

Schulich School of Medicine & Dentistry

Vision and Blueprint
For the
Undergraduate Medical Education Program

Mission	4
Curriculum Philosophy	4
Undergraduate Medical Curriculum Competencies	5
Years 1 and 2	11
Year 3	16
Year 4	16
Management and Operation of the Curriculum	18
Instructional Methodologies	22
Student Assessment	23
Grading & Approval Process	27
Program Evaluation	28
Curricular Mapping	28

The distributed Undergraduate Medical Education Program of the Schulich School of Medicine & Dentistry is an integrated four year program that is delivered at sites in London, Windsor and throughout Southwestern Ontario. All students in the distributed program will be required to meet the same objectives.

Mission

1. Develop physicians who provide outstanding patient-centred care.
2. Develop physicians to be reflective practitioners with a commitment towards, and the skills required for, lifelong learning
3. Develop and deliver our curriculum:
 - utilizing the best educational practices;
 - with a student-centred approach;
 - grounded in the needs of our patients, our communities and our country;
 - aligning assessment methods with curricular objectives;
 - striving for continuous improvement through rigorous evaluation.

Curriculum Philosophy

Our Pledge To Be Patient-Centred:

Medicine is a calling, a call to service. The patient-centred curriculum reflects this noble tradition of commitment to individual patients, their families and the community. The physician's covenant is a promise to be fully present to patients in their time of need - to "be there", even when the physician can offer no cure, to provide relief whenever possible, and always to offer comfort and compassion.

The patient is the centre of our clinical work and, consequently, the centre of our learning. Patient-centred care requires a relationship in which patients will feel that their concerns have been acknowledged and that the physician has understood their plight from each patient's own unique perspective. Patients and physicians must work together to find common ground regarding management - reaching a mutual understanding of their problems, goals of treatment and the respective roles of patient and physician. Patient-centred care also incorporates the concept of ecosystem health which studies human health within the interrelations between economic activity, social organization and the ecological integrity of natural systems.

Our curriculum is a reflection of our responsibility to attend to our patients' in the broadest and deepest sense. Our graduates must have a thorough understanding of the biological, behavioural and population sciences basic to medicine. They will apply their medical learning within the integrated context of patient's lives, families and communities.

Undergraduate Medical Curriculum Competencies

Physicians graduating from the Schulich School of Medicine at the University of Western Ontario will possess the knowledge, skills, and attitudes basic to all physicians such that they may satisfactorily proceed to further training in any area of the profession.

The graduating physician will be able to identify, analyze and manage clinical problems in a way that provides effective, efficient and humane patient care. Detailed objectives are set out below under eight physician roles / competencies.

To achieve the central competencies the student will

1.0 Medical Expert

Establish knowledge, skills and attitudes appropriate to medicine.

- 1.1. Demonstrate knowledge, appropriate to an undifferentiated physician, of normal human structure, function and development from a biomedical, clinical and socio-behavioural perspective.
- 1.2. Demonstrate knowledge, appropriate to an undifferentiated physician, of abnormal human structure, function and development from a biomedical, clinical and socio-behavioural perspective.
- 1.3. Develop knowledge of medical vocabulary, facts, concepts, principles, laws, methods, and procedures.
- 1.4. Describe the principles of quality care and patient safety in clinical practice through integration of available best evidence and best practices.

Perform a complete and appropriate assessment of a patient.

- 1.5 Effectively identify and explore issues to be addressed in a patient encounter, including the patient's context and preferences.
- 1.6 For the purposes of disease prevention and health promotion, diagnosis and/ or management, elicit a history that is relevant, concise and accurate to context and preferences.
- 1.7 For the purposes of disease prevention and health promotion, diagnosis and/or management, perform a focused physical examination that is relevant and accurate.

Demonstrate proficient and appropriate skills in the use of diagnostic and therapeutic interventions.

- 1.8 Describe effective, appropriate, and timely performance of diagnostic procedures.
- 1.9 Develop an effective patient-centred management plan.
- 1.10 Describe effective, appropriate, and timely application of preventive diagnostic and therapeutic interventions.
- 1.11 Demonstrate effective clinical problem solving, judgment and ability to interpret and integrate available data in order to address patient problems and generate differential diagnoses and management plans.

2.0 Communicator

Develop rapport, trust, and ethical therapeutic relationships with patients and families.

- 2.1. Identify good communication as a core physician skill and that effective physician-patient communication can foster patient satisfaction, physician satisfaction and improved clinical outcomes.
- 2.2. Establish positive therapeutic relationships, characterized by understanding, trust, respect, honesty and empathy, with patients and their families.
- 2.3. Respect patient confidentiality and privacy.

Accurately elicit and synthesize relevant information and perspectives of patients and families, colleagues, and other professionals.

- 2.4. Gather relevant information about a disease, but also about a patient's beliefs, concerns, expectations and illness experience.
- 2.5. Seek out and synthesize relevant information from other sources, such as a patient's family, caregivers and other professionals.

Develop a common understanding on issues, problems and plans with patients, families, and other professionals to develop a shared plan of care.

- 2.6. Effectively identify and explore problems to be addressed from a patient encounter, including the patient's context, responses, concerns, and preferences.
- 2.7. Respect diversity and difference in shared decision-making including, but not limited to, the impact of gender, religion and cultural belief.
- 2.8. Engage patients, families, and relevant health professionals in shared decision-making to develop a plan of care.
- 2.9. Effectively address challenging communication issues such as obtaining informed consent, delivering bad news, and addressing anger, confusion and misunderstanding.
- 2.10. Deliver information to a patient and family, colleagues and other professionals in a humane manner and in such a way that it is understandable, and encourages discussion and participation in decision-making.

Convey effective oral and written information about a medical encounter.

- 2.11. Maintain clear, accurate, and appropriate records (i.e., written or electronic) of clinical encounters and plans.
- 2.12. Effectively present verbal reports of clinical encounters and plans.

3.0 Collaborator

Participate effectively and appropriately in an interprofessional healthcare team.

- 3.1. Work effectively with patients and families.
- 3.2. Work effectively with other health professionals to prevent, negotiate, and resolve interprofessional conflict.
- 3.3. Recognize and respect the diversity of roles, responsibilities and competencies of other professionals in relation to one's own.
- 3.4. Work with others to assess, plan, provide and integrate care for individual patients (or groups of patients) and review other tasks, such as research problems and educational work.

Contribute to a positive working environment with colleagues and other members of the health care team.

- 3.5. Recognize interpersonal differences, misunderstandings and limitations that may contribute to interprofessional tension.
- 3.6. Contribute to the working relationships on teams and participate in a collegial process to maximize the effective functioning of individuals and the team.

4.0 Manager

Contribute to the effectiveness of the healthcare system.

- 4.1 Describe the structure and function of the healthcare system.
- 4.2 Describe and access community resources and health care services.
- 4.3 Access and manage appropriate resources for learning and patient care.
- 4.4 Develop the skills required to make ethical decisions for the allocation of finite health care resources.
- 4.5 Participate effectively in committees and meetings.
- 4.6 Describe and participate in quality assurance initiatives.

5.0 Health Advocate

Advance the health and well-being of individual patients, communities and populations.

- 5.1 Use health-related knowledge and skills to contribute to community well-being.
- 5.2 Identify opportunities for advocacy, health promotion, disease prevention and health care quality improvement in the community, and respond appropriately.
- 5.3 Identify the legal rights and responsibilities of physicians to the community and to patients.
- 5.4 Identify moral and ethical responsibilities of physicians to the community and to patients.
- 5.5 Describe determinants of health and explain their role in individual and community well being.

6.0 Scholar

Develop skills in life-long learning.

- 6.1 Identify areas of deficiency in one's personal knowledge or skills.
- 6.2 Identify appropriate educational resources to address knowledge or skill deficiencies.
- 6.3 Evaluate personal learning progress using appropriate tools.
- 6.4 Develop the self-knowledge necessary for personal growth.
- 6.5 Apply newly gained knowledge or skills to the care of patients.
- 6.6 Demonstrate skill in disseminating knowledge within the medical and scientific communities and the community.

Critically evaluate medical information and its sources, and apply this appropriately.

- 6.7 Determine the validity and applicability of published evidence through critical appraisal.
- 6.8 Demonstrate a proclivity towards curiosity and humility, and the ability to question in the face of the unknown.

Contribute to the creation, dissemination, application and translation of new knowledge and practices.

- 6.9 Demonstrate skill in the use of the scientific method to further understanding of human health, disease and illness.
- 6.10 Attain familiarity with basic scientific and translational research and demonstrate how its results can be applied to clinical medicine.
- 6.11 Adhere to the principles of ethical research.

7.0 Professional

Demonstrate commitment to one's teachers, classmates, patients, the profession and society through ethical behaviour.

- 7.1 Demonstrate and practice the Four Pillars of Professionalism: Altruism, Integrity, Responsibility and Respect.
- 7.2 Recognize and respond appropriately to ethical issues.
- 7.3 Maintain appropriate professional boundaries.
- 7.4 Appropriately identify and manage conflicts of interest.

Demonstrate social accountability through a commitment to one's colleagues, patients, the profession and society.

- 7.5 Abide by the professional, legal and ethical codes of practice.
- 7.6 Respond appropriately to the diverse needs of individuals and communities served.
- 7.7 Recognize and respond appropriately to the unprofessional behaviour of others.

Demonstrate a commitment to personal health, balancing the goal of excellence in education with a sustainable work ethic.

- 7.8 Balance personal and professional priorities to ensure personal health, successful education and proficient service.
- 7.9 Strive to heighten personal and professional awareness and insight.
- 7.10 Demonstrate knowledge of obligations, resources and options for care in the event that they identify impairment in themselves or colleagues.

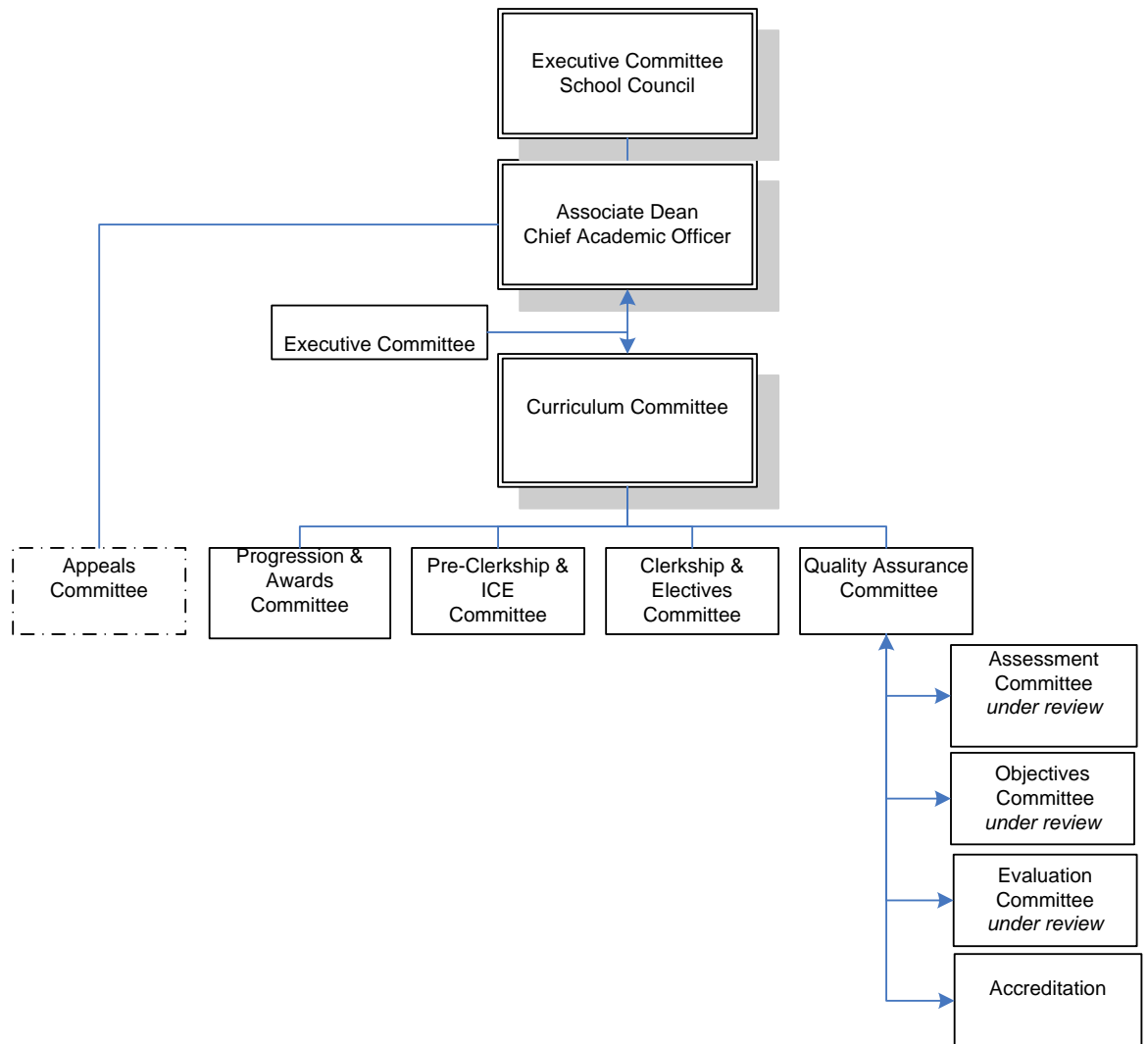
Demonstrate a commitment to reflective practice.

- 7.11 Develop skills in self-reflection, and an understanding of how one's biases, attitudes and feelings impact self-learning and service.
- 7.12 Demonstrate the ability to gather information about personal performance, to know one's own limits, and to seek help appropriately.
- 7.13 Reflect on events, especially critical incidents, to deepen self-knowledge.

Revised December 2010

Blueprint for the Undergraduate Curriculum

The Curriculum Committee governs the Undergraduate Medical Curriculum



Curriculum Schematic

	September							May/June		August
Yr 1	Patient Centred Clinical Methods			Exm	Patient Centred Clinical Methods					
	Ethics	Population Health		Exm	Epidemiology					
	Intro to Medicine	Blood	Infection & Immunity	Exm	Skin	Heart & Circulation	Respiration & Airways	Genitourinary	Cnsl	Exm R & R
	Professional Portfolio*									
Yr 2	Patient Centred Clinical Methods			Exm	Patient Centred Clinical Methods					
	Health Care Systems		Ethics	Exm	Ethics	Patient Centred Clinical Methods				
	Digestive & Nutri	Endocrinology	Reproduction	Key	Exm	Musculoskeletal	EC	Neuro, Eye & Ear	Psych & Behaviour	Exm
	Professional Portfolio*									
Yr 3**	Family Medicine	Paediatrics	Obstet-Gynaecology		Psychiatry	Internal Medicine			Surgery	
Yr 4	Electives				I.C.E.	CaRMS	I.C.E.		ACLS	

*Professional Portfolio - to be introduced September 2012

**Students take rotations in different orders

R & R Rural & Regional Week

Cnsl Consolidation

EC Emergency care

Years 1 and 2

The first two years of the curriculum provide the student with a solid grounding in the integration of basic and clinical sciences. These two years are each divided into a series of systems-based courses. Each course focuses on an introductory overview, grounding in normal structure and function, pathophysiology and the diagnosis and treatment of related diseases. Additional courses cover the topics of professional and ethical issues, population health, epidemiology and critical appraisal, and the health care systems.

Clinical Methods I & II are two longitudinal courses that extend through the first two years of the program. Clinical Methods is the introduction to both communication and clinical skills. Clinical Methods emphasizes a patient-centred approach to medicine with early patient contact. At the end of first year, all medical students participate in Rural & Regional Discovery Week to gain clinical experience and exposure to rural and regional medicine in a community in southwestern Ontario.

Emphasis is on concurrent integration using educational methodologies such as small group tutorials, problem based learning, lectures and large group discussions, self-instructional materials, and laboratories. The portfolio is designed to enhance the synthesis of theoretical and clinical work. The portfolio will develop reflective learning skills, as well as the expectations of presenting oneself as a professional to colleagues. Time is also provided for students to explore research and career opportunities. Consolidation weeks are designed to integrate material learned in the preceding courses.

First Year Courses :	Weeks	Course Number	Weight
Patient Centered Clinical Methods I:	32	Medicine 5139	1.0
Population Health	9 sessions	Medicine 5105R	0.25
Introduction to Medicine	6	Medicine 5115	1.0
Infection & Immunity	5	Medicine 5116	1.0
Genitourinary System	6	Medicine 5104	1.0
Respiration & Airways	5	Medicine 5119	1.0
Heart & Circulation	6	Medicine 5120	1.0
Blood	4	Medicine 5121	1.0
Skin	1	Medicine 5117T	0.25
Epidemiology	16 sessions	Medicine 5107B	0.5
Second Year Courses:			
Patient Centered Clinical Methods II:	34	Medicine 5246	1.5
Endocrine & Metabolism	5	Medicine 5202	1.0
Digestive System & Nutrition	5	Medicine 5203	1.0
Reproduction	6	Medicine 5205	1.0
Musculoskeletal System	6	Medicine 5218	1.0
Neurosciences, Eye & Ear	6	Medicine 5206	1.0
Psychiatry & the Behavioural Sciences	5	Medicine 5207	1.0
Key Topics in Family Medicine	1	Medicine 5210S	0.25
Emergency Care	1	Medicine 5208T	0.25
Health Care Systems	9 sessions	Medicine 5209R	0.25
Year 1 & 2 Courses			
Medical Ethics & Humanities	4 sessions Year 1 9 sessions Year 2	Medicine 5130A	0.5
Professional Portfolio	37 weeks each Year	Medicine 5140	1.0

Course Descriptions Years 1 & 2

Medicine 5104: *Genitourinary System* (Year 1) This course uses basic principles of renal physiology to understand commonly encountered fluid and electrolyte disorders and the actions of diuretic drugs. The pathophysiology of diabetic kidney disease, glomerular and tubulointerstitial diseases, and the relationship between hypertension and the kidney are discussed. The basic principles of urinary system anatomy and physiology are applied to understand kidney stones, genitourinary cancers and infections, as well as disorders of the bladder and prostate. The course also introduces basic principles of dialysis and kidney transplantation. Lectures, small group problem-solving and team-based learning sessions will be used to help medical students gain insight into the interesting world of genitourinary diseases. (weight 1.0)

Medicine 5105R: *Population Health* (Year 1) the concepts of health, illness and disease will be examined. In particular, there will be focus on: determinants of health, environmental effects on health such as air quality, food and water safety and security, and public health including communicable diseases. The role of the Public Health Unit and medical practice of Community and Occupational Medicine will be introduced. (Weight 0.25)

Medicine 5107B: *Epidemiology* (Year 1) A discussion of the fundamental concepts of the science of epidemiology and biostatistics as they apply to medicine. Students will use this knowledge and related skills to critically appraise clinical trials and observational studies. (Weight 0.5)

Medicine 5115: *Introduction to Medicine* (Year 1) This course ensures that all students, regardless of their academic background, are grounded in some principles of the basic sciences that underpin medicine. These include anatomy, biochemistry, genetics, pathology, physiology and pharmacology. It also introduces some aspects of human development; and addresses some areas that are contextual to medicine including ethics, epidemiology, health and healthcare. In addition to lectures on these topics, students meet in small groups each week to discuss issues arising from patient cases and the week's lectures. (Weight 1.0)

Medicine 5116: *Infection & Immunity* (Year 1) This course outlines the attributes of infectious agents relevant to understanding the causation, control, and management of infectious diseases. The course also provides of a general understanding of the molecular and cellular basis of immune response, as well as its roles in defense against infections and diseases due to abnormal immune response. Patient-centered learning will enable the student to explore the common experiences of illness related to specific diseases in a contextual and focused manner. (Weight 1.0)

Medicine 5117T: *Skin* (Year 1) During this course, the students will learn how to take a dermatological history and describe cutaneous physical signs in an organized way using proper terminology. The students will learn about the pathophysiology and treatment of important and common medical and surgical skin diseases. Students will appreciate the impact of skin diseases on patients and their families and will take part in a community outreach program. Patient-centered learning will enable the student to explore the common experiences of illness related to specific diseases in a contextual and focused manner. (Weight 0.25)

Medicine 5119: *Respiration and Airways* (Year 1)

This course examines the structure and function of the upper respiratory tract and lower respiratory tract. Basic science material will be correlated with respiratory tract symptoms of clinical relevance, such as dyspnea, wheezing, hoarseness, dysphagia, cough, airway obstruction, and neck mass. Basic science material will also be correlated with clinically relevant respiratory tract problems seen in clinical specialties including, but not limited to: Otolaryngology (ENT), Respiriology, Dentistry, Oncology, Anaesthesiology, and Paediatrics. Cross-disciplinary lectures will be integrated to engage related specialties such as Audiology, Genetics, and Communication Sciences. Patient-centered learning will enable the student to explore the common experiences of illness related to specific diseases in a contextual and focused manner. (weight 1.0)

Medicine 5120: *Heart & Circulation* (Year 1)

This course examines the structure, function, disease recognition and management of the cardiovascular system. Integrative learning models will be used to study congenital heart disease, valvular and coronary heart disease, atherosclerosis, hypertension, trauma, heart failure, and rehabilitation of patients with heart disease. Patient-centered learning will enable the student to explore the common experiences of illness related to specific diseases in a contextual and focused manner. (Weight 1.0)

Medicine 5121: *Blood* (Year 1)

This course covers the essential fundamental knowledge of blood structure and function in health and disease. Blood is a highly specialized circulating system that is linked to all body organs and responsible for the life and wellbeing of an individual. At the end of the course, the student will have the necessary skills to make the appropriate diagnosis/differential diagnoses, be able to perform the necessary investigative tests, and treat the disease. (weight 1.0)

Medicine 5139: *Patient Centred Clinical Methods I* (Year 1)

This course examines the process of the doctor-patient interaction. Using a patient-centred approach, instruction is given in interviewing and physical examination. Clinical reasoning and decision making are explored through the Problem-Orientated Clinical Record. Professionalism and ethics are emphasized as they relate to the clinical setting. Integration of knowledge, application of skills and development of appropriate attitudes are evaluated in this course. (weight 1.0)

Medicine 5130A: *Medical Ethics & Humanities* (Years 1 & 2)

A discussion of ethical issues that arise in the delivery of medical care. Topics will include an introduction to the principles and theories of bioethics. Additional discussions will be drawn from topics such as professional obligations, confidentiality and privacy, informed choice, resource allocation, culture and medicine, and end of life issues. This course will be taught over two years. (weight 0.5)

Medicine 5140: *Professional Portfolio* (Years 1 & 2) An Introduction to the concept of a professional portfolio. Through practical application of curriculum competencies students will develop the skills required to assemble and utilize a professional portfolio. The portfolio will be further developed during years three and four. This course spans years one and two of the medical curriculum. Course weight 1.0 To be introduced September 2012

Medicine 5202: *Endocrine & Metabolism* (Year 2)

This course introduces common diagnoses of the Endocrine system. The physiology of the hypothalamic–pituitary–end organ axis is discussed, including growth and puberty, thyroid, and adrenal function. Each axis is discussed more specifically with respect to its physiology, anatomy, and common pathologic conditions. Type 1 and Type 2 diabetes mellitus, and common issues

related to bone and calcium abnormalities are also reviewed. A patient-centered approach is used with case descriptions and many small group sessions to complement the lectures. (weight 1.0)

Medicine 5203: *Digestive System and Nutrition* (Year 2)

This course introduces the anatomy, physiology and biochemistry of the gastrointestinal tract and its role in nutrition. The student will learn the common diseases that involve the esophagus, stomach, intestines, pancreas and liver as well as the pathophysiology, epidemiology and treatment of these diseases. The nutrition component includes the absorption of essential nutrients, nutritional assessment, normal nutrition and the use of nutrition as therapy. The study of gastrointestinal malignancies will be covered in the associated patient centered small group sessions. (weight 1.0)

Medicine 5205: *Reproduction* (Year 2)

This course covers the relevant anatomy, physiology and pathology of female reproductive system. It integrates the basic science understanding of reproduction with core content in women's reproductive health and clinical obstetrics & gynaecology. Formal lectures, small group patient centre learning, and group projects will enable the student to learn normal gynaecologic and pregnancy care, and common problems in women's reproductive health and pregnancy. (weight 1.0)

Medicine 5206: *Neurosciences, Eye & Ear* (Year 2)

This course introduces and integrates the basic and clinical science aspects of the nervous system, the eye and the ear. This course uses small and large group sessions in addition to lectures to provide the essentials of neuroanatomy, physiology, pathology and pharmacology in a clinical context. At the end of Neurosciences, Eye, and Ear, the student will be able to discuss the presentation of common illnesses involving the nervous system, eye and ear. Patient-centered learning enables the student to appreciate extrinsic and intrinsic factors that impact on an individual's ability to participate fully in family, social or occupation. (weight 1.0)

Medicine 5207: *Psychiatry and the Behavioural Sciences* (Year 2)

Psychiatry and the Behavioural Sciences is an integrated course that synthesizes basic science and basic psychopathology including diagnostic criteria and treatments. The emphasis of this course will be on the most commonly encountered psychiatric disorders. The approach follows that of the Diagnostic and Statistical Manual of Mental Disorders (DSM IV TR). The phenomenology of mental disorders, etiology and epidemiology will be presented utilizing a patient-centred focus. (weight 1.0)

Medicine 5208T: *Emergency Care* (Year 2)

This course introduces the care of the patient with shock and multiple traumas. Objectives include an approach to initial assessment and resuscitation of patients presenting with respiratory distress, hypotension, and trauma, disorders of temperature regulation (hyperthermia and hypothermia) or cardiac arrest. (weight 0.25)

Medicine 5209R: *Health Care Systems* (Year 2)

Topics important to understanding the organization of the health care system in Canada will be reviewed. Legal requirements for medical records, disclosure, and mandatory reporting will be discussed. This course will cover many of the objectives required for the CLEO (Considerations of the Legal, Ethical, and Organizational Aspects of Medicine) component of the Medical Council of Canada exam. (weight 0.25)

Medicine 5210S: *Key Topics in Family Medicine* (Year 2) Students are introduced to the most common complaints that patients present to their family physicians. Key components of the

history and physical examination skills that are core to family medicine and that aid in determining the most appropriate management style will be identified. The course will build on how the Patient-Centred Clinical Method is incorporated into clinical practice through case vignettes. (Weight 0.25)

Medicine 5218: *Musculoskeletal System* (Year 2).

This course examines the structure, normal function and pathologic dysfunction of the musculoskeletal system to develop the skills necessary to perform a general musculoskeletal screening examination. This course covers musculoskeletal and joint anatomy, physiology, biochemistry and pathology with clinical correlates, musculoskeletal radiology, biophysics, musculoskeletal injuries, development and remodeling of bone, metabolic bone disease, bone tumors, fractures, and muscle and connective tissue diseases. A rheumatology component includes arthritis, autoimmune disorders, genetic influences on joint disease, septic arthritis and the basic science of joint inflammation. The diagnosis and treatment of musculoskeletal diseases will be taught from both a medical and surgical perspective. Small group interactions will promote student participation in clinical case presentations. Patient-centered learning will enable the student to explore the common experiences of illness related to fundamental aspects of musculoskeletal function and dysfunction in a contextual and focused manner. (Weight 1.0)

Medicine 5246: *Patient Centred Clinical Methods II* (Year 2)

This course examines the process of the doctor-patient interaction. Using a patient-centred approach instruction is given in interviewing and physical examination. Clinical reasoning and decision making is explored through the Problem-Orientated Clinical Record. Professionalism and ethics are emphasized as they relate to the clinical setting. Integration of knowledge, application of skills and development of appropriate attitudes are evaluated in this course. (Weight 1.5)

Year 3

Clinical Clerkship is an integrated course in which the types of patients, the clinical conditions, the appropriate clinical setting and the level of responsibility which students encounter during each rotation are defined and monitored. Clinical Clerkship begins in September of the third year and consists of a one week of Introduction, followed by fifty one weeks of an integrated clerkship. This includes forty eight weeks of clinical rotations and three weeks of vacation.

Clinical Clerkship is a single course (Medicine 5475) of eight course weights. The rotations that comprise clerkship are:

Rotation	Weeks	Weight
Internal Medicine	12	2.0
Surgery	12	2.0
Family Medicine	6	1.0
Paediatrics	6	1.0
Psychiatry	6	1.0
Obstetrics & Gynaecology	6	1.0

- The Clinical Clerkship allows students to apply their basic and clinical sciences knowledge acquired in the first two years of medical school in the clinical setting.
- During the Year 3 Clerkship at Western, all students will complete a minimum of four weeks of clinical training in a small or mid-sized community outside of London or Windsor.
- For those students with a particular interest in community medicine, a rural/regional clerkship stream is available. Each year a section of students will complete the majority of the clerkship in a SWOMEN location. Students have the option of completing up to twelve weeks outside of these teaching centres.
- Students are assigned to clinical units participating in the care of patients and will care for patients in the office, clinic, or hospital setting under direct supervision of faculty.
- Students have the opportunity to take graded responsibility for patient care in a supportive setting where a balance is established between time for service work and education.

Year 4

Clinical Science Electives Medicine 5401

- The Year 4 Clinical Electives course provides students with the opportunity to study an area of interest in greater depth and fill in personal knowledge gaps through a self-directed program. Students are responsible for creating their individual program that meets the students' academic and personal needs. Students take no more than eight electives over a sixteen week period.
- Students must choose electives from a minimum of 3 different CaRMs entry disciplines for a minimum of two weeks each. At least four weeks must be in a different area. (Under review)
- Electives may be completed locally, through the SWOMEN network, nationally or internationally.

Integration Consolidation & Enrichment Medicine 5402

- During the 4th Year Integration Consolidation & Enrichment course students return to the classroom for a review of basic medical sciences as applied to clinical medicine.
- Students are responsible for selecting 186 course hours to their own academic needs.
- Assessment includes a learning portfolio

Course Descriptions

Medicine 5475: *Clinical Clerkship* (Year 3)

an integrated learning experience with major rotations in: Medicine, Surgery, Family Medicine, Obstetrics and Gynaecology, Paediatrics, and Psychiatry. The entire experience is designed to be integrated and progressive, with time for independent learning. Objectives, evaluation and feedback are built on clinical problems and skills developed by relating specific knowledge, skills and attitudes to an overall set of objectives. Evaluation is designed to carry over from rotation to rotation. It is meant to highlight the stages of evolution of the student's clinical skills and direct the student in the next phase of learning. (Weight 8.0)

Medicine 5401 Clinical Science Electives (Year 4)

Students must complete four blocks of Clinical Science Electives. Clinical Science Electives are chosen by the individual student and may be in any clinical area. A menu Clinical Science Electives offered at Western will be provided at an appropriate time. (Weight 1.5)

Medicine 5402 Integration, Consolidation and Enrichment (Year 4)

After completion of clinical science electives, students return to Schulich for Integration, Consolidation and Enrichment to integrate the scientific and clinical aspects of medicine in light of their clinical experience. Offerings include a variety of classroom, laboratory and seminar experiences. The satisfactory completion of 186 credit hours is required to pass Integration, Consolidation and Enrichment. (Weight 2.0)

Management and Operation of the Curriculum

Key Principles of Conjoint Course Planning between the London Program and the Windsor Program

Course Chair

- ultimately responsible for the course content and delivery at both sites
- clear communication and agreement between course chair and Windsor course coordinator so that each knows what is being offered in either setting (sound pedagogy and required by LCME/CACMS)
- currently all London-based, but Windsor-based is possible
- reciprocal and personal relationships at the course level

Content

- needs to be agreed upon and planned collaboratively between course chair and Windsor course coordinator so that each knows what is being taught on any particular day and overall
- timing of delivery could be different
- if tight alignment not possible, as long as there is: i) good communication, ii) students are aware of expectations, iii) clarity around the objectives; iv) clarity around what is examined

Objectives of formal curriculum

- must be the same and specific (keeps students assured of what will be examined)
- different delivery possible, but requires agreement on how they will be met

Formal assessment of courses

- based on shared objectives
- absolutely clear students are receiving and examined on the same content.

Small groups

- dialogue between London & Windsor to ensure there is a mutual understanding of what is being delivered, how it is being delivered, and both are comfortable
- Windsor program organizes using shared template, objectives and to some extent resources
- small group size can vary, as well as content-expert versus non-content expert

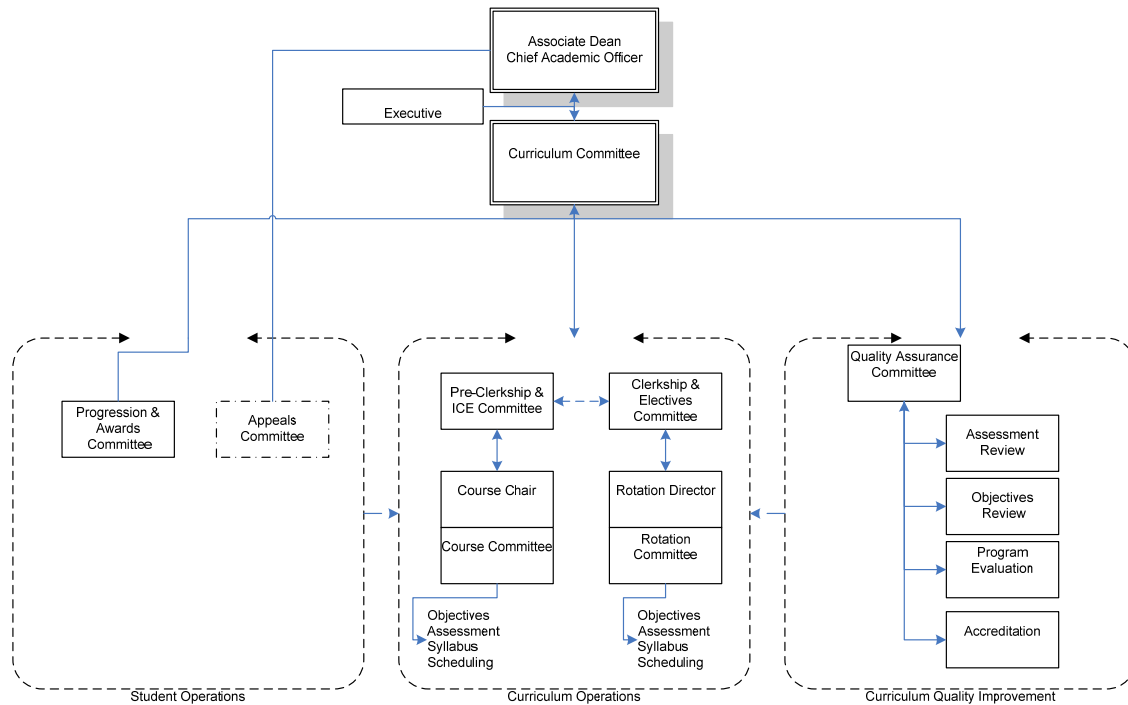
Value-added and novel activities

- ideally discussed and agreed upon before course begins
- enrichment: recognizing every experience cannot be identical and allowing possibility for common experience

Monitor students, directly and indirectly

- reassure they will get the information required but may look different at different sites.

Course Management



Years 1, 2 & Integration, Consolidation & Enrichment:

Courses in Years 1, 2 and the Integration, Consolidation & Enrichment course in Year 4 are governed by the Pre-Clerkship & Integration Period Committee (PIC) which reports to the Curriculum Committee. The chair of each course committee is represented on the PIC.

The Course Committee will:

1. Plan, develop and deliver the course objectives in accordance with the principles and standards of the Undergraduate Medical Education Program. The objectives will be written utilizing appropriate pedagogical taxonomy and will encompass all learning activities for the course. The committee will demonstrate that the learning objectives relate to the overall UME Central competencies. The distribution of objectives with respect to the level of difficulty will be evenly distributed throughout the course.
2. Develop student assessment blueprinted to the objectives of the course. Student assessment should be reviewed prior to and after administration of the assessment.
3. Develop self directed learning modules.
4. Develop Patient-Centred Context Integration and Application Cases for the course.
5. Communicate with the faculty responsible for the actual teaching and ensure that they are familiar with their responsibilities.
6. Collaborate with other course managers to develop an integrated and coherent curriculum.
7. Provide appropriate schedules, educational tools, assignments and exams to the UME Office within the specified deadline.
8. Coordinate the scheduling of the course.

9. Provide remedial work as specified by the Progression and Awards Committee.
10. Present documentation on behalf of the course at student appeals.
11. Review the need for faculty development and make recommendations to Continuing Professional Development.
12. Participate in regular faculty development.
13. Provide documentation for CACMS/LCME accreditation standards relevant to the curriculum and the course.
14. Recommend textbooks for purchase.

Course Committee Composition

Course Committees will be representative of the disciplines covered by the course material.

1. Wherever appropriate, the Committee will include Co-Chairs with relevant clinical and basic science expertise.
2. All course committees must include a representative from Family Medicine.
3. All course committees must include a student representative.
4. The Committee will include the Course Coordinators from the Windsor campus.
5. The Committee must deliver the curricular content in an integrated manner.

Year 3 Clerkship and Year 4 Electives:

Clerkship and Electives are governed by the Clerkship & Electives Committee (CEC) which reports to the Curriculum Committee. Each rotation is represented on the CEC.

The Rotation Director will:

1. Coordinate the experiences of the clerks in each clinical rotation in collaboration with the appropriate Site Coordinator at each of the sites in London, Windsor and rural locations.
2. Develop appropriate objectives for each rotation. The objectives will be written utilizing appropriate pedagogical taxonomy, will be related to overall UME competencies, and will encompass all learning activities for the course. Rotation objectives will be identical regardless of the site of the clinical rotation.
3. Ensure each clerkship experience is appropriately assessed and linked to objectives.
4. Document progress of students in the clinical rotation.
5. Report all clerkship assessment to the UME Office.
6. Recommend students for awards.
7. Present documentation on behalf of the rotation at student appeals.
8. Prepare cases for the Year 4 OSCE examination.
9. Recruit faculty to be preceptors for clinical clerks and ensure that they and post graduate trainees are aware of the objectives for the clinical rotation and the methods of assessment.
10. Recruit faculty to assess students in the Year 4 OSCE.
11. Hold peer review sessions of examination questions and OSCE stations.
12. Provide and document mid and end of rotation feedback sessions for each clerk.
13. Ensure the recommendations of the Assessment, Objectives and Evaluation committees are implemented.
14. Ensure that the teaching faculty and the rotation are appropriately evaluated.
15. Participate in regular Faculty Development.
16. Provide documentation for CACMS/LCME accreditation standards relevant to the curriculum and the rotation.

Instructional Methodologies

Video-conference Activities:

1. Video-conference activities are given in a maximum three-hour period. Year 1 is presented in the morning starting at 8:30 to 11:30 a.m. Year 2 is presented in the afternoons starting at 1:30 to 4:30 p.m.
2. The video-conference activities will only be presented by lecturers fully trained in video-conference lecture presentation.
3. The learning experience will be comparable for all students at all sites.
4. While most lectures will originate in London, some will be delivered from Windsor.
5. Video-conference activities will include variety of case presentations, didactic lectures, wrap-ups, and other forms of interactive learning.

Small-group Tutorials:

1. Patient Centred Context Integration and Application (PCCIA): The sessions are designed to promote integration of the wide range of content presented in the course. The sessions will be clearly seen as an integral component of each course. The tutors will be group facilitators. The objectives to be met will be at the higher cognitive level and will be correlated with the broad range of the Undergraduate Medical Education Central Competencies.
2. Discipline-based tutorials: Within each course there will be discipline based small-group tutorials. The tutors will be content experts. The tutorials will be held at each site. The content will be consistent across all sites following the learning objectives established for the session. The scheduling of the tutorials may be different at each site but must keep relationship to the other course content. Small group tutorials may be scheduled instead of or in addition to the allotted three hour VC limit for a total of four hours.
3. Child Health tutorials: Within each course there will be child health based small-group tutorials. The tutors will be content experts. The tutorials will be held at each site. The content will be consistent across all sites following the learning objectives established for the session. The scheduling of the tutorials may be different at each site but must keep relationship to the other course content.
4. Patient Centred Clinical Methods: The sessions will be held at each site. The tutors will be experts in teaching clinical skills. Scheduling of sessions may be different at each site but must follow the order established for these tutorials. The content will be consistent across all sites. Where Standardized Patients or Volunteer Patients are used, each site will recruit, train and manage such patients so as to be able to deliver a comparable experience to the students.
5. All small-group tutors will have participated in training for their teaching role before facilitating any small-group sessions.

Laboratory Exercises:

1. Anatomy: The sessions will be held at each site. The tutors will be content experts. The scheduling of laboratory exercises may be different at each site but must keep relationship to the other course content. The content will be consistent across all sites. The learning environment, including access to cadaveric material, models, bones etc., will be comparable at all sites.
2. Computer-based laboratory exercises: Access to computers will be at a level consistent with accepted distributed education practice, and will be comparable at all sites.
3. Other exercises: All other laboratory exercises will occur in equivalent learning settings resulting in a comparable experience for all students.

Online Course Resources

1. Courses must publish the syllabus including objectives and assessment details online.
2. Online teaching modules will be well developed and integrated into each course.

Directed Self Learning

1. Each course will have objectives and on-line modules for course directed self-learning.

Student Assessment

Integrated assessment is a method for achieving formative and summative assessments throughout the learning experience. The development of an evaluation blueprint, determined by available resources and evaluation needs, is key to the process.

Key Principles in developing the assessment blueprint:

- Define the Educational Objectives
- Define the Assessment Objectives
- Identify Assessment Resources
- Choose Assessment Methods
- Develop Assessment Instruments
- Review the Performance of the Assessment

Operating Principles in the Creation of Student Assessments

- It is the responsibility of Course Chairs with the Course committee & instructors to identify the learning objectives appropriate for assessment.
- A description of course requirements and weighting of the assessments towards the final mark must be stated in student materials posted on the web and must explained to the students on the first day of each course.

Professional Portfolio

In years one and two the Professional Portfolio will be introduced as a course in September 2012. The course – Medicine 5140 will span two years. Only Year 1 students will be enrolled in September 2012

- At the end of Year 1 students will be given a grade of IPR with a final grade at the end of Year 2
- Satisfactory progression will be defined in the Medicine 5140 Professional Portfolio course syllabus
- Should a student fail Medicine 5140 Professional Portfolio the failure will contribute to the number of course weights allowable for remedial work as any other course in Years 1 & 2
- In Year 3 it will be a requirement of Medicine 5475 Clinical Clerkship course to be integrated as of September 2012
- In Year 4 it will be a requirement of Medicine 5402 Integration, Consolidation & Enrichment course

Student Assessment Years 1 & 2:

Four-Six Week Course

- 10% - Patient Centered Context Integration and Application (small group case-based learning)
- 15% - written assignment
- 30% - end of course test
- 40% - end of semester exam (during evaluation week)

The remaining 5% can be attributed to the assignment, test or exam as determined by the course committee

One Week Courses:

Assignments and end of week tests may be incorporated but must be stated at the beginning of the course. The majority of marks will be incorporated into end of semester exam (minimum of 70%).

Patient Centered Context Integration and Application

The goal for student assessment for this component of student learning is to assess and encourage student performance /participation in group settings. The focus of the learning is all the central competencies of a physician on which the Undergraduate curriculum is based.

The PCCI&A mark of 10% for each course is:

5% student peer assessment

5% faculty facilitator final assessment

Each of these components is addressed on the following pages

Written Assignment

Assignments provide opportunities for students to develop higher order learning skills, beyond basic declarative knowledge and comprehension. These higher order skills include analysis, application, synthesis, and evaluation of information.

- Assignments should assist students with integration of content.
- Assignments should assist students with developing problem-solving skills.
- Assignments should assist students with application of concepts.
- Assignments should also provide opportunities for students to develop strong information gathering skills including advanced use of literature searching, use of library resources, application of critical appraisal skills, evaluation of web-based information etc.
- Assignments can assess student's ability to organize and express complex content and ideas.
- Assignments can assess a student's ability in the directed self learning topics.

Principles:

- All assignments will be developed/agreed upon by the course committee members.
- All assignments will require a written submission.
- Assignments should require students to work approximately 2 hours/week to successfully complete the assignment.
- Assignments should be constructed to achieve the core objectives of the courses. Through the assignment the student will demonstrate an outcome that is defined by a core objective(s). The objective could be related to knowledge, skills (although that might be more difficult to achieve) or attitudes.
- The assignments should be challenging and require students to do more than just list things or answer questions based directly on course notes or class lectures. In most cases students should have to read beyond the basic information that can be provided in a lecture to complete an assignment.
- Usually one major assignment will be given but a course could decide to use 2 or 3 smaller assignments. Thought must be given to the amount of work required by the students if more than one assignment is given.

- A high standard of writing should be expected. Assignments should require references and should be evaluated for clarity, style, and quality.
- To be assured of originality and fairness ‘*Turn-it-in*’ <http://www.turnitin.com> will be used to detect plagiarism. Assignments would therefore be handed in electronically as well as in hard copy for marking and returning to students.
- Group assignments can also be useful. The group must accept that they will all receive the same grade for the assignment and that a higher standard might be applied for an assignment completed by more than one individual.
- Group assignments would not be offered as a choice to students. If group assignments are used the students should be assigned randomly to groups of an appropriate size for the scope of the assignment.

Exams and Tests

- All exams and tests must be in fully finished format before the course begins. Full year courses will have the first term completed before the course begins.
- All exams and tests will be validated through correlation of exam questions with course objective.
- Exams and tests will be identical at all sites in terms of content, timing and grading.
- The undergraduate office will distribute the exams and tests and hold the only official grades resulting from examination.

End of Course Test

- The length of end of course tests would be adjusted based on how many weeks involved (e.g. 3 week course = 1 hour exam; 6 week course = 2 hour exam).
- Maximum 1 MCQ question per minute with fifteen minutes of flex time for the students.
- Minimum of 20% short answer questions and a maximum of 80% MCQ/extended match questions.
- MCQ will have a question stem and four or five options single best answer, R type.
- Royal College of Physicians and Surgeons document entitled “Developing Multiple Choice Questions for Royal College of Physicians and Surgeons of Canada Examinations” may be used as a guideline for multiple choice questions
http://rcpsc.medical.org/residency/certification/examinerguide/multiplechoice_e.php.
- Royal College of Physicians and Surgeons document entitled “Short Answer Questions: Guidelines for their Development” may be used as a guideline for creating short answer questions:
http://rcpsc.medical.org/residency/certification/examinerguide/SAQguidelines_e.php

End of Semester Exam

- The length of exams should be 2 hours for a four or five week course and 2 1/2 for a six or more week course (1 week).
- Maximum 1 MCQ question per minute with fifteen minutes of flex time for the students.
- Minimum of 20% short answer questions and a maximum of 80% MCQ/matching questions.
- Royal College of Physicians and Surgeons document entitled “Developing Multiple Choice Questions for Royal College of Physicians and Surgeons of Canada Examinations” may be used as a guideline for multiple choice questions

- Royal College of Physicians and Surgeons document entitled “Short Answer Questions: Guidelines for their Development” may be used as a guideline for creating short answer questions.

Student Assessment Year 3

- Students must meet expectations in the final assessment of each rotation to receive a pass in the clerkship.
- The final assessment for each rotation will consist of an end of rotation assessment of clinical performance using the standard end of rotation form.
- The Clinical Clerkship has a grade of Pass/Fail for the overall Clerkship.
- The performance in individual rotations is assessed as Meets Expectations or Does Not Meet Expectations.
- Rotation assessment tools may include case reports, chart reviews, written and oral examinations, multi-station examinations, peer evaluation, or other methods at the discretion of the departments.
- Each rotation director will inform the students of the components of the final evaluation for the rotation. Clinical clerks will also receive formative feedback intended to help them improve their skills and make them aware of how well they are doing.
- Mid-rotation feedback must be given and documented part way through each major rotation to ensure that students not meeting the expectations of the rotation have an opportunity to work on their areas of weakness.
- There will be an exam at the end of every rotation.

Criteria for Failure in any of the Clerkship Rotations

When determining the final assessment using the standard form, a student will be deemed to “Not Meet Expectations” according to the following criteria:

If the clerk “Does Not Meet Expectations” on any **one** of the following two competencies and associated subcomponents:

Medical Expert:

- Clinical Reasoning and the Application of Basic Knowledge
- Patient Assessment – History Taking
- Patient Assessment – Physical/Mental Examination

Professional:

- Ethical and Social Behaviour
- Reflective Practice

If the clerk “Does Not Meet Expectations” on any **two** of the remaining five competencies and associated subcomponents:

Communicator:

- Relationships
- Conveying Information

Collaborator:

- Interprofessional Healthcare Team
- Conflict Prevention and Resolution

Manager:

- Healthcare System

Health Advocate:

- Patients, Communities, Populations

Scholar:

- Life-long Learning
- Evaluation and Application

- Detailed information (including mid-rotation assessment) must be provided for any student who “Does Not Meet Expectations”.
- At the end of each rotation, it is the responsibility of the department to ensure that all final assessments are submitted to the appropriate clerkship section coordinator for review.

Student Assessment Year 4

Clinical Electives

- In order to pass the course, a student must satisfactorily complete all 8 blocks (16 weeks)
- If a student fails the Clinical Electives period, remedial work may be permitted.
- The student is expected to be present at a Clinical Elective every working day during each elective block.
- Electives may be 2 or 4 weeks in length subject to departmental availability. Four week electives at Schulich must be taken in a calendar month.
- Students are NOT permitted to take Clinical Electives under the supervision of an individual where there is a conflict of interest.

Comprehensive Exam

- The purpose of the Comprehensive OSCE (Objective Structured Clinical Examination) is to ensure that the primary objectives of the clerkship and electives have been met.
- The students will be presented with problems that are sufficiently undifferentiated as to allow them to demonstrate their skills.
- It will be scheduled at the end of the clerkship and clinical electives period.
- It will comprise a number of stations where standardized patients, models, mannequins and computer simulations may be used.
- The examination will be approximately three hours long. The student will be presented with approximately ten clinical scenarios.
- The result will be reported as Pass/Fail.
- Students must pass this required examination in order to progress.

Integration, Consolidation & Enrichment

Assessment in the Integration, Consolidation & Enrichment course is based on student participation, assignments, written evaluations and a learning portfolio.

Grading & Approval Process

- Grades will be recorded using the Western Grading Tools
- Students' Final Grade is recorded on their transcript as Pass/Fail
 - Pass: 60 % or above
 - Fail: 59% or below
- Grades are used to adjudicate students for awards

- The UME Office will present or request nominations for awards at the appropriate times
- The Progression and Awards Committee will review and approve all final grades and Awards

Assessment Feedback to Students and Faculty

- Feedback will be provided to students on all assessments upon request.
- Students are able to review their assessments on an individual basis through the UME office.
- All assessments must be available for review by students for a period of one year following reporting.
- UME Office will release interim and final percentage grades to students using the Western Grading tools.
- Pass/Fail marks will be reported to students through the UME Office. It is responsibility of the UME Office to notify students if they have failed an exam, a course, or are required to withdraw.
- The UME Office will forward final grades to the Registrar's Office for Transcripts at the end of the Academic Year.
- Statistical reports in regard to student performance on MCQ questions will be reviewed by each course committee and the Progression and Awards Committee. The course committee will review the other forms of assessment.

Program Evaluation *Under Review*

- The Evaluation Committee has overall responsibility for undergraduate medical education program evaluation.
- Distributed curriculum delivery will be evaluated and sites will be compared.
- The Evaluation Committee will provide a report to each course, and reports to Curriculum Committees.
- The Curriculum Committee, PTC, CEC and course committees will ensure that the results of evaluation are taken into account in program, course and session planning.
- In addition the Objectives Committee will systematically review all objectives for gaps and redundancies.

Curricular Mapping

Annually each course will evaluate and revise their course objectives with the assistance of the Curriculum Specialist. The Curriculum Specialist will assist in mapping to both the UME general competencies and the educational program objectives. Revised objectives will be loaded in to the curriculum mapping tool annually