1,2,3,4,5	1,2,3,4,5,6,7,8,9,10 11,12,13,14,15,16,17,18,19,20
9	30-Jun	Week 9	Self Reflection	1,2,3,4,5	21,22,23,24,25,26,27,28,29,30 31
10	07-Jul	Week 10	Formative Self Reflection	1,2,3,4,5	<b>Appendix F</b>
11	14-Jul	Week 11	Self Reflection	1,2,3,4,5	1,2,3,4,5,6,7,8,9,10 11,12,13,14,15,16,17,18,19,20
12	21-Jul	Week 12	Formative Self Reflection	1,2,3,4,5	21,22,23,24,25,26,27,28,29,30 31,32,33,34,35,36,37,38,39,40
13	28-Jul	Week 13	Self Reflection	1,2,3,4,5	41,42,43,44,45,46
14	04-Aug	Week 14	Sumative Self Reflection	1,2,3,4,5	
15	11-Aug			<b>Remediation Week 1</b>	
16	18-Aug			<b>Remediation Week 2</b>	

## Course Timeline

The Intermediate Scanning Skills Lab 3 begins on May 26, 2025, and is expected to conclude on August 8, 2025.

## Attendance Requirements

No clinical rotations will occur during Weeks 1-3 of the term. Students are encouraged to practice scanning all learned protocols before clinical rotations begin in Week 4.

Weeks 4-14 are mandatory. Students are expected to be on-site for 8 hours per week. Weeks 15 and 16 may also be required if a remediation plan is enacted or if attendance/portfolio requirements are not met by the end of Week 14.

### **Schedule Changes**

Any changes to the schedule must be approved by the Clinical Liaison and communicated to the Clinical Preceptor.

## **Assessment and evaluation**

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<b>Type</b>	<b>Description</b>	<b>Weight</b>
Participation	Image Review (x4)	30
Participation	Weekly Self-Reflections (x11)	10
Practical Assessment	Formative Evaluation (x4)	10
Practical Assessment	Summative Evaluation (x2)	10
Practical Assessment	Unassisted Clinical Competency Completion	40

## **Course guidelines and expectations**

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### **Unassisted Competencies**

The Clinical Liaison will determine the minimum and maximum number of unassisted competencies required for successful completion of this course. Students who complete the required number of unassisted competencies will be eligible for full marks in this category. Students who fail to achieve the required number may be eligible for remediation or additional clinical hours. If a student is unable to obtain the required unassisted competencies due to a lack of exposure in required exams (e.g., clinic bookings, no-shows, absences), they may qualify for remediation, with the specifics determined by the Clinical Liaison. Conversely, if a student cannot obtain the required competencies despite adequate exposure to the necessary exams, they may require a learning plan and/or remediation, as decided by the Clinical Liaison. Failure to complete the required number of clinical skills may result in the student receiving an incomplete grade, which could impact their ability to use this course as a pre-requisite and hinder their progression in the program.

## **Image Reviews**

Students will be required to meet with their Clinical Liaison periodically throughout the term to randomly review images and discuss interesting cases. The Clinical Liaison will coordinate the times for these reviews. Students will be assessed on professionalism, receptiveness to constructive feedback, and overall participation in the image review process. Failure to actively participate in image reviews or demonstration of unprofessional behaviors may result in students not receiving full marks for this section. Repeated concerns regarding participation or professionalism may lead to a score of zero (0) in this course.

## **Communications**

Communications will be sent via the course News Feed on D2L. It is the student's responsibility to configure their notifications and check the course News Feed daily. Online discussion areas will be set up for questions and ongoing discussions.

## **Academic Requirements**

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 them as pre-requisites and to progress in their program.

## **Participation in Learning Activities**

Students in Allied Health & Technologies Programs must engage in learning activities that involve intimate and direct personal contact with their classmates during supervised practice. As part of their training, students will perform duties typical of healthcare professionals, which often require frequent close physical contact with patients and clients. Students may need to simulate and execute these activities on one another throughout the course. Additionally, students may be required to employ specific hygiene practices and protective gear to guard against the transmission of communicable diseases (such as COVID-19). The risks associated with learning and performing the physical duties of a healthcare profession cannot be completely eliminated, even with precautionary measures.

## **Refusal or Inability to Participate**

Students who refuse or are unable to participate in these activities due to personal or medical limitations may only continue to engage in coursework if supported by officially registered accommodations or temporary medical advisories.

## **Program Handbook**

Please refer to the Diagnostic Medical Sonography (SONO) Program Handbook for guidelines on classroom and lab etiquette, as well as expectations for professional behavior. (

<https://camosun.ca/hshs/student-info/hshs-student-handbook/diagnostic-medical-sonography-sono-program-handbook> )

### **Late Policy**

Late assignments will not be accepted, and the student will receive a score of zero (0%) for the late assignment. Should there be a significant extenuating circumstance, the student MUST contact the instructor prior to the assignment due date, giving as much notice as possible.

### **Use of Artificial Intelligence (AI)**

To meet program learning outcomes and course objectives, the use of generated artificial intelligence (AI) tools is prohibited unless explicitly stated in the course syllabus. Unauthorized use of AI tools will be considered a violation of Camosun College's Academic Integrity Policy, and students may face sanctions as outlined in the policy.

## **School or departmental information**

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### **Health & Human Services Student Handbook**

For comprehensive information regarding policies and procedures, please refer to the Health & Human Services Student Handbook. <https://camosun.ca/hshs/student-info/hshs-student-handbook>

### **General Practicum Information**

For details about practicum experiences, please visit the General Practicum Information page. <https://camosun.ca/hshs/student-info/practicums>

### **Allied Health & Technologies Department Handbooks**

#### **Certified Medical Laboratory Assistant**

For specific guidelines and resources related to the Certified Medical Laboratory Assistant program, visit: <https://camosun.ca/hshs/student-info/hshs-student-handbook/certified-medical-laboratory-assistant-program-handbook>

#### **Diagnostic Medical Sonography**

For information regarding the Diagnostic Medical Sonography program, please refer to: <https://camosun.ca/hshs/student-info/hshs-student-handbook/diagnostic-medical-sonography-sono-program-handbook>

#### **Medical Radiography**

For details pertaining to the Medical Radiography program, please visit:

<https://camosun.ca/hshs/student-info/hshs-student-handbook/medical-radiography-mrad-program-handbook>

## College policies and student responsibilities

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The college expects students to be responsible, respectful members of the college community. Responsible students meet expectations about attendance, assignments, deadlines, and appointments. They become familiar with academic policies and regulations, and their rights and responsibilities.

College policies are available online at the [Policies and Directives](#) page. Academic regulations are detailed on the [Academic Policies and Procedures for Students](#) page.

Policies all students should be familiar with include the [Academic Integrity Policy](#). This policy expects students to be honest and ethical in all aspects of their studies. It defines plagiarism, cheating, and other forms of academic dishonesty. Infractions of this policy can result in loss of marks or a failing grade. To learn more about plagiarism and cheating, including the use of artificial intelligence, review the [Academic Integrity Guide](#).

The [Academic Accommodations for Students with Disabilities Policy](#) defines how Camosun provides appropriate and reasonable academic accommodations. The Centre for Accessible Learning (CAL) coordinates academic accommodations. Students requiring academic accommodations should request and arrange accommodations through CAL. Contact CAL at least one month before classes start to ensure accommodations can be put in place in time. Accommodations for quizzes, tests, and exams must follow CAL's booking procedures and deadlines. More information is available on the [CAL website](#).

Students must meet the grading and promotion standards to progress academically. More information is available in the [Grading Policy](#).

The college uses two grading systems. A course will either use the standard letter grade system (A+ to F) or a competency-based approach with grades of complete, completed with distinction or not completed. Visit the [Grades/GPA page](#) for more information.

Students must meet the college's academic progress standards to continue their studies. A student is not meeting the standards of progress when a GPA falls below 2.0. The college offers academic supports for students at risk of not progressing. The [Academic Progress Policy](#) provides more details.

If you have a concern about a grade, contact your instructor as soon as possible. The process to request a review of grades is outlined in the [Grade Review and Appeals Policy](#).

The [Course Withdrawals Policy](#) outlines the college's requirements for withdrawing from a course. Consult the [current schedule](#) of deadlines for fees, course drop dates, and tuition refunds.

If students experience a serious health or personal issue, they may be eligible for a [medical or compassionate withdrawal](#). The [Medical/Compassionate Withdrawal Request Form](#) outlines what is required.

The [Acceptable Technology Use](#) policy ensures the use of the college network and computers contribute to a safe learning environment. This policy also applies to the use of personal devices with the college network.

Students experiencing sexual violence can get support from the Office of Student Support. This Office of Student support is a safe and private place to discuss supports and options. More information is available on the [sexual violence support and education site](#). Students can email [oss@camosun.ca](mailto:oss@camosun.ca) or phone 250-370-3046 or 250-370-3841.

The [Student Misconduct Policy](#) outlines the college's expectations of conduct. Students should behave to contribute to a positive, supportive, and safe learning environment.

The [Ombudsperson](#) provides an impartial, independent service to help students understand college policies.

## Services for students

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Successful students seek help and access college services. These services are recommended to make the most of your time at college.

### Services for Academic Success

- [Career Lab](#): Connects students with work-integrated learning experiences, including co-op placements and career fairs.
- [English, Math, and Science Help Centres](#): Get one-on-one help with homework.
- [Library](#): Get help with research, borrow materials, and access e-journals and e-books. Libraries at both campuses provide computers, individual and group study spaces.
- [Makerspace](#): A place to innovate, collaborate, and learn new skills and technology in a fun, dynamic, inclusive environment.
- [Writing Centre & Learning Skills](#): Get assistance with academic writing or meet with a learning skills specialist for help with time management, preparing for exams, and study skills.

### Enrolment, Registration, and Records

- [Academic Advising](#): Talk to an academic advisor for help with program planning.

- [Financial Aid and Awards](#): Learn about student loans, bursaries, awards, and scholarships.
- [Registration](#): Get information about Camosun systems, including myCamosun, and college policies and procedures.
- [Student Records](#): Get verification of enrolment to access funding, request a transcript, or credential.

#### Wellness and Cultural Supports

- [Counselling](#): It's normal to feel overwhelmed or unsure of how to deal with life's challenges. The college's team of professional counsellors are available to support you to stay healthy. Counselling is free and available on both campuses. If you need urgent support after-hours, contact the Vancouver Island Crisis Line at 1-888-494-3888 or call 911.
- [Centre for Indigenous Education and Community Connections](#): Provides cultural and academic supports for Indigenous students.
- [Camosun International](#): Provides cultural and academic supports for international students.
- [Fitness and Recreation](#): Free fitness centres are located at both campuses.

For a complete list of college services, see the [Student Services](#) page.

## Changes to this syllabus

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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 the course content or schedule. When changes are necessary the instructor will give clear and timely notice.