# Selective Clinical Rotations

MEDC 408.8 Year 4 (Terms 1 and 2)

COURSE SYLLABUS 2023-2024



#### 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.

## SELECTIVE CLINICAL ROTATIONS – COURSE OVERVIEW

#### **COURSE DESCRIPTION**

This course is designed to allow medical students to pursue their own interests in the areas of internal medicine and surgery in keeping with their individual goals. The Selective Clinical Rotations course is a four-week course in which the student will select to study subspecialties in both Internal Medicine and Surgery. The student will choose one surgical subspecialty over a two-week period, and one medical subspecialties over a two-week period comprising the full four weeks.

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

#### **OVERALL COURSE OBJECTIVES**

- 1. By the completion of this course, students will be expected to:
- 2. Recognize the role of the sub-specialist surgeon/internist in the delivery of healthcare to the population.
- 3. Demonstrate professional behavior through punctuality, appropriate attire, and respectful attitudes to patients, families, and other health care providers.
- 4. Recognize and advocate for addressing the needs of patients, families, communities, and populations in all areas that affect health and well-being.
- 5. Perform a patient-centered history and physical examination that pertains to the patient's presenting problem.
- 6. Develop initial working diagnostic hypotheses based upon history and physical examination findings.
- Select and interpret appropriate and resource-conscious diagnostic tests, including laboratory, imaging, electrophysiologic and other modalities, to complement your clinical diagnosis.
- 8. Integrate clinical information to arrive at a working diagnosis to guide patient care.
- 9. Develop an initial management plan with the patient addressing their presenting problem, including pharmaceutical, non-pharmaceutical and surgical

approaches.

- 10. Discuss primary and secondary strategies to prevent the development of illness and disease.
- 11. Work in and appreciate the role of intra/inter-professional teams, by collaborating together on improving patient care, including through effective consultation.
- 12. Perform procedural skills appropriate for the subspecialty (see objectives of each sub-specialty rotation for detailed objectives).
- 13. Develop effective communication skills to include maintaining clear, accurate, and appropriate records of clinical encounters and/or communicating in a language easily understood by patients and family members.

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 most current objectives through the link below:

https://elentra.usask.ca/community/ugmecurriculum

Information on literal descriptors for grading in the College of Medicine at the University of Saskatchewan can be found in the <u>Pre-Clerkship Student Information Guide</u> – Student Assessment Section.

More information on the Academic Courses Policy on course delivery, examinations and assessment of student learning can be found at: <a href="http://policies.usask.ca/policies/academic-affairs/academic-courses.php">http://policies.usask.ca/policies/academic-affairs/academic-courses.php</a> NOTE: The College of Medicine a specific policies and procedures for course delivery, exams and assessment that can found on the <a href="Policies">Policies</a>, <a href="Policies">Procedures</a> and <a href="Policies">Forms</a> 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: <a href="https://teaching.usask.ca/documents/vptl/LearningCharter.pdf">https://teaching.usask.ca/documents/vptl/LearningCharter.pdf</a>

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#### **COURSE SCHEDULE**

This course is a 4-week rotation consisting of 2 weeks of a medicine subspecialty and 2 weeks of a surgery subspecialty.

Each rotation must be of a minimum of 2 weeks in duration.

## **INDEPENDENT LEARNING (IF APPLICABLE)**

Please note, students are encouraged and expected to enhance and expand their knowledge of selective rotation objectives through self-directed learning, consistent with Pre-Clerkship Self-Directed Learning activity. This can be done through an identification, analysis and synthesis of credible information sources, a sharing of knowledge with peers and/or instructors, an application of new knowledge within the selective rotations, and seeking out feedback from their peers and instructors regarding their knew knowledge and skills.

#### **COURSE DELIVERY**

Students will learn through a variety of methods including:

- Interactive small group learning sessions
- Independent self-directed reading and exercises
- In-patient and out-patient exposure

#### **COURSE MATERIAL ACCESS**

Course information will be posted to one45.

## **RECOMMENDED MEDICAL INSTRUMENTS (IF APPLICABLE)**

A stethoscope is required. The hospitals provide examining kits consisting of ophthalmoscope/otoscope and reflex hammer on most wards (the quality and availability of these is variable).

PPE (Personal Protective Equipment) is strongly encouraged and available in most patient areas. This is not limited to standard precautions which are the basic level of infection control which should be used for all patients all of the time.

#### **RESOURCES**

A general medical text should be consulted for reference in reading around patient problems, such as:

McMaster Textbook of Internal Medicine (available online through the library)

Longo, Dan et al. *Harrison's Principles of Internal Medicine*. 18<sup>th</sup> ed. New York: McGraw-Hill Education, 2011. Lee Goldman and Andrew I. Schafer. *Goldman-Cecil Medicine*. 25<sup>th</sup> ed. Philadelphia: Saunders, 2015.

The following textbooks are resources for the surgical disciplines: Lawrence PF: Essentials of General Surgery and Surgical Specialties (5<sup>th</sup> ed.). Baltimore, MD: Lippincott Williams & Wilkins, 2018.

Townsend CM and Beauchamp RD, Evers BM, Mattox KL: Sabiston Textbook of Surgery: The Biological Basis of Modern Surgical Practice (21st Ed.). Philadelphia, PA, Elsevier, 2012

## 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/

#### **COURSE ASSESSMENT OVERVIEW**

Each of the 2-week rotations will have the following assessment components:

- 1. Clinical performance as measured by clinical assessments (ITARs) filled out by attending physicians at the end of each medicine and surgery two-week rotation. The following criteria are required to pass.
  - A grade of 70% or greater for each medicine and surgery rotation.

- A minimum of "Meets Expectations" in each individual ITAR.
- Assessments of professionalism must be at a minimum "Meets Expectations" for all assessments.
- 2. Adequate completion of EPAs #1-12, in accordance with Year 4 expectations (see EPA section below).

At the end of the rotation students must have at least 2 ITARs (one for the medicine selective and the other for the surgery selective)

Each 2-week rotation mark will be calculated as follows:

Assessment Type	Weight
Clinical Assessment (ITAR)	100%
2. EPA #1 through #12	Formative
Total	100%

Final grade will be determined by the average of each of the 2-week rotation marks.

## **Entrustable Professional Activities (EPAs)**

Please note that the EPA requirement is for the entirety of Year 4 and includes **both** the Electives and Selectives courses.

For the 2023/2024 academic year, all fourth-year Clerks will be required to complete a minimum of 12 EPAs every 6 weeks (average 2 per week) of Elective/Selective time. A minimum of 49 EPAs are required to be completed through the Electives/Selectives courses (see below).

EPA	Requirement
1	6
2	4
3	6
4	4
5	4
6	6
7 A and	4 (2 Each)
В	
8	3
9	3
10	3
11	3
12	3

Completion of EPAs is a valuable opportunity to get formative feedback on your clinical performance and demonstrate your clinical competency. Students are strongly encouraged to achieve more than the minimum number of EPAs to help guide their continued learning and demonstrate competency. Additionally, based on their interim EPA performance, the competency committee may require Clerks to compete additional EPAs in different categories if there are concerns about entrustibility. Discussing your EPA plan with your elective/selective supervisor early helps ensure that your plan will be successfully completed by the end of each elective/selective.

We recognize that not all electives/selectives provide equal opportunity to obtain EPAs. It is acceptable to have less than the expected amount for a given 2-week elective/selective; however, you are still required to meet the 6-week minimum expectation of 12 EPAs. The student should formulate a plan which EPAs to achieve in each elective/selective. This plan should be submitted to your Year 4 Chair or Site Director for approval 1 month prior to the start of electives/selectives.

- EPA 1: Obtain a history and perform a physical examination adapted to the patient's clinical situation
- EPA 2: Formulate and justify a prioritized differential diagnosis
- EPA 3: Formulate an initial investigative plan based on the diagnostic hypothesis
- EPA 4: Interpret and communicate results of common diagnostic and screening tests
- EPA 5: Formulate, communicate and implement management plans
- EPA 6: Present oral and written reports that document a clinical encounter
- EPA 7: Provide and receive the handover in transitions of care
- EPA 8: Recognize a patient requiring urgent or emergent care, provide initial management and seek help
- **EPA 9:** Communicate in difficult situations
- EPA 10: Contribute to a culture of safety and improvement
- **EPA 11:** Perform general procedures of a physician
- EPA 12: Educate patients on disease management, health promotion and preventive medicine

Completion of all EPAs is **mandatory** and is a requirement to successfully complete Year 4 and graduate medical school. Failure to complete the required number of EPAs, at a level that is satisfactory to the competency committee, will have academic and/or professionalism consequences, including being ineligible for graduation. Further, if students are found to be missing EPAs, additional clinical time may be required to complete missing EPAs or demonstrate an acceptable level of clinical competency.

#### **Process:**

Faculty is expected to fill out the EPAs with their app under the student's name, selecting "Selectives" as the rotation.

#### COURSE POLICY FOR SUCCESSFUL COMPLETION AND REMEDIATION

In order to successfully complete this course for the purposes of promotion, a student must achieve:

- Within each 2-week rotation, 70% or greater on the ITARs,
- EPAs majority entrustable

Students not promoted on the basis of failing this course will receive an "F" on their transcript for the relevant course.

#### **REMEDIATION**

Students who do not achieve the minimum standard in any of the two separate selective rotations will be required to meet with the Course Director to develop a remediation plan including supplemental assessment and more clinical time to meet clinical expectations. The Course Director, along with Student Academic Support person, will determine the specific type of remediation needed for each individual student. Students who successfully remediate will receive a 70% in that 2-week rotation. Students who are not successful after remediation will receive a fail for the course.

The implications of failing to successfully complete the course will be adjudicated at the Year 4 Promotions Committee and a final decision on academic outcomes will be determined by the Student Academic Management Committee.

An Informal Discussion Form for Professionalism may be submitted if EPA observations are not complete, and additional clinical time may be required.

#### ATTENDANCE EXPECTATIONS

**Vacation/Education Leave:** Vacation is not permitted on this rotation. Education leave may be allowed with permission from the College of Medicine and the course director. This will be assessed on a case-by-case basis. Appropriate documentation of the educational session being attended will be required.

#### **COURSE EVALUATIONS QUALITY IMPROVEMENT**

The following changes reflect course quality review recommendations and student feedback:

- 1. Additional selective options including Addictions Medicine.
- 2. The observed History and Physical assignment was replaced with EPA assessments.
- 3. Selective opportunities have been streamlined as a result of student feedback.

## **COURSE MODULE**

The selective program is designed to allow medical students to pursue their own interests and to design programs in keeping with their individual goals. Selective opportunities are available in the program areas listed below (not all selectives are available at all sites). Further information may be found under the specific program in discipline-specific sections below.

	Saskatoon	Regina
Medicine		
Addictions Medicine	Х	
Cardiology	Х	X
Dermatology		X
Endocrinology	Х	X
Gastroenterology	X	X
Geriatrics	Х	X
Hematology	Х	X
Infectious Diseases		X
Nephrology	X	X
Neurology	Х	X
Occupational and Environmental	X	
Medicine		
Oncology (Medical, Radiation)	X	X
Physical Medicine &		X
Rehabilitation		
Respirology	X	X
Rheumatology	X	X
Surgery		
Cardiothoracic Surgery		X
ENT	X	X
Neurosurgery	X	X
Pediatric Surgery	X	X
Plastic Surgery	Х	X
Thoracic Surgery	X	
Vascular Surgery	X	Х
Urology	Х	X

Students who are interested in subspecialties not listed above may be granted approval by the course director. This will be assessed on a case-by-case basis at both sites. Students will be required to submit objectives for this rotation to the course director prior to approval and obtain confirmation of preceptor(s) availability from the specific division UG lead.

## **MODULE OBJECTIVES**

## **SPECIFIC SUBSPECIALITY SURGERY OBJECTIVES**

## **Cardiothoracic Surgery**

Core Thoracic Surgery Presentations/Conditions: Solitary Pulmonary Nodule, Pleural Effusion, Pneumothorax

- 1. Perform a focused patient-centered history and physical on a patient with a core thoracic surgery presentation/condition.
- 2. Discuss the investigations required for a patient presenting with a core thoracic surgery presentation/condition.
- 3. Generate a differential diagnosis for the thoracic surgery core presentations/conditions.
- 4. Formulate a management plan for patients presenting with a core thoracic surgery presentation/condition.
- 5. Perform a focused patient-centered history and physical examination in a patient with cardiovascular disease (specifically coronary artery disease, valvular diseases and heart conduction abnormalities).
- 6. List the indications and investigative tools to evaluate cardiovascular disease.
- Appreciate the role of medical and physical supports for circulation, including: inotropes, vasopressors, afterload reducers, intra-aortic balloon pumping (IABP), and ventricular assist devices (VAD).
- 8. Recognize early and intermediate complications of cardiac procedures.
- 9. Discuss the indications for and expected benefits of surgical management of cardiovascular disease, including cardiac device implantation (pacemakers/ICD's), and the pertinent ethical consideration thereof.

#### **ENT**

Core ENT Presentations: Ear Pain, Hearing Loss, Tinnitus, Otorrhea, Vertigo, Nasal Obstruction, Rhinorrhea, Sore Throat, Oropharyngeal Dysphagia, Hoarseness, Neck Mass, Mouth Lesion

- 1. Perform a focused patient-centered history on a patient with a core ENT presentation.
- 2. Perform a focused physical examination on a patient with a core ENT presentation, including demonstrating the skills of otoscopy, tuning fork hearing testing, nasal exam, throat tongue depressor exam and neck palpation.
- 3. Generate a differential diagnosis in a patient with a core ENT presentation.
- 4. Based on the differential, determine initial management, including ordering of appropriate investigations.
- Discuss the epidemiology, risk factors, primary and secondary prevention strategies, key symptomatic findings, initial investigations (including appropriate staging studies), and

treatment options for patients presenting with head and neck cancers.

- Appreciate the role of community resources available for patients presenting with ENT problems, including audiologists, speech language pathologists and vestibular rehabilitation therapists.
- 7. Demonstrate the proper technique for nasal packing in epistaxis.

## Neurosurgery

Core Neurosurgical Presentations/Conditions: Altered Level of Consciousness, Low Back Pain, Brain Mass.

- 1. Perform a focused, patient-centered history and physical examination on a neurosurgery patient.
- 2. Discuss the clinical presentation and management of common neurosurgical conditions, such as traumatic brain injury (subdural hematoma, epidural hematoma, subarachnoid hemorrhage, diffuse axonal injury), low back pain, cauda equina syndrome, cerebral aneurysm, brain tumors and hydrocephalus.
- 3. Describe the mechanism of action of the following drugs commonly used in neurosurgery: Mannitol, Dilantin, Decadron.
- 4. Recognize basic imaging patterns seen on x-ray, CT, and MRI that aid in the diagnosis of a patient with a neurosurgical problem.
- 5. Generate a differential diagnosis on a patient presenting with a core neurosurgical presentation.
- 6. Based on the differential, determine initial management, including ordering of appropriate investigations.

## **Pediatric Surgery**

Core Pediatric Surgery Presentations/Conditions: Incarcerated Inguinal Hernia in the Neonate, Aspirated and Ingested Foreign Bodies, Acute Abdomen in the Neonate or Infant or Older Child, Acute Gastrointestinal Bleeding, Blunt Abdominal and Thoracic Trauma, Scrotal Pain and Mass, Bilious and Non-Bilious Vomiting

- 1. Demonstrate the unique communication skills necessary to obtain thorough, focused pediatric histories from children, parents or other caregivers.
- 2. Perform a focused physical examination in a pediatric surgery patient, including employing strategies used to elicit key physical signs despite potential poor compliance.
- 3. Discuss the unique natural history of surgical diseases in children.

- 4. Discuss the heat regulation problems in infants and the need for careful environmental control during evaluation and management.
- Recognize the need to individualize drug dosage and fluid administration on the basis of weight, and be able to calculate expediently fluid and electrolyte requirements using standard formulas.
- 6. Recognize and accommodate for the altered physiological systems (such as immature hepatic and renal function) that affect drug and anesthetic administration.
- 7. Provide a differential diagnosis for each of the core pediatric surgery presentations.
- 8. Construct an initial management plan for the core pediatric presentation, recognizing that while ideally managed in a special pediatric facility, management may need to be provided elsewhere based on urgency or distance.
- 9. List and initiate treatment common post-operative complications in children.
- 10. Apply pediatric trauma principles in the initial resuscitation and management of traumatized children.
- 11. Recognize the unique emotional and ethical issues surrounding the care of a sick child and the need to involve parents, children's advocates and other health care-givers in these situations.

#### **Plastic Surgery**

- 1. Perform a focused, patient-centered history and physical examination (including detailed hand and face examination) on a plastic surgery patient.
- 2. Discuss the processes that occur during each phase of wound healing.
- 3. Describe the different options available for wound closure.
- 4. Discuss common hand disorders and basic treatment approaches to these disorders (including carpal tunnel syndrome, trigger finger, common hand fractures, common soft tissue injuries of the hand (tendons, ligaments etc), hand infections and common hand tumours.
- 5. Apply a splint on the hand.
- 6. Identify common facial fractures on clinical examination and imaging modalities.
- 7. Discuss the initial assessment and management of a patient presenting with a burn (thermal, electrical, chemical).
- 8. Identify the features of common skin malignancies (basal cell carcinoma, squamous cell carcinoma, melanoma) and premalignant skin lesions (actinic

keratosis).

9. List options for breast reconstruction following mastectomy.

## **Thoracic Surgery**

Core Thoracic Surgery Presentations/Conditions: Solitary Pulmonary Nodule, Pleural Effusion, Dysphagia

- 1. Perform a focused patient-centered history and physical on a patient with a core thoracic surgery presentation/condition.
- 2. Discuss the investigations required for a patient presenting with a core thoracic surgery presentation/condition.
- 3. Generate a differential diagnosis for the thoracic surgery core presentations/conditions.
- 4. Formulate a management plan for patients presenting with a core thoracic surgery presentation/condition.
- 5. Describe key features of the history, physical and cardiorespiratory testing when assessing a patient's suitability for pulmonary resection.
- 6. Discuss the important elements of lung cancer and esophageal cancer staging, treatment and prognosis.
- 7. Discuss the differences between an exudative and transudative effusion and list examples of each.
- 8. Participate in common thoracic surgical procedures and post-operative care.
- 9. Observe proper technique for chest tube insertion.
- 10. Discuss gastroesophageal reflux disease, its management and the clinical importance of Barrett's esophagus.
- 11. Discuss the various types of hiatus hernia and their management.
- 12. Interpret a chest x-ray and CT chest image.

## **Vascular Surgery**

Core Vascular Surgery Presentations/Conditions: Known aortic aneurysmal disease, peripheral arterial occlusive disease, acute limb ischemia, varicose veins and diabetic foot.

1. Perform a focused patient-centered history on a patient presenting with a core vascular surgery presentation/condition.

- 2. Perform a focused physical examination on a vascular surgery patient, including the assessment of pulses and the circulation with the ankle-brachial index and hand held Doppler device.
- 3. Discuss the key symptomatic findings and initial investigations and management for patients presenting with a core vascular surgery presentation/condition.
- 4. Review the anatomy of the arterial and superficial and deep venous system of the lower extremity.
- 5. Discuss the pathophysiology of superficial venous hypertension.
- 6. Describe the unique anatomic and pathophysiologic changes that occur in diabetes which predispose to foot complications.
- 7. List the types of aortic aneurysms.
- 8. List the potential complications and indications for elective repair of abdominal aortic aneurysms.
- 9. Discuss the epidemiology, risk factors, and primary and secondary prevention strategies for the core vascular surgery presentations/conditions.
- 10. Recognize the roles of community resources available for patients presenting with vascular surgery problems.

## Urology

Core Urological Presentations: Acute Testicular Pain (including testicular torsion), Testicular Mass and/or Swelling (including testicular cancer), Microscopic and Gross Hematuria, Urinary Retention, Urinary Incontinence, Lower Urinary Tract Symptoms (LUTS) (including benign prostatic hyperplasia), Acute Flank Pain (including renal colic), Male Sexual Dysfunction

- 1. Perform a focused patient-centered history and physical examination in a patient with a core urological presentation.
- 2. Generate a differential diagnosis in a patient with a core urological presentation.
- 3. Based on the differential, determine initial management, including ordering of appropriate investigations.
- 4. Discuss the epidemiology, risk factors, key symptomatic findings, initial investigation (including appropriate staging studies), and treatment options for patients presenting with cancer of the prostate, bladder and kidney.
- 5. List the indications and potential complications of urethral catheterization.

- 6. Perform a male and female urethral catheterization using proper technique.
- 7. Identify the important landmarks on a KUB (Kidney/Ureter/Bladder) x-ray, including recognizing the presence of calculi.

#### SUBSPECIALTY MEDICINE OBJECTIVES

The following objectives apply to all medical subspecialties:

- 1. Appreciate the role of the medical subspecialist in the delivery of health care to the population.
- 2. Develop the knowledge, attitudes and skills in each medical subspecialty to improve the delivery of primary health care and/or quality of specialist referral for patients presenting with clinical problems relating to that subspecialty.
- 3. Collaborate with the health care team to ensure adequate patient care.
- 4. Develop effective communication skills to include maintaining clear, accurate, and appropriate records of clinical encounters and/or communicating in a language easily understood by patients and family members.
- 5. Demonstrates professional behavior with patients and their families, fellow students and residents, interdisciplinary team members and faculty.

## **Addictions Medicine**

- 1. Learn a plain-language approach to the physiological, anatomical, socio-economic and psychological complexities of pain management.
- 2. Obtain a patient-centered history and physical examination on a patient presenting with common chronic pain disorders/presentations, and opioid use disorder.
- 3. Develop a differential diagnosis, clinical approach and initial management plan of a patient presenting with common chronic pain disorders/presentations and opioid use disorder.
- 4. Adjust personal communication style to patient and extra professional team needs considering knowledge level, background, culture etc.
- 5. Identify advocacy measures relevant to the health promotion of their patients, families, and communities.
- 6. Manage workload effectively.

7. Demonstrate self-directed learning utilizing the appropriate resources.

## **Cardiology**

- 1. Perform a focused patient-centered history on a patient with chest pain.
- 2. Generate a differential diagnosis for a patient who presents with chest pain.
- 3. Perform a physical exam focusing on the cardio-respiratory system.
- 4. Interpret an ECG.
- 5. Assess a patient with a history of congestive heart failure, focusing on specific aspects of the history and physical exam.
- 6. Formulate a management plan for a patient with congestive heart failure.
- 7. Discuss the indications and potential complications for left heart catheterization.
- 8. Discuss the epidemiology and risk factors for patients with coronary artery disease and congestive heart failure.
- 9. Determine investigations useful for patients with a primary cardiac pathology, based on the history and physical.

## Dermatology

- 1. Discuss epidemiology, risk factors and management of common squamous cell carcinoma, basal cell carcinoma and malignant melanoma.
- 2. Perform a focused dermatological physical exam.
- 3. Discuss the indications and complications of cryotherapy.

## **Endocrinology**

Core Endocrinology Presentations: Diabetes Mellitus, Adrenal Insufficiency, Secondary Hypertension, Thyroid Disorders, Calcium and Phosphate Abnormalities

- 1. Perform a patient-focused history on a patient presenting with a core endocrinology presentation.
- 2. Perform a focused physical examination on a patient presenting with a core endocrinology presentation.

- 3. Based on the history and physical, generate a differential diagnosis, clinical approach and initial management of a patient presenting with a core endocrinology presentation.
- 4. Discuss the indications and complications for ultrasound-guided biopsy of a thyroid nodule.

## Gastroenterology

Core Gastroenterology Presentations: Liver Abnormalities including Ascites, Abnormal Liver Enzymes/Function, Jaundice, Bowel Disorders including Irritable Bowel Syndrome, Inflammatory Bowel Disease, Constipation, Diarrhea, Hematemesis and Melena, Nausea, Vomiting, Weight Gain and Loss

- 1. Perform a patient-focused history on a patient presenting with a patient with a core gastroenterology presentation.
- 2. Perform a focused physical examination on a patient presenting with a core gastroenterology presentation.
- 3. Generate a differential diagnosis, clinical approach and initial management of a patient presenting with a core gastroenterology presentation.
- 4. Discuss the indications and complications of gastroscopy and colonoscopy.
- 5. Outline and participate in the management for a patient with acute GI bleeding.

#### Geriatrics

Core Geriatrics Presentations: Falls, Frailty, Urinary incontinence, Failure to Thrive

- 1. Perform a patient-focused history on a patient presenting with a core Geriatrics presentation.
- 2. Perform a focused physical examination on a patient presenting with a core Geriatrics presentation.
- 3. Based on the history and physical, generate a differential diagnosis, clinical approach and initial management of a patient presenting with a core Geriatrics presentation.
- 4. Assist patients and families to mitigate the risks of polypharmacy, including the risks of cross-reaction to self- or other- prescribed drugs, over-the-counter medications, and

herbal, "natural" or nutraceutical products.

5. Work in interprofessional teams to collaborate on patient care.

## Hematology

Core Hematology Presentation: Coagulation Disorders, Abnormalities of the Complete Blood Count including Thrombocytopenia/Thrombocytosis, Leukopenia/Leukocytosis, Anemia/Polycythemia

- 1. Perform a patient-focused history on a patient presenting with a core Hematology presentation.
- 2. Perform a focused physical examination on a patient presenting with a core Hematology presentation.
- 3. Based on the history and physical, generate a differential diagnosis, clinical approach and initial management of a patient presenting with a core Hematology presentation.
- 4. Discuss the indications and complications of bone marrow aspirate and biopsy.

#### **Infectious Disease**

Core Infectious Disease Presentations: Fever, Infections of Bodily systems, HIV, Hepatitis B and C

- 1. Perform a patient-focused history on a patient presenting with a core Infectious Disease presentation.
- 2. Perform a focused physical examination on a patient presenting with a core Infectious Disease presentation.
- 3. Generate a differential diagnosis, clinical approach and initial management of a patient presenting with a core Infectious Disease presentation.
- 4. Discuss the epidemiology and risk factors of patients with HIV and Hepatitis B and C.
- 5. Discuss common bacterial pathogens that are responsible for infections of bodily systems and recommended antibiotic treatment.

#### **Nephrology**

- 1. Perform a patient-centered history in a patient who presents with acute kidney injury.
- 2. Perform a physical examination in a patient who presents with acute kidney injury.
- 3. Differentiate the different categories of acute kidney injury.

- 4. Develop a differential diagnosis of a patient with acute kidney injury.
- 5. List key investigations for patients presenting with acute kidney injury.
- 6. Formulate a management plan for a patient with acute kidney injury.
- 7. Discuss the indications and potential complications for acute dialysis.
- 8. Interpret an arterial blood gas.
- 9. Discuss the epidemiology and risk factors for patients with chronic kidney disease.
- 10. Discuss and list the complications of patients with a reduced GFR.
- 11. Generate a clinical approach, differential diagnosis and management plan for patients with electrolyte abnormalities.

## **Neurology**

Core Neurological Presentations: Diplopia/Visual Abnormalities, Dizziness/Vertigo, Ataxia, Headache, Weakness/Paralysis, Sensory Abnormalities (numbness/tingling), Aphasia and Speech Disorders, Altered Mental State/Coma, Seizure, Delirium/Dementia

- 1. Perform a focused patient-centered neurological history.
- 2. Perform a through and complete neurological physical exam.
- 3. Based on the history and physical exam findings, determine the neuroanatomical location of the patient's symptoms/finding.
- 4. Develop a differential diagnosis of patient's symptoms/findings.
- 5. Develop a management plan for patients with common and uncommon neurological disease.
- 6. Based on the history and physical exam findings, determine appropriate investigations for a patient who presents with common and uncommon neurological diseases.

#### **Occupational and Environmental Medicine**

- Conduct histories and physical examinations of patients presenting to the Occupational Medicine clinic under supervision. This includes taking a thorough occupational history and relevant physical examination, suggesting investigations, and if possible participating in follow-up and management of patients including communications with referring physicians.
- 2. Select and complete a short written article on a selected occupational medical topic

for publication in the Rural Health Extension Program newsletter, written for the lay public. If the schedule permits, students will present at the CCHSA Tuesday seminar series on a selected occupational medicine health topic (35-40 minutes). This topic can be the same as the selected topic for the newsletter article if the student wishes.

- 3. List the fundamental rights of workers under Saskatchewan occupational health and safety legislation.
- 4. Explain briefly a physician's role and expectations under WCB legislation if a patient presents to clinic with a work-related illness or injury.
- Attend worksite walkthroughs or visits with Faculty of workplaces in or around Saskatoon, and discuss with Faculty health and safety issues and hazards that they witnessed during the walkthrough.

## Oncology

- 1. Perform a focused and concise history of cancer patients who are being treated with curative and palliative intentions.
- 2. Perform a concise patient-centered physical examination on a patient with a common cancer and their complications:
  - a. Lymphatic system examination
  - b. Skin examination for neoplastic, paraneoplastic and treatment related complications
  - c. Breast examination
  - d. Gastro-intestinal tract examination including for ascites, bowel obstruction, bowel perforation, and liver dysfunction
  - e. Cardio-pulmonary examination including for pleural effusion, cardiac tamponade, and superior vena cava obstruction
  - f. CNS examination including for spinal cord compression, neuropathy and CNS metastases
  - g. Vascular examination including for deep venous thrombosis & limb ischemia
  - h. Musculoskeletal examination including for bone metastases & myopathy
- 3. Use the Eastern Cooperative Oncology Group (ECOG) performance status scale.
- 4. Discuss histology and its role in diagnosis and treatment of malignancy.
- 5. Discuss tissue diagnosis of cancer and its role in identifying malignant cell of origin and primary site of the disease, and also in detecting various prognostic and predictive markers to tailor systemic treatment.
- 6. Discuss the balance of risks and benefits of treatment as a key consideration in

making treatment decisions.

- 7. Interpret and synthesize patient's data to perform a structured and concise presentation.
- 8. Observe the diagnostic or therapeutic procedures that are done on outpatient basis at the Cancer Centre.
- 9. Recognize the concept of primary prevention and its application in oncology.
- 10. Demonstrate knowledge of current guidelines for cancer screening.
- 11. Recognize the role and structure of palliative and supportive care in the multidisciplinary management of advanced cancer including:
  - a. Optimal Pain Control
  - b. Nutritional Support
  - c. Psychosocial Support

## Physical Medicine & Rehabilitation (PMR)

Core PMR disorders and presentations: Stroke, Acquired brain injury, Spinal cord injury, Amputation, Multiple Sclerosis, Motor neuron disorders (plexopathies, radiculopathies, peripheral neuropathies, neuromuscular junction disorders, myopathies, mononeuropathies, dystonia), Musculoskeletal disorders including sports injuries, overuse injuries and myofascial pain, Chronic Pain, complex regional pain syndrome (CRPS).

- 1. Obtain a patient-centered and functional history and physical examination for a patient presenting with common PM&R disorders/presentations.
- 2. Develop a differential diagnosis, clinical approach and initial management plan for a patient presenting with common PM&R disorders/presentations
- 3. Demonstrate the ability to communicate effectively with patients and all member of the interdisciplinary team.
- 4. Identify advocacy measures relevant to the health promotion of patients, families, and communities.
- 5. Demonstrate self-directed learning utilizing the appropriate resources.
- 6. Demonstrate professional behavior informed by ethical/legal standards such as: informed consent, confidentiality, capacity, patient autonomy and others.

#### Respirology

Core Respirology Presentations: Cough/Hemoptysis, Dysnea/Wheezing, Hypoxia/Hypercapnia, Pneumonia, Thromboembolic Disease, Pleural Effusion, Asthma/COPD

- 1. Perform a patient-focused history on a patient presenting with a core Respirology presentation.
- 2. Perform a focused physical examination on a patient presenting with a core Respirology presentation.
- 3. Generate a differential diagnosis, clinical approach and initial management of a patient presenting with a core Respirology presentation.
- 4. Discuss the epidemiology, risk factors, symptoms, physical exam findings, investigations and treatment options for patients with tuberculosis.
- 5. Discuss the indications and complications of bronchoscopy.

## Rheumatology

Core Rheumatology Presentations: Joint Pain (Oligo, Polyarthralgia), Musculoskeletal Pain, Arthritis (Crystal Induced, osteo-, Inflammatory), Connective Tissue Disorders

- 1. Perform a patient-focused history on a patient presenting with a core Rheumatology presentation.
- 2. Perform a focused physical examination on a patient presenting with a core Rheumatology presentation.
- 3. Generate a differential diagnosis, clinical approach and initial management of a patient presenting with a core Rheumatology presentation.
- 4. Discuss the indications and complications of joint aspiration.

#### IMPORTANT AND RELEVANT STUDENT INFORMATION

The following information is extremely important for your success in medical school. Please refer to the <u>UGME Policies</u> page and the <u>Student Information Guide</u> 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** 

TECHNICAL STANDARDS – ESSENTIAL SKILLS AND ABILITIES REQUIRED FOR THE STUDY OF MEDICINE https://medicine.usask.ca/policies/com-technical-standards.php#relatedForms

**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 <a href="http://policies.usask.ca/policies/academic-affairs/academic-courses.php">http://policies.usask.ca/policies/academic-affairs/academic-courses.php</a>

#### 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<sup>[1]</sup>.

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 <a href="https://www.nlm.nih.gov/bsd/uniform\_requirements.html">www.nlm.nih.gov/bsd/uniform\_requirements.html</a>

## **PROFESSIONALISM**

Students can be deemed unsuccessful on any course assessment for not achieving course expectations of professionalism. This would include, but is not limited to, any unapproved absences from a mandatory session, and/or submission of late assignments. Students failing to meet professional expectations in the course should anticipate a meeting with the Module/Course Directors and/or Year Chair to discuss the concern, which may result in associated documentation. For further information on professionalism, please refer to the UGME Procedures for Concerns with Medical Student Professional Behavior.

http://medicine.usask.ca/policies/professionalism-standard-operating-procedure.php

#### **RECORDING OF THE LECTURES**

Most lectures will be recorded and posted to the course Canvas site under Course Materials. However, each lecturer reserves the right to choose whether 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.

<sup>&</sup>lt;sup>11</sup> Canvas routinely updates their systems on certain Wednesday evenings. In the event that Canvas is down for scheduled maintenance or due to technical difficulties, assignments are to be submitted by 0900 the following morning.

For questions about recording and use of sessions in which you have participated, including any concerns related to your privacy, please contact the UGME 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, 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.

#### **COPYRIGHT**

Course material created by your professors and instructors is their intellectual property and **cannot be shared without written permission**. This includes exams, PowerPoint/PDF lecture slides and other course notes. If materials are designated as open education resources (with a creative commons license) you can share and/or use them in alignment with the <u>CC license</u>. Other copyright-protected materials created by textbook publishers and authors may be provided to you based on license terms and educational exceptions in the <u>Canadian Copyright Act</u>.

You are responsible for ensuring that any copying or distribution of materials that you engage in is permitted by the University's "Use of Materials Protected By Copyright" Policy. For example, posting others' copyright-protected materials on the open internet is not permitted by this policy unless you have copyright permission or a license to do so. For more copyright information, please visit <a href="https://library.usask.ca/copyright/students/index.php">https://library.usask.ca/copyright/students/index.php</a> or contact the University Copyright Coordinator at copyright.coordinator@usask.ca or 306-966-8817.

#### **INTEGRITY**

The University of Saskatchewan is committed to the highest standards of academic integrity (https://academic-integrity.usask.ca/).

Students are urged to read the <u>Regulations on Academic Misconduct</u> and to avoid any behaviours that could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence.

For help developing the skills for meeting academic integrity expectations, see: <a href="https://academic-integrity.usask.ca/students.php">https://academic-integrity.usask.ca/students.php</a>

Students are encouraged to ask their instructors for clarification on academic integrity requirements.

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: <a href="https://libguides.usask.ca/AcademicIntegrityTutorial">https://libguides.usask.ca/AcademicIntegrityTutorial</a>).

Assignments in this course are designed to support your learning and professional development, and the work you submit should demonstrate your own knowledge and understanding of the subject matter.

Artificial intelligence text generator tools (also known as large language models, such as ChatGPT or similar), are not permitted to be used in any assessments for this course, unless permission is explicitly given in the assessment instructions that these tools may be used. Any unauthorized use of such tools is considered academic misconduct.

When the assignment instructions allow use of Artificial Intelligence text generator tools, students are required to disclose the use of the tools and explain how the tool was used in the production of their work. Disclosure on the use of AI should be similar to how other tools, software, or techniques are explained in academic research papers. AI cannot be cited as a resource or author. Please be aware that use of portions of another's work in an AI-generated text may be a breach of copyright – this is an area of evolving legal understanding. Students are accountable for the accuracy and integrity of their submissions including references produced with AI. The submission of AI assisted work without disclosure is a breach of academic integrity and professionalism.

Students wanting to connect their assessment in this course to assessments they have completed in another course must get explicit permission of the instructor in order to avoid potential academic misconduct of self-plagiarism.

## **ACCESS AND EQUITY SERVICES (AES)**

Access and Equity Services (AES) is available to provide support to students who require accommodations due to disability, family status, and religious observances.

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 AES for advice and referrals at any time. Those students who are registered with AES with mental health disabilities and who anticipate that they may have responses to certain course materials or topics, should discuss course content with their instructors prior to course add / drop dates.

Students who require accommodations for pregnancy or substantial parental/family duties should contact AES to discuss their situations and potentially register with that office.

Students who require accommodations due to religious practices should contact the Office of Student Affairs a minimum of four weeks in advance of the scheduled assessment.

Any student registered with AES may request alternative arrangements for mid-term and final examinations by submitting a request to AES by the stated deadlines. Instructors shall provide the examinations for students who are being accommodated by the deadlines established by AES.

For more information or advice, visit <a href="https://students.usask.ca/health/centres/access-equity-services.php">https://students.usask.ca/health/centres/access-equity-services.php</a>, or contact AES at (306) 966-7273 (Voice/TTY 1-306-966-7276) or email <a href="mailto:aes@usask.ca">aes@usask.ca</a>.

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.

#### STUDENT SUPPORTS

## **College of Medicine, Academic Support Team**

Faculty Consultant: Dr. Ayla Mueen – <u>ayla.mueen@usask.ca</u>

Academic Support Specialist: Dr. Joshua Lloyd – joshua.lloyd@usask.ca

Academic Support Administration Office – med.academicsupport@usask.ca

## **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:

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

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

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

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

Director, Student Services, Dr. Ginger Ruddy – ginger.ruddy@usask.ca or (302) 966-7275

#### **Academic Help for Students**

Visit the <u>University Library</u> and <u>Learning Hub</u> to find supports for undergraduate and graduate students with first-year experience, study skills, learning strategies, research, writing, math and statistics. Students can attend <u>workshops</u>, access <u>online resources and research guides</u>, book <u>1-1 appointments</u> or hire a subject tutor through the USask Tutoring Network

Connect with library staff through the <u>AskUs</u> chat service or visit various <u>library locations</u> at the Saskatoon campus.

SHA Library: <a href="https://saskhealthauthority.libguides.com/home">https://saskhealthauthority.libguides.com/home</a>

#### **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 <a href="http://students.usask.ca">http://students.usask.ca</a>.

#### **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 (<a href="https://students.usask.ca/student-central.php">https://students.usask.ca/student-central.php</a>).

## **Gordon Oakes Red Bear Student Centre**

The Gordon Oakes Red Bear Student Centre is dedicated to supporting Indigenous 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 an intercultural gathering space that brings Indigenous and non-Indigenous students together to learn from, with and about one another in a respectful, inclusive, and safe environment. Visit <a href="https://students.usask.ca/indigenous/index.php">https://students.usask.ca/indigenous/index.php</a> or students are encouraged to visit the ASC's Facebook page <a href="https://students.usask.ca/indigenous/gorbsc.php">https://students.usask.ca/indigenous/gorbsc.php</a>

## **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. Visit <a href="https://students.usask.ca/international/issac.php">https://students.usask.ca/international/issac.php</a> for more information.