THE UNIVERSITY OF BRITISH COLUMBIA

Faculty of Medicine
Curriculum Management Unit

Year 1 and 2 Curricular Weeks and Week Objectives

(Last Updated – Dec 13, 2023)

2023/2024 Academic Year			
MEDD 411	MEDD 412	MEDD 421	MEDD 422
Week 01 - Introduction to Medical School and Foundations of Medical Sciences I	Week 18 - Intro to MEDD 412	Week 39 - Neonatal Transition	Week 56 - Chest Pain / Angina / Myocardial Infarction
Week 02 - Introduction to Medical School and Foundations of Medical Sciences II	Week 19 - Neuromuscular Function and Dysfunction	Week 40 - Chromosomal Abnormalities	Week 57 - Nausea / Vomiting / Diarrhea
Week 03 - Fetal Development	Week 20 - Spinal Cord Injury	Week 41 - Normal and Abnormal Growth and Development	Week 58 - Osteoarthritis
Week 04 - Breast Mass	Week 21 - Stroke	Week 42 - Adolescent Health and Development	Week 59 - Heart Failure
Week 05 - Immunology and Allergy	Week 22 - Brain Stem	Week 43 - Rash	Week 60 - Jaundice
Week 06 - Pneumonia / Cough	Week 23 - Anemia	Week 44 - Arrhythmia	Week 61 - Pregnancy, Birth and Newborn
Week 07 - Obstructive Lung Disease	Week 24 - Bleeding Disorders and Hematological Malignancy	Week 45 - Joint Injury	Week 62 - Inflammatory Joint Disease
Week 08 - Electrolyte Disturbance	Week 25 - Thyroid and Parathyroid	Week 46 - Fracture (Child Maltreatment)	Week 63 - Abnormal Vaginal Bleeding
Week 09 - Hypertension	Week 26 - Hypothalamic, Pituitary, and End Organ Axis	Week 47 - Osteoporosis	Week 64 - Prostate Cancer and Benign Prostatic Hyperplasia
Week 10 - Heart Murmur	Week 27 - Adrenal Dysfunction	Week 48 - Deep Vein Thrombosis / Pulmonary Embolism	Week 65 - Sepsis
Week 11 - Upper Gastrointestinal Tract	Week 28 - Central Nervous System Infections	Week 49 - Acute Kidney Injury (AKI)	Week 66 - Hypotension / Shock
Week 12 - Nutrient Absorption and Malabsorption	Week 29 - Mood and Anxiety Disorders	Week 50 - Chronic Kidney Disease	Week 67 - Dementia
Week 13 - Lower Gastrointestinal Tract	Week 30 - Headache and Pain	Week 51 - Ataxia / Movement Disorder / Tremor	Week 68 - Consolidation of Clinical Transition 1 (TICE)
Week 14 - Diabetes Mellitus	Week 31 - Head Injury	Week 52 - Psychosis and Substance Use	Week 69 - Consolidation of Clinical Transition 2 (TICE)
Week 15 - Infertility	Week 32 - Asthma and Pharmacology		
Week 16 - Pregnancy			

Prepared by the Curriculum Management Unit (CMU)

Subject to change throughout the term

Week 01 - Introduction to Medical School and Foundations of Medical Sciences I

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1	1. Discuss the basic concepts of cell biology
1	2. Explain the biopsychosocial aspects of Health Care
1	3. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
1	4. Describe the assessment and evaluation modalities in the MD Undergraduate Program
1	5. Describe the resources, services, and events provided in the MD Undergraduate Program
1	6. Participate in activities to discuss matter of interest arising from learning activities and to foster collegiality and collaboration
1	7. Describe the expectations of entering a professional program and multiple roles that physicians may play within the diversity of medical careers
1	8. Describe the basic principles of homeostasis
1	9. Describe the basic biology of human systems
1	10. Describe the structure of the Cardiovascular System, its adaptation to environmental changes and diseases arising from the dysfunction in its regulation
1	11. Discuss the CanMEDS competency domains and framework and their relevance to medical school
1	12. Describe the educational resources available in the MDUP and the role of the librarian in medical education
1	13. Discuss workplace safety, including anti-harassment, lab safety and procedures
1	14. Describe the pillars of the BC Health Care System and the College of Physicians and Surgeons of BC and the role of students within them
1	15. Discuss the socioeconomic factors and determinants of health in local and global health and disease and describe how major policy issues and cultural factors impact the health of Indigenous patients and populations, and the role physicians can play in improving the health of Indigenous people
1	16. Describe the basic concepts of metabolism including the role of electrolytes and hormones in achieving homeostasis
1	17. Describe the cell and its organelles and relate them to normal and abnormal functions
1	18. Describe curriculum management and educational delivery approaches at UBC including the format and elements of small group and Case-Based Learning utilized by MDUP

Week 02 - Introduction to Medical School and Foundations of Medical Sciences II

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2	1. Discuss the ethical principles of medical practice
2	2. Describe the principles of radiology and its application to medicine
2	3. Describe altruism and discuss the conduct and professional behaviours in the anatomy lab
2	4. Describe the purpose of feedback and the art of giving and receiving feedback
2	5. Describe the structure and use of a clinical note in the patient encounters
2	6. Define fundamental concepts in anatomy
2	7. Identify the anatomical structures of the scapular region
2	8. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
2	9. Describe the resources, services, and events provided in the MD Undergraduate Program
2	10. Discuss the concepts of plagiarism, academic integrity, citation, and authorship
2	11. Participate in activities to discuss matter of interest arising from learning activities and to foster collegiality and collaboration
2	12. Explain the basic principles of pharmacology and pharmacodynamics
2	13. Explain small group dynamics (CBL groups) and how to resolve conflicts within the group
2	14. Describe the activities of Clinical Experiences in the MDUP
2	15. Describe curriculum management and educational delivery approaches at UBC including the format and elements of small group and Case-Based learning utilized by the MD Undergraduate Program
2	16. Discuss workplace safety, including anti-harassment, lab safety and procedures
2	17. Describe the role of anatomy, micro-anatomy (histology) and pathology in the study and practice of medicine
2	18. Define fundamental concepts in histology
2	19. Describe the phenomena of gene segregation and single gene inheritance patterns
2	20. Describe Infection Prevention and Exposure Control Measures, including the use of Personal Protective Equipment (PPE) and additional safety measures, which can be used in non-clinical settings as well as before, during, and after a clinical experience

Week 03 - Fetal Development

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3	1. Explain the concept of segmentation and how this relates to the concept of dermatomes and myotomes
3	2. Relate the primary germ layers to their adult derivatives
3	3. Describe the basic events that lead to the development of an early tubular embryo from a fertilized egg
3	4. Recognize and describe the four basic tissues that compose the human body and identify and describe the normal micro-anatomical structures and functions of each, relating them to the general organization of the body as a whole
3	5. Describe the role of the genome in normal and abnormal fetal development, factors that make congenital disorders more or less likely to be sporadic vs familial, and the different tests used to identify genetic variants that cause disease
3	6. Identify factors, including socioeconomic and geographic, affecting fetal development
3	7. Identify the critical period, during fetal development, for teratogenesis and give examples (example - fetal alcohol syndrome)
3	8. Describe the normal and abnormal development of the embryo and fetus
3	9. Describe the basic components of prenatal care as it relates to the development of the embryo and fetus, including basic lab tests and diagnostic imaging
3	10. Describe the basic principles of drug absorption, distribution, metabolism and excretion
3	11. Identify and describe the pathological changes in the structure or function related to clinical presentations of abnormal fetal development
3	12. Describe the appropriate management and plan related to clinical presentations of abnormal fetal development pertaining to maternal serum screening and ultrasound
3	13. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
3	14. Identify and describe the key structures in the anatomy of the cranial nerves, spinal cord, spinal nerves and upper back as well as the anatomy of the central and peripheral nervous system (including relevant diagnostic imaging)
3	15. Identify evidence-based strategies to lower the risk of birth defects
3	16. Describe the basic concepts in anatomy, using the proper terminology
3	17. Describe gene segregation and transmission in human reproduction, including the most common single gene patterns of inheritance
3	18. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 04 - Breast Mass

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4	1. Identify the key structures in the anatomy of the pectoral region, anterior chest wall, breast and related lymphatics, including related diagnostic imaging
4	2. Demonstrate a patient-centered medical interview
4	3. Describe the key features of cellular protein synthesis and processing, normal cellular growth and proliferation and the cell cycle
4	4. Describe breast development and how this hormone-sensitive tissue changes throughout life
4	5. Explain the spectrum of abnormalities that can occur in normal tissue, the key hallmarks of cancer and the different types of malignancy, and that the progression to malignancy can be unpredictable
4	6. Describe the differences between hereditary and sporadic cancers
4	7. Identify modifiable and non-modifiable risk factors for development of malignancy
4	8. List the key principles in the detection and management of cancer, including pharmacological, radiotherapeutic, and surgical approaches
4	9. Identify and describe epithelial and glandular tissue
4	10. Explain the role of guidelines in medicine and the key concepts of guideline development
4	11. Explain how patient counseling and patient education is important in the context of an anxious patient
4	12. Describe the structure, content, and format of a medical history; document a medical history
4	13. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
4	14. List the key features of a screening test, discuss the implications of screening as a preventive health measure, and describe the rationale for performing screening tests for certain malignancies, but not others
4	15. Demonstrate basic suturing skills used by family physicians, including hand and instrument ties, correct eversion of the wound, correct suture tension, and correct suture distance placement
4	16. Describe abnormal cellular growth and proliferation, including hyperplasia, hypertrophy, metaplasia, dysplasia and neoplasia
4	17. Describe the normal anatomy of the visceral nervous system and the structure and function of cranial nerves and spinal nerves as they relate to pain pathways
4	18. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 05 - Immunology and Allergy

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5	1. Describe the characteristics of the immune system, including the structure and function of antibodies and the concept of the MHC locus
5	2. Describe innate immunity and inflammation
5	3. Describe acquired immunity and the structure and function of B cells and T cells
5	4. Describe the molecular mechanisms underlying the functions of the immune system
5	5. Identify and describe the structure and function of the major organs of the immune system
5	6. Describe the pathophysiology, clinical presentations, and principles of management of allergic reactions and anaphylaxis
5	7. Describe the use of electronic health records as sources of patient information
5	8. Describe the causes and clinical presentations of congenital and acquired immune deficiency states
5	9. Describe the principles of vaccine development, their use in the control of disease transmission, and their importance to public health
5	10. Demonstrate a patient-centered medical interview
5	11. Explain universal safety precautions and demonstrate effective infection control measures
5	12. Identify socioeconomic and spiritual factors that affect the health of a particular patient and discuss the impact of living and working conditions on the health of an individual
5	13. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
5	14. Describe an approach to administering cryotherapy and injections, including the management of anaphylactic reaction or other complications
5	15. Describe an approach to assessment of vital signs, including blood pressure, heart rate, respiratory rate and temperature and outline the components of an introductory clinical examination
5	16. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
5	17. Identify and describe the key structures in the anatomy of the head and neck

Week 06 - Pneumonia / Cough

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6	1. Identify and describe the gross and microscopic anatomy, and prototypical pathologies, of the airways, lungs, pleura, and chest wall, and the gross anatomy of the mediastinum
6	2. Describe normal anatomy on a chest radiograph and recognize common pathological chest presentations on a chest radiograph
6	3. Describe the control of breathing and the principles of pulmonary ventilation, gas exchange and gas transport
6	4. Define host pathogenicity, virulence, colonization, infection, and symbiosis
6	5. Explain the mechanisms of lung defense (cilia, alveolar macrophages, and immune system of the lung)
6	6. Describe the etiology (including categories of microbes and common pathogens), pathophysiology (including cellular response to injury and repair), and classic signs and symptoms of infection, particularly for pneumonia and other common respiratory diseases
6	7. List investigations appropriate for a patient presenting with suspected pneumonia
6	8. Describe an approach for treating pneumonia, taking into consideration the severity of illness, Canadian evidence-based clinical practice guidelines and the pharmacology and appropriate use of relevant antibiotics and antivirals
6	9. Describe the goals of care, advance care planning, and considerations in "do not resuscitate" (DNR) discussions
6	10. Describe the principles of interprofessional care and shared care and the impact of caregiver burden in the care of frail or elderly patients
6	11. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
6	12. Explain the concept of normal flora (respiratory tract/GI tract) and contrast colonization vs. normal flora
6	13. Identify non-medical factors (ie. determinants of health) affecting the health of a particular patient
6	14. Demonstrate a patient-centered medical interview, including elderly/frail patients
6	15. List the major defenses humans have evolved or created against infection and the most common causes of immune system failure
6	16. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 07 - Obstructive Lung Disease

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7	1. Discuss the fundamental concepts in patient safety
7	2. Recognize the importance of communication in the medical context
7	3. Describe the mechanisms of chronic airflow obstruction
7	4. Describe the mechanisms of hypoxemia and hypercarbia and their complications
7	5. Recognize radiographic presentations of chronic obstructive pulmonary disease (COPD) and list pathological conditions that cause hemoptysis
7	6. Identify socioeconomic and spiritual factors that affect the health of a particular patient and discuss the impact of living and working conditions on the health of an individual
7	7. Identify the prevalence and patterns of distribution of chronic obstructive pulmonary disease (COPD) in the community
7	8. Describe an approach to the investigation and management (pharmacological and non-pharmacological) of COPD and Asthma
7	9. Describe the pharmacology of drugs used for the treatment of asthma and chronic obstructive pulmonary disease (COPD), including routes of administration, modes of action, side effects, and safety issues
7	10. Describe the etiology and pathophysiology of pleural effusions
7	11. Describe the principles of interprofessional care, shared care, and end-of-life care
7	12. Discuss the role of exercise as a treatment and prevention strategy
7	13. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
7	14. Demonstrate an introductory respiratory clinical examination
7	15. Identify and describe the gross and microscopic anatomy of the lungs, mediastinum, and great vessels and the radiologic anatomy of the chest
7	16. Describe the epidemiology, clinical features, complications, and prevention of influenza
7	17. Describe the development and proper storage and administration of the influenza vaccines, the immune response to the vaccine, and common myths about the vaccine
7	18. Describe the etiology (including roles of smoking and environment), epidemiology, pathology, and clinical presentations of asthma, chronic obstructive pulmonary disease (COPD), and lung cancer
7	19. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
7	20. Demonstrate consistent, appropriate professional behaviour

Week 08 - Electrolyte Disturbance

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8	1. Define the normal body fluid compartments, the sources of intake and output of fluids, and the normal distribution of electrolytes
8	2. Describe the normal osmolality of body fluids
8	3. Describe the basic forces that govern the movement of water and solute between compartments
8	4. Describe the forces that determine glomerular filtration, hormonal and pharmacological factors that affect the glomerular filtration rate, and the normal mechanisms for regulation of glomerular filtration rate (GFR) and for concentrating and diluting urine
8	5. Describe the key components of the renin angiotensin system and its effects on glomerular filtration rate (GFR) and sodium handling
8	6. Explain the normal physiology of the kidney, with a focus on regulation of sodium content and regulation of sodium and water balance
8	7. Recognize the clinical symptoms and signs of alterations in body fluid compartments
8	8. Explain the regulation of body fluids and electrolytes during endurance exercise
8	9. Describe the pharmacology of diuretic drugs and agents that manipulate the arginine-vasopressin system and the composition of common intravenous fluids
8	10. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
8	11. Develop a diagnostic approach to electrolyte disturbances, including laboratory investigations
8	12. Demonstrate and discuss a patient-centred medical interview
8	13. Use terminology appropriate to sex- and gender-diverse patient populations, and explain the importance of using this language, in patient care and other health professional contexts
8	14. Describe the gross anatomy and ultrastructure of the kidney, ureters and urinary bladder, including the functional anatomy and histology of the nephron
8	15. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 09 – Hypertension

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9	1. Demonstrate a patient-centered medical interview
9	2. Describe the structure, content, and format of a medical history; document a medical history
9	3. Identify socioeconomic and spiritual factors that affect the health of a particular patient and discuss the impact of living and working conditions on the health of an individual
9	4. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
9	5. Describe and identify the gross anatomy and the normal micro-anatomical design of blood vessels (arteries, veins and capillaries) and lymphatic vessels and relate these to their function
9	6. Describe the normal physiology and determinants (control) of blood pressure
9	7. Outline diagnostic criteria for, and classification of, hypertension
9	8. List investigations appropriate for a patient with a new diagnosis of hypertension
9	9. Discuss non-pharmacological and pharmacological treatment of hypertension in general and special populations
9	10. Describe the pathogenesis of hypertension and atherosclerosis and its clinical consequences
9	11. Describe the clinical manifestations of hypertension
9	12. Illustrate the role of public health in prevention of hypertension
9	13. Demonstrate an introductory cardiac examination
9	14. Evaluate the advantage of a longitudinal relationship and a biopsychosocial approach with a patient in managing a chronic health problem
9	15. Describe the concepts of electronic medical/health record, telehealth, mobile health, remote monitoring and the key principles that govern their use (example - privacy, relationships to establish trust, consumer versus professional grade data, longitudinal monitoring)
9	16. Describe how technology can help patients change behaviour or cope with their disease
9	17. Describe the pathophysiology of hypertension, including the role of medical (eg. inheritance) and non-medical factors (eg. socioeconomic status, education)
9	18. Describe how a patient's cultural background may relate to their identity formation and medical history
9	19. Discuss racism, discrimination, and bias (using intersectionality) and their impact on identity formation, socioeconomic status, and health of indigenous communities and individuals
9	20. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 10 - Heart Murmur

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10	1. Demonstrate a patient-centered medical interview
10	2. Identify and describe the gross and microscopic anatomy of the lungs, mediastinum, and great vessels
10	3. Describe the microscopic, gross and radiological anatomy of the heart
10	4. Describe the embryology and development of the heart in fetal life, the normal birth parent-fetal circulation, and the transition to postnatal circulation
10	5. Describe the normal cardiac cycle in the adult
10	6. Describe the normal heart sounds, their genesis according to the cardiac cycle, and the genesis of abnormal heart sounds and murmurs
10	7. Describe the concepts of preload, afterload, and contractility
10	8. State the Law of Laplace and describe the pathophysiology of cardiac hypertrophy and dilation as it relates to chronic pressure and volume overload
10	9. Describe the following concepts in congenital heart disease: incidence and etiology; embryogenesis; general features of history, physical exam, and investigations; and classification and pathophysiology of congenital heart defects
10	10. Describe the common cardiac congenital defects and their consequences and natural history, including atrial septal defect, ventricular septal defect, patent ductus arteriosus, and aortic coarctation
10	11. Describe the health impact of socioeconomic factors on patients and their families
10	12. Recognize the impact of self-awareness and self-care on the effectiveness of a healer
10	13. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
10	14. Demonstrate an introductory cardiac examination
10	15. Describe the general approaches to the management of congenital heart disease, including the role for parental counselling, decisions re: pregnancy termination, and end of life care
10	16. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
10	17. Contrast the inheritance of most isolated congenital heart defects with the inheritance of single gene disorders affecting the heart such as Long QT syndrome (student-created video)
10	18. List investigations appropriate for a patient with a heart murmur, including chest x-ray, electrocardiography and echocardiography; Identify cardiac borders on plain chest radiograph; Identify cross sectional anatomy of the heart on imaging

Week 11 - Upper Gastrointestinal Tract

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11	1. Demonstrate and document a medical history
11	2. Identify and describe the anatomical structures of the anterior abdominal wall and relate them to function
11	3. Identify and describe the anatomical structures of the male and female inguinal canals, including the normal and abnormal descent of the testis, and its clinical correlations
11	4. Identify and describe the embryological development and anatomical structures of the upper GI tract organs (stomach, duodenum, liver, and pancreas), their blood supply, the enteric nervous system and relate them to function
11	5. Describe the pathology of common upper GI tract diseases and correlate them with their clinical presentations
11	6. Describe the esophageal pressure changes during swallowing and the roles played by the swallowing centre and sphincters
11	7. Describe the physiology of gastric acid secretion
11	8. Explain the cellular physiology of the enteric nervous system in the control of the gastrointestinal motility
11	9. Explain the basis of symptoms and physical findings for common upper GI conditions such as heartburn, dysphagia, regurgitation, epigastric pain and vomiting
11	10. Describe the medical (including pharmacology) and surgical management of common GI disorders such as esophagitis, gastritis, peptic ulcer disease, and chronic constipation
11	11. Identify the appropriate laboratory and imaging investigations for GI tract disorders and abdominal pain and recognize normal and abnormal findings on an abdominal radiograph
11	12. Identify and describe the histological features of the GI tract including mouth, esophagus, stomach, small and large intestine
11	13. Identify the anatomical structures of the abdomen on the radiological images
11	14. Demonstrate and discuss a patient-centred medical interview and physical exam in the context of a community office visit
11	15. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
11	16. Differentiate between illness, syndrome, and disease and explore the patients' experiences of illness
11	17. Demonstrate an introductory abdominal examination
11	18. Identify health promotion principles and advice given in the context of a community office visit
11	19. Apply strategies of reflective practice and scholarly approach to learning
11	20. Explain the embryological origins, anatomic and radiologic landmarks, and the blood supply of the fore, mid, and hindgut organs, portal vein formation and drainage
11	21. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
11	22. Apply proper techniques and post-procedural care to common procedures performed in the context of office-based family practice

Week 12 - Nutrient Absorption and Malabsorption

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12	1. Describe the physiology of the three phases of nutrient digestion, absorption, and metabolism of macronutrients, micronutrients and key macrominerals
12	2. Describe the concepts of essential dietary nutrients (macro and micronutrients) and explain how each contributes to fulfill nutrient requirements and the rationale for nutritional recommendations
12	3. Describe the physiology of the pancreas including its role in digestion
12	4. Describe, in overview, disorders of malabsorption and malnutrition, including the pathophysiological basis for the symptoms and signs in the assessment of nutritional state and the different tests used for diagnosis of malabsorption of fat, carbohydrates, vitamin B12, and bile salts
12	5. Describe, in overview, the etiology and pathophysiology of acute and chronic pancreatitis and the direct and indirect tests of pancreatic exocrine function
12	6. Define malnutrition and explain its implications in developing countries, specifically in early childhood nutrition
12	7. Describe and identify findings on radiologic imaging involving the GI tract and abdomen
12	8. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
12	9. Describe fluid/electrolyte transport of sodium, potassium, chloride and water in the intestinal tract
12	10. Describe the characteristic histological appearance of the gastrointestinal tract from the stomach to the colon, including liver and pancreas and relate them to function
12	11. Describe the role of gastrointestinal pathogens (bacterial, viral, parasites) in weight loss and malabsorption
12	12. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
12	13. Describe the etiology and pathophysiology of common lower gastrointestinal tract and accessory organs diseases

Week 13 - Lower Gastrointestinal Tract

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13	1. Demonstrate and document a medical history
13	2. Explain the mechanism of referred pain and relate them to common clinical conditions
13	3. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
13	4. Describe fluid/electrolyte transport of sodium, potassium, chloride and water in the intestinal tract
13	5. Describe the clinico-pathological and histopathological findings seen in common intestinal disorders, with special attention to chronic inflammatory bowel disease (ulcerative colitis and Crohn's disease), colon cancer and polyps
13	6. Describe the gut-associated immune system in health and disease with particular attention to inflammatory bowel disease and Celiac disease
13	7. Discuss the clinical presentations of common causes of gastrointestinal infections (bacterial, viral, parasites)
13	8. Define surveillance of communicable diseases and explain when and how to report a communicable disease
13	9. Explain the role of public health in the Canadian health care system
13	10. List approaches to shared leadership and describe its importance in health care
13	11. Recognize and explain resources available to health care team members in an adverse event
13	12. Describe the laboratory and radiological investigations (including findings) for common gastrointestinal (GI) tract disorders (e.g., gastroesophageal reflux disease (GERD), peptic ulcer disease, GI neoplasms, pancreatitis, inflammatory bowel disease)
13	13. Compare and contrast the anatomy, embryology, radiologic appearance, histology and blood supply of the lower versus the upper gastrointestinal tract and relate them to function
13	14. Outline the role of the Family Doctor in the long-term management of inflammatory bowel disease (IBD)
13	15. Describe the clinical approach in formulating a differential diagnosis for common intestinal disorders including diarrhea, irritable bowel syndrome, and lower gastrointestinal bleeding
13	16. Describe the epidemiology, pathology, clinical presentations, diagnosis, treatment, prognosis and potential complications of inflammatory bowel disease and irritable bowel syndrome
13	17. Describe the pharmacological, non-pharmacological, and radiological interventions for the treatment of lower gastrointestinal (GI) disorders
13	18. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 14 - Diabetes Mellitus

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14	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
14	2. Describe the regulation, synthesis, action, and key physiological roles of insulin and the counter-regulatory hormones in the maintenance of metabolic homeostasis with a focus on its anabolic actions on carbohydrate and lipid metabolism
14	3. Compare and contrast Type 1 and Type 2 diabetes with respect to etiology, risk factors, pathophysiology, epidemiology, genetics, clinical features, laboratory investigations, and management
14	4. Describe the pathophysiology, clinical presentation, appropriate investigations, prevention strategies, and management of diabetes including its common acute and chronic complications
14	5. Describe the micro-anatomy of the pancreas with particular attention to the relationship between the vasculature and the endocrine component (islets of Langerhans)
14	6. Describe the determinants that influence behavior regarding eating and physical activity and how to assess a patient's ability and readiness to make changes in relation to diet and exercise
14	7. Relate the physiological mechanisms regulating metabolism to the mechanisms of action for the various pharmacological and non-pharmacological interventions for diabetes prevention and treatment
14	8. Explain the social, economic and structural risk factors for chronic illnesses such as diabetes, including in low resource communities within Canada and in the developing world
14	9. Describe (in collaboration with a patient, his/her family and relatives, and health care providers) a management plan for an indigenous patient with diabetes based on considerations of traditional medicines, ceremony, and other healing modalities
14	10. Discuss the use of evidence-based medicine and clinical practice guidelines regarding the screening, diagnosis, and treatment of diabetes
14	11. Describe how technology supports the individual patient as well as the larger general population in the diagnosis, management, and education of Type 2 Diabetes
14	12. Describe the important features of a case presentation of fatigue or weight loss that allow the construction of a prioritized differential diagnosis
14	13. Explain the role of the Family Physician in the diagnosis, motivation, treatment, and longitudinal partnership with the patient and family affected by diabetes
14	14. Describe the physical, psychological, sexual, and sociological impacts of diabetes on patients, families, and society
14	15. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 15 – Infertility

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15	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
15	2. Describe the radiological approach to interpreting abdominal and pelvic radiographs and CTs
15	3. List the common causes of infertility and the investigations appropriate to a couple with infertility
15	4. Develop a rational clinical approach to the infertile couple, including obtaining an appropriate history
15	5. Explain the clinical manipulation of the hypothalamic-pituitary-ovarian (HPO) axis and the mechanisms of action of other contraceptive strategies for achieving or preventing pregnancy
15	6. Identify and define the gross and microscopic anatomy of the pelvis and genitalia and relate them to function
15	7. Describe the anatomical, histological, and physiological changes of the ovary and uterus during pregnancy, including placenta and umbilical cord
15	8. Explain the micro-anatomical structures and cells of the ovaries and uterus in relation to their changing histology and functions during the normal phases of the ovarian cycle in a healthy, fertile person; correlate these to the endocrine physiology of the normal ovary
15	9. Discuss the common causes, diagnosis, treatment, and complications of polycystic ovary syndrome (PCOS)
15	10. Describe the epidemiology, pathophysiology, clinical syndromes, diagnosis, management, and outcomes of sexually transmitted infections
15	11. Describe the process of fertilization and implantation
15	12. Discuss the normal menstrual cycle and the hypothalamic-pituitary-ovarian (HPO) axis regulation of the menstrual cycle
15	13. Use terminology appropriate to LGBTQ2+ populations, and explain the importance of using this language
15	14. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
15	15. Describe the histopathological changes that occur in common reproductive conditions
15	16. Differentiate between concepts of chromosomal sex, gender identity and sexual orientation

Week 16 – Pregnancy

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16	1. Describe how a patient's cultural background may relate to their medical history
16	2. Demonstrate and document a medical history
16	3. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
16	4. Describe birth parent physiological adaptations to a normal pregnancy, including changes in the uterus
16	5. Describe the events that lead to the spontaneous onset of labor, the normal stages of labor with particular reference to the roles of oxytocin and prostaglandins
16	6. Describe factors affecting birth parent oxygen content and discuss the essential components of placental oxygen transfer
16	7. Identify and describe the anatomy of the pelvic floor, erectile tissue and their coverings in the superficial perineal pouch in both males and females
16	8. Identify and define the gross and microscopic anatomy and physiology of the placenta
16	9. Describe the components of prenatal care, including imaging and laboratory investigations, for a low risk pregnancy
16	10. Describe the normal birth parent physiological changes of the postpartum period
16	11. Explain the importance of routine prenatal care including genetic screening and BC guidelines for genetic screening
16	12. Describe breastfeeding, its benefits, and the management of common breastfeeding problems
16	13. Describe the processes of implantation, placental development and placental function
16	14. Describe the risk factors, pathophysiology, and clinical presentation of common pregnancy complications
16	15. Describe the physiology of amniotic fluid
16	16. Review the radiological imaging of the key anatomical structures
16	17. Explain the roles of various members of the interprofessional care team in providing care during a normal pregnancy
16	18. Describe the prevalence and impact of sexual assault in the community
16	19. Describe a trauma-informed approach to the care of the survivors of sexual assault
16	20. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
16	21. Discuss examples of birth parent and newborn childcare in various communities including the World Health Organization guidelines for promotion of birth parent / newborn child health

Week 18 - Intro to MEDD 412

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18	1. Describe the assessment modalities in the MD Undergraduate Program
18	2. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
18	3. Discuss the patient's biopsychosocial context of wellness and, in light of this context, identify barriers to the access of health care and strategies to promote and prevent disease
18	4. Outline the logistics, learning goals, tasks, appropriate professional boundaries and content of the MEDD 412 course
18	5. Explore the unique nature of your specific UGME site within the Faculty of Medicine at UBC
18	6. Describe roles physicians may play in collaborating with Indigenous Communities and Leaders, through a site visit, to foster positive and equitable healthcare while incorporating traditional indigenous perspectives

Week 19 – Neuromuscular Function and Dysfunction

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19	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
19	2. Discuss the patient's biopsychosocial context of wellness and, in light of this context, identify barriers to the access of health care and strategies to promote and prevent disease
19	3. Describe the embryology, normal anatomy, histology and physiology of the peripheral nervous system, relating structure to function
19	4. Describe the response of peripheral nerves to injury and how these changes may manifest clinically
19	5. Describe the clinical and pathological features, investigations, and treatment of the major types of peripheral neuropathies, in particular focusing on axonal and demyelinating neuropathies
19	6. Describe the pharmacology of local anesthetics
19	7. Describe how to take a pain and symptom history, including assessment of total pain (physical, psychological and spiritual)
19	8. Demonstrate a patient-centred medical interview and focused physical examination and propose a list of differential diagnosis in the context of a community office visit
19	9. Practice effective verbal and written communication skills for reporting history and physical exam findings and for obtaining informed consent
19	10. Identify and describe the gross and microscopic anatomy of the skull, brain, and intracranial compartments and their importance
19	11. Define the elements of a focused history related to the peripheral vascular system and perform an examination of the peripheral vascular system, including the measurement of the ankle-brachial index (ABI)
19	12. Describe the organization of muscle fibers, motor units, and neuromuscular junctions. Outline the etiology and pathogenesis of muscle disorders and describe a clinical approach to their diagnosis, including clinical examination and appropriate investigations
19	13. Describe how to perform the clinical sensory, motor, and reflex neurological examinations, outlining basic principles of 'localization' of pathology through analysis of clinical abnormality
19	14. Describe the anatomy of the skull and identify imaging modalities used to investigate skull pathology
19	15. Describe the structure of each component of the PNS and CNS, outlining the paths of incoming sensory signals and outgoing motor transmissions
19	16. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 20 - Spinal Cord Injury

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20	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
20	2. Describe the anatomy of the spinal cord, vertebral column
20	3. Describe the structure and function of the major ascending and descending tracts in the spinal cord
20	4. Define and identify upper and lower motor neurons and describe clinical signs of their dysfunction
20	5. Predict typical clinical manifestations of patients presenting with spinal cord injuries based on the functional neuroanatomy of the affected structures
20	6. Describe available radiologic modalities, and their advantages and disadvantages, for imaging different components of the nervous system (spinal cord, nerve roots, and vertebral column)
20	7. Describe the modalities used in spine imaging and an approach to image interpretation
20	8. Describe the prognosis and factors influencing recovery in the different patterns of spinal cord injury
20	9. Discuss the psychology of loss associated with spinal injury
20	10. Describe the key components of a spinal cord injury rehabilitation program, including goals, professions that should be engaged, factors used to predict possible extent of recovery, and potential interventions that may be used
20	11. Discuss an approach to injury prevention and health promotion at the level of a community
20	12. Outline available treatment options for spasticity
20	13. Correlate the clinical experience of being a patient with the personal, social, and practical implications of living with a spinal cord injury
20	14. Perform a focused medical history and neurological exam, including assessment of mental status, in a patient with a neurological complaint
20	15. Demonstrate a clinical approach to the history, physical examination maneuvers, investigations, diagnosis, and management of common nerve root compression, spinal cord injuries, and spinal fractures
20	16. Briefly outline the organization of the autonomic nervous system and apply this understanding to blood pressure and sexual response sequelae of spinal cord injury
20	17. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 21 – Stroke

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21	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
21	2. Describe cardiovascular symptoms and perform a focused medical history and a complete cardiovascular examination in a patient with a cardiac complaint
21	3. Discuss the location and function of primary and association areas of the cortex, visual pathways, major subcortical fiber bundles, internal capsule (and its blood supply), and the thalamus
21	4. Recognize major aphasias and localize them to specific language areas of the cortex
21	5. Relate symptoms seen in vascular disease of the central nervous system (CNS) to the functional areas of the cortex supplied by the cerebral arteries
21	6. Describe the anatomical blood supply to the brain, the vascular territory supplied by each major cerebral artery, and the clinical presentations of common stroke syndromes associated with each major cerebral artery
21	7. List and describe the major modifiable and non-modifiable risk factors for ischemic and hemorrhagic stroke
21	8. Discuss evidence-based strategies for ischemic and hemorrhagic stroke prevention including the importance of nutrition and physical activity
21	9. Describe the etiology, pathophysiology, risk factors, clinical presentation, investigations, diagnosis, and management of acute ischemic and hemorrhagic stroke
21	10. Perform an appropriate, focused neurological examination in a patient presenting with acute stroke
21	11. Discuss the use of antithrombotics in vascular neurology
21	12. Identify common complications in the acute and chronic post-stroke period, including effects on mood, cognition, and maintenance of nutritional status
21	13. Identify the factors that can affect a stroke patient's ability to rehabilitate (example - aphasia, neglect) and that help determine reasonable rehabilitation goals post stroke
21	14. Outline community supports that are available for people with stroke-related disability and consider how the physical location (urban vs rural) and technology can aid in the timely diagnosis, treatment, and intra and inter-professional collaboration in a patient with a stroke
21	15. Describe the important features of a case presentation of focal neurological deficit that allow the construction of a prioritized differential diagnosis
21	16. Explain the role of the Family Physician and nursing home staff in the care of patients in nursing homes and how they engage with and form part of the multidisciplinary teams
21	17. Describe the use of clinical assessment tools in balancing the risk of thromboembolic stroke against the risk of excess bleeding in patients with atrial fibrillation
21	18. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 22 - Brain Stem

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22	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
22	2. Describe the structure and function of the cranial nerves, including clinical manifestations that would be expected with cranial nerve abnormalities
22	3. Explain how the micro-anatomy (histology) of the eye and its adnexa are responsible for vision and how the micro-anatomy (histology) of the ear is responsible for hearing and balance
22	4. Describe etiologic factors, pathology, pathogenesis, cardinal manifestations/ features, diagnostic criteria, and investigations of multiple sclerosis
22	5. Outline a collaborative management plan for multiple sclerosis, taking into consideration the disease stage (early, active versus late, progressive) and prognosis
22	6. Describe the principles of palliative care and whole patient care, including its role in the care of patients with chronic life-threatening illnesses
22	7. Describe social institutions and practices that can be used to help manage progressive disability and define levels of care required
22	8. Describe the pharmacology of drugs used to treat multiple sclerosis
22	9. Correlate the clinical experience of being a patient with the personal, social, and practical implications of living with multiple sclerosis
22	10. Perform a full neurological examination, including examination of mental status, cranial nerves, motor and sensory functions and reflexes, and describe patterns of abnormal signs that lead to a neuroanatomical diagnosis
22	11. Describe the approach (including relevant aspects of history and physical exam), differential diagnosis, and management of acute vision loss
22	12. Identify and describe the anatomy and function of the brainstem, orbit (including its imaging and clinical aspects), muscles of ocular movement, and inner ear
22	13. Discuss the prevalence and severity of disability in multiple sclerosis
22	14. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 23 – Anemia

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23	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
23	2. Describe the process of hematopoiesis and identify the stages of development of each blood cell line and the different types of mature blood cells
23	3. Identify characteristic red blood cell, white blood cell, and platelet morphologies seen on the peripheral blood smear and bone marrow aspirate
23	4. Describe the metabolism of iron, the role of iron, B12, and folate in the function of the red blood cell, and recognize the features of anemias related to these nutrient deficiencies
23	5. Discuss the structure and function of hemoglobin and the characteristics of anemias related to abnormalities in hemoglobin
23	6. Describe the role of the red cell membrane and certain red cell enzymes in the function of the red cell and how abnormalities in these red cell components can lead to anemias
23	7. Demonstrate a clinical approach to the diagnosis of anemia, including the appropriate use of physical examination maneuvers and investigations and their interpretations to distinguish different etiologies
23	8. List major causes of anemia in developing countries and in at-risk populations in Canada: low resource communities, new immigrants, and refugees
23	9. Describe the microscopic anatomy of the bone marrow
23	10. Perform a focused medical history and complete abdominal examination in a patient with gastrointestinal complaint
23	11. Identify organs of the abdomen such as liver, spleen and aorta using ultrasound and recognize its indications and limitations
23	12. Discuss treatments for anemias
23	13. Identify drugs that cause anemia and/or other cytopenias and describe mechanisms for these adverse effects
23	14. Introduce the approach to the diagnosis and treatment of other cytopenias such as thrombocytopenia and neutropenia
23	15. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 24 - Bleeding Disorders and Hematological Malignancy

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24	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
24	2. Discuss the patient's biopsychosocial context of wellness and, in light of this context, identify barriers to the access of health care and strategies to promote and prevent disease
24	3. Practice effective verbal and written communication skills for reporting history and physical exam findings and for obtaining informed consent
24	4. Describe the basic principles and indications of transfusion for packed red cells, platelets, and plasma
24	5. Provide clear and concise informed consent with regards to blood transfusion
24	6. Explain the management of complications from blood transfusions
24	7. Describe the basic physiology of normal hemostasis including the roles of platelets and coagulation factors
24	8. Describe the pathogenesis, key historical features, findings on physical examination, expected results of laboratory investigation, and management of common bleeding disorders
24	9. Describe a diagnostic approach to classify abnormal bleeding using information from history, physical exam, and laboratory investigations
24	10. Explain the basic mechanisms of common bleeding disorders secondary to platelet and platelet-related abnormalities and coagulation factor abnormalities
24	11. Describe a diagnostic approach to classify and differentiate hematologic malignancies and bone marrow disorders using information from history, physical exam, and laboratory and radiologic investigations
24	12. Explain the pathogenesis, key historical features, findings on physical examination, expected results of laboratory investigations, and management of common hematologic malignancies and bone marrow disorders
24	13. Describe the management and prognosis for childhood acute lymphoblastic leukemia
24	14. Describe an approach to diagnose the cause of lymphadenopathy and splenomegaly using information from history, physical exam, and laboratory and radiologic investigations
24	15. Describe an approach to care that supports patient choice around their care, as well as use of traditional medicines
24	16. Describe an approach to delivering bad news to a patient, family or caregiver using the SPIKES (setting, perception, invitation, knowledge, empathy, summarize/strategize) method
24	17. Describe the physical manifestations and clinical approach to a patient presenting with significant hemorrhage
24	18. Define and classify hypovolemia and hemorrhage and describe the body's compensatory responses
24	19. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
24	20. Describe some traditional medicines requested in a clinical and tertiary care setting and list potential barriers to First Nations accessing health care
24	21. Describe strategies to optimize safe / efficient transfer of care from the community to tertiary care centres
24	22. Describe the basic micro-anatomy and function of normal thymus, spleen, and lymph node
24	23. Describe how developments in genetics and genomics understanding have improved treatment outcomes in genetic diseases, including emerging treatments in formerly untreatable conditions and explain barriers to genomic-based patient care

Week 25 - Thyroid and Parathyroid

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25	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
25	2. Define the elements of a focused history related to head and neck diseases and perform an examination of the head and neck, with a focus on the thyroid and lymphatic chains
25	3. Identify and describe the surface anatomy of the head and neck
25	4. Describe the normal gross, radiologic, and microscopic anatomy of the head and neck, including the thyroid and parathyroid glands and the cellular features of thyroid disorders
25	5. Describe the physiology of the hormones relevant to the thyroid gland, including their production, mechanism of action and feedback loops, plus the clinical manifestations of over- or under-production of each hormone
25	6. Interpret laboratory tests of thyroid function and autoimmunity in different disease contexts
25	7. Describe the expected findings on imaging investigations for different disease states involving the thyroid gland
25	8. Describe advantages and disadvantages of the modalities used to image the thyroid and the parathyroid gland
25	9. Briefly outline the clinical presentation and types of thyroid cancer and principles of thyroid surgery and follow-up
25	10. Describe the pharmacology of drugs used to treat thyroid disorders
25	11. Demonstrate a clinical approach to the diagnosis of thyroid abnormalities, including the appropriate use of physical examination maneuvers and their interpretations, to distinguish different disease states
25	12. Outline the physiology of bodily calcium regulation, including the roles of parathyroid hormone (PTH) and vitamin D systems and the calcium sensing receptor
25	13. Explain expected maternal thyroid adaptations to pregnancy and the vital importance of adequate maternal thyroid hormone for the developing fetus
25	14. Interpret serum calcium and parathyroid hormone (PTH) levels and other clinical data to make appropriate differential diagnoses and suggest basic management in cases of hyper- and hypocalcemia
25	15. Describe the basic anatomy, physiology and neurophysiology of the male and female sexual response and describe some common sexual dysfunctions along with some pharmacological and non-pharmacological treatments options
25	16. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
25	17. Describe the differential diagnosis for hyperthyroidism along with diagnostic approaches and management options
25	18. Describe the differential diagnosis for hypothyroidism along with diagnostic approaches and management options
25	19. Identify patients who may be susceptible to hereditary cancers from common patterns of inheritance and summarize the limitations and appropriate use of this testing to manage hereditary cancers and opportunities to decrease morbidity and mortality

Week 26 - Hypothalamic, Pituitary, and End Organ Axis

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26	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
26	2. Describe the normal gross and microscopic anatomy of the hypothalamus, pituitary structures, pineal glands, and cavernous sinus
26	3. Describe the molecular basis of hormone synthesis and action
26	4. Describe the physiology of the hypothalamic-pituitary-end-organ axis, including the production, mechanism of action, and feedback loops for relevant hormones and the clinical manifestations of over- or under-production of each hormone
26	5. Describe different mechanisms by which pituitary function could become altered and for each mechanism predict the hormonal changes and potential clinical manifestations that could result
26	6. Describe the physiologic basis for the expected results of relevant laboratory tests of hypothalamic and pituitary function in different disease contexts
26	7. Identify the pituitary, hypothalamus, and nearby structures on basic radiological imaging
26	8. Identify contraindications to and monitoring of testosterone replacement
26	9. Discuss possible therapeutic options for pituitary tumours, including their potential consequences on the HPO axis
26	10. Demonstrate a clinical approach to the diagnosis of abnormalities of the HPO axis, including the appropriate use of physical examination maneuvers and investigations and their interpretations to distinguish different etiologies
26	11. Describe the differences between biological sex, gender identity, gender expression, sexual orientation, and intersex conditions
26	12. Describe the principles and responsibilities in interprofessional care of patients, including the importance of timely, well-documented, and safe referral to specialists and other health care professionals
26	13. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
26	14. Describe the physiological anatomy of the adrenal gland, relating structure to function including the areas of production of major secretory hormones and describe pathological changes of prototypical diseases

Week 27 - Adrenal Dysfunction

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27	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
27	2. Describe cardiovascular symptoms and perform a focused medical history and a complete cardiovascular examination in a patient with a cardiac complaint
27	3. Describe steps to be taken when a patient suffers an adverse event
27	4. Discuss shared leadership and surgical safety and quality initiatives
27	5. Review the embryology related to the external genitalia
27	6. Describe the basic biochemical and physiological functions of the adrenal cortex and medulla including the synthesis, regulation, and metabolism of steroid hormones (cortisol, aldosterone and adrenal androgens) and catecholamines
27	7. Describe the pathogenesis, clinical features, expected findings on investigations, diagnostic criteria and management of Cushing's syndrome, primary adrenal insufficiency, secondary adrenal insufficiency, Conn's syndrome (hyperaldosteronism), congenital adrenal hyperplasia, adrenal incidentalomas (adrenal mass) and pheochromocytoma
27	8. Recognize pathology of the adrenal gland at both the gross and microscopic levels
27	9. Describe methods used to image the adrenal glands and recognize common findings
27	10. List the cranial nerves and other structures found in the infratemporal fossa, the imaging modalities used, and outline possible clinical manifestations of injury in this area
27	11. Outline the moderate complexity of physiological adrenal steroid replacement therapy in contrast to replacement of an array of other hormones
27	12. Outline best practices in physiological adrenal hormone replacement
27	13. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
27	14. Outline the diagnosis and mechanism by which supra-physiologic levels of glucocorticoid (GC) hormones (whether endogenous or exogenous) suppress the hypothalamic-pituitary-adrenal axis and causes Cushing's syndrome

Week 28 - Central Nervous System Infections

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28	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
28	2. Explain the formation, circulation, and composition of cerebrospinal fluid (CSF) and interpret changes in health and disease
28	3. Describe the role of the microbiology lab, including the collection and handling of specimens in the diagnosis of infections
28	4. Identify potential sources of cognitive bias in a clinical case
28	5. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
28	6. Describe the host barriers to central nervous system (CNS) infection and the pathophysiology of common CNS infections
28	7. Explain the role of lumbar puncture in diagnosis of Central Nervous System (CNS) infections, what tests should be requested, and how to interpret the results
28	8. Describe the indications, mechanism of action, spectrum of use, and toxicity of antimicrobial drugs that are commonly used to treat CNS infections
28	9. Describe the clinical features, diagnosis and management of human herpes viruses (herpes simplex virus, varicella zoster, Epstein-Barr virus, and cytomegalovirus)
28	10. Describe the pathogenesis, diagnosis, management and prevention of HIV/acquired immunodeficiency syndrome (AIDS)
28	11. Describe the role social determinants of health play in the transmission of infectious diseases
28	12. Describe how age, immune status, and exposure risk factors affect the epidemiology of CNS infections
28	13. Demonstrate awareness of the connection between trauma and addiction, and the role of harm reduction in the treatment of addiction
28	14. Describe the concepts of antimicrobial stewardship and empiric and targeted antimicrobial therapy including mechanism of action and spectrum of activity
28	15. Describe the clinical presentation of meningitis and encephalitis and develop a differential diagnosis for both acute and chronic disease
28	16. Explain the role of CT scan and MRI in the diagnosis of CNS infections, including the timing of imaging, lumbar puncture and initiation of antimicrobial therapy
28	17. Outline the primary blood-borne viral pathogens and public health strategies to prevent transmission

Week 29 - Mood and Anxiety Disorders

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29	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
29	2. Explain how psychiatric disorders are classified, diagnosed and monitored in an ongoing fashion
29	3. Discuss the impact of mental illness on patients, families, the community and society
29	4. Discuss how societal attitudes towards mental illnesses can be a barrier to care and how physicians might influence these
29	5. Demonstrate a clinical approach to the diagnosis of psychiatric disorders, with emphasis on depression, including the appropriate use of the psychiatric interview and investigations and their interpretations to distinguish and monitor different etiologies
29	6. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
29	7. Describe the functional anatomy and physiology of the limbic system and explain its influence on behavioural outputs
29	8. Summarize current knowledge regarding the etiology and pathophysiology of mood and anxiety disorders
29	9. Describe clinical manifestations, prevalence and course of the following major mood, anxiety and related disorders: major depressive disorder, bipolar disorder, generalized anxiety disorder, panic disorder, agoraphobia, post-traumatic stress disorder, obsessive compulsive disorder, specific phobia, social anxiety disorder
29	10. Formulate a basic treatment plan for major depressive disorder and generalized anxiety disorder, considering pharmacologic and non-pharmacologic interventions
29	11. Describe the basic pharmacology of first-line medications used for the treatment of major depressive disorder and generalized anxiety disorder, including mechanism of action, side effects, and key safety issues
29	12. Identify risk factors that might influence prognosis, recovery or relapse of mental health disorders
29	13. Describe multifactorial inheritance using bipolar disorder as an example
29	14. List major classes of neurotransmitters present in the central nervous system and describe mechanisms by which they may be impacted by psychotropic medications
29	15. Summarize core psychotherapy principles and outline the basic mechanisms underlying cognitive behavioural therapy
29	16. Define personality and describe key clinical manifestations of personality disorders, and the principles of management of such disorders

Week 30 - Headache and Pain

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30	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
30	2. List the key attributes of the most effective health care organizations and discuss how these attributes contribute to effectiveness
30	3. Identify the facial nerve and the branches of the trigeminal nerve and explain pain, sensory deficits, and motor function based on functional anatomy
30	4. Describe the physiology of pain perception and internal modulation
30	5. Describe the clinical symptoms of headache and chronic pain and correlate them to the neurophysiological mechanisms that underlie them
30	6. Classify the major types of headache disorders based on their pathogenesis and findings on clinical history, physical examination, and investigations
30	7. Describe a clinical approach to investigating and diagnosing a patient with chronic pain
30	8. Describe potential pharmacological and non-pharmacological options to manage and prevent recurrence of headache disorders and chronic pain disorders, based on underlying neuropathology and pharmacological mechanisms of action
30	9. Explain the pharmacology and risks for addictive potential of common medications used to treat headache and acute pain disorders
30	10. Discuss the key features of an integrated, interprofessional approach to chronic pain management
30	11. Evaluate the emotional, cognitive, behavioural, and socio-economic impact of chronic headache and chronic pain disorders
30	12. Discuss the concept of how chronic pain and/or headaches may differ across various cultural contexts, and how these differences may impact your approach to assessment and management
30	13. Identify apps and social media approaches to engaging patients and public in mental health recognition, treatment, and prevention
30	14. Describe how core ethical principles inform the decision-making process
30	15. Discuss strategies for difficult clinical scenarios such as speaking with parents or children about terminal illness (delivering bad news)
30	16. Discuss the different pain management methods in non-cancer and cancer pain
30	17. Describe the typical presentation, pathophysiology and management of ocular conditions commonly associated with headache
30	18. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
30	19. Describe the epidemiology of pain and the pathophysiology and treatment of acute and chronic pain
30	20. Describe the pharmacology of opioid medication, opioid stewardship and recognize opioid misuse and risk factors for opioid use disorder

Week 31 - Head Injury

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31	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
31	2. Describe the structure and function of the cranial nerves, including clinical manifestations that would be expected with cranial nerve abnormalities
31	3. Explain how the micro-anatomy (histology) of the eye and its adnexa are responsible for vision and how the micro-anatomy (histology) of the ear is responsible for hearing and balance
31	4. Describe the neurologic control of chewing and swallowing
31	5. Describe the pathology and pathophysiology of brain injury and relate them to clinical findings
31	6. Describe the potential etiologies, pathophysiology, and consequences of elevated intracranial pressure
31	7. Describe the anatomical and physiologic basis for consciousness and, based on these principles, describe why a patient may have an altered state of consciousness
31	8. Describe potential etiologies, pathophysiology, clinical classification, appropriate investigations, and a management plan for patients presenting with seizures
31	9. Develop a rehabilitation plan for patients with a head injury with or without periods of unconsciousness
31	10. Identify normal anatomical structures and common abnormalities (example - different types of intracranial hemorrhages or signs of increased intracranial pressure) on modalities used to image the brain and skull
31	11. List professions central to our publicly funded health care system; explain their roles and relationships
31	12. Recognize and discuss some of the common affective and cognitive biases that could impact the care of patients with cognitive impairment
31	13. Describe tools that can be used to help facilitate clear and effective communication between health professionals (example - ISBAR)
31	14. Define mild traumatic brain injury (concussion) and describe its signs and symptoms, prevention, assessment, and management
31	15. Describe the complications of brain injury
31	16. Correlate the clinical experience of being a patient with the personal, social, and practical implications of living with a traumatic brain injury
31	17. Demonstrate how to take an appropriate ocular health history and a systematic approach to the examination of the eye
31	18. Identify the intracranial compartments, anatomically and by imaging, and describe how an increase in content and therefore pressure within a compartment may lead to herniation of contents and altered consciousness
31	19. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
31	20. Apply knowledge of the anatomy and function of the eye, orbit and ear to explain the pathophysiology and initial management of traumatic and other ocular, orbital and auditory conditions
31	21. Describe the physiological determinants of cerebral oxygen delivery and the factors that control cerebral blood flow in health

Week 32 - Asthma and Pharmacology

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32	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
32	2. Describe the clinical application of general anesthetics and their mode of action
32	3. Perform a focused medical history and a complete respiratory examination in a patient with a respiratory complaint
32	4. Identify and describe the surface anatomy of the chest
32	5. Describe the mechanisms of drug interactions and the principles of clinical management
32	6. Describe the principles of clinical pharmacokinetics and pharmacodynamics, including factors that contribute to interindividual variability in drug response, and apply them to the design of drug dosing regimens
32	7. Describe the basic principles of safe medication practice
32	8. Define asthma and describe its etiology, epidemiology, pathophysiology, natural history, clinical manifestations, differential diagnosis, methods of diagnosis and management
32	9. Describe the pathophysiology and approaches to prevention of pollutant-induced lung injury
32	10. Discuss the potential roles of physicians in improving the patient care experience
32	11. Discuss the history and physical exam findings and investigations that will help diagnose the cause of fatigue
32	12. Describe an approach to the interpretation of imaging of the airways in pediatric and adult patients
32	13. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
32	14. Describe the anatomy of the oral cavity and upper airway and relate them to function
32	15. Explain the indications, clinical utility, and application of genomic testing and describe the individual variability in drug response

Week 39 - Neonatal Transition

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39	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
39	2. Describe the physiological and anatomical transitions that occur at birth in regards to respiration, circulation, thermoregulation, and nutritional requirements
39	3. Identify and interpret minor congenital abnormalities in the context of a newborn's clinical presentation
39	4. Relate the development of the components of the respiratory system to the timing of lung maturation
39	5. Compare and contrast the epidemiology, pathophysiology, and initial management of common neonatal respiratory conditions
39	6. Describe the sequence of typical and atypical child development in cognitive, social, emotional, language, and motor domains in infants
39	7. Outline an approach to the diagnosis and initial management of a critically ill newborn
39	8. Review the concepts of innate and adaptive immunity and explain the basis for unique congenital, trans placental, and neonatal infections, and the response to and sequelae of these infections
39	9. Elicit perspectives of the newborn patient's family with respect to clinical decision making
39	10. Identify and explain risk factors for impaired growth and development causing congenital and infant disease and mortality in a low resource setting (i.e. prenatal nutrition, food insecurity, poverty, infectious disease, toxins, etc.)
39	11. Describe how pregnancy and the unique characteristics of neonates affect drug pharmacokinetics, efficacy, toxicity, and dosing
39	12. Describe the imaging modalities commonly used in clinical evaluation of an infant with respiratory distress
39	13. Discuss the diagnosis and management of conditions resulting from chromosomal abnormalities, using Trisomy-21 as an example
39	14. Describe the etiology, pathogenesis, and investigation of common congenital dysmorphisms with reference to macroscopic and microscopic changes in structure and function, as well as relevant molecular abnormalities
39	15. Describe the important features of a case presentation of dysmorphism that allow the construction of a prioritized differential diagnosis
39	16. Describe the implications of recurrence risk when there is a family member with a chromosomal variation
39	17. Review some of the physical criteria used to assess gestational age and perform a complete Physical Examination of the newborn
39	18. Describe the acute and lifelong impact of chromosomal variations, intellectual disability, and congenital anomalies on the individual and their family/community
39	19. Describe Infection Prevention and Exposure Control Measures, including the use of Personal Protective Equipment (PPE) and additional safety measures, which can be used in non-clinical settings as well as before, during, and after a clinical experience
39	20. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
39	21. Recall the elements of the prenatal and perinatal history and explain its relevance to the health of the newborn

Week 40 - Chromosomal Abnormalities

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40	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
40	2. Describe the clinical and pathological features, investigations, and treatment of frequently encountered abnormal developmental conditions, including Global Developmental Delay, Speech and Language Delay, Cerebral Palsy and Autism Spectrum Disorder
40	3. Describe the biological basis of common genetic abnormalities including the range of chromosomal disorders (microdeletions to triploidy) and nomenclature of chromosomal and molecular variations
40	4. Identify health, social service, and community resources available to children (and families of children) with developmental disorders
40	5. Recognize the physical factors that could contribute to feeding and nutritional challenges in pediatric patients with chromosomal abnormalities and describe the impact of this on growth patterns
40	6. Demonstrate a clinical approach to the diagnosis and basic management of chromosomal variations and inherited chromosomal abnormalities, including ordering and interpreting the results of basic investigations
40	7. Describe the roles and responsibilities of team members such as healthcare providers, Elders, Health Directors, Patient Navigators, Traditional Knowledge Keepers, and healers in providing care
40	8. Explain the embryological development of the head and the central nervous system and relate it to major congenital syndromes
40	9. Describe the development of the pharyngeal arches and their derivatives and relate this to typical malformations of the face
40	10. Describe how to critically evaluate the evidence and data quality of a claim, such as MMR vaccine causes autism, using FiLCHeRS
40	11. Describe the appropriate role of the physician in the care of health problems in his or her family
40	12. Discuss principles related to early clinical intervention in child development
40	13. Describe the important features of a case presentation of developmental delay that allow the construction of a prioritized differential diagnosis
40	14. Discuss the impact of a genetic disorder on a family
40	15. Identify the "live vaccines" in routine childhood vaccination schedules and list their contraindications
40	16. Identify the key structures in the anatomy of the face
40	17. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
40	18. Describe the acute and lifelong impact of chromosomal variations, intellectual disability, and congenital anomalies on the individual and their family/community, including the potentially inherited risk of substance-use disorders
40	19. Interpret genetic test results in the context of a patient and family including different types of results possible and their impact on clinical utility
40	20. Outline relevant pre and post-test counselling issues for prenatal screening and newborn screening
40	21. Describe the nutritional requirements for and feeding development in infants and toddlers
40	22. Describe factors that contribute to postnatal development, including normal human variation and differentiate between mutation, variant, and polymorphism
40	23. Recognize indications for genetic testing in pregnancy, pediatrics, and adult medicine, and understand when a disease is more likely sporadic vs. familial

Week 41 - Normal and Abnormal Growth and Development

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41	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
41	2. Describe the endocrine control of normal growth from birth to adolescence with particular focus on the specific pituitary hormones as a function of age/maturity
41	3. Identify the basic mechanisms responsible for non-pathological short stature as well as potential causes of abnormal growth
41	4. List the appropriate laboratory investigations for the assessment of a child with abnormal growth and development and use pathogenetic reasoning to provide a basic interpretation of the most common abnormalities in these tests
41	5. Record requisite anthropometric measurements (height/length, weight, and head circumference), gathered at well-child and medical /surgical follow-up assessments, accurately on a growth chart and interpret the data correctly
41	6. Explain the concept of growth velocity and describe the difference between chronological age and bone age, and apply this knowledge to the recognition of normal and pathological growth
41	7. Describe the sequence of typical and atypical child development for preschool and early school age children and how relevant factors (poverty, abuse, neglect, trauma etc) may negatively impact this development, and how intervention might help to mitigate some of this negative impact
41	8. Discuss the concept of Temperament in young children and how it impacts child behaviour and parent-child interactions including the process and importance of attachment in child development
41	9. Discuss the diagnosis and treatment of ADHD, including behavioural, environmental and pharmacologic strategies
41	10. Describe how observation of children's play contributes to the assessment of social and cognitive domains of child development
41	11. Describe how prenatal substance exposure can result in developmental as well as behavioural challenges, in preschool and early school age children
41	12. Define Physical Literacy and how it relates to optimal childhood growth and development and describe ways in which Physical Literacy impacts both normal and abnormal growth and development in children
41	13. Discuss how learning disorders present and their impact on children
41	14. Describe the components of a psychoeducational assessment and what the physician's role is in integrating psychoeducational results into the child's clinical presentation
41	15. Explain the embryological development of the skull, the axial skeleton, limbs, and muscles and relate it to major congenital syndromes
41	16. Describe the different types of memory, the parts of the brain involved in memory, the development of those parts, and synaptic plasticity
41	17. Discuss the presentation and differential diagnosis of disruptive behaviour in children
41	18. Integrate and apply clinical information, and form basic differential diagnoses, considering common and life-threatening causes for the presenting complaint
41	19. Formulate rudimentary management plans appropriate to the patient's clinical presentation
41	20. Present information obtained from the history, physical exam and laboratory investigations in a structured manner to other members of the healthcare team
41	21. Explain the role of Family Physicians and the primary care team in the longitudinal and comprehensive care of their patients
41	22. Describe the elements and relevance of the history, physical examination, and screening tools in the medical assessment of the patient across the various stages of childhood development
41	23. Describe the imaging modalities used for the musculoskeletal system and the types of joints found in the upper and lower limb
41	24. Describe the clinical presentation, causes, and treatment options for Autism Spectrum Disorder (ASD) and Fetal Alcohol Spectrum Disorder (FASD) and explain the role of the physician in caring for children with these conditions
41	25. Describe nutritional requirements and recommendations for school aged children and adolescents, the importance of nutritional assessments to determine nutritional adequacy, and the impact of nutritional deficiency on growth patterns
41	26. Describe an approach to infants and children presenting with an abnormal visual response and outline the etiology of common visual impairments and when to refer them to a specialist
41	27. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 42 - Adolescent Health and Development

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42	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
42	2. Present information obtained from the history, physical exam and laboratory investigations in a structured manner to other members of the healthcare team
42	3. Describe the changes to the body that occur during puberty and the underlying physiologic mechanisms responsible for these changes in "normal", precocious, and delayed-onset puberty
42	4. Describe the clinical approach to assessing and treating obesity in adolescents
42	5. Describe adolescent psychological development and explain resilience, risk, and protective factors in the adolescent psychosocial history; describe how to apply positive youth development concepts in interviewing adolescents
42	6. Describe the presentation of depression in adolescence, the impact of depression in adolescent health, developmentally appropriate history and screening for depression in adolescence, and initial management of depression in adolescence
42	7. Describe the approaches for treating anxiety and depression in adolescents
42	8. Identify and describe the impact of chronic health conditions and/or learning disorders on psychosocial development during adolescence
42	9. Describe the social, economic, and structural factors that impact the health of an adolescent patient and family and ways in which healthcare professionals can advocate with their patients to address these issues
42	10. Describe the difference between a family-based and an autonomous health care model and explain how a safe transition from pediatric to adult care services can be achieved
42	11. Explain the appropriate approaches to care and trauma-informed practice as they apply to adolescents impacted by anti-Indigenous racism
42	12. Describe how major policy issues have impacted the number of First Nation / Indigenous adolescents in care
42	13. Describe the importance of culture and identity as it relates to Indigenous adolescent health
42	14. Describe the concept of access to health care services, including availability, accessibility, accommodation, affordability, and acceptability
42	15. Describe a clinical approach to assessment and management in a child presenting with gender dysphoria
42	16. Describe developmental and biological considerations in screening, diagnosing, and treating sexually transmitted infections in adolescents
42	17. Define and classify epilepsy and epileptic syndromes, discuss their impact on pediatric and adolescent patients, and describe an approach to diagnosing seizures in this population
42	18. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
42	19. Describe the patterns and terminology related to substance use in adolescence, and identify the role of harm reduction approaches to support healthy adolescent development
42	20. Discuss recommended nutrient requirements and list physical activity guidelines for adolescents and the long-term consequences of physical literacy as it relates to prevention and management of various chronic diseases

Week 43 – Rash

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43	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
43	2. Describe the basic macro- and micro-anatomy of the skin (epidermis, dermis, and subcutaneous layers), integumentary vasculature and nervous supplies, hair, nails, pigmentation, sweat glands and external mucosae, including expected variations based on anatomic location and the relationship between the structure and function
43	3. Describe the pathophysiology, histology, basic clinical features, and approach to the prevention, diagnosis, and treatment for common malignant and benign neoplastic disorders of the integument
43	4. Demonstrate a basic clinical approach to the patient presenting with an integumentary problem, including skin examination and broad comprehension of psychosocial issues
43	5. Describe the role of interprofessional collaboration, and longitudinal support for a patient with a chronic dermatological condition
43	6. Describe the important features of a case presentation of a skin complaint that allow the construction of a ranked differential diagnosis
43	7. Describe the pathophysiology, histology, basic clinical features, and approach to diagnosis and treatment of common inflammatory disorders, infections, and infestations of the skin including those affecting hair, nails, oral mucosa, sweat, and pigmentation
43	8. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
43	9. Describe normal and abnormal cutaneous growth, differentiation, and changes, using psoriasis, and skin cancer as examples
43	10. Demonstrate the appropriate use of dermatologic terminology and apply visual literacy to accurately describe and characterize the morphological features of abnormal skin conditions; recognize that a patient's constitutive (i.e. background) skin colour will influence the appearance of various skin disorders

Week 44 – Arrhythmia

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44	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
44	2. Describe the anatomy and normal electrophysiology of the cardiac electrical system
44	3. Describe the micro-anatomy (structure/function) of cardiac muscle and correlate it to the structures and functions of the normal cardiac electrical system
44	4. Explain the causes and underlying mechanisms of tachycardia and bradycardia
44	5. Describe the etiology and pathogenesis of cardiac arrhythmias, including conditions commonly associated with them
44	6. Describe a clinical approach to the diagnosis of common arrhythmia syndromes, including ordering relevant investigations and interpretation of their results
44	7. Describe the potential acute hemodynamic sequelae and the potential chronic consequences of arrhythmias
44	8. Describe the restrictions and risk factor modifications recommended for patients with arrhythmias
44	9. Explain the underlying physiology that results in a normal electrocardiogram (ECG) tracing and describe an organized approach to interpreting 12-lead ECGs
44	10. Diagnose common normal and abnormal rhythms on an ECG rhythm strip and/or a 12-lead ECG
44	11. Describe the pharmacologic and non-pharmacologic management of tachy- and bradyarrhythmias
44	12. Describe the important features of a case presentation of syncope or palpitations that allow the construction of a prioritized differential diagnosis
44	13. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 45 - Joint Injury

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45	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
45	2. Explain the role of Family Physicians and the primary care team in the longitudinal and comprehensive care of their patients
45	3. Describe the anatomy and histology of the knee joint, including structure and function of tendons and ligaments
45	4. Describe the structure and function of the menisci of the knee
45	5. Describe the clinical features of a major ligamentous injury of the knee
45	6. Outline a rehabilitation plan for an acute ligamentous injury of the knee
45	7. Describe potential management options for common types of acute knee injuries and joint pain, including indications for particular strategies and expected outcomes based on type of injury
45	8. Define what is meant by strain versus a sprain
45	9. Explain how tendons and ligaments heal
45	10. Explain the structure and function of the muscle-tendon junction
45	11. Discuss the three principles (individual clinical expertise, best external evidence, and patient values/expectations) of evidence-based medicine in the context of joint injury
45	12. Describe the important features of a case presentation of joint pain that allow the construction of a prioritized differential diagnosis
45	13. Describe the basis and indications for the diagnostic imaging modalities available for examining MSK pathology
45	14. Demonstrate a clinical approach to the history, physical examination maneuvers, investigations and diagnosis of acute knee injuries to distinguish different potential etiologies
45	15. Develop practical approaches to the hypothesis driven assessment and physical exam for chronic pain
45	16. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
45	17. Describe a clinical approach to the diagnosis of acute injury of the hip, leg and knee, including the history, the appropriate use and interpretation of physical examination maneuvers, and imaging investigations to distinguish different potential etiologies
45	18. Describe the anatomical structure and function of the muscles, nerves, and blood supply of gluteal regions, thigh, hip and knee joints
45	19. Describe the etiology and pathogenesis of musculoskeletal fractures and soft tissue injuries with reference to macroscopic and microscopic changes in structure and function, as well as relevant molecular abnormalities

Week 46 - Fracture (Child Maltreatment)

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46	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
46	2. Describe the formation of cartilage models for bone
46	3. Describe the different structures and types of bone and their micro-anatomical features as they relate to their function
46	4. Describe the process of bone formation and development through to full skeletal maturity, including relevant micro-anatomy, relating structure to function
46	5. Explain the response of bone to stress
46	6. Describe the process of bone healing and remodeling in children, including features that may be seen on diagnostic imaging
46	7. Describe common presentations and consequences of child maltreatment, the legal and ethical challenges that may arise in these situations, the principles used to guide decision-making, and an approach to reporting suspected child maltreatment
46	8. Describe factors that affect bone health including nutritional factors, nutritional deficiencies, physical activity and genetic/hereditary bone disease in children and adults
46	9. Describe the importance of relationship-centered care and respectful communication in cases of suspected or actual child maltreatment
46	10. Describe the pharmacological management of pain in children
46	11. Identify basic musculoskeletal structures on radiographs and computed tomograms (CT) using a systematic approach
46	12. Describe radiographic fracture classifications and findings suggestive of fractures, abnormal bone healing and non-accidental injury
46	13. Describe the etiology and pathogenesis of bone fractures with reference to macroscopic and microscopic changes in structure and function, as well as relevant molecular abnormalities
46	14. Describe surgical and non-surgical treatment options for fractures in children
46	15. Describe the important features of a case presentation of child maltreatment that allow the construction of a prioritized differential diagnosis
46	16. Describe the nature, signs and risk factors of child abuse and its impact on society
46	17. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
46	18. Describe the pathophysiology, appropriate investigations and potential complications of normal fractures, pathological fractures, osteoporosis, Paget disease, and osteosarcoma/bone metastases
46	19. Describe the anatomical structure and function of the muscles, nerves, and blood supply of the thigh, leg, knee and foot

Week 47 – Osteoporosis

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47	1. Discuss key concepts in care of the elderly/frail patient
47	2. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
47	3. Describe the physiological roles of the skeleton with respect to support, locomotion, mineral metabolism, endocrine regulation and blood cell production
47	4. Describe the clinical and technological approach to the assessment of bone health in an individual patient
47	5. Describe the epidemiology, etiology, pathogenesis, diagnostic criteria, and screening criteria/modalities for osteoporosis
47	6. Explain the differences between adults and children in their responses to nutritional deficiencies in bone disease
47	7. Describe the pharmacological and non-pharmacological management of osteoporosis
47	8. Describe the roles and responsibilities of different care team members in the management of frail elderly patients with osteoporosis and their transition to community care resources
47	9. Describe the pathology of bone disease including bone manifestations associated with malignancy
47	10. Explain an approach for a best possible medication history (BPMH) for an elderly patient
47	11. Explain the basic components of a rehabilitation program for patient's post-hip fracture and its potential impact on outcomes
47	12. Describe the muscles, nerves, and blood supply of the posterior and lateral leg and foot regions and relate the structure and function of the anatomical components of these regions
47	13. Search, appraise, and apply articles related to harm or risk factors for developing disease (example - osteoporosis) and describe how 10-year-fracture-risk assessment tools (FRAX) can assist in the diagnosis, management, and education surrounding osteoporosis in the elderly
47	14. Outline strategies to prevent falls and reduce fracture risk in older patients
47	15. Identify barriers to effective use of pharmacological agents for osteoporosis (specifically administration, side effects, adherence, and financial)
47	16. Describe the important features of a case presentation of Osteoporosis (applications to the clinical setting) that allow the construction of a prioritized differential diagnosis
47	17. Describe the physiology of bone formation, remodeling, and resorption
47	18. Describe the normal anatomy of the foot and ankle joint as well as imaging modalities and guidelines used to assess injuries to these areas
47	19. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
47	20. Describe benefits and recommendations for physical activity in all patients including various common chronic diseases and conditions and outline a physical activity prescription template

Week 48 - Deep Vein Thrombosis / Pulmonary Embolism

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48	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
48	2. Present information obtained from the history, physical exam and laboratory investigations in a structured manner to other members of the healthcare team
48	3. Describe the normal coagulation and fibrinolytic pathways
48	4. Summarize the factors (hereditary and acquired) that predispose a patient to venous thrombosis
48	5. Summarize the laboratory tests used in diagnosing coagulation abnormalities and monitoring anticoagulant therapy
48	6. Describe the pharmacology of anticoagulants and fibrinolytics
48	7. Discuss the etiology and pathogenesis of thromboembolic disease
48	8. Discuss the clinical presentation, differential diagnosis, and investigations for venous thromboembolism
48	9. Describe a clinical approach to the prevention and management of venous thromboembolism and its complications
48	10. Summarize the benefits of smoking cessation for morbidity and mortality with respect to venous thromboembolism and list the main options for treatment of nicotine use disorder
48	11. Describe the role(s) of physicians and pharmacists in team-based care of patients receiving anticoagulation therapy, including communication strategies that may help to reduce likelihood of mismanagement
48	12. Describe the risks and benefits of thromboprophylaxis for surgical patients
48	13. Describe how determining a patient's pretest probability for venous thromboembolism will help to guide the strategy used for clinical investigations
48	14. Describe the important features of a case presentation of shortness of breath that allow the construction of a prioritized differential diagnosis
48	15. Describe the classification, etiology, pathogenesis, signs, symptoms, appropriate investigations, treatment, and prognosis of lung cancers
48	16. Describe the etiology, pathogenesis, and investigations for interstitial lung disease and pulmonary hypertension
48	17. Describe how technology (ie - PharmaNET) can support the diagnosis, management, and intra- and interprofessional support for a patient with a thromboembolic event
48	18. Describe a radiological approach to diagnosing thromboembolitic disease and the pros and cons of each modality
48	19. Discuss the impact of thrombosis on the pathophysiology and pharmacological management of acute coronary syndrome (ACS)
48	20. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 49 - Acute Kidney Injury (AKI)

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49	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
49	2. Describe the anatomical features of the posterior abdominal wall
49	3. Define proteinuria and tests used in its measurement
49	4. Describe the clinical features suggestive of glomerular disease and the initial investigations to diagnose glomerulonephritis (GN)
49	5. List the indications for urinary catheterization
49	6. Describe the normal and abnormal embryological development of the kidney, ureters, urinary bladder, male and female genitalia
49	7. Recognize and discuss the ethical challenges in balancing patient risks and benefits in discharge planning
49	8. Identify and describe the gross and microscopic anatomy (structure and function) of the kidney, ureters and bladder, including the innervation of the bladder
49	9. Outline the normal functions of the kidney and the factors (structures) involved in determining normal urine output
49	10. Describe the normal constituents of urinalysis
49	11. Define microscopic hematuria and list potential etiologies
49	12. Define acute kidney injury, including risk factors for its development, and list markers commonly used in practice to identify and follow kidney function
49	13. Outline a basic clinical approach to acute kidney injury using the categories of pre-renal, renal, and post-renal causes
49	14. Describe key features of clinical examination in the assessment of the patient with acute kidney injury
49	15. List the common causes of acute tubular injury and describe the pathophysiology of acute tubular necrosis
49	16. List the major metabolic complications of acute kidney injury and their initial management
49	17. Describe the pathophysiology, risk factors, microbiology and management of common urinary tract infections
49	18. Explain how rhabdomyolysis can lead to AKI and its initial management. Identify potentially life-threatening complications of rhabdomyolysis (hyperkalemia, compartment syndrome)
49	19. Present information obtained from the history, physical exam and laboratory investigations in a structured manner to other members of the healthcare team
49	20. Develop practical approaches to the hypothesis driven physical exam
49	21. Describe the utility of bedside ultrasound in identifying relevant anatomical structures, physiological measurements, and assessing volume status and the limitation of this technology
49	22. Describe a radiological approach to abdominal and pelvic radiographs, computed tomograms (CTs) and ultrasound images, interpret abdominal and pelvic pathology using these imaging modalities, and consider the indications for each type of imaging
49	23. List the reasons to initiate dialysis in acute kidney injury and discuss the impact of acute kidney injury and dialysis on the life of a patient
49	24. Describe basic renal handling of potassium and important hormone systems involved in potassium homeostasis; outline the evaluation and treatment of hyperkalemia
49	25. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
49	26. Discuss the role an addictions management team can play in patient care planning in both the hospital and community setting including recognizing the impact of social determinants of health and supporting patient autonomy

Week 50 - Chronic Kidney Disease

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50	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
50	2. Present information obtained from the history, physical exam and laboratory investigations in a structured manner to other members of the healthcare team
50	3. Describe basic tools used to differentiate acute kidney injury from chronic kidney disease (CKD)
50	4. Define chronic kidney disease (CKD) based on glomerular filtration rate (GFR) and proteinuria
50	5. List the stages of chronic kidney disease (CKD) with the symptoms and complications that tend to arise at each stage
50	6. Describe the etiology, epidemiology, pathophysiology, clinical presentation, appropriate investigations, and management of chronic kidney disease (CKD)
50	7. Describe risk factors for progression to end-stage kidney failure and treatments commonly used to slow progressive loss of kidney function
50	8. Describe derangements in the calcium-phosphate-parathyroid hormone axis as it pertains specifically to the patient with moderate-to-severe chronic kidney disease (CKD) and outline a logical and physiology-based approach to minimizing the impact of such derangements
50	9. Describe how chronic kidney disease (CKD) contributes to anemia and outline the benefits and risks of management of anemia with erythropoietin as well as blood transfusion
50	10. Discuss the impact that chronic kidney disease (CKD) may have on patients' lives, including the need for life-sustaining therapy (dialysis or transplant), impact on daily care needs, and dietary and lifestyle limitations
50	11. Explain the utility of estimated glomerular filtration rate (eGFR) and the value associated with a formal staging system in establishing prognosis for patients with chronic kidney disease (CKD) and how that provides guidance and direction to physicians and other multidisciplinary team caring for these patients
50	12. Discuss the role of the multidisciplinary team (including patient and family) in management of chronic disease and strategies for collaborative decision-making
50	13. Reflect on personal beliefs and values regarding chronic illness, and how these personal beliefs and values impact care
50	14. Describe dietary recommendations for patients with chronic kidney disease (CKD) and explain the consequences of non-adherence; consider the practical consequences of following recommendations for both diabetes and chronic kidney disease and suggest strategies for maintaining behavior change
50	15. Describe the pharmacological management of chronic kidney disease (CKD) including how and why drug dosing may need to be altered in patients with impaired kidney function
50	16. Describe solute transport and clearance and compare the advantages and disadvantages of common dialysis modalities based on method (peritoneal, hemodialysis) and location (home, community, hospital)
50	17. Describe the indications, options, advantages, disadvantages, ethics and outcomes for kidney and other organ transplantation
50	18. Describe the important features of a case presentation that allow the construction of a prioritized differential diagnosis
50	19. Explain the role of the family physician in the screening, diagnosis, motivation, treatment, and longitudinal partnership with the patient and family affected by diabetes
50	20. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
50	21. Discuss the use of evidence-based medicine and clinical practice guidelines regarding the screening, diagnosis, and treatment of diabetes
50	22. Summarize the indications and utility of different types of genetic testing, screening, counseling and investigations for genetic diagnoses
50	23. Describe the ethical, legal and moral issues pertaining to potential genetic discrimination, stigmatization, informed consent, confidentiality when communicating genetic information

Week 51 - Ataxia / Movement Disorder / Tremor

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51	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
51	2. Review and perform a neurological exam in a patient with a neurological complaint, describe common patterns of neurological abnormalities, and arrive at an anatomical diagnosis
51	3. Describe an example of the day-to-day life of a patient living in a nursing home including the program activities and the role of the nursing home as a residence
51	4. Describe how, why and when medication reviews are conducted in a nursing home
51	5. Describe the histology, gross and functional neuroanatomy of the basal ganglia and cerebellum, including the inputs to and outputs from these structures and relate this to both normal movement and to movement disorders
51	6. Discuss the key neuroendocrine factors that contribute to the control of movement
51	7. Compare and contrast the imaging modalities available to evaluate movement disorders and recognize the typical imaging findings for common movement disorders
51	8. Describe the etiology and pathogenesis of movement disorders and ataxia with reference to macroscopic and microscopic changes in structure and function, as well as relevant molecular abnormalities
51	9. Describe appropriate laboratory investigations for the assessment of movement disorders and ataxia and use pathogenetic reasoning to provide a basic interpretation of the most common abnormalities in these tests
51	10. Recognize ataxia and common movement disorders, including tremor, tics, athetosis, chorea, ballism, dystonia, tremor, and bradykinesia
51	11. Discuss the clinical features (symptoms and signs) seen in Parkinson's disease including the non-motor complications of Parkinson's Disease (cognitive, psychiatric, autonomic, olfactory, gastrointestinal, urologic, speech, swallowing)
51	12. Outline causes of extrapyramidal symptoms with Parkinsonian features other than Parkinson's disease
51	13. Outline the potential motor complications and non-motor side effects of medications used to treat Parkinson's disease
51	14. Describe the important features of a case presentation of tremor that allow the construction of a prioritized differential diagnosis
51	15. Discuss the pharmacologic and non-pharmacologic management of Parkinson's disease and other common movement disorders, and recognize differences between the management of older versus younger patients
51	16. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
51	17. Explain the role of the Family Physician and nursing home staff in providing culturally safe care to patients in nursing homes and how they engage with and form part of the multidisciplinary teams
51	18. Identify the role of each team member involved in the management of patients with Parkinson’s disease, describe how technology can support the diagnosis, effective intra-professional collaboration, and longitudinal patient support, and recognize the limited access to services for patients living in remote communities or with limited resources

Week 52 - Psychosis and Substance Use

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52	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
52	2. Discuss the patient's biopsychosocial context of wellness and, in light of this context, identify barriers to the access of health care and strategies to promote and prevent disease
52	3. Describe the elements that should be covered in a suicide risk assessment and when such an assessment should be carried out
52	4. Summarize the role of the dopamine system in the pathogenesis of psychotic and substance-use disorders
52	5. Describe diagnostic criteria (DSM-5), key clinical manifestations, prevalence, and course of schizophrenia and related psychotic disorders
52	6. Formulate a basic treatment plan for schizophrenia
52	7. Describe the pharmacology of antipsychotic drugs
52	8. Identify factors which might influence prognosis, recovery or relapse of psychotic disorders
52	9. Describe diagnostic criteria (DSM-5) and management of substance-use disorders
52	10. Identify issues around involuntary admission and treatment of psychiatric disorders
52	11. Identify the prevalence of suicidal and self-injurious behaviour and risk-factors associated with such behaviour
52	12. Describe diagnostic criteria, key clinical manifestations, prevalence, and course of behavioural addictions
52	13. Discuss how major policy issues and cultural factors can impact patients' and families' understanding of mental illness, its management, and recovery; approaches to care that are culturally appropriate; and the role of physicians in effective management, particularly in the context of Indigenous populations
52	14. Discuss the role of dopamine in the basal ganglia circuitry, and in particular how this relates to integration with the limbic system and the reward pathways
52	15. Conduct an interview and a mental status examination using the headings - Appearance and General Behaviour, Speech, Emotional State, Thought Form and Content, Perception and Cognition Functions - with a patient presenting with a psychiatric complaint
52	16. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
52	17. Identify risk factors, warning signs and consequences of opioid use disorder while understanding assessment tools, stigma, bias, barriers to care and importance of non-stigmatizing language and trauma informed care in patient encounters
52	18. Describe cannabis composition, its use in BC, and its potential benefits and adverse effects on mental health

Week 56 - Chest Pain / Angina / Myocardial Infarction

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56	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
56	2. Describe the normal functioning endothelium, and the underlying pathophysiology behind the development of atherosclerosis
56	3. Describe the histology of the normal heart and coronary vessels and recognize the histological features of atherosclerotic disease and myocardial infarction
56	4. Identify the common biological, psychosocial, and socio-economic risk factors for atherosclerosis and differentiate the concepts of risk assessment and risk stratification as they relate to coronary artery disease (CAD)
56	5. Describe the global impact of atherosclerosis from a population health perspective
56	6. Explain the physiology of lipoprotein metabolism and its relationship to clinical presentations of cardiovascular disease
56	7. Describe the determinants of myocardial oxygen supply and demand
56	8. Explain the hemodynamic parameters that influence myocardial ischemia
56	9. Describe the embryonic origin of the heart and coronary vessels, identify their anatomical structures and outline their appearance on radiograph and CT imaging
56	10. Describe the role of different diagnostic modalities (ECG, cardiac imaging, and invasive coronary angiography) utilized in the assessment of coronary artery disease
56	11. Describe the key features in the history and physical exam of the cardiovascular disease, including various manifestations of atherosclerotic coronary artery disease (CAD)
56	12. Describe strategies, including lifestyle modifications, pharmacotherapy, and invasive/surgical procedures, used in the management and prevention of atherosclerosis; including Coronary Artery Disease (CAD)
56	13. Recognize how diagnostic imaging can help narrow the differential diagnosis for acute chest pain
56	14. Describe a clinical approach that can be used to create a prioritized differential diagnosis for a patient presenting with chest pain
56	15. Describe how technology supports the access to evidence-based healthcare and assists in the management of patients in urban and rural communities
56	16. Integrate clinical information to form differential diagnoses in the family practice setting
56	17. Develop management plans appropriate to the patient's clinical presentation and biopsychosocial background
56	18. Effectively present history and physical examination information in a structured manner
56	19. Describe different types and special interests of a family physician
56	20. Explain the role of family physicians and the primary health care team in the longitudinal and comprehensive care of their patients
56	21. Describe the use, indications, and limitations of cardiac ultrasound and identify anatomical structures of the heart using ultrasound
56	22. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 57 - Nausea / Vomiting / Diarrhea

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57	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
57	2. Describe the nerve and blood supply, lymphatic drainage, and venous drainage of GI tract
57	3. Describe the embryological development and congenital malformations of the midgut and hindgut
57	4. Describe the epidemiology, clinical presentation, prevention, and treatment strategies for viruses, parasites and bacteria that can result in infections of the digestive system
57	5. Describe the appropriate clinical assessment, laboratory investigations, and microbiologic tests used for gastrointestinal infections
57	6. Develop a differential diagnosis and treatment strategy for acute gastroenteritis
57	7. Describe an approach to diagnosis and management of a returning traveller with fever or diarrhea
57	8. Describe the effects of enteric infections in children and the global burden of disease with respect to child health
57	9. Describe the intestinal microbiome and its role in health and disease
57	10. Describe efforts to address leading preventable causes of poor child health and mortality
57	11. Describe the pathophysiology and associated histological findings, approach to clinical assessment, appropriate investigations, and management of nausea, vomiting, and diarrhea in both adults and children
57	12. Describe the environmental factors and lifestyle behaviours that contribute to gastrointestinal infections and disease in a community and outline its related surveillance, preventative and public policies
57	13. Discuss processes to promote health equity in First Nation communities as well as rural or remote communities
57	14. Outline the steps for conducting an outbreak investigation
57	15. Describe the imaging modalities used to examine the abdomen/pelvis, and how these can be used following trauma
57	16. Define the major classes of antibiotics, their major bacterial targets, mechanisms of action, clinical use and common evidence-based approaches for the treatment of antibiotic-resistant bacteria
57	17. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 58 – Osteoarthritis

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58	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
58	2. Compare and contrast the development, histology, biochemistry, structure and function of the 3 types of cartilage, indicate their respective locations in the body, and correlate structure to function and dysfunction
58	3. Describe the function and anatomy of forearm
58	4. Review normal radiographic musculoskeletal anatomy and explain the micro-anatomy and physiology of the structures that support the biomechanics of the synovial joints
58	5. Describe a clinical approach that can be used to create a prioritized differential diagnosis for a patient presenting with pain in the lower extremity joints and spine and describe what investigations would be done in urban compared to more isolated communities
58	6. Describe the pathophysiology, clinical presentation, relevant investigations, and prevention and management options for osteoarthritis
58	7. Describe points of transition in the care of chronic conditions and the roles different health professionals play in facilitating effective collaborations and care for the patient
58	8. Identify common medications used in OA, such as NSAIDs (non-steroidal anti-inflammatory drugs) and analgesic medications and describe their indications and potential adverse effects, particularly in an older individual
58	9. Outline an approach to rehabilitation in patients with osteoarthritis
58	10. Demonstrate competence with history taking and examination of a patient with hip pain, stiffness or traumatic injury
58	11. Demonstrate competence with history taking and examination of a patient with shoulder, elbow and forearm joints pain and injury
58	12. Describe the major causes of mechanical low back pain
58	13. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
58	14. Recognize burn-out during medical training and in the medical profession and discuss strategies and resources to help prevent and mitigate the effects of burn-out

Week 59 - Heart Failure

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59	1. Discuss key concepts in care of the elderly/frail patient
59	2. Describe the principles of interprofessional care and shared care and the impact of caregiver burden in the care of frail or elderly patients
59	3. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
59	4. Describe the assessment and management of patients at risk of dying with an implanted cardiac defibrillator (ICD)
59	5. Describe and differentiate preload, afterload, and contractility in valvular heart disease and other cardiac disease states
59	6. Describe pressure-volume loops and explain how these are applied in the hemodynamic assessment of valvular heart disease and other cardiac disease states
59	7. Describe the impact of pressure and volume overload states on wall stress and its pathophysiologic effect on cardiac hypertrophy
59	8. Explain the underlying pathophysiology, epidemiology, clinical manifestations, relevant investigations, diagnosis and appropriate management strategies for heart failure, valvular heart disease and other cardiac disease states
59	9. Describe the pharmacological properties of the drugs used for the management of cardiac disease states
59	10. Develop a basic approach to interpretation of electrocardiogram (ECG) findings and describe common ECG diagnoses
59	11. Discuss pharmacological and non-pharmacological approaches to heart failure, including the use of defibrillator, cardioversion, transplantation, lifestyle and diet modifications
59	12. Describe an approach to managing fatigue and dyspnea in advanced illness
59	13. Describe a clinical approach that can be used to create a prioritized differential diagnosis for a patient presenting with exertional dyspnea
59	14. Develop a basic approach to interpretation of normal and pathologic radiological findings and describe common signs of heart failure on x-ray
59	15. Describe the ethical and legal process of developing an Advanced Care Directive
59	16. Describe potential hazards of hospital/institutional care for older adults
59	17. Explain the role of the family physician in the longitudinal care of a patient with congestive heart failure
59	18. Discuss the psychosocial impact of chronic illnesses such as heart failure for patients and caregivers and the role of inter-professional teams in the care of these patients
59	19. Perform and document a complete medical history and physical exam, report on the findings, create a differential diagnosis list, and write pertinent admission orders
59	20. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
59	21. Describe the pathophysiology, diagnosis, management and unbiased clinical approach to obesity

Week 60 – Jaundice

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60	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
60	2. Describe the gross and microscopic anatomy of the liver including the vasculature, gall bladder and bile ducts; outline their appearance on radiograph and CT imaging and relate them to function
60	3. Describe the blood supply, innervation and lymphatic drainage of foregut
60	4. Describe the congenital malformation of the organs derived from foregut
60	5. Describe the functions of the liver
60	6. Describe enterohepatic circulation
60	7. Outline the pathophysiology, risk factors, differential diagnosis, diagnosis and management of common causes of elevated liver enzymes, lactic acidosis and jaundice
60	8. Describe the pathogenesis, histopathology, epidemiology, natural history, diagnosis, treatment, complications and prevention of acute and chronic viral hepatitis B, and C
60	9. Describe the clinical and laboratory diagnosis and management of metabolic, genetic, infectious, and autoimmune liver diseases
60	10. Explain the pathogenesis of cirrhosis and describe its complications and treatment strategies
60	11. Describe the diagnosis and management of benign and malignant liver tumors
60	12. Describe the pathogenesis, diagnosis and management of gallstone disease
60	13. Describe roles physicians may play in collaborating with others to promote health equity within immigrant and First Nations populations
60	14. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
60	15. Perform and effectively present history and physical examination information in a structured manner, identify key investigations to order, report on the findings, and create a differential diagnosis based on the information collected

Week 61 - Pregnancy, Birth and Newborn

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61	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
61	2. Describe the schedule and rationale of routine prenatal care, including standard investigations and counseling as defined in BC guidelines
61	3. Describe the underlying pathophysiology, clinical presentation, investigation and management of gestational diabetes and hypertension during pregnancy
61	4. Describe an effective approach to identification and initial management of antepartum and postpartum hemorrhage, including potential maternal, fetal, and neonatal implications
61	5. Describe the underlying pathophysiology, diagnosis and management of common fetal-neonatal transition conditions including hyperbilirubinemia and of hypoglycemia
61	6. Identify and explain the maternal physiological changes during pregnancy
61	7. Describe the principles in managing pre-existing maternal medical conditions in pregnancy
61	8. Outline routine BC Newborn screening and guidelines
61	9. Define the effect of maternal nutrition and physical activity on maternal health and fetal development, and identify factors that influence maternal nutritional status during pregnancy
61	10. Describe components of neonatal, infancy and childhood nutrition (including breastfeeding and nutritional supplements)
61	11. Outline the epidemiology, etiology, and options available for women with unintended pregnancy, and describe the physician's responsibility to counsel women with unintended pregnancy, including discussion of future contraceptive options
61	12. Describe how personal beliefs and unhealthy lifestyles, such as use of alcohol and other drugs, can affect pregnancy
61	13. Describe effective provincial perinatal and maternity care collaborations. Outline strategies that positively contribute to effective team function in perinatal care including low resource communities
61	14. Describe the medical and ethical concerns and unique communication strategies involved in maternal fetal medicine and neonatology
61	15. Discuss the prevalence, risk factors, definitions, and implications (maternal, fetal and neonatal) of maternal mental health problems
61	16. Identify common direct and indirect causes of maternal mortality and methods to improve maternal care
61	17. Discuss both medical and ethical considerations in counseling a patient about abortion
61	18. Describe an approach to screening and managing a patient who is at risk of suicide
61	19. Describe the anatomy and development of the human visual system, the steps involved in the newborn eye examination, and the significance of abnormal findings
61	20. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
61	21. Describe and discuss management options of genetic conditions with patients and families and how therapeutic options must weigh benefits, outcomes and health economics
61	22. Identify the anatomical structures of the female pelvic organs and perineum and correlate them to function using radiograph and CT imaging
61	23. Describe current prenatal and newborn genetic screening programs, and the physicians' role in interpreting and summarizing results, and counseling patients in both pre and post-test settings

Week 62 - Inflammatory Joint Disease

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62	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
62	2. Integrate clinical information to form differential diagnoses in the family practice setting
62	3. Develop management plans appropriate to the patient's clinical presentation and biopsychosocial background
62	4. Explain the role of family physicians and the primary health care team in the longitudinal and comprehensive care of their patients
62	5. Consider the role of a complete history in developing the differential diagnosis of various forms of inflammatory arthritis
62	6. Describe the gross anatomy (including nerve and blood supply) and imaging modalities used to evaluate the hand and wrist
62	7. Differentiate between inflammatory arthritis and non-inflammatory arthritis by comparing and contrasting their history, physical exam, laboratory and radiographic assessments
62	8. Compare and contrast the pathogenesis, clinical presentations, laboratory and radiographic findings among the various forms of inflammatory arthritis
62	9. Describe the pathogenesis, clinical presentation, and diagnosis of systemic lupus erythematosis (SLE)
62	10. Consider how a chronic disease such as Rheumatoid Arthritis can affect the patient's activities of daily living, quality of life and psychosocial well-being
62	11. Explain the role of the health care team in dealing with a chronic disease such as Rheumatoid Arthritis, and the importance of treating the "whole patient"
62	12. Describe the underlying risk factors, diagnosis and principles of management of gout
62	13. Consider and rule against septic arthritis when a patient presents with a monoarthritis
62	14. Consider the role of telehealth and eHealth in collaborating with specialists on assessment of the clinical presentation, diagnosis, and management of the patient
62	15. Consider how Rheumatoid Arthritis presents clinically and why it is a medical urgency to diagnose and treat with Disease Modifying Anti Rheumatic Drugs (DMARDs)
62	16. Consider other diagnoses such as soft tissue rheumatism/ fibromyalgia syndrome, Polymyalgia Rheumatica, Giant Cell /Temporal Arteritis in the appropriate clinical setting
62	17. Describe different methods of non-pharmacologic and pharmacological management of inflammatory joint disease and the mechanisms of action of drugs used
62	18. Consider how inflammatory back pain of seronegative spondyloarthropathy as well as Psoriatic and Reactive Arthritis (Reiter's disease) present clinically
62	19. Describe the organization of muscle fibers, motor units, and neuromuscular junctions. Outline the etiology and pathogenesis of muscle disorders and describe a clinical approach to their diagnosis, including clinical examination and appropriate investigations
62	20. Develop an approach to the recognition, diagnosis, work up and management of the red eye and other common inflammatory eye diseases
62	21. Identify health, social service, community resources and supports available to Indigenous people living with a chronic disease, particularly in a rural context
62	22. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 63 - Abnormal Vaginal Bleeding

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63	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
63	2. Demonstrate a systematic clinical approach to and documentation of the physical examination of the breast and axilla
63	3. Demonstrate a systematic clinical approach to and documentation of the physical examination of the pelvis
63	4. Review and describe the anatomy of the female pelvis
63	5. Describe the normal microanatomy of the cervix and techniques to properly sample the squamo-columnar junction
63	6. Describe the functions and interactions of the endocrine components of the hypothalamic-pituitary-ovarian axis that bring about the normal menstrual cycle and in menopause and premature ovarian failure
63	7. Describe a clinical approach that can be used to create a prioritized differential diagnosis for a patient presenting with abnormal vaginal bleeding
63	8. Differentiate primary and secondary amenorrhea, and develop differential diagnoses, approaches, and treatment plans for both, including both contraceptive and fertility options
63	9. Explain the principles of investigation and management of ovulatory and anovulatory abnormal vaginal bleeding
63	10. Discuss the physiological implications, anatomical changes and treatment options for menopause and premature ovarian failure
63	11. Discuss different etiologic factors that lead to dysfunctional uterine bleeding based on cyclic menstrual parameters
63	12. Describe an effective approach to diagnosis and management of post-menopausal pelvic bleeding
63	13. Using Pap smear as an example, describe the characteristics of a good screening test
63	14. Outline the current BC guidelines for Cervical Cancer Screening and explain the rationale for Human Papillomavirus (HPV) vaccination in targeted populations
63	15. Describe how Pap smear results, including macroscopic and microscopic findings, are classified and outline the management of an abnormal Pap smear
63	16. Describe the natural history, pathology, diagnosis, clinical staging system, and management of cervical dysplasia and invasive carcinoma of the cervix and endometrial cancer
63	17. Identify common gynecological cancers and review natural history and diagnosis and treatment options
63	18. Develop an approach to identify and address sexual dysfunction in women following diagnosis and treatment of pelvic cancer(s)
63	19. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
63	20. Demonstrate skills required to obtain a psychosocial history from a distressed patient using a trauma-informed approach

Week 64 - Prostate Cancer and Benign Prostatic Hyperplasia

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64	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
64	2. Demonstrate skills required for screening for and assessing sexual difficulties in a patient based on physiology of sexual response
64	3. Distinguish normal and abnormal histology of the prostate and testis
64	4. Describe the gross anatomy and the imaging modalities (x-ray, ultrasound and CT) available to evaluate the normal genitourinary system and identify common congenital abnormalities of the genitourinary tract
64	5. Describe different types of lower urinary tract symptoms, their potential causes, a diagnostic approach that can be used to create a prioritized differential diagnosis and treatment plan
64	6. Describe the physiology of normal micturition, the autonomic innervation of the urinary tract and the key features of male sexual response
64	7. Describe the differential diagnosis and common complications of urinary obstruction as well as the pathology, clinical presentation, and treatment of benign prostatic hypertrophy
64	8. Describe risk factors, common presentation, investigations and management for genitourinary malignancy
64	9. Identify general risk factors, methods of prevention, clinical features, diagnostic approach, management options and prognosis for prostate cancer
64	10. Describe the pharmacological management for bladder outlet obstruction, detrusor overactivity, and erectile dysfunction
64	11. Describe pathophysiology, clinical presentation, investigations and management for urinary stone disease
64	12. Describe the imaging modalities commonly used in clinical evaluation of common renal and urinary abnormalities
64	13. Classify neurogenic bladder dysfunctions and urinary incontinence, and describe their investigations and management
64	14. Compare and contrast the Canadian Urology Association and the Canadian Task Force on Preventive Health Care guidelines for prostate-specific antigen screening
64	15. Describe the etiology and pathogenesis of various diseases of the male genitourinary tract with reference to macroscopic and microscopic changes in structure and function, as well as relevant molecular abnormalities
64	16. Discuss the criteria necessary for an effective screening test, and how to formulate recommendations for patients and populations for screening based upon current standards and discussions of individualized risk
64	17. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
64	18. Demonstrate a sensitive, systematic and trauma informed approach to the complete examination of the male genital urinary system

Week 65 – Sepsis

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65	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
65	2. Describe the pathophysiology, clinical presentation, and appropriate laboratory investigations for the assessment of systemic inflammatory response syndrome (SIRS), sepsis, and septic shock as well as their treatment
65	3. Describe the pathophysiology, clinical presentation, and management of streptococcal and staphylococcal toxic shock syndromes
65	4. List the risk factors for bloodstream infection and identify the most common pathogens in community and hospital settings
65	5. Describe the appropriate investigations for a patient with suspected and confirmed bloodstream infections and nosocomial infections
65	6. Describe the clinical presentation, microbiology, and treatment of cellulitis, necrotizing fasciitis and other soft tissue infections
65	7. Explain the importance of appropriate empiric antimicrobial therapy choice and infection source control in reducing mortality from sepsis
65	8. Describe the general mechanisms of antimicrobial resistance in common gram-positive and gram-negative organisms
65	9. Recognize risk factors for antimicrobial resistance and choose appropriate empiric antimicrobial regimens for different clinical scenarios
65	10. Describe the appropriate use of imaging in the diagnostic work up of patients with refractory urinary tract symptoms
65	11. Outline the initial diagnostic, stabilization, source control treatment and preventions of hospital acquired infections
65	12. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
65	13. Summarize the basic microbiology of Fungal Pathogens, their spectrum of disease, appropriate microbiologic diagnostic tests and mechanisms of action of common antifungal therapies

Week 66 - Hypotension / Shock

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66	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
66	2. Describe the pathophysiology, clinical presentation, diagnosis, and management of shock
66	3. Differentiate between sepsis and septic shock
66	4. Describe the vasoactive and inotropic therapies employed in the treatment of shock and explain their related pharmacology
66	5. Explain mechanical, circulatory, and respiratory support in the treatment of shock, and describe the anticipated changes in cardio-pulmonary physiology with positive-pressure ventilation
66	6. Explain the microbiology of infective endocarditis, myocarditis and pericarditis, their risk factors, diagnostic investigations, management and potential complications
66	7. Recognize clinical situations where an acid-base disorder may be present, differentiate primary respiratory and metabolic acid base disorders, and describe the treatment and consequences of these disorders in critically ill patients
66	8. Develop an approach to the interpretation of wide complex tachyarrhythmias on ECG, and understand the applied pharmacology of antiarrhythmic therapies in the treatment of cardiac arrhythmias
66	9. Describe the utility of bedside ultrasound in identifying relevant anatomical structures, physiological measurements, and assessing volume status and the limitation of this technology
66	10. Describe the roles of different health care professions in medical care
66	11. Discuss advanced care planning and treatment options using the ethical decision-making framework (EDM) and incorporating the patient, family and other health care professionals' perspectives
66	12. Describe factors that contribute to misunderstandings, differences, and conflicts in the health care setting and outline basic principles of conflict resolution within and across professions
66	13. Explain how to effectively contribute to team function and communication
66	14. Describe the metabolic responses to critical illness and the challenges in providing for the nutritional needs of critically ill patients including the risks and benefits of nutrition support
66	15. Describe the normal role of the kidney in the maintenance of the bicarbonate buffer system
66	16. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 67 – Dementia

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67	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
67	2. Describe how changes to frontal and temporal lobe structures in neurocognitive disorders such as Alzheimer's disease can manifest as personality, behavioural, and memory changes
67	3. Describe the etiology, prevalence, classification, key clinical and functional manifestations, diagnostic criteria, monitoring, and management strategies for the main neurocognitive disorders
67	4. Describe the pathophysiology associated with the main neurocognitive disorders, including major genes, and neuropathological findings
67	5. Describe the impact of neurocognitive disorders on patients, their families, and care providers
67	6. Describe normal sleep, the effect of aging on sleep, and the clinical features and management of insomnia and other primary sleep disorders
67	7. Discuss the potential nutritional consequences of evolving cognitive impairment, and the role of nutritional deficiency in cognitive function
67	8. Discuss a basic management plan for neurocognitive disorders as well as the preventative measures and implications associated with long-term care
67	9. Identify pathophysiology, risk factors for and clinical presentations of delirium and describe the approach to its management
67	10. Describe the pharmacological and non-pharmacological management for dementia
67	11. Describe a geriatric assessment, including the components of a functional assessment and list the main causes of mortality and/or morbidity in the elderly with an emphasis in dementia and delirium
67	12. Discuss the role of community and social resources for patients and caregivers
67	13. Describe the normal anatomy of the eye and the changes to structure and function in aging patients
67	14. Outline risk factors, investigations and management options for common age-related eye diseases; describe driving regulations and resources available for people with low-vision
67	15. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care

Week 68 - Consolidation of Clinical Transition 1 (TICE)

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68	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
68	2. Demonstrate approaches to diagnosing and managing clinical presentations commonly encountered in outpatient settings
68	3. Demonstrate correct prescription writing and how to obtain best possible medication history
68	4. Describe ways to empower patients to be active participants in their care using e-health tools
68	5. Demonstrate critical thinking skills and technical skills required in assessing a patient during clinical encounters
68	6. Identify patient safety issues and demonstrate use of incident response systems
68	7. Demonstrate strategies of collaborative decision-making and identify how all team members (including patient/family) contribute to improve patient care
68	8. Describe how to consult other physicians or health professionals
68	9. Describe an approach to management of common infections and principles of antimicrobial stewardship
68	10. Demonstrate correct wound management, closure of a simple soft tissue laceration, and biopsy of a skin lesion
68	11. Demonstrate important infection control techniques in different clinical settings
68	12. Discuss the different pain management methods in non-cancer and cancer pain
68	13. Demonstrate proper technique of putting on a respirator and the principle behind preventing transmission of airborne hazards in the clinical setting
68	14. Discuss quality improvement opportunities that may stem from patient safety topics such as disclosure of medical outcomes or conflict resolution
68	15. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
68	16. Describe the epidemiology of pain and the pathophysiology and treatment of acute and chronic pain
68	17. Describe the pharmacology of opioid medication, opioid stewardship and recognize opioid misuse and risk factors for opioid use disorder
68	18. Describe the role of virtual health systems in providing virtual clinical care that supports equitable patient-centered care to the Canadian population
68	19. Identify leadership and conflict resolution styles and behaviours and explore areas for further development, such as practicing emotional intelligence

Week 69 - Consolidation of Clinical Transition 2 (TICE)

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69	1. Demonstrate key components of professionalism including informed consent; respect of patient's confidentiality, privacy, and autonomy; appropriate boundaries in patient-physician relationships; respectful attitude toward colleagues and office staff
69	2. Demonstrate personal strategies to incorporate behaviours consistent with professional competencies
69	3. Identify patient safety issues and demonstrate use of incident response systems
69	4. Demonstrate how to function as a health care provider during clinical emergencies
69	5. Describe how to consult other physicians or health professionals
69	6. Demonstrate an approach to ordering appropriate radiological investigations and interpreting basic imaging modalities including identification of common pathological findings
69	7. Demonstrate skills required in admitting and rounding on a patient to hospital
69	8. Demonstrate an effective approach to interpreting an electrocardiogram
69	9. Demonstrate key components of the CanMEDS roles and their impact on patient care in the clinical setting
69	10. Demonstrate strategies of collaborative decision-making and identify how all team members (including patient/family) contribute
69	11. Demonstrate an ability to communicate an organized and succinct case presentation based on the interpretation and understanding of information obtained from history, physical exam, laboratory and imaging tests
69	12. Describe the impact climate change has on the health care, how marginalized and vulnerable groups are disproportionately affected, and how health care leaders can problem solve some of these challenges
69	13. Apply foundational knowledge, critical thinking skills, and clinical decision making in the context of a simulated or real clinical scenario that includes describing and considering patient barriers to care
69	14. Demonstrate skills and competence in discharging a patient, communicating a clear plan of next steps, medications and follow-ups