



Course Syllabus

Course title: OB Sonography Procedures 2

Class section: MIDS - 187 - BX01C

Term: 2025W

Course credits: 3

Total hours: 75

Delivery method: Blended

Territorial Acknowledgement

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

Instructor Details

Name: Bridget Mavety

Email: MavetyB@camosun.ca

Name: Dustin Pendergast

Email: Pendergastdustin@camosun.ca

Instructor Statement

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.

Instructor Office Hours

Office:

Hours:

Room # 317

Hours: By Appointment

Course Description

Course Description:

Students expand on their understanding of the clinical applications of sonography for the surveillance of pregnancy. Students review relationships of the maternal and fetal anatomy while learning to recognize the normal and abnormal sonographic appearances of second and third trimester pregnancies. Students learn to select appropriate scanning protocols based on patient history, physiologic data, laboratory values, and complementary imaging studies.

Prerequisites:

All of:

- C+ in MIDS 147
- C+ in MIDS 151

Course Learning Outcomes / Objectives

Upon successful completion of this course, the learner will be able to

1. Explain the significance of gestational age, history, laboratory results, patient preparation, and body habitus on the approach to second and third trimester sonography and discuss the selection of protocols, transducers, and impact on resultant sonographic image quality
2. Explain how the normal and abnormal sonographic appearance of maternal and fetal anatomy alters depending on gestational age, physiological, hormonal, and pathological causes
3. Define and apply the components of a diagnostic examination to second and third trimester sonography

4. Discuss the significance of multiple gestations, congenital defects, catastrophic pathology, unexpected fetal death, and gender identification on parental bonding, selective abortions, and maternal welfare
5. Discuss the legal and ethical implications of gestational surveillance for student sonographers and graduates
6. Perform ultrasound examinations and collect measurements of all required maternal and fetal structures within the recommended Sonography Canada guidelines for scheduling and time allotments while scanning simulated patients, live subjects, or laboratory partners

Course Competencies

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 second and third trimester sonography.

Sonography Canada Competencies:

Appendix A:

1 GYN, 1st, 2nd, 3rd Adnexa

3 GYN, 1st, 2nd, 3rd Cervix

8 GYN, 1st, 2nd, 3rd Ovaries

9 GYN, 1st, 2nd, 3rd Urinary bladder

10 GYN, 1st, 2nd, 3rd Kidneys

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

24 2nd, 3rd Cerebral vessels

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

36 2nd, 3rd Palate

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

51 2nd, 3rd Ductal 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

69 2nd, 3rd Contour

70 2nd, 3rd Thickness

72 2nd, 3rd Feet

73 2nd, 3rd Femora

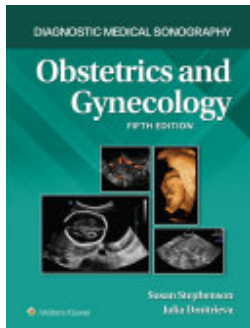
74 2nd, 3rd Fibula

75 2nd, 3rd Hands

76 2nd, 3rd Humeri
77 2nd, 3rd Radius
78 2nd, 3rd Ribs
79 2nd, 3rd Tibia
80 2nd, 3rd Ulna
81 1st, 2nd, 3rd Placental location / development
82 2nd, 3rd Grading
83 2nd, 3rd Relation to internal os
84 2nd, 3rd Thickness
85 2nd, 3rd Amniotic Fluid -Single Pocket Evaluation
86 2nd, 3rd Amniotic fluid index
87 1st, 2nd, 3rd Chorionicity
88 2nd, 3rd Cervical length
89 2nd, 3rd Fetal lie
90 2nd, 3rd Fetal presentation
91 1st, 2nd, 3rd Number of Fetuses
93 3rd Cord Doppler
94 3rd Amniotic fluid
95 3rd Breathing
96 3rd Fetal movement
97 3rd Fetal tone
3.3i Understand when to perform a transperineal / translabial scan.

Course Materials

Title: Obstetrics and Gynecology



Authors: Susan Stephenson, Julia Dmitrieva

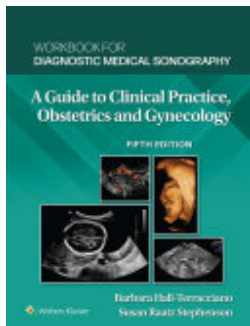
Publisher: Lippincott Williams & Wilkins

Publication Date: 2022-08-03

Edition: 5th

Additional Information

REQUIRED TEXTBOOK



Title: Workbook for Diagnostic Medical Sonography: Obstetrics and Gynecology

Authors: Barbara Hall-Terracciano, Susan Stephenson

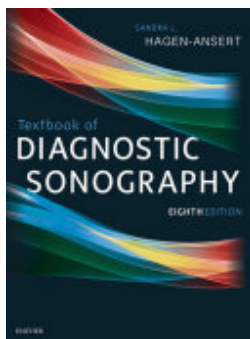
Publisher: Lippincott Williams & Wilkins

Publication Date: 2022-09-01

Edition: 5th

Additional Information

REQUIRED TEXTBOOK



Title: Textbook of Diagnostic Sonography - E-Book

Authors: Sandra L. Hagen-Ansert

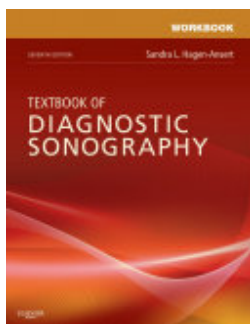
Publisher: Elsevier Health Sciences

Publication Date: 2017-01-25

Edition: 8th

Additional Information

OPTIONAL TEXTBOOK



Title: Workbook for Textbook of Diagnostic Sonography - E-Book

Authors: Sandra L. Hagen-Ansert

Publisher: Elsevier Health Sciences

Publication Date: 2011-05-27

Edition: 8th

Additional Information

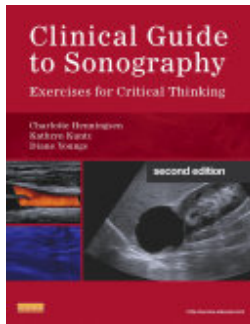
OPTIONAL TEXTBOOK

Title: Clinical Guide to Sonography - E-Book

Authors: Charlotte Henningsen, Kathryn Kuntz, Diane J. Youngs

Publisher: Elsevier Health Sciences

Publication Date: 2023-04-07



Edition: 2nd
Additional Information
 OPTIONAL TEXTBOOK

Course Schedule, Topics, and Associated Preparation / Activity

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

| WEEK | DATE | LESSON | READINGS | LEARNING OUTCOMES | LEARNING OBJECTIVES | SONOGRAPHY CANADA COMPETENCY |
|------|-------------------------------------|--|------------|-------------------|---------------------|--|
| 1 | Jan 6 | 1. Introduction to Course Review course outline Gestational Age and Measurements Establishing Fetal Lie/Presentation/Cervix | Chapter 20 | 1 | 1.0-2.6 | Appendix A: 16, 17, 18, 19, |
| | Green Font is Asynchronous Material | 2. Introduction to 2nd/3rd trimester ultrasounds Protocols and transducer/equipment considerations for 2nd/3rd trimester | | | | Appendix A: 1, 3, 8, 9, 10, 88, 89, 90 3.3i |
| | Jan 7, 9 | 3. LAB: Maternal Cervix, Fetal Lie Simulation | | 3 | 3.0, 3.1, 3.2, 3.3 | Appendix A: 1, 3, 8, 10, 88, 89, 90 |

| | | | | | | |
|---|------------|---|------------------------|------|------------|--|
| 2 | Jan 13 | 4. Fetal Head, Face and Neck in the 2nd/3rd Trimesters 5. Tech Worksheet Videos | Chapter 23, 24 | 2 | 4.0-4.24 | Appendix A: 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 Appendix A: 35, 36, 37, 38, 39, 41 |
| | Jan 14, 16 | 6. LAB: Fetal Head Anatomy and Head Biometry | | 3 | 6.0-6.7 | Appendix A: 20, 21, 22, 23, 25, 26, 35, 37, 38, 39, 41 |
| 3 | Jan 20 | 7. Amniotic Fluid and normal placenta IUGR, Biophysical profile 8. Fetal Placenta/ Umbilical cord and Abnormalities, Cord Doppler | Chapter 21, 22, 30, 32 | 2 | 7.0-8.42 | Appendix A: 63, 64, 65, 66, 81, 82, 83, 84, 85, 86 93, 94, 95, 96, 97 |
| | Jan 21, 23 | 9. LAB: Fetal Biometry, Placenta, Measuring AFI, DVP | | 3 | 9.0-9.8 | Appendix A: 16, 17, 18, 19, 65, 81, 83, 85, 86 |
| 4 | Jan 27 | 10. Fetal Chest, Diaphragm, Shape 10.1. Asynchronous TBD | Chapter 26 | 2 | 10.0-10.17 | Appendix A: 42, 43, 44 |
| | Jan 28, 30 | 11. LAB: Assessment 1: Cervix, Placenta, Fetal Lie, Amniotic Fluid, Head Biometry & Anatomy 25 Minutes | | 3, 6 | 11.0-11.16 | Appendix A: 20, 21, 22, 23, 25, 26, 35, 37, 38, 39, 41 |
| 5 | Feb 3 | 12. Fetal Heart evaluation: Normal Anatomy, FHR, Arch, | Chapter 25 | 2 | 12.0-12.7 | Appendix A: 45, 46, 47, 48, 49, 50, 51, 52, 53 |

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|----|----------------|--|----------------|------|------------|--|
| | | RVOT, LVOT, 3 Vessel View, Situs and Size 13. Fetal Heart Congenital Disease | | 2, 4 | 15.0-15.18 | |
| | Feb 4, 6 | 14. LAB: Fetal Heart Simulation 1 | | 3 | 14.0-14.8 | Appendix A: 45, 46, 47, 48, 49, 50, 51, 52, 53 |
| 6 | Feb 10 | EXAM 1 REVIEW SESSION 15. Medical Gaslighting Patient Videos and Reflection Assignment | | | | |
| | Feb 11, 13 | 16. LAB: Fetal Heart Simulation 2 | | 3 | 16.0-16.8 | Appendix A: 45, 46, 47, 48, 49, 50, 51, 52, 53 |
| 7 | Feb 17 | Reading Week, No Classes* | | | | |
| | No Labs | *MIDS 181 still in session | | | | |
| 8 | Feb 24 | EXAM 1 17. Asynchronous TBD Workbook Activity 1 Due Feb 23rd 11:59 PM | | | | |
| | Feb 25, 27 | 18. LAB: Assessment 2: Normal Fetal Heart 15 mins | | 3 | 18.0-18.8 | Appendix A: 45, 46, 47, 48, 49, 50, 51, 52, 53 |
| 9 | Mar 3 | 19. Fetal Abdomen, skin and pathology Fetal Urogenital System and pathology 20. Asynchronous TBD | Chapter 27, 28 | 2 | 19.0-19.60 | Appendix A: 54, 55, 56, 57, 58, 59, 60, 61, 62 Appendix A: 67, 68, 69, 70 |
| | Mar 4, 6 | 21. LAB: Fetal Abdomen Simulation | | 3 | 21.0-21.6 | Appendix A: 42, 43, 60, 61, 62, 64, 66, 67, 68 |
| 10 | Mar 10 | 22. Fetal Spine | Chapter 24, | 2 | 22.0-23.19 | Appendix A: 32, |

| | | | | | | |
|----|------------|--|------------------------------------|----------|--------------------------|--|
| | | 23. Fetal Skeleton | 29 | | | 33, 34, 72, 73, 74, 75, 76, 77, 78, 79, 80 |
| | Mar 11, 13 | 24. LAB: Fetal Skeleton & Spine | | 3 | 24.0-24.4 | Appendix A: 72, 73, 74, 75, 76, 77, 79, 80 |
| 11 | Mar 17 | 25. Multiple Gestation in the 2nd and 3rd Trimester; chorionicity, membranes 26. Asynchronous TBD | Chapter 31 D2L | 2, 4, 5 | 25.0-25.1 | Appendix A: 87, 91 |
| | Mar 18, 20 | 27. LAB: Assessment 3: Fetal Biometry & Abdomen 20 minutes | | 3, 6 | 27.0-27.16 | Appendix A: 20, 21, 22, 23, 25, 26, 35, 37, 38, 39, 41 |
| 12 | Mar 24 | 28. Soft Marker evaluation 29. Asynchronous TBD | SOGC Document, D2L Readings D2L | 4 c-1 | 28.0-29.18 | Appendix A: 38 |
| | Mar 25, 27 | 30. LAB: Soft Markers, Pathology & Spine/Skeletal | | 3 | 30.0-30.5 | Appendix A: 38, 41 |
| 13 | Mar 31 | 31. Patterns of Fetal Anomalies 32. The Post-Partum Uterus and Maternal disease in pregnancy | Chapter 34, 35 Chapter 33 | 4 | 31.0-31.14 28.0-29.18 | |
| | Apr 1, 3 | 33. LAB: Assessment 4: Fetal Limbs & Skeleton 25 mins | | 3 | 32.0-32.10 | Appendix A: 42, 43, 60, 61, 62, 64, 66, 67, 68, 72, 73, 74, 75, 76, 77, 78, 79, 80 |
| 14 | Apr 7 | EXAM 2 REVIEW SESSION | | | | |

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|----|-----------|--|--|------|-----------|--|
| | | 34. Asynchronous TBD Workbook Activity 2 Due April 13th 11:59 PM Medical Gaslighting Assignment Due April 13th 11:59 PM | | | | |
| | Apr 8, 10 | 35. LAB: Final Assessment: TBD 25 mins | | 3, 6 | 33.0-33.8 | Appendix A: 45, 46, 47, 48, 49, 50, 51, 52, 53 |
| 15 | TBD | EXAM 2* | | | | |

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

Evaluation of Learning: Weighted

| DESCRIPTION | WEIGHTING |
|--------------------------------|-------------|
| Skills Assessment 1 | 6% |
| Skills Assessment 2 | 6% |
| Skills Assessment 3 | 6% |
| Skills Assessment 4 | 6% |
| Workbook Activities | 4% |
| Medical Gaslighting Assignment | 8% |
| Exam 1 (Weeks 1-5 Content) | 22% |
| Exam 2 (Weeks 8-14 content) | 22% |
| Final Skills Assessment | 20% |
| TOTAL: | 100% |

Students must pass all Critical Criteria in the Professional Performance section, and achieve at least 65% on the Interrogation and Image Quality section and sub-sections of each Skills Assessment.

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

NOTE: Students must achieve at least a ("C+") or COM in all program courses.

Camosun's Grading Systems

<https://camosun.ca/registration-records/student-records/camosun-grading-systems>

Grade Reviews and Appeals

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.

<http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf>

The Centre for Accessible Learning (CAL) is part of Camosun's Student Affairs unit. CAL coordinates academic accommodations and provides related programs and services to students with documented disabilities.

Students who require academic accommodations are expected to request and arrange accommodations through CAL in a timely fashion. While we understand that not all accommodation needs are known to students at the beginning of a course, accommodations cannot be provided unless the proper process is followed through CAL and an accommodation letter has been released to the instructor. Students are responsible for providing CAL with the proper documentation prior to the beginning of a course.

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

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

Please consult the CAL webpage for more information:

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

Artificial Intelligence: A Guide for Students

Generative Artificial Intelligence (GenAI) is an evolving technology that brings potential benefits but also substantial risks. While GenAI tools have the ability to transform how we work and learn, it is essential for the college community to adapt to these changes in a thoughtful and secure way.

When using GenAI tools, students should ensure proper citation and attribution guidelines are followed. This includes acknowledging AI assistance in reports ,presentations, or any external communications. Clear citation helps build trust, ensures ethical use, and reduces the risk of misinformation or copyright issues.

For citation support visit the college's citation style guide.

<https://camosun.libguides.com/cite>

Artificial Intelligence: A Guide for Students

Visit the following website to learn about AI use in academic settings.

<https://camosun.libguides.com/artificialintelligence/home>

Course Guidelines & Expectations

Asynchronous Materials

Except for Week 1, asynchronous materials should be accessed prior to the Monday lectures. This will give students opportunity to ask questions in class that may have arisen from the asynchronous materials.

Late Assignments/Assessments

Late assignments will not be accepted and the student will be assessed a 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, with as much notice as possible.

Professionalism & Participation

A key component of being a successful student and healthcare worker is demonstrating professional behaviours and actively engaging in classroom, laboratory and clinical activities. Examples of these behaviours are: asking questions in class, actively participating in group or lab activities, participating in class discussions, responding to emails in a timely fashion, respecting laboratory dress code, speaking and engaging respectfully with classmates and instructors, and using effective communication skills.

Additional Information

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

School or Departmental Information

Students are required to read and are accountable for the College policies (outlined below) and practicum guidelines as described in the School of Health and Human Services (HHS) and program handbooks.

[SONO Program Handbook](#)

Clinical and Practice Placements in HHS

<https://camosun.ca/programs-courses/school-health-and-human-services/hhs-programs/practicums>

School of Health and Human Services (HHS)

<https://camosun.ca/programs-courses/school-health-and-human-services/information-health-and-human-services-students-1#top>

HHS Program Handbooks

<https://camosun.ca/programs-courses/school-health-and-human-services/information-health-and-human-services-students-1#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.

College Policies

Academic Integrity

Students are expected to follow the college's [Academic Integrity policy](#), and be honest and ethical in all aspects of their studies. To help you understand these responsibilities review the online [Academic Integrity guide](#).

The college's [Academic Integrity policy and supporting documents](#) detail the process for addressing and resolving matters of academic misconduct.

Academic Accommodations for Students with Disabilities

If you have a documented disability and need accommodations contact the Centre for Accessible Learning (CAL). CAL will arrange the appropriate academic accommodations so you can participate in all academic activities. Visit the [CAL website](#) for more information

Academic Progress

The [Academic Progress policy](#) details how the college monitors students' academic progress and what steps are taken if a student is at risk of not meeting the college's academic progress standards.

Acceptable Technology Use

The [Acceptable Technology Use](#) policy outlines how students are expected to use college technology resources, this includes using your own devices on the college's network. The use of the college resources in a way that violates a person's right to study in an environment free of discrimination, harassment or sexual violation is prohibited.

Course Withdrawals Policy

For details about course withdrawal see the [Course Withdrawals policy](#). Be aware of the [deadlines for fees, course drop dates, and tuition refunds](#).

Grading Policy

To learn more about grading see the [Grading Policy](#).

Grade Review and Appeals

The process to request a review of grades is outlined in the [Grade Review and Appeals policy](#).

Medical / Compassionate Withdrawals

If you have experienced a serious health or personal issue, you may be eligible for a [medical/compassionate withdrawal](#). The [Medical / Compassionate Withdrawal Request form](#)

outlines what is required.

Sexual Violence

If you have experienced sexual violence on or off campus, you can get support from the Office of Student Support. The Office of Student Support is a safe and private place to talk about what supports are available and your options for next steps. Visit the [sexual violence support and education site](#) to learn more or email oss@camosun.ca or phone: 250-370-3046 or 250-370-3841.

Student Misconduct (Non-Academic)

Camosun expects students to conduct themselves in a manner that contributes to a positive, supportive, and safe learning environment. Review the [Student Misconduct Policy](#) to understand the college's expectations of conduct.

Looking for other policies? See [Camosun College Policies and Directives](#)

Services and Supports

Services are free and available to all students.

| Academic Supports | Enrollment Supports |
|--|--|
| Centre for Accessible Learning | Academic Advising |
| English, Math and Science Help Centres | Financial Aid and Awards |
| Library | Registration |
| Writing Centre & Learning Skills | Tuition and Fees |
| Health and Wellness | Applied learning |
| Counseling | Co-operative Education and Career Services |
| Fitness and Recreation | Makerspace |
| Office of Student Support | |

The [Centre for Indigenous Education Centre and Community Connections](#) provides cultural and academic supports for Indigenous students.

[Camosun International](#) provides supports to international students.

[The Ombudsperson](#) provides an impartial, independent service to ensure students are treated fairly. The service is a safe place for students to voice and clarify concerns and complaints.

If you have a mental health concern, contact Counselling. Counselling sessions are available at both campuses during business hours. If you need urgent support after-hours, contact the Vancouver Island Crisis Line at 1-888-494-3888 or call 911.

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