



Foundations in Clinical Medicine I

MEDC 136.21

YEAR 1 TERM 1

 **COURSE SYLLABUS**
2022/2023



UNIVERSITY OF SASKATCHEWAN

College of Medicine

MEDICINE.USASK.CA

LAND ACKNOWLEDGEMENT

As we engage in teaching and learning, we acknowledge we are on Treaty Six and Treaty Four Territory and the Homeland of the Métis. We pay our respect to the First Nation and Métis ancestors of this place and reaffirm our relationship with one another. We recognize that in the course of your studies you will spend time learning in other traditional territories and Métis homelands. We wish you safe, productive and respectful encounters in these places.

Foundations in Clinical Medicine I – Course Overview

REMOTE LEARNING CONTEXT

To address uncertainties related to delivering academic programming during a pandemic, some instructors may deem it necessary to revise syllabi in ways that impact assignments, assessments, and weighting of grades, among other things. Such changes will be permitted if they have been approved by the Department Head (in a departmentalized college) and by the Dean/Executive Director or designate within a College/School. This provision is temporary and will be reviewed by the Academic Programs Committee at the beginning of each semester until any permanent change in this regard is approved by Council.

If you are on campus at any time, ensure you know what is required and expected of you: One of the critical lessons learned in dealing with COVID-19 is knowing that situations can change and we must be flexible and ready to adjust our safety protocols. Instead of listing all of the relevant information in your course outline, the university has created [a webpage](#) where all up-to-date information around returning to campus is listed.

You are responsible for regularly checking the health and *safety* guidelines <https://covid19.usask.ca/about/safety.php#Expectations> and knowing what is expected of you throughout the winter term. The College of Medicine has specific COVID protocols that are also important for you to be aware of and follow on the [College of Medicine website](#). COVID Pandemic policy wording will be updated as required.

COURSE DESCRIPTION

This course is first in a series of four Foundations of Clinical Medicine courses and includes three curricular components:

1. An introductory module [encompassing major biomedical science themes and sections on principles of health promotion as well as health information literacy skill development].
2. A longitudinal case-based learning module.
3. Clinical systems based modules.

Through these curricular components students will begin to learn to apply knowledge and skills towards care of people with common and/or urgent medical conditions.

Completion of this course will help you attain elements of your overall undergraduate program objectives ([Program Learning Objectives](#)).

OVERALL COURSE OBJECTIVES

Building on knowledge of normal anatomy, histology and physiology, students will learn to care for patients with common and/or urgent medical conditions by acquiring and applying knowledge and clinical reasoning skills to:

1. Explain the pathogenesis and pathophysiology of the subject conditions, with reference to the divergence from normal anatomy, histology and/or physiology.
2. Generate reasonable differential diagnoses and evidence-based management plans.
3. Select and interpret appropriate evidence-based investigations.
4. Develop an evidence informed approach to health promotion, illness prevention and disease screening for healthy and at risk populations.

In addition, each individual module in the course will also have its own specific module objectives and separate session objectives of learning. Detailed individual lecture and session objectives will be posted in one45. Please take care to review in advance.

More information on the Academic Courses Policy on course delivery, examinations and assessment of student learning can be found at: <http://policies.usask.ca/policies/academic-affairs/academic-courses.php>
NOTE: The College of Medicine a specific policies and procedures for course delivery, exams and assessment that can found on the [Policies, Procedures and Forms](#) page of the College of Medicine website.

The University of Saskatchewan Learning Charter is intended to define aspirations about the learning experience that the University aims to provide, and the roles to be played in realizing these aspirations by students, instructors and the institution. A copy of the Learning Charter can be found at: www.usask.ca/university_secretary/LearningCharter.pdf

COURSE CONTACTS

Course Chairs: Dr. Jennifer Chlan - jen.chlan@usask.ca (306) 220-0014
Dr. Matt Wong – msw932@mail.usask.ca (306) 966-6138 c/o Cheryl Pfeifer
Co-Chair (Assessment) – Dr. Kelsey Brose - kelsey.brose@saskcancer.ca (306) 655-1483
Administrative Coordinator: Cheryl Pfeifer - cheryl.pfeifer@usask.ca (306) 966-6138

COURSE SCHEDULE

The Foundations in Clinical Medicine I Course is organized in 3 modules running sequentially on specific assigned days and a Case-Based-Based Learning module that runs longitudinally throughout the term. Session schedules for each of the modules will be posted in one45.

All information relating to this course is available in One45. Please check One45 **DAILY** to ensure that you have the most current schedule information.

All learning objectives (course, module, and session) can be accessed on the College of Medicine/Curriculum website under the appropriate year and course. A print version is also available. Please access the link below for the most current objectives.

<https://share.usask.ca/medicine/one45/kbase/Curriculum.aspx>

COURSE DELIVERY

Students will learn through a variety of methods, including:

- Large group sessions including lectures, interactive discussions, case-based problem solving
- Interactive small group learning sessions
- Independent self-directed reading and exercises

COURSE MATERIAL ACCESS

Course materials are available in one45. The syllabus, forms, and other useful documents will be posted there. In some modules, Canvas will be used for submission of assignments.

RESOURCES

It is strongly recommended that you use the following resources (or similar general texts) as references for the Foundations course. Relying on class notes alone will not typically be sufficient to meet your learning objectives. Individual Modules will have additional specific recommended or required resources. It may be helpful to review websites such as <http://www.choosingwiselycanada.org>.

The Firstline (formerly Spectrum) app for infectious disease/microbiology/antibiotic therapy guidance is available for free download through the App Store and Google Play. A web-version is also available <https://firstline.org/sha/>

The FirstLine app is a useful resource with information around infectious diseases/microbiology and antibiotic choices. The FirstLine app also includes access to the educational game Microbial Pursuits developed in collaboration with FirstLine by U of S faculty/students. [Firstline - Microbial Pursuit](#)

The CANImmunize app with guidance for immunization schedules and information is available for free download through the App Store and Google Play.

The texts listed below are all available as free e-books through the Health Sciences library <http://libguides.usask.ca/c.php?g=16462&p=91000>. If you need assistance finding these texts, contact your Health Sciences librarian.

1. A general medicine text such as Harrison's Principles of Internal Medicine by Kasper et al (ISBN: I 978-0-07-1802161 for e-book). Edition: 19.
2. A general surgical text such as Sabiston Textbook of Surgery by Townsend C (ISBN 978-1-4377-1560-6). Edition: 19 or Current Diagnosis and Treatment – Surgery by Doherty G (ISBN 978-0-07-179211-0). Edition: 14.
3. A general pediatrics text such as Nelson Essentials of Pediatrics by Marcdante, Karen J (ISBN: 978-1-4557-5980-4). Edition: 7 or Rudolph's Pediatrics by Rudolph C. et al. (ISBN: 9780071790376). Edition: 22.
4. Anatomy TV: <https://libguides.usask.ca/PRIMAL>
5. Additional Anatomy Resources: <https://libguides.usask.ca/medicine/anatomy>

Undergraduate Diagnostic Imaging Fundamentals E-Book

The Undergraduate Diagnostic Imaging Fundamentals, by Dr. Brent Burbridge (MD, FRCPC) is an e-book resource to augment the presentation for imaging of common clinical conditions. Guiding principles related to minimizing radiation exposure, requesting appropriate imaging, and static images are enhanced and discussed.

Additionally, users can access other imaging from the Dicom viewer (ODIN) to further advance their experience with viewing diagnostic imaging pathologies. <https://openpress.usask.ca/undergradimaging/>

Textbooks are available online from the University of Saskatchewan Bookstore:

<https://bookstore.usask.ca/students.php#MyTextbooks>

COURSE ASSESSMENT OVERVIEW

Course Component	Module Components	Module Weight	Component Requirement	Weighting in Final Foundations I Mark
Biomedical Sciences Module	Health Promotion Assignment	15%	70% on module	34%
	Histology Virtual Microscopy (2 x 1.25% each)	2.5%		
	Genetic Pedigree/Patterns of Inheritance Assignment	3%		
	Genetic Testing and Screening Assignment	2%		
	Immunology Quizzes x 5 (1% each)	5%		
	Health Information Literacy Assignment	7.5%		
	Mid-Module Exam	25%		
	End-of Module Exam	40%		
Hematology/Oncology Module	3 Assignments (3% each)	9%	70% on module	33%
	3 Unit Exams (18% each)	54%		
	End of Module Exam	37%		
Endocrine/Metabolism Module	5 Quizzes (2% each)	10%	70% on module	33%
	Assignment	10%		
	Module Exam I	40%		
	Module Exam II	40%		
Case-Based Learning Module	10 Cases	Competency Based	All competencies met and 70% of competencies on CBL End of Module Exam	Pass/Fail
	CBL End of Module Exam			
	Other Module End of Module Exams*			
Course Total Mark				100%
Foundations I Final Exam **			60% on exam	

In order to provide students more individualized feedback following most exams, students will receive individual feedback sheets that will detail the student's progress towards achievement of the course/module objectives.

* Case-Based Learning assessment points may be examined in the Biomedical Sciences, Hematology/Oncology, Endocrine/Metabolism Module final examinations and the Foundations I Final Exam.

** The Foundations I Final exam is a cumulative exam and tests clinical application of content from Foundations I. It is modeled on the national exam at the end of medical school, the MCCQE part 1 exam, and consists of a series of clinical vignettes that test a student's ability to diagnose, investigate, and treat various health conditions. Question styles may include: short answer, multiple choice, extended multiple choice, fill-in-the-blank, and matching. A minimum score of 60% on the Foundations I Final Exam is required for successful course completion.

EXAM PROCTORING

Exams will be completed in-person. The program may determine specific exceptional circumstances in which examinations during this course be delivered remotely. In that event, proctoring software or other remote invigilation methods will be employed concurrently during the examination to ensure academic integrity of the assessment.

MIDTERM AND FINAL EXAMINATION SCHEDULING

Midterm and final examinations must be written on the date scheduled.

Students should avoid making prior travel, employment, or other commitments for in-term exams and final exams. If a student is unable to write an exam through no fault of their own for medical or other valid reasons, they should refer to the College of Medicine [Deferred Exam policy and procedure](#).

RUBRICS

Where applicable, rubrics for all assignments will be posted on one45 for the relevant session. For those assignments submitted via Canvas they are also posted in Canvas. In the event of a discrepancy between the two versions, that posted on Canvas shall be taken to be correct.

COURSE POLICY FOR SUCCESSFUL COMPLETION & REMEDIATION

For successful course completion for the purposes of promotion, students must achieve a minimum grade of 70% in each of the three block/systems based modules within the Foundations I course (Introduction to Biomedical Sciences, Hematology/Oncology, and Endocrine/Metabolism Modules) and the required competencies in the fourth Case-Based Learning module. Students must also achieve a minimum grade of 60% in the Foundations Final Examination for Foundations I. Students not promoted as a result of being unsuccessful on the course will receive a grade of "F" on their transcripts.

A student's grade for each block/systems module will be determined at the end of each module and is based on the weighted cumulative average of all graded assessments within each individual module.

The requirements for successful completion of the Foundations I Course are listed below. Please note that students must meet the overall Term 2 promotion standards in order to be promoted to Year 2 (see Student Information Guide).

- A) Students will be considered to have successfully completed the Foundations I Course if they have achieved a minimum 70% average grade in each of the three systems-based modules, the required amount of competencies for the Case-Based learning Module, 70% of the required competencies in the Case-Based Learning End of Module Exam and a minimum 60% grade on the end of term Foundations I Final Examination.
- B) Students are required to complete all assignments, quizzes, tests and examinations in each of the Foundations modules, as well as the Foundations I Final Examination. A mark of 0% will be given for any missed quiz, test or examination, unless otherwise arranged as per the College of Medicine Attendance Policy and Deferral Policy. Assignments are adjudicated as per the Assignment Submission Policy.

- C) Students who do not achieve the required 70% average grade in any of the three system based modules, the required competencies in the Case-Based Learning module, 70% of the required competencies in the Case-Based Learning End of Module Exam or a 60% grade in the Foundations I Final Examination will be allocated grade deficit points, which are weighted based on the percentage grade below the pass standard for either the modules or Foundations I Final Exam (see Table 1 & Table 2 for grade deficit point allocation rubric). Feedback regarding the Case-Based Learning module will be provided earlier in the term and will be better able to target individual education needs. Students who appear to be having difficulty will be offered a meeting with Academic Support and the Module Director. Students accumulating 2 or more deficit points at any point during the course will be deemed to be experiencing academic difficulty. The severity of academic difficulty will be based on the weighted grade deficit assessment. Students in academic difficulty will be required to meet with a course sub-committee of at least 2 people (made up of Course Chairs(s); Year Chair(s), Academic Support Specialist or designates), or others as needed, to discuss ways to improve academic performance. The goal of such a meeting is not meant to be punitive, but should be student-centered, and focused on the success and well-being of the student. With any further accrual of deficit points, the student may be required to again meet with the course sub-committee.
- D) Students who have failed a module or the Foundations I Final Exam may be offered remediation. The determination of eligibility for any remediation will be based on the number of accumulated weighted grade deficit points (see Table 1 for grade deficit point allocation rubric), or the number of failed modules. Students who have **accrued a total of four (4) or more** grade deficit points or accrued deficit points in **three (3)** separate modules within Foundations I will be considered to have been unsuccessful in the Foundations I Course and will NOT be offered further remediation or supplemental assignments and/ or examinations as per usual course policy. Further decisions regarding academic outcomes will be adjudicated by the Year 1 (Term 2) Promotions Committee and the Student Academic Management Committee.
- E) The module director will determine the specific type of remediation needed for each individual student. Remediation may be in the form of additional assignments, additional cases, assigned readings, and/or meetings with the module director or designate. The remediation timeline will begin once the student has been notified of failure in a module or the Foundations I Final. A remediation plan will be arranged between the module director and student, in consultation with the Academic Support Specialist, which will be carried out from the beginning of the remediation timeline until the date of the supplemental assessment. The module director, in consultation with the Assessment Specialist, will determine the specific type of supplemental assessment.
- F) Supplemental examinations will **only** be scheduled after the final exam period in December. Students required to remediate modules will be informed of the specific supplemental examination dates. Students should anticipate that supplemental exams for all but the final module and the Case-Based Learning module of the term will be held within 7 days of the last final exam and that supplemental exams for the final module of the term and the Foundations I Final Exam will be held mid-January. Where students have supplemental exams in more than one module or course then adjustments may be made to the supplemental exam schedule by the Year Chair, in coordination with Course Chair/Module Director(s).

Supplemental assessments will be scheduled after the final exam period and will be scheduled by the UGME office. Supplemental assessments will ONLY be offered on scheduled dates unless there are exceptional circumstances (such as personal illness, bereavement, etc.). In cases of exceptional circumstances, students should follow the [Deferred Exam Procedure](#) to request adjustment of their schedule. Exceptions will not be made for personal travel, and students will be required to adjust personal travel arrangements

- G) A maximum of **one (1)** supplemental examination per module will be allowed, up to the point of course failure (see D). As well, students will only be allowed to write **one (1)** supplemental examination for the Foundations I Final Exam, up to the point of course failure (see D). Students who have been unsuccessful in any supplemental examination will be deemed unsuccessful in the Foundations I course. Further decisions regarding academic outcomes will be adjudicated by the Year 1 (Term 1) Promotions Committee and the Student Academic Management Committee.
- H) If a student fails an assignment identified as a mandatory pass in a module, supplemental assignments may be written as arranged between the student, module director and/ or course chair(s). Supplemental assignments must be completed by the date set by the Module Director with the latest possible due date being two weeks after the end of the module; however, alternative earlier due dates may be arranged between student and module director.
- * **NOTE** All assessments including the final exam are mandatory to complete.
- I) If a failure of a supplemental examination occurs during or after the final examination period, this decision as to whether any additional remediation/supplemental assessment will be allowed will be adjudicated by the Promotions Committee and the Student Academic Management Committee.
- J) Success in any supplemental assessment will be accorded a maximum grade equivalent to the minimum requirement for that component of the course (70% for a Module, 60% for the Foundations I Final Exam and the minimum number of required competency points).
- K) Grade deficit points will not appear on the student's transcript, nor are they transferred to any other course in the UGME Program.

Students who are eligible for supplemental examination will be contacted by the Module Director and should arrange to meet with the Module Director and the Academic Support Specialist to discuss educational issues and develop a learning plan.

Table I: Grade Deficit Point Allocation for Systems Based Modules and Foundations I Final Exam

	Overall grade achieved in module before remediation or grade achieved in Supplemental Examinations.		
	< 70% and \geq 60%	< 60% and \geq 50%	<50%
Biomedical Sciences Module	I	II	III
Hematology/Oncology Module	I	II	III
Endocrine/Metabolism Module	I	II	III
Foundations I Final Exam	N/A	I	II

I: one grade deficit point; II: two grade deficit points; III: three grade deficit points; N/A: not applicable.

Table II: Grade Deficit Point Allocation for Case-Based Learning Module

	Number of Competencies not achieved before remediation.		
	One Competency OR Failure of the End of Module Exam	Two Competencies	Three or More Competencies OR Failure of Module Exam Plus One or more Competencies
Case-Based Learning Module	I	II	III

I: one grade deficit point; II: two grade deficit points; III: three grade deficit points; N/A: not applicable.

ASSESSMENT REVIEW

Course or Module Directors will provide all students with a summary of post-examination learning points focusing on clarification of concepts where significant numbers of students appeared to have difficulty. Actual examination papers will not be made available to all students; however, in the event of specific module or examination failure students may work with the academic support team and the module/course leaders to review their examination performance and discuss concepts that students may be struggling with.

IMPORTANT GUIDELINES FOR THIS TRANSITION TERM

During this transition term it is important that we undertake in-person elements of this class safely. In order to do this the university has developed a set of expectations and safety protocols that all students must adhere to if they are to engage in in-person activity.

Throughout the Term:

- **Protect the Pack:** Right now, the impact of student choices and activities when not on campus cannot be separated from time spent on campus. In order to “protect the pack”, the university is asking all students who are doing in-person work to be mindful and do whatever possible to lower the risk that you will contract COVID-19 and bring it onto campus.
- **Know what is Required and Expected of You:** One of the critical lessons learned in dealing with COVID-19 is knowing that situations can change and we must be flexible and ready to adjust our safety protocols. Instead of listing all of the relevant information in your course outline, the university has created a [webpage](#) where all up-to-date information around returning to campus is listed. **You are responsible** for **regularly** checking the health and safety guidelines <https://covid19.usask.ca/about/safety.php#Expectations> and knowing what is expected of you throughout the fall term.
- **Follow all Guidance:** Students are expected to follow all guidance provided by the University’s Pandemic Recovery/Response Team (PRT), College/Department, professors, lab instructors, TAs, and any other staff member involved in the in-person academic program activities (e.g., Protective Services, Safety Resources).
- **Key Channels of Communication:** If there is a need for the class to pause meeting in-person for a period of time you will be notified. If this occurs, you will be provided with detailed information on what you will need to do in place of the in-person class sessions (e.g., read content posted in Canvas, complete learning activities in Canvas).

Foundations in Clinical Medicine I – Module Syllabus

This section of the course syllabus will describe the specific objectives, requirements and expectations, and assessment procedures for each module within the Foundations in Clinical Medicine I Course.

MODULE 1

Biomedical Sciences

MODULE DIRECTOR

Dr. Susan Gilmer

Email: susan.gilmer@usask.ca

Phone Number: (306) 966-4091

Office Hours: Please contact for a meeting

ADMINISTRATIVE STAFF

Cheryl Pfeifer, Administrative Coordinator

Email: cheryl.pfeifer@usask.ca

Phone Number: (306) 966-6138

MODULE DESCRIPTION

The practice of medicine requires grounding in scientific principles, as well as understanding how current medical knowledge is scientifically justified, and how that knowledge evolves. Curiosity, skepticism, objectivity, and the use of scientific reasoning are fundamental to the practice of medicine. This module will introduce students to the principles of biomedical sciences that form the scientific basis of clinical medicine. Students will also be introduced to the concept of evidence based medicine, an approach to sourcing and translating medical literature towards clinical care provision and a lifespan approach towards health promotion/preventative care considerations.

Completion of this course will contribute to attaining elements of the overall undergraduate program objectives ([Program Learning Objectives](#)).

MODULE OBJECTIVES

By the completion of the Biomedical Sciences module, students will be expected to:

1. Explain the normal form and function of the human body with introductory application to human health and disease.
2. Apply at an introductory level, the basics of health promotion/illness prevention and have an approach to patient education around health promotion/illness prevention.
3. Apply, at an introductory level, principles of genetics to the diagnosis and management of common genetic disorders and have an approach to basic genetic counseling.
4. Describe the basic principles of pharmacology, how various agents alter homeostasis and the pharmacological basis of therapeutics.
5. Explain the basic principles of general immunology and microbiology with introductory application to human health and disease.
6. Begin to develop an evidence – informed approach to health care provision.

Information on literal descriptors for grading in the College of Medicine at the University of Saskatchewan can be found in the [Pre-Clerkship Student Information Guide](#) – Student Assessment Section

More information on the Academic Courses Policy on course delivery, examinations and assessment of student learning can be found at: <http://policies.usask.ca/policies/academic-affairs/academic-courses.php> **NOTE:** The College of Medicine has specific policies and procedures for course delivery, exams and assessment that can be found on the [Policies, Procedures and Forms](#) page of the College of Medicine website.

The University of Saskatchewan Learning Charter is intended to define aspirations about the learning experience that the University aims to provide, and the roles to be played in realizing these aspirations by students, instructors and the institution. A copy of the Learning Charter can be found at: www.usask.ca/university_secretary/LearningCharter.pdf

All learning objectives (course, module, and session) can be accessed on the College of Medicine/Curriculum website under the appropriate year and course. A print version is also available. Please access the link below for the most current objectives.

<https://share.usask.ca/medicine/one45/kbase/Curriculum%20Objectives.aspx>

MODULE SCHEDULE

The Introduction to Biomedical Sciences Module is organized in 3 sections running concurrently. Session schedules for each of the modules will be posted on One45.

All information relating to this course is available in **One45**. Please check One45 **DAILY** to ensure that you have the most current schedule information.

MODULE SECTIONS

Biomedical Sciences Section

Including: Physiology, Histology, Embryology, Anatomy, Genetics, Immunology, Microbiology, Pharmacology, Pathology

Health Promotion/ Illness Prevention Section

Health Information Literacy/ Introduction to Critical Appraisal Section

MODULE DELIVERY

Students will learn through a variety of methods, including:

Large group sessions including lectures, interactive discussions, online materials, and case-based problem solving.

Facilitated small group learning sessions.

Independent self-directed reading and exercises.

MODULE MATERIAL ACCESS

Course materials are available in One45. This syllabus, forms, and other useful documents will be posted there.

If you have not been assigned a user name (NSID – U of S Network Service ID) and password for PAWS, contact Student Central (306) 966-1212 or contact IT Services Help Desk (306) 966-4817.

Course materials and electronic assignment submission will be done through Course Tools (Canvas).

STUDENT ASSESSMENT

Assignments	35%
Health Promotion Assignment	15%
Histology Virtual Microscopy Assignments (2 x 1.25% each)	2.5%
Genetics Pedigree Assignment	3%
Genetics Inheritance Assignment	2%
Immunology Quizzes (5 x 1% each)	5%
Health Information Literacy	7.5%
Exams	65%
Mid-Module Exam	25%
End of Module Exam	40%

Assessment 1: Health Promotion Assignment

Value: 15% of Final Grade

Due Date: September 29, 2022 at 11:59 PM

Description: The student will complete a paper [1500-2000 words] which relates to a health promotion/illness prevention topic which may be on either a community or an individual patient scale.

In this paper the student will clearly articulate the problem or health challenge/threat and population affected. Include a review of relevant literature appropriately referenced. Recognize strengths/weaknesses and potentially unanticipated consequences of different approaches to addressing the topic. Propose solutions or next steps in a solution finding process. Acknowledge for the topic selected the potential contribution towards impact of social determinants of health (including cultural considerations) on people/individuals as well as on potential solutions.

Assessment 2: Histology Virtual Microscopy Assignments

Value: 2.5% of Final Grade

Due Dates: Dates are posted in One45

Description: Students will label cells and histological structures using virtual slides. There will be 2 assignments worth 1.25% each.

Assessment 3: Genetic Pedigrees and Patterns of Inheritance Assignment

Value: 3% of Final Grade

Due Date: August 23, 2022 at 11:59 PM

Description: Take-home assignment in Canvas that consists of a pedigree drawing, determination of inheritance based on pedigrees and reasons for choosing the pattern of inheritance.

Assessment 4: Genetic Testing and Screening Assignment

Value: 2% of Final Grade

Due Date: September 6, 2022 at 11:59 PM

Description: Take-home assignment in Canvas that consists of two cases which integrate the content from the Genetic Testing and Screening lectures.

Assessment 5: Immunology Quizzes

Value: 5% of Final Grade

Due Date: Dates are posted in One45

Description: Students will be asked to watch short videos related to the lecture material, either before or after the lecture. Then the students will answer a short quiz based on the information provided in the video they watched. The quizzes consist of multiple choice, short answer and/or matching questions. These quizzes are open book and there are 5 in total worth 1% each.

Assessment 6: Information Literacy and Evidence-Based Medicine (EBM) Assignment

Value: 7.5% of Final Grade

Due Date: September 14, 2022

Description: Understanding the information literacy and EBM concepts that will be discussed in the case-based learning events, students will be required to complete and submit an assignment consisting of short-answer questions relating to the topics covered.

Mid-Module Exam

Value: 25% of Final Grade

Date: August 25, 2022

Type: Comprehensive In-Class; all biomedical science sections may be covered.

Description: Question type may include: multiple choice, multiple choice multiple answer, fill in the blank, true-false, short answer, matching, and extended written questions.

End of Module Exam

Value: 40% of Final Grade

Date: September 28, 2022

Type: Comprehensive In-Class; all sections may be covered.

Description: Question type may include: multiple choice, multiple choice multiple answer, fill in the blank, true-false, short answer, matching, and extended written questions.

Biomedical Sciences Section

SECTION LEAD

Dr. Susan Gilmer

Email Address: susan.gilmer@usask.ca

Phone Number: (306) 966-4091 / Cell Phone (306) 281-4765

Office Hours: By appointment only

SECTION DESCRIPTION

In this section of this Introductory module, students are introduced to some of the foundational scientific principles of biomedical sciences which underpin and support our understanding of the human body structure and function. Focus will be on broad biomedical discipline content acknowledging more specific content is integrated in systems-based modules later in the curriculum. An introduction to anatomy, embryology, histology, physiology, immunology, genetics, microbiology and principles of pharmacology will support students in establishing a foundation for learning clinical medicine. Students will also begin to explore principles around pathologic basis of disease supporting advancement in learning in subsequent Foundations course modules.

SECTION OBJECTIVES

By the completion of this section of the Introductory module, students will be expected to:

1. Explain the normal form and function of the human body with introductory application to human health and disease.
2. Apply, at an introductory level, principles of genetics to the diagnosis and management of common genetic disorders and have an approach to basic genetic counseling.
3. Describe the basic principles of pharmacology, how various agents alter homeostasis and the pharmacological basis of therapeutics.
4. Explain the basic principles of general immunology and microbiology with introductory application to human health and disease.

SECTION SCHEDULE

All information relating to this section is available in **One45**. Please check One45 **DAILY** to ensure that you have the most current schedule information.

REQUIRED RESOURCES

Embryology

Larsen's Human Embryology 5th Ed. by Shoenwolf, Bleyl, Brauer, and Francis West [978-0443-06811-9]

Genetics

Schaefer, GB and Thompson, JN (2014) Medical Genetics an Integrated Approach. McGraw Hill Education: New York. Details of the pre-readings from this text for the lectures will be provided on One45. This is a recommended text which is available as an E-Book from the Health Sciences Library.

Histology

Textbooks: Both are available as Kindle editions.

Wheater's Functional Histology by Barbara Young, Phillip Woodford and Geraldine O'Dowd (2013) [ISBN 978-0-7020-4747-3]

OR

Histology: A Text and Atlas (2016) by M.H. Ross and W. Paulina [ISBN 978-1-4511-8742-7]

Immunology

Recommended

Review of Medical Microbiology and Immunology (Lange Medical Books) Paperback. by Warren Levinson (Author). 978-0071818117

Immunology Made Ridiculously Simple: Massoud Mahmoudi: 978-0-940780-89-7

CANImmunize app available for free download through the App Store or Google Play Store.

Microbiology

Review of Medical Microbiology and Immunology (Lange ...Medical Books) Paperback. by Warren Levinson (Author). [978-0071818117]

Clinical Microbiology Made Ridiculously Simple: Mark Gladwin MD, William Trattler MD, C. Scott Mahan MD: [9781935660156]

The First Line (formerly Spectrum) app for infectious disease/microbiology/antibiotic guidance is free and can be downloaded both through the App Store and Google Play. There is a web-version that can easily be accessed at <https://firstline.org/sha/>. There is also an educational game – Microbial Pursuit on this platform which can be accessed at <https://firstline.org/microbial-pursuit/>

Pathology

Robbins Basic Pathology, 9e (Robbins Pathology) [Hardcover] Vinay Kumar MBBS MD FRCPath (Author), Abul K. Abbas MBBS (Author), Jon C. Aster MD PhD (Author) [ISBN 978-1-4377-1781-5] Edition: 9

Recommended: [Undergraduate Diagnostic Imaging Fundamentals E-Book](#)

The Undergraduate Diagnostic Imaging Fundamentals, by Dr. Brent Burbridge (MD, FRCPC) is an e-book resource to augment the presentation for imaging of common clinical conditions. Guiding principles related to minimizing radiation exposure, requesting appropriate imaging, and static images are enhanced and discussed. Additionally, users can access other imaging from the Dicom viewer (ODIN) to further advance their experience with viewing diagnostic imaging pathologies.

<https://openpress.usask.ca/undergradimaging/>

Pharmacology

Recommended

Goodman & Gilman's Manual of Pharmacology and Therapeutics (2nd Edition). Eds. By Hilal-Dandan & Brunton.

Principles of Pharmacology: The pathophysiologic Basis of Drug Therapy. By David E Golan (3rd Edition).

Applied Pharmacology. By Stan Bardal, Jason Waechter, Doug Martin. ISBN [978-1-4377-0310-8]

Health Promotion/Illness Prevention Section

SECTION LEAD

Dr. Regina Taylor-Gjevre

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Office Hours: Please contact in advance for a meeting

SECTION DESCRIPTION

In this portion of the Introductory Module, students will be introduced and engaged with to an approach to health promotion/ preventative care which will support future learning and participation in clinical care planning or delivery. During this section, focus will be placed on diet/nutrition, physical activity, maltreatment awareness, psychological health and cultural connection, vaccination, dental health, sleep health, and impact of environment/climate change on health. A framework based on ages/stages of life from infancy to the elderly will be utilized. Students will be introduced to the importance of considering the influence of social determinants of health on health promotion/ preventative care planning.

SECTION OBJECTIVES

By the completion of this section of the Introductory module, students will be expected to:

1. Apply at an introductory level, the basics of health promotion/illness prevention and have an approach to patient education around health promotion/illness prevention.

SECTION SCHEDULE

All information relating to this section is available in **One45**. Please check One45 **DAILY** to ensure that you have the most current schedule information.

SUPPLEMENTAL RESOURCES

1. Health Promotion and Disease Prevention. 3rd Edition. Editor Jessica Coviello
<http://library.usask.ca/scripts/remote?URL=http://dx.doi.org/10.1007/978-3-319-54509-7>
2. Health Promotion and Aging: Practical Applications for Health Professionals. 8th Edition. David Haber
<http://library.usask.ca/scripts/remote?URL=https://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&AN=2230728>
3. Trauma, Resilience, and Health Promotion in LGBT Patients: What Every Healthcare Provider Should Know. Editors Kristen Eckstrand & Jennifer Potter
<http://library.usask.ca/scripts/remote?URL=http://dx.doi.org/10.1007/978-3-319-54509-7>
4. Follow the Food BBC Series
<https://www.bbc.com/future/ bespoke/ follow-the-food/>
5. Nutrition Related Resources
<https://www.scientificamerican.com/custom-media/science-for-life/how-diet-can-change-your-dna/>

Health Information Literacy/Introduction to Critical Appraisal Section

SECTION LEADS

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Ms. Erin Watson

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SECTION DESCRIPTION

This section introduces the evidence-based medicine concepts and skills that will be applied and further developed in the case-based learning curriculum. It reinforces and builds upon students' existing information literacy knowledge and skills and introduces the critical appraisal of scientific evidence. All content will be specific to the medical context. Students will be asked to draw upon the skills and knowledge developed here when participating in case-based learning events.

SECTION OBJECTIVES

The purpose of this section is to provide a base of knowledge on which to build throughout the case-based learning series. By the completion of this section of the Introductory module, students will be expected to:

1. List and describe the common study designs used in quantitative research.
2. Describe the basic epidemiologic concepts related to critical appraisal such as validity (bias, random error confounding), interpretation of results, and application.
3. Describe scholarly publishing processes and trends.
4. Analyze patient websites.
5. Create a clearly defined, searchable question relevant to a clinical scenario.
6. Develop a well-constructed search strategy to find primary literature relevant to the question.

SECTION SCHEDULE

All information relating to this section is available in **One45**. Please check One45 **DAILY** to ensure that you have the most current schedule information.

SUPPLEMENTAL RESOURCES

Users' Guides to the Medical Literature: A Manual for Evidence-Based Clinical Practice, 3rd ed by Gordon Guyatt, Drummond Rennie, Maureen O. Meade, Deborah J. Cook. Available online at <http://library.usask.ca/scripts/remote?URL=http://jamaevidence.mhmedical.com/book.aspx?bookID=847>, and in print at the Leslie and Irene Dube Health Sciences Library at RA427 .U74 2015 and the Regina General Hospital Library at WB 102 U845 2015.

<https://casp-uk.net/casp-tools-checklists/>

MODULE 2

Hematology/Oncology

MODULE DIRECTOR

Dr. Kelsey Brose

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Office Location: RUH 2609

Office Hours: Please contact for meeting

ADMINISTRATIVE STAFF

Cheryl Pfeifer, Administrative Coordinator

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Phone Number: (306) 966-6138

MODULE DESCRIPTION

The Hematology/Oncology module is divided into four units. Upon completion of each unit, students will be better equipped to perform a focused history and physical, select investigations in a prioritized fashion, and recommend appropriate treatment for common and/or important hematology/oncology conditions.

1. Anemia – An introduction to the physiology of red blood cell formation and important disorders that cause anemia.
2. Hemostasis and Thrombosis – An introduction to the physiology of platelet production and clotting, with a focus on disorders that cause excess clotting and/or bleeding.
3. Malignancy – An introduction to the principles of oncology, including oncogenesis, genetics, screening, diagnosis, and treatment principles. Application of these principles to a wide variety of malignant conditions will be demonstrated, with a primary focus on hematological cancers. The approach to differentiating malignant from non-malignant presentations will also be highlighted.
4. Wrap-Up – A final overview of the module as a whole, with a focus on presentations that span the first 3 units, including pancytopenia and hematology/oncology emergencies.

MODULE OBJECTIVES

By the completion of this module, students will be able to do the following for selected hematology/oncology presentations/diseases:

1. Describe human development, structure, and function including the inherent variability in health and disease.
2. Describe the spectrum of pathology and pathophysiology of acute and chronic diseases.
3. Develop a prioritized differential diagnosis through clinical reasoning and integration of clinical information.
4. Select appropriate diagnostic investigations and interpret results.
5. Develop and implement an appropriate patient-centered and evidence-informed management plan.
6. Apply evidence-informed principles of surveillance and screening, as appropriate.

MODULE SCHEDULE

All information relating to this course is available in One45. Please check One45 **DAILY** to ensure that you have the most current schedule information.

REQUIRED RESOURCES

Lecture notes are designed to be comprehensive enough for most purposes. Students wishing to deepen their understanding can refer to the supplemental textbooks listed below.

Supplemental Resources:

Essential Hematology (Wiley-Blackwell, 8th edition)

Note: Student pre-reading is required in this module. Students are strongly encouraged to come to class prepared to actively participate in the educational sessions.

MODULE DELIVERY

Students will learn through a variety of methods, including:

Large group didactic, interactive and case-based problem-solving sessions

Interactive small group learning sessions

Independent self-directed reading and exercises

STUDENT ASSESSMENT

Assignments	9%
Unit 1 Assignment - Anemia	3%
Unit 2 Assignment – Hemostasis and Thrombosis	3%
Unit 3 Assignment – Malignancy	3%
Exams	91%
Unit 1 Exam – Anemia	18%
Unit 2 Exam – Hemostasis and Thrombosis	18%
Unit 3 Exam – Malignancy	18%
End of Module Exam	37%

Assignments

Value: 9% of Final Grade - three assignments worth 3% each

Due Date: Due dates can be found in One45

Description: Each assignment will contain several common/important patient scenarios. Students will be asked to classify each scenario using common descriptors, for example: acute vs chronic, acquired vs congenital, normal vs abnormal. Based on this classification, students will be asked to provide a brief differential diagnosis.

Unit 1 Exam: Anemia

Value: 18% of Final Grade

Date: October 11, 2022

Description: Tests the student's knowledge of normal blood formation, as well as the approach to a patient with anemia.

Question type may include: multiple choice, multiple choice multiple answer, fill in the blank, true-false, short answer, matching, and extended written questions.

Unit 2 Exam: Hemostasis and Thrombosis

Value: 18% of Final Grade

Date: October 17, 2022

Description: Tests the student's knowledge of normal coagulation, as well as the approach to a patient presenting with bleeding or clotting abnormalities.

Question type may include: multiple choice, multiple choice multiple answer, fill in the blank, true-false, short answer, matching, and extended written questions.

Unit 3 Exam: Malignancy

Value: 18% of Final Grade

Date: October 24, 2022

Description: Tests the student's approach to the patient presenting findings suggestive of a malignancy, as well as the principles of oncology.

Question type may include: multiple choice, multiple choice multiple answer, fill in the blank, true-false, short answer, matching, and extended written questions.

End of Module Exam

Value: 37% of Final Grade

Date: October 27, 2022

Description: A comprehensive exam of all the hematology module objectives.

Question type may include: multiple choice, multiple choice multiple answer, fill in the blank, true-false, short answer, matching, and extended written questions.

MODULE 3

Endocrine/Metabolism

MODULE CO-DIRECTORS

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ADMINISTRATIVE STAFF

Cheryl Pfeifer, Administrative Coordinator

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MODULE DESCRIPTION

The Endocrine system is set up by topics, including core sections of pituitary, thyroid, calcium, diabetes, and adrenal. Different lecturers will present each session through didactic lectures that provide objectives and literature references where appropriate. In addition to clinical endocrinology, the basic science, pathophysiology, diagnostic imaging, and laboratory medicine integral to Endocrine assessment is introduced within these lectures and clinical cases. Separately, clinical case scenarios that encompass both chronic endocrine disorders and important endocrine emergencies are provided in a question-answer format. Self-directed time is provided to work through 1-2 clinical cases at a time. Canvas quizzes (5 in total) will be incorporated to supplement learning. These quizzes will be marked as a participatory grade yet a minimum passing mark is needed for full points (2% or full mark for 7/10 or more correct; 1% or half mark for 1-6/10 correct; 0% if not completed or 0/10) and completion dates will be posted. Quizzes will be completed between the relevant lectures/cases and case reviews, outside of class time. Quizzes will be reviewed during the case review sessions, and they should provide familiarity with midterm exam level question expectations. The clinical cases and exam questions will highlight diagnostics, management, key historical features, physical exam findings, and laboratory investigations relevant to the Endocrine topics and further supplement the lectures. An assignment pertaining to the diabetes workshop will account for 10% of the total module mark. Suggested reading for each topic may be provided by the individual lecturers, and the majority of cases have suggested reading guides or will have enclosed articles/guidelines to use as reference. There will also be a hands-on diabetes workshop to provide real-world experience into diabetes management. There are two noncumulative module exams, without a cumulative final.

General Module Objectives

By the completion of this module, students will be able to:

1. Describe the clinically relevant anatomy, physiology and biochemistry of the pituitary, adrenal, thyroid, pancreas, and parathyroid glands.
2. Describe the major clinical actions of hormones secreted from or under control by the pituitary, adrenal, thyroid, pancreatic islet, and parathyroid glands and their relationship to disease.
3. Explain the clinical sequelae of under- or over-secretion of hormones of the pituitary, adrenal, thyroid, pancreatic islet, and parathyroid glands.
4. Identify endocrine specific disorders in a patient presenting with a common, non-specific complaints.
5. Given a high clinical suspicion of an endocrine abnormality, describe and interpret appropriate investigations.
6. Given a firm diagnosis of an endocrine abnormality, develop an appropriate plan of management and prognosis, including involvement of multidisciplinary care.

MODULE SCHEDULE

All information relating to this course is available in One45 and Canvas. Please check One45 **DAILY** to ensure that you have the most current schedule information and Canvas for session materials and other information pertinent to this module.

RECOMMENDED RESOURCES

Jameson JL. Harrison's Endocrinology 3rd ed. New York (NY): McGraw-Hill; 2013: ISBN-10: 0071814868; ISBN-13: 9780071814867

Greenspan's Basic and Clinical Endocrinology, Ninth Edition: David Gardner, Dolores Shoback: ISBN-9780071622431

Diabetes Canada Clinical Practice Guidelines (2018): <http://guidelines.diabetes.ca/fullguidelines>

Supplemental

Please note that articles and/or clinical guidelines of major relevance for course review and future use will be provided at the onset of the course. These articles/guidelines will also supplement the cases and can be used as key sources of information for preparing them.

MODULE DELIVERY

Students will learn through a variety of methods, including didactic lectures, small group learning, group workshops, and student self-assessment.

STUDENT ASSESSMENT

Quizzes **10%**

Quizzes x 5 5 x 2% All quizzes will be done on Canvas
Scoring as per: 7/10 or more correct = full marks; 1-6/10 correct = half marks; 0/10 or not completed = no marks

Assessment(s) **10%**

Diabetes Assignment 10%

Exams **80%**

Module Exam I 40%

Module Exam II 40%

Diabetes Quiz Diabetes Cases #1 and #2 and Small Group Cases

Value: 2% of Final Grade

Due Date: November 3, 2002 by 11:59 PM

Description: The quiz will cover content drawn from the Diabetes Lectures as well as cases 3 and 4.

Question type may include: multiple choice, multiple choice multiple answer, fill in the blank, true-false, short answer, matching, and extended written questions.

Pituitary Quiz Pituitary Cases 1, 2 and 3

Value: 2% of Final Grade

Due Date: November 15, 2022 by 11:59 PM

Description: The quiz will cover content drawn from Pituitary cases 1, 2, and 3.

Question type may include: multiple choice, multiple choice multiple answer, fill in the blank, true-false, short answer, matching, and extended written questions.

Thyroid Quiz Thyroid Cases 1, 2, and 3

Value: 2% of Final Grade

Due Date: November 22, 2022 by 11:59 PM

Description: The quiz will cover content drawn from Thyroid cases 1, 2, and 3.

Question type may include: multiple choice, multiple choice multiple answer, fill in the blank, true-false, short answer, matching, and extended written questions.

Calcium Quiz Calcium Cases 1 and 2

Value: 2% of Final Grade

Due Date: November 27, 2022 by 11:59 PM

Description: The quiz will cover content drawn from Calcium cases 1 and 2.

Question type may include: multiple choice, multiple choice multiple answer, fill in the blank, true-false, short answer, matching, and extended written questions.

Adrenal Quiz Adrenal Cases 1 and 2

Value: 2% of Final Grade

Due Date: November 28, 2022 by 11:59 PM

Description: The quiz will cover content drawn from Adrenal cases 1 and 2.

Question type may include: multiple choice, multiple choice multiple answer, fill in the blank, true-false, short answer, matching, and extended written questions.

Assessment Diabetes Assignment

Value: 10% of Final Module Grade

Due Date: November 16, 2022 by 11:59 PM

Description: At the conclusion of the diabetes workshop, students will be expected to work in small groups (assigned) to complete a clinical case assignment pertaining to a newly diagnosed patient with type 1 diabetes and a newly diagnosed patient with type 2 diabetes.

Module Exam I

Value: 40% of Final Grade

Date: November 21, 2022

Description: ExamSoft. Please reference Module Exam I Blueprint for breakdown of Module Exam I material and question allotment.

Question type may include: multiple choice, multiple choice multiple answer, fill in the blank, true-false, short answer, matching, and extended written questions.

Module Exam II

Value: 40% of Final Grade

Date: December 2, 2022

Description: ExamSoft. Please reference Module Exam II Blueprint for breakdown of Module Exam II material and question allotment.

Question type may include: multiple choice, multiple choice multiple answer, fill in the blank, true-false, short answer, matching, and extended written questions.

Please refer to overall course promotion/failure/remediation standards outlined earlier in this syllabus.

MODULE 4

Cased-Based Learning

MODULE CONTACTS

Case-Based Learning Development Director

Dr. Deirdre Andres – Email: d.andres@usask.ca Phone Number (306) 222-4177

Module Director

Dr. Andrea Symon – Email: andrea.symon@usask.ca Phone Number: (306) 966-5354

Administrative Staff

Sonja MacDonald [Pre-Clerkship Program Coordinator] – Email: Sonja.macdonald@usask.ca Phone: (306) 966-5354

Cassie Eskra [Pre-Clerkship Coordinator – Regina] – Email: cassandra.eskra@saskhealthauthority.ca Phone: (306) 766-3773

Sarah Zdunich [Year One Admin Assistant] – Email: sarah.zdunich@usask.ca Phone: (306) 966-7202

MODULE DESCRIPTION

This module introduces students to the concept of clinical reasoning and its components and introduces an approach to differential diagnosis. Students will be introduced to sources of bias/error and their effect on clinical decisions and patient care. Basic clinical reasoning skills will be reinforced through the use of cases. In these small group learning experiences, the student will work through patient cases in order to have practice applying knowledge from the various courses in this first term and to develop clinical reasoning skills. Cases will also reinforce and expand upon students' existing information literacy knowledge and skills to develop skills specific for the patient/medical context.

This module will consist of a series of patient-based cases. Each case will be designed to run over three sessions in a week.

The first session will start with an orientation to the case. Students will then have time to work through the case materials. These cases are designed to help students develop a general approach to common clinical problems and to develop their clinical reasoning skills.

The second session will be devoted to medical information literacy related to the case materials from the first session. Students will need to formulate a question, find relevant information to answer that question (e.g. patient web sites/handouts, studies, guidelines etc.), critically appraise the information found and apply it to the patient.

The third session will be a facilitator guided small group session. During this session the case will be reviewed and students' clinical reasoning, related to the case content will be explored and further developed.

MODULE OBJECTIVES/COMPETENCIES/MILESTONES

Competencies

1. Utilize Clinical Reasoning in:

i) Analyzing the patient interview.

Determine appropriate questions to understand the disease process, illness experience and relevant patient context.

Interpret the answers.

Milestones:

Choose significant positives from a patient history.

Ask relevant questions and provide sound rationale.

ii) Analyzing components of the physical examination.

Determine appropriate maneuvers.

Interpret the findings.

Milestones:

Link physical exam strategies to further define elements of presenting problem/

Give rationale for the choices.

iii) Synthesizing information to develop a rational differential diagnosis and a working diagnosis.

Milestones:

Use mnemonics (VINDICATE, VITAMINS – ABCDE) to develop a differential diagnosis.

Narrow the differential diagnosis based on presenting data.

Utilize data from history and physical exam to support the differential diagnosis.

iv) Determining appropriate investigations.

Determine appropriate investigations.

Interpret the information.

Synthesize the information to further define the patient's problem.

Milestones:

Discuss BRAN (benefits, risks/results, alternatives and doing nothing).

Choose investigations that will help stratify differential diagnoses/explains why.

-
- v) Utilizing effective management strategies.

Milestones:

Identify social determinants of health that might affect management strategies.

Develop a problem list.

Develop an appropriate therapeutic plan, including pharmacological and non-pharmacological interventions that incorporates the patient's illness experience.

Discuss BRAN (benefits, risks/results, alternatives and doing nothing)

- vi) Analyzing diagnostic errors.

Identify common errors in information gathering and synthesis.

Develop strategies to decrease errors in diagnosis.

Milestones:

Identify bias and its effects on patient interactions.

Diagnostic time-out-outlines the procedures and step in an effective diagnostic time-out.

2. Utilize the Patient-Centered Clinical Method (PCCM) to integrate illness experience and patient context into active shared decision-making around management.

Milestones:

Identify the elements of FIFE (feelings, ideas, function, expectations) in the interview.

Assess level of health literacy.

3. Utilize opportunities for health promotion and illness prevention.

Identify opportunities for health promotion and illness prevention.

Provide evidence-informed rationale for intervention.

Incorporate patient preferences and expectations into health promotion and illness prevention interventions.

Milestones:

Identify opportunities for health promotions and illness prevention.

Find a critique evidence-based interventions.

4. Determine an evidence-based course of action in response to a patient problem.

-
- Demonstrate self-directed learning.

Milestones:

Given an area of knowledge or skill difficulty, search for an answer, present the result and receive feedback.

- Exhibit professionalism.
-

MODULE RESOURCES

The following are recommended resources for student use:

- Clinical Reasoning Handbook

The Clinical Reasoning Handbook by Dr. Andrea Symon and Dr. Deirdre Andres overviews the clinical reasoning process and its components for early medical learners. It serves as a good background resource for the information and principles you will need to use during the CBL module. You will be provided access to this resource at the beginning of the term.

- Symptom to Diagnosis Podcast (Case-Based Diagnostic Reasoning) [McGraw Hill's Access Medicine]

This podcast presents case-based discussion of signs, symptoms, and diagnostic tests to improved clinical reasoning and evidence-based practice. It is available for free on several podcast streaming services.

- Teaching Medicine Website

<https://www.teachingmedicine.com/>

This website contains several computer-based patient cases which can be used for your learning purposes. Some of these cases will be used during the CBL sessions.

MODULE ASSESSMENT OVERVIEW

The Case Based Learning module will be assessed at multiple points throughout the semester. It may be assessed during the Case-based learning sessions, during the end of module final exam, as part of other Foundations module exams and/or the Foundations Integrated final exam.

The student will need to acquire a pre-set number of assessment points to demonstrate competency (see chart below). Competency points can be accrued during:

- the case-based learning sessions
- the CBL end of module exam
- competencies examined on the block/system module exams
- the Foundations I final exam

Multiple competencies will be assessed with a requirement that 70% of competencies on this exam will need to be met. Failure to achieve 70% of the competencies on this exam will result in failure of the module and the requirement for remediation.

OVERALL MODULE COMPETENCY COMPONENTS

During this module students will be introduced to the Competency-Based Medical Education (CBME) model of assessment.

In order for a student to progress from the early stages of learning to the level of competence necessary to function in a clinical setting, they should demonstrate that they are competent as indicated in the table below. Maintenance of competency will be assessed on the module final exam, where 70% of competencies must be met to achieve success in the module. Feedback will be provided earlier in the term to target individual educational needs. Students in academic difficulty for a competency will be offered a meeting with Academic Support and/or the module director or their designate.

Competencies	Where competency may be assessed	Number of successful competency assessments to display competence
1. Utilize Clinical Reasoning (CR) to: Analyze the patient interview: Determine appropriate questions required to understand the disease process, illness experience, and relevant patient context. Interpret the answers.	Cases/Exams	6
Analyze components of the physical examination: Determine appropriate maneuvers. Interpret the findings.	Cases/Exams	6
Synthesize information to develop a rational differential diagnosis and a working diagnosis.	Cases/Exams	6
Determine appropriate investigations: Determine investigations. Interpret the information. Synthesize the information to further define the patient's problem.	Cases/Exams	4
Utilize effective management strategies: Integrate illness experience into active shared decision making around management.	Cases/Exams	2
Analyzing diagnostic errors: Identify common errors in information gathering synthesis. Develop strategies to decrease errors in diagnosis.	Cases/Exams	2
2. Utilize the Patient-Centered Clinical Method (PCCM) to integrate illness experience and patient context into active shared decision making around management.	Cases/Exams	6

Competencies	Where competency may be assessed	Number of successful competency assessments to display competence
3. Utilize opportunities for health promotion and illness prevention.	Cases/Exams	4
Identify opportunities for health promotion and illness prevention.		
Provide evidence-informed rationale for intervention.		
Incorporate patient preferences and expectations into health promotion and illness prevention interventions.		
4. Determine an evidence-based course of action in response to a patient problem.	Cases	5
5. Demonstrate self-directed learning.	Cases Formatively Assessed	--
6. Exhibit professionalism.	Individually Assessed	--
*Failure to exhibit professional behavior will be adjudicated on an individual basis.		

IMPORTANT AND RELEVANT STUDENT INFORMATION

The following information is extremely important for your success in medical school. Please refer to the [UGME Policies](#) page and the [Student Information Guide](#) for the following policies:

UGME CONTACT INFORMATION

EMAIL COMMUNICATIONS ETHICS

AND PROFESSIONALISM PROGRAM

EVALUATION

GUIDELINES FOR PROVIDING FEEDBACK

EMERGENCY PROCEDURES

MD PROGRAM ATTENDANCE POLICY ASSESSMENT

POLICY

PROMOTION STANDARDS

CONFLICT OF INTEREST

NON-INVOLVEMENT OF HEALTH CARE PROVIDERS IN STUDENT ASSESSMENT

APPEALS PROCEDURES

STUDENT DISCRIMINATION, HARRASSMENT, AND MISTREATMENT PROCEDURE

ACCOMMODATION OF STUDENTS WITH DISABILITIES

OFFICE OF STUDENT AFFAIRS

Where a specific College of Medicine policy or procedure does not exist, the College refers to the U of S Academic Courses Policy at <http://policies.usask.ca/policies/academic-affairs/academic-courses.php>

UNDERGRADUATE MEDICAL EDUCATION ASSIGNMENT SUBMISSION POLICY

Any assignment submitted after 23:59 SK time on the specified date is deemed late (unless otherwise specified).

All due dates or timelines for assignment submission are published in the student course syllabus. In the event of a general service disruption on Canvas at the time an assignment is due, they are to be submitted by 0900 the following morning.

A late assignment may still be submitted up to three consecutive calendar days (72 hours) from the original deadline for that assessment. The assignment must be submitted to the appropriate year Administrative Coordinator in Saskatoon, or the Pre-Clerkship Coordinator in Regina for years 1-2. Years 3-4 must submit to the Rotation Coordinator. The student, if submitting a late assignment that is deemed to be at or above the pass mark for that assignment will receive the pass mark for the assignment. If it is assessed as below the pass mark, the student will receive the actual grade assigned for the assignment.

Any late assignments not submitted by 23:59 on the third day will receive a mark of 0%. After this period, all mandatory assignments must still be submitted, or the student will be deemed to be missing a course component, which will result in an incomplete course. Subsequent academic consequences will be determined at the promotions committee meetings.

In addition to the consequences specified herein, students submitting mandatory assignments late should anticipate a meeting to discuss professionalism, which may result in associated documentation.

All requests for a deferral of an assignment due date must be received a minimum of 72 hours prior to the deadline. All such requests must be sent to the Course Director or Rotation Coordinator and copied to the relevant Administrative Coordinator. The course director, in consultation with the year chair and appropriate course/module/rotation director will make a final decision and notify the student of the outcome. Exceptional, unforeseen circumstances will be considered on an individual basis as above.

CITATION FORMAT

Unless otherwise specified by the course or module director, the expected citation format is that of the International Committee of Medical Journal Editors (ICMJE). Examples of this citation format are available at www.nlm.nih.gov/bsd/uniform_requirements.html

RECORDING OF THE LECTURES

Most lectures will be recorded and posted to the course Canvas site under Panopto Video. However, each lecturer reserves the right to choose whether or not their lectures will be recorded. Lecture recordings are not intended to be a replacement for attending the session but rather to enhance understanding of the concepts.

Please remember that course recordings belong to your instructor, the University, and/or others (like a guest lecturer) depending on the circumstance of each session, and are protected by copyright. Do not download, copy, or share recordings without the explicit permission of the instructor.

For questions about recording and use of sessions in which you have participated, including any concerns related to your privacy, please contact the UME administrative coordinator for this course. More information on class recordings can be found in the Academic Courses Policy <https://policies.usask.ca/policies/academic-affairs/academic-courses.php#5ClassRecordings>

REQUIRED VIDEO USE

At times in this course you may be required to have your video on during video conferencing sessions, in order to support observation of skills, to support group learning activities, or for exam invigilation. It will be necessary for you to use of a webcam built into or connected to your computer.

For questions about use of video in your sessions, including those related to your privacy, contact your instructor.

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For more information about copyright, please visit <https://library.usask.ca/copyright/index.php> where there is information for students available at <https://library.usask.ca/copyright/students/rights.php>, or contact the University's Copyright Coordinator at <mailto:copyright.coordinator@usask.ca> or (306) 966-8817.

INTEGRITY DEFINED (FROM THE OFFICE OF THE UNIVERSITY SECRETARY)

Although learning in a remote context is different, the rules and principles governing academic integrity remain the same. If you ever have questions about what may or may not be permitted, ask your instructor. Students have found it especially important to clarify rules related to exams administered remotely and to follow these carefully and completely.

The University of Saskatchewan is committed to the highest standards of academic integrity (<https://academic-integrity.usask.ca/>). Academic misconduct is a serious matter and can result in grade penalties, suspension, and expulsion.

Prepare for Integrity

Students are expected to act with academic integrity.

- Students are encouraged to complete the Academic Integrity Tutorial to understand the fundamental values of academic integrity and how to be a responsible scholar and member of the USask community (tutorial link: <https://libguides.usask.ca/AcademicIntegrityTutorial>)
- Students can access campus resources that support development of study skills, time and stress management, and ethical writing practices important for maintaining academic integrity and avoiding academic misconduct.

Responses to Misconduct

Students are expected to be familiar with the academic misconduct regulations

(<https://governance.usask.ca/student-conduct-appeals/academic-misconduct.php#About>).

- Definitions appear in Section II of the academic misconduct regulations.
- The academic misconduct regulations apply regardless of type of assessment or presence of supervision during assessment completion.
- Students are advised to ask for clarification as to the specific expectations and rules for assessments in all of their courses.
- Students are urged to avoid any behaviour that could result in suspicions of cheating, plagiarism, misrepresentation of facts. Students should note that posting copyrighted course materials (e.g., notes, questions, assignments or exams) to third party websites or services or other forum or media without permission is an academic or non-academic misconduct offense.

Non-academic offenses are dealt with under the [Standard of Student Conduct in Non-Academic Matters and Regulations and Procedures for Resolution of Complaints and Appeals](#).

EXAMINATIONS WITH ACCESS AND EQUITY SERVICES (AES)

Students who have disabilities (learning, medical, physical, or mental health) are strongly encouraged to register with Access and Equity Services (AES) if they have not already done so. Students who suspect they may have disabilities should contact the Student Affairs Coordinator at the Office of Student Affairs (OSA) for advice and referrals. In order to access AES programs and supports, students must follow AES policy and procedures. For more information, check <http://www.students.usask.ca/aes>, or contact AES at (306) 966-7273 or aes@usask.ca.

Students registered with AES may request alternative arrangements for mid-term and final examinations.

Students must arrange such accommodations through the Office of Student Affairs (OSA) by the stated deadlines. Instructors shall provide the examinations for students who are being accommodated by the deadlines established by AES.

RECOMMENDED TECHNOLOGY FOR REMOTE LEARNING

Students are reminded of the importance of having the appropriate technology for remote learning. The list of recommendations can be found at <https://students.usask.ca/remote-learning/tech-requirements.php>.

STUDENT SUPPORTS

COLLEGE OF MEDICINE, OFFICE OF STUDENT AFFAIRS

Student Affairs offers confidential support and advocacy at arm's length from the academic offices.

For more information please contact:

COM Student Affairs Coordinator (Saskatoon), Edith Conacher at edith.conacher@usask.ca or (306) 966-4751

COM and the School of Rehabilitation Science Coordinator (Saskatoon), Bev Digout at bev.digout@usask.ca or (306) 966-8224

Administrative Assistant (Saskatoon), Chris Florizone at cdf300@mail.usask.ca or (306) 966-7331

Student Affairs Coordinator (Regina), Sue Schmidt at sue.schmidt@saskhealthauthority.ca or (306) 766-0620

Student Affairs Director, Dr. Nicole Fahlman (Regina) at nicole.fahlman@usask.ca or (306) 209-0142

Student Affairs Director, Dr. Tiann O'Carroll (Regina) at tiann.ocaroll@usask.ca or (306) 529-0777

Administrative Assistant (Regina) Michelle Grove at michelle.grove@saskhealthauthority.ca or (306) 766-0553

ACADEMIC HELP FOR STUDENTS

The University Library offers a range of learning and academic support to assist USask undergrad and graduate students. For information on specific services, please see the Learning page on the Library web site <https://library.usask.ca/support/learning.php>.

Remote learning support information <https://students.usask.ca/remote-learning/index.php>

Class and study tips <https://students.usask.ca/remote-learning/class-and-study-tips.php>

Remote learning tutorial https://libguides.usask.ca/remote_learning

Study skills materials for online learning <https://libguides.usask.ca/studyskills>

A guide on netiquette, principles to guide respectful online learning interactions <https://teaching.usask.ca/remote-teaching/netiquette.php>

TEACHING, LEARNING AND STUDENT EXPERIENCE

Teaching, Learning and Student Experience (TLSE) provides developmental and support services and programs to students and the university community. For more information, see the students' web site

<http://students.usask.ca>.

FINANCIAL SUPPORT

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact Student Central (<https://students.usask.ca/student-central.php>).

ABORIGINAL STUDENTS CENTRE

The Aboriginal Students Centre (ASC) is dedicated to supporting Aboriginal student academic and personal success. The centre offers personal, social, cultural and some academic supports to Métis, First Nations, and Inuit students. The centre is also dedicated to intercultural education, bringing Aboriginal and non-Aboriginal students together to learn from, with and about one another in a respectful, inclusive and safe environment.

Students are encouraged to visit the ASC's Facebook page (<https://www.facebook.com/aboriginalstudentscentre/>) to learn more.

International Student and Study Abroad Centre

The International Student and Study Abroad Centre (ISSAC) supports student success and facilitates international education experiences at USask and abroad. ISSAC is here to assist all international undergraduate, graduate, exchange and English as a Second Language students in their transition to the University of Saskatchewan and to life in Canada. ISSAC offers advising and support on matters that affect international students and their families and on matters related to studying abroad as University of Saskatchewan students. Please visit students.usask.ca or updates.usask.ca for more information.

Recommended Technology for Remote Learning

Students are reminded of the importance of having the appropriate technology for remote learning. The list of recommendations can be found at <https://students.usask.ca/remote-learning/tech-requirements.php>.

Remember, there are [many supports available](#) to help you thrive in the remote learning context.