

Wednesday, August 12 2020 4:00 pm via Zoom

Attendees: Tanis Adey, , Craig Campbell, Vernon Curran, Norah Duggan, Jasbir Gill, Alan Goodridge, Alison Haynes, Elizabeth Hillman, Heather Jackman, Brian Kerr, Todd Lambert, Amanda Pendergast, Stephen Pennell, Jacinta Reddigan, Claire Skanes, Margaret Steele, Lindsay Webster, Katrin Zipperlen

Absent: Lindsay Alcock, Taryn Hearn

Regrets: Carla Peddle

Topic	Details	Action Items and person responsible
Introduction and Welcome	T. Adey called meeting to order at 4:01 pm.	
Agenda review	No conflicts of interest declared. Phase 3 Clinical Skills	Moved: N. Duggan
- Review for Conflict of	has been added to agenda. Move learner feedback	Seconded: A. Goodridge
Interest	regarding proctored exams to 1.1 of matters arising.	All in favor.
- Confirmation of Agenda	Motion: adopt agenda as amended.	Motion carried.
Review and approval of	Review of July 15 2020 meeting minutes.	Moved: S. Pennell
June 17, 2020 minutes	Motion: approve minutes as circulated.	Seconded: A. Haynes
		All in favor.
		Motion carried.
1. Matters arising from the minutes		
1.1 Learner feedback	C. Campbell presented updated learner feedback	
re online proctored	(based on 44 responses) regarding online proctored	S. Pennell to share link of
exams	exams. See supporting documentation here for details.	Higher Education
	Learners expressed preference for WebEx, more	Community Vendor
	concerns with Proctorio. Main issues are privacy, data	Assessment Tool with
	security and cost. Also concern over facial recognition of BIPOC learners.	committee.
	S. Pennell indicated cost are per year. With WebEx,	S. Pennell to share
	more cost for additional invigilators. S. Pennell	response from privacy
	explained safety of data: Proctorio only records in web	office once available.
	browser and access to collected data limited, only e-	
	learning team and assessment working group. Audio	C. Campbell to bring
	and video of learner, including learner's face and room,	information back to
	will be recorded. Proctorio also flags any unusual	learners.
	behaviors and movements such as learner leaving	
	screen. Assessment working group will review any flags	
	by software and determine if it is a legitimate concern	
	or not. S. Pennell to confirm Proctorio's data storage.	
	Proctorio has also been submitted for review by Privacy	



1.2 Phase 4 Management Team terms of reference 1.3 UGMS report template	looking to provide space for learners who are unable to take exam at home. Has to be within capacity limits and public health guidelines. If this becomes an option, it should also be offered at sites in New Brunswick and PEI for Phase 4 learners. UGMS committee will need to make decision regarding online proctoring platform soon. S. Pennell is recommending Proctorio. Plan to vote on this (likely via e-vote) after response received from Chief Information Officer regarding Proctorio. Checklist currently being reviewed, should have answer next week. N. Duggan presented revised terms of reference for Phase 4 Management Team. See supporting documentation here for details. Changes include revising membership, updating course titles, voting rights and updated language. Phase 4 Team has approved revised terms of reference. Motion: accept revised Phase 4 Management Team terms of reference as presented. Brian Kerr presented UGMS report template and how to use it. See supporting documentation here for details. The template is intended to capture activities	Moved: N. Duggan Seconded: A. Goodridge All in favor. Motion carried. J. Reddigan to prepare final version of Phase 4 Team terms of reference. B. Kerr to update UGMS report template based on
	public health guidelines. If this becomes an option, it should also be offered at sites in New Brunswick and	



	(motion, action items) of committees reporting to UGMS. Appropriate UGMS committee member to present report at meeting and to provide to UGMS admin team ahead of time. This will improve formal documentation required for accreditation. Committee in favor of using report template. Suggestion to have section for sharing observations and general information. Further feedback on template via email welcome. Learners will not need to provide formal report but will have option to share feedback and input during UGMS meetings.	feedback and share with committee for use.
2. New business		
2.1 Timing of exams	There have been questions regarding the time zone for exam scheduling. T. Adey stated that the schedule and exams are in Newfoundland Time. Teaching and exams can be scheduled during 9:00-16:00 hours Monday through Friday except only 9:00-12:00 hours on Tuesday. Despite impact on learners in other time zones, UGME office made decision to keep exams as scheduled in the morning (Newfoundland Time). Switching exams to the afternoon would result in learners having clinical skills or lectures the morning of the afternoon exam. Class of 2024 was advised that if time zone is a challenge they should consider moving to province or time zone where the curriculum schedule would be compatible with remote attendance.	
2.2 Phase 3 Clinical Skills	T. Adey updated that there will be some face-to-face clinical skills sessions in Phase 3. To accommodate this with current CLSC capacity limitations and required cleaning protocol in place, the clinical skills sessions will have to be scheduled longer than 4 pm. Exceptions to duty hours outlined in policy allowed at the discretion of UGMS committee. Some clinical skills sessions may have already gone longer in the past to accommodate tutor schedules. This change of the duty hours for clinical skills will need to be communicated with learners. Motion: allow temporary exception from policy as follows: "in some circumstances, clinical skills sessions may be extended beyond 4 pm to as late as 5:30 pm due to CLSC capacity limitations and required cleaning	Moved: T. Adey Seconded: J. Gill All in favor. Motion carried.



	so condany to the nandomic This additional time	
	secondary to the pandemic. This additional time may	
2 Standing Committee	not be able to be made up in the schedule".	
3. Standing Committee		
Reports	A Coodridge reported that response rate for program	A Coodridge to bring
3.1 PESC	A. Goodridge reported that response rate for program evaluation surveys remains poor. Response rate used to be 50-60%, now usually 20% response rate. Drop in response rate especially after Phase 1. Many attempts have been made in the past to improve response rate, continued advocacy to complete surveys. Concerns that this will be an issue with accreditation despite best efforts. It is also an issue at other institutions. A. Goodridge suggested to provide financial incentives to learners in form of awards, \$50 and \$25 respectively for each course survey, to increase response rate. This has been reported as an effective tool in the literature. Estimate of total cost is \$1,800 annually. M. Steele concerned with plan of financial incentive, current budget very limited. Need to provide summary with data and solutions from other institutions before moving forward with this idea. A. Goodridge commented that withholding assessments to ensure learners complete evaluations, as currently practiced in Phase 4, is problematic and also impractical. A. Goodridge reported learner survey data received	A. Goodridge to bring feedback to PESC regarding financial incentive. Summary report with data and solutions from other institutions needed before moving forward.
	regarding mode of virtual teaching. Live lecture webcast highly rated, also pre-recorded lecture. PPT slides and teleconference scored low as modes of teaching.	
3.2 SAS	V. Curran provided updates from Faculty Development Committee. S. Shorlin currently working with HSIMS to create faculty development for online delivery of teaching and that addresses feedback from learners. There will be webinars for remote teaching using WebEx and resources will be made available as well. No formal presentation for SAS, next meeting scheduled for September. D. Deacon has retired from her position, K. Zipperlen will start in this role at the end of August.	
3.3 iTac	S. Pennell advised that EMS cloud assessment has been cancelled by CLSC. Aperio VA is proceeding but not	Moved: S. Pennell Seconded: N. Duggan



	scheduled yet. HSIMS e-learning team will provide support for any live teaching sessions and also for faculty recording lectures using WebEx. Faculty may also use recorded lectures from previous academic year. S. Pennell advised to not use Screencast-O-Matic software as there are licensing issues unless personal account is used. S. Pennell again informed committee that Office of Chief Information Officer recommends using WebEx. Request has been made for resource accounts so one dedicated link to WebEx would be used for specific cohort or group. Faculty should not use other platforms for online delivery. Need to confirm with T. Pittman and Faculty Relations if UGMS committee can mandate faculty member use of WebEx or if that is in violation of MUNFA agreement. Motion: strongly recommend the use of WebEx for all	All in favor. Motion carried. COWG to update message to faculty as needed regarding recommended use of WebEx.
	meetings and online delivery of curriculum.	
3.4 COWG	A. Haynes presented teaching overview document which has been developed for each content area. See supporting documentations here for more details. This should help faculty determine where their lecture fits within each theme and phase. This document has been provided to UCLs to share with their teaching faculty. B. Kerr has created course goals overview document. See supporting documentation here for more details. Request to post documents on the UGME website. Committee in favor of posting as long as version dates are added to documents.	
4. Phase 4 report	Class of 2021 learners back doing clinical rotations, no issues so far. Phase 4 Management Team meeting next week. Working improved virtual delivery of content. AFMC student portal now open for home electives, applications will be accepted starting August 16.	
5. Phase 3 report6. Phase 2 report	Phase 3 ready to start on August 31, schedule is complete. One major curriculum change to bring forward but lacked quorum at last Phase 3 team meeting. This change needs to be approved prior to UGMS meeting in September. No update from Phase 2, meeting will be in September.	T. Adey to send curricular change for e-vote once approval from Phase 3 team received.



7. Phase 1 report	A. Pendergast presented curricular changes for Phase 1. See supporting documentation here for details. Next Phase 1 Management Team meeting scheduled for September. Motion: approve curricular changes as presented for the Class of 2024.	Moved: A. Pendergast Seconded: N. Duggan All in favor. Motion carried.
8. Report from NB	New Brunswick sites started electives application process on August 9, many submissions received already including from St. John's campus. The matching for Memorial University learners will be done through the Student Portal.	T. Lambert to send wording of revised Horizon Health recommendation so T. Adey can share with task force.
	Melissa Dunnett has resigned from her position as Program Manager, will finish at the end of August. Recruitment for position in progress. T. Lambert praised Melissa for her excellent work over the last 5 years. T. Adey and M. Steele also expressed their sincere gratitude and appreciation for Melissa's service.	T. Lambert to connect with Horizon Health leadership regarding decision-making process.
	T. Lambert updated that Horizon Health New Brunswick has changed guidelines, learners are allowed to participate in aerosol-generating procedures where N95 masks are required even if the patient is a suspected or confirmed Covid-19 case. This was initiated by Dalhousie Medicine program. T. Adey to bring this forward to Covid Task Force, whether changes to Memorial University's guidelines are warranted. M. Steele questioned process, should be collaboration with all medical schools involved. T. Lambert to liaise with Horizon leadership (Jennifer Hall and Erica Holloway) regarding collaborative process.	
9. Accreditation matters	B. Kerr advised that accreditation has been postponed by one year. Further communication will be sent out.	
10. Learner Issues	L. Webster reported that some Class of 2021 learners concerned over knowledge translation requirement for Phase 4 research given travel restrictions and impact on conference attendance. K. Zipperlen indicated this was discussed with Research Curriculum Advisory Group. Consensus by group that changes to deliverable not required as many conferences now done virtual and there are other options for knowledge translation. Conference attendance not a requirement.	K. Zipperlen to send email to Class of 2021 with information regarding knowledge translation options.



11. Senate / SCUGS/	M. Steele reported that Senate has been cancelled for	
University issues	August. The Academic Scenario Planning Group has	
	been disbanded. SCUGS has recommendations	
	regarding online invigilated exams.	
	T. Adey indicated that planning for possible second	
	wave of Covid-19 under way. Other institutions plan to	
	not remove learners from clinical service even with	
	increase in cases.	
12. Senior Management	UGME updates have been provided to SMC. J.	
Committee / Policy	Reddigan shared update on new avenue for reporting	
	professionalism concerns. Working with Chief Risk	
	Officer to utilize existing system for learners to	
	anonymously report learner mistreatment. Also	
	collaborating with Privacy Officer regarding use of data	
	and implications of anonymous complaints. This	
	initiative has been brought to SMC for discussion.	
	Information to be shared with learners for feedback.	
13. UGME Office report	UGME continues to send updates to learners and	
	Faculty of Medicine community.	
	T. Adey expressed thanks to K. Zipperlen for assistance	
	with UGMS.	
Next Meeting	Next meeting September 16, 2020.	
6	T. Adey adjourned meeting at 5:58 pm.	

Student Feedback - Online Testing Platform

Preferred Testing software

Answer Choices	N (37)	Percentage (100%)
WebEx Platform	23	62%
Procturio Platform	0	0%
No Preference	10	27%
No confidence in options	4	11%

Student Comments

<u>Security concerns:</u> some students are concerned about being recorded at home and do not have confidence that their information will be kept private by either software platform. Students who responded seem to be concerned with webcam-invigilated exams and some have said they feel their privacy rights are being taken away from them. There are concerns about what data will be recorded on their computer screens, where that data will be stored and how long it will be stored for. Some students are not in support of the use of eye-tracking/screen sharing software. Students would like to know where and for how long the data recorded during exams will be stored.

<u>Comfort with WebEx:</u> some students responded indicating they are comfortable with WebEx since they have used it before. There are concerns about the costs associated with Procturio and whether those costs will fall on the backs of students in the form of tuition increases. Some students wonder whether the cost of Procturio is justified if it will not be a long-term tool used by the medical school, assuming the preference is to return to in-person exams after the upcoming school year.

Questions about protocols during exams:

- What happens if students need to be excused from the screen visible to the invigilator during the exam for a washroom break?
- Has the option of in-person exams been completely taken off the table?
- Do the platforms have accessibility features (i.e. magnifiers) built in, or would they interfere with a student's ability to use a magnifier on their laptop during exams?
- Will tech support be available for the WebEx option as it will be for the Procturio option?
- Will students still be granted the use of scrap paper during exams?



Faculty of Medicine

Phase 4 Management Team Terms of Reference

Overview

The Undergraduate Medical Studies (UGMS) committee is responsible for the oversight of the integrated curriculum that comprises the Faculty of Medicine Doctor of Medicine (M.D.) program. The operational oversight of each curricular phase rests with a Phase Management Team. All Phase Management Teams report to the UGMS committee via the Phase Lead. The Office of Undergraduate Medical Education (UGME) provides administrative support to each Phase Management Team.

Membership

Voting Members

Phase 4 Lead (Chair)

Phase 4 Discipline Coordinator:

- Anesthesia
- Emergency Medicine
- Internal Medicine
- Obstetrics and Gynecology
- Pediatrics
- Psychiatry
- Rural Family Medicine
- Surgery

Assessment Lead

Electives Lead

Advanced Practice Integration Lead

Clinical Skills IV Lead

Physician Competencies IV Lead

Research Lead

Two (2) learner representatives, one (1) from each Phase 4 class Associate Dean, Office of Learner Well-Being and Success or delegate Assistant Dean, New Brunswick (NB) or delegate

Undergraduate Coordinator, Prince Edward Island (PEI) or delegate

Approval: UGMS Committee

Revised: December 20, 2017; August 12, 2020

Non-Voting Members

Associate Dean, UGME or delegate

Coordinator, UGME

Curriculum Lead

Curriculum and Accreditation Advisor

One (1) learner representative from Phase 3

Representative, Student Assessment Subcommittee

Representative, Program Evaluation Subcommittee

Representative, Health Sciences Information and Media Services

Representative, Clinical Learning and Simulation Centre

Academic Program Administrator, UGME

Administrative Assistants, PEI, NB and Yukon (YK)

Phase 4 Academic Program Assistant (recording secretary)

Operations

- The Phase 4 Management Team (Team) meets monthly and at the call of the Chair.
- Quorum shall be 50% of voting members plus one.
- Decisions on substantive issues are decided by majority vote whereas other routine matters may be decided by Team consensus. Voting may also take place via email with responses sent to ugme.phase4@med.mun.ca.
- Committee members are expected to attend at least 75% of meetings. If unable to attend a meeting, members are to send advance notice of their absence.
- Meeting minutes that reflect the activity of the committee shall be recorded
- Approved minutes are posted on the UGME website.
- Learner representatives will be appointed by the President of the Medical Student Society (MSS), subsequent to a call for expressions of interest.
 - The term of appointment for learner representatives is one (1) year, once renewable.
- Each representative from the Student Assessment Subcommittee, Program Evaluation Subcommittee, Health Sciences Information and Media Services and the Clinical Learning and Simulation Centre shall be appointed as per the procedures of the respective subcommittee/unit.
 - The term of appointment for the subcommittee/unit representatives is three (3) years, renewable.
- The Team may involve or consult individuals with specific expertise as needed.
- The Team may develop working groups for the operation of each course within the Phase.

Approval: UGMS Committee

Revised: December 20, 2017; August 12, 2020

Responsibilities

The Team is responsible for overseeing the delivery of the Phase 4 curriculum as outlined in the University Calendar. These responsibilities include matters pertaining to, but not limited to:

- implementing policy approved by the UGMS committee
- performing activities delegated by the UGMS committee
- communicating recommendations to the UGMS committee
- monitoring timely formal formative and summative feedback
- reviewing required clinical experiences and mandatory procedures annually
- liaising with the Office of Learner Well-Being and Success in matters related to Phase
- monitoring curriculum delivery to ensure comparable educational experience and equivalent methods of assessment across all instructional sites

The Team is responsible for monitoring learner progress throughout the phase and assigning and recommending remediation activities as appropriate. Learner progress is discussed during an *in camera* session that does not include the learner representatives or non-voting members except the recording secretary and Coordinator, UGME. Minutes of learner progress meetings are confidential and not posted on the UGME website.

Approval: UGMS Committee

Revised: December 20, 2017; August 12, 2020



UGMS Summary Report

[Insert Month & Year]

Phase Team or

Liaison to the UGMS: (member name) Date of Last Meeting: (day / month / year) Date of Next Meeting: (day / month / year) Agenda Items Requiring Phase Team or Sub-Committee Action Item Recommended Action Status Agenda Items Requiring UGMS Action: 1. 2. 3. Additional Comments, Suggestions, New or Pending Business: 1. 2. 3.	Sub-Committee:	(committee name)		
Agenda Items Requiring Phase Team or Sub-Committee Action Item Recommended Action Status Agenda Items Requiring UGMS Action: 1. 2. 3. Additional Comments, Suggestions, New or Pending Business: 1. 2.	Liaison to the UGMS:	(member name)		
Agenda Items Requiring Phase Team or Sub-Committee Action Item Recommended Action Status Agenda Items Requiring UGMS Action: 1. 2. 3. Additional Comments, Suggestions, New or Pending Business: 1. 2.	Date of Last Meeting:	(day / month / year)		
Item Recommended Action Status Agenda Items Requiring UGMS Action: 1. 2. 3. Additional Comments, Suggestions, New or Pending Business: 1. 2.	Date of Next Meeting:	(day / month / year)		
Agenda Items Requiring UGMS Action: 1. 2. 3. Additional Comments, Suggestions, New or Pending Business: 1. 2.	Agenda Items Requir	ring Phase Team or So	ub-Committee Action	
1. 2. 3. Additional Comments, Suggestions, New or Pending Business: 1. 2.	Item		Recommended Action	Status
1. 2. 3. Additional Comments, Suggestions, New or Pending Business: 1. 2.				
1. 2. 3. Additional Comments, Suggestions, New or Pending Business: 1. 2.				
1. 2. 3. Additional Comments, Suggestions, New or Pending Business: 1. 2.				
1. 2. 3. Additional Comments, Suggestions, New or Pending Business: 1. 2.			1	
2. 3. Additional Comments, Suggestions, New or Pending Business: 1. 2.	Agenda Items Requir	ring UGMS Action:		
Additional Comments, Suggestions, New or Pending Business: 1. 2.	1.			
Additional Comments, Suggestions, New or Pending Business: 1. 2.				
1. 2.	J.			
1. 2.				
1. 2.				
2.	Additional Comment	s, Suggestions, New	or Pending Business:	
J'				
	٠,			



UGMS Summary Report

January 2020

Phase Team or

Sub-Committee: Phase 2 Management Team

Liaison to the UGMS: Dr. Heather Jackman

Date of Last Meeting: 13 / January / 2020

Date of Next Meeting: 3 / February / 2020

Agenda Items Requiring Phase Team or Sub-Committee Action			
Item	Recommended Action	Status	
Learner request through SAS for a session explaining the Hofstee and reassessment.	Vivian Whelan will add the Reassessment info session to the schedule on January 29 @ 12:00p.m.	DONE	

Agenda Items Requiring UGMS Action:

- 1. Major change for Pharmacology, added an objective for translational research. There is no time change.
- 2. Major change for Microbiology and Infectious Diseases. 10 objectives were removed and 13 new objectives were added for Approach to Tuberculosis session.

Additional Comments, Suggestions, New or Pending Business:		
1.		
2.		
3.		



Monday, January 13, 2020 4:00 p.m. 2M240

Attendees: Heather Jackman (Chair), David Stokes, Alison Haynes, Heidi Coombs, Diana Deacon, Katrin Zipperlen, Maria Goodridge, Brian Kerr, Yaswanta Gummadi, Steve Shorlin, Barton Thiessen, Vivian Whelan

Regrets: Maisam Najafizada

Topic	Details	Action Items and
		person responsible
Introduction and Welcome		
Agenda review - Review for Conflict of Interest - Confirmation of Agenda		
Review and approval of prior minutes - Review of action items from previous meeting	Move a portion under Assessment to Evaluation	Send June and July minutes for a e-vote
1. Business Arising	The new procedure for curricular procedure for making changes is to divide into minor and major curriculum content changes. As part of the process for minor curriculum content changes, they are submitted and reviewed by the COWG, and approved if appropriate. Then it is brought back to the Phase Management Team and UGMS for information purposes. There are a lot of changes because all objectives are being reviewed with the	Motion to put forth the major change for Pharmacology: Maria Goodridge Seconded: Yaswanta Gummadi All in favour to bring it to UGMS



	Undergraduate Content Lead. Most of the changes are minor with rewording of objectives and some modifications of the Medical Council of Canada objectives. If anyone would like to make changes, a change request form can be provided.	Motion to put forth the changes with Microbiology and Infectious Disease: Maria Goodridge Seconded by: Yaswanta Gummadi
	There is a major change for Pharmacology, added an objective for translational research. There is no time change.	All in favour to bring to UGMS
	There is a major change for Microbiology and Infectious Diseases. 10 objectives were removed and 13 new objectives were added for Approach to Tuberculosis.	
	COWG is looking at course goals for each course because of the shuffling and allocation of most of the content in the patient courses. Feedback is wanted should anything be added or taken away. Proposed changes will go to the Phases Teams before going to UGMS. Objectives that aren't looked in detail because they don't affect assessment. Some goals have moved to other course. The course goals can be viewed on CBlue. Some of the goals are outdated or not associated with this course anymore.	
2. Assessment	The exam review group had one meeting and will continue to meet weekly. Assessment	



		T
	maps were up before the holidays and everything is going well.	
	SAS received a request for a session explaining the Hofstee and reassessment. A session has been added on January 29 @ 12:00 for both Phases.	Vivian Whelan will add the Reassessment info session to the schedule on January 29 @ 12:00
	One learner met with Heather re: visual disorder. The learner can contact the Blundon Centre if special needs are required. If accommodate is recommended, then the Faculty of Medicine has to fulfill it. The assessment team can work with the learner, also.	
3. Evaluation	Statement regarding online material being available always scores the lowest. Faculty do not have to provide online material. Some faculty do submit online material in a timely manner but there are some that don't submit anything. The sentence will stay on the course evaluation but PESC will look at rewording it.	
5. Evaluation	Faculty pictures are challenging. Some learners suggested that they may forget who a faculty member is if they just taught one session. The faculty evaluation form includes all faculty that taught. It would be labour intensive to embed a photo of each faculty member each time the evaluation is sent out.	



	A link can be added to the faculty member's page on the Faculty of Medicine website but not all have a picture and not all faculty have a website. But it might help remind the learners who the faculty member was. The first ILS is on January 31.	
4. The Patient		
5. Community Engagement		
6. Physician Competencies	An introduction was done with the Phase 3 class. Documents have been uploaded to Brightspace. Research plan is due by February 7.	
7. Clinical Skills	Clinical Skills starts tomorrow, January 14.	
8. Student Issues	Students are enjoying the current block. There is a lot of anatomy and physiology. To pass a block exam, 70% or Hofstee pass is needed. The OSCE is different. Criteria for a passing the patient course and the OSCE is included on the assessment plan.	
9. New Business	The promotions meeting is tomorrow.	
10. ILS	Discussions are ongoing to have a balanced approach that is responsive to the learners without losing the overall goals of ILS.	



	Looking at delivery of ILS and the Can med roles. Phase 2 will be slightly different from Phase 1. Steve will attend the first ILS to explain. Changes are based on student feedback. Plan to reduce repetition in the large group. Learner responsibility will increase gradually. There's not a lot of talk about health advocacy or leadership. They will be encouraged to be broader in their approach in terms of those Can med roles. This should help with repetition. A guide will be provided for the facilitators. Expectations of learners will be better communication.	
Next Meeting	February 3, 2020	

THEME BASED CURRICULUM CLASS 2024: ENDOCRINOLOGY

Session	Time	Phase
Foundations		•
Introduction to the Endocrine System	1 hr	1
Joint Pain	·	
Calcium Homeostasis	1 hr	2
Hypercalcemia and Hypocalcemia	1 hr	2
Metabolic Bone Disease	1 hr	2
Metabolic Bone Disease Tutorial	1 hr	2
Hormone and Blood Disorders		
Endocrine Control System	1 hr	3
Anterior Pituitary Physiology	1 hr	3
Posterior Pituitary Physiology and Disorder of Water Balance	1 hr	3
Pituitary Disease	1 hr	3
Adrenal Physiology	1 hr	3
Adrenal Disease	1 hr	3
Pituitary and Adrenal Tutorial	1.5 hrs	3
Thyroid Physiology	1 hr	3
Thyroid Disease	1 hr	3
Thyroid Disease Tutorial	1 hr	3
Steroid Therapy	1 hr	3
Pregnancy, Delivery and Newborns		
Male Reproductive Physiology and Hypogonadism	1 hr	3
Syncope and Chest Pain	·	
Lipid Physiology	1 hr	3
Lipid Disorders	1 hr	3
Lipid Disorders Tutorial	1 hr	3
Renal Failure and Diabetes		
Pancreatic Hormones	1 hr	3
Type 2 Diabetes	2 hrs	3
Insulin Therapy	1 hr	3
Hypoglycemia	1 hr	3
Management and Screening of Diabetes Complications	1 hr	3
Metabolic Syndrome and Obesity	1 hr	3
Diabetes Tutorial	1 hr	3
Diabetes Workshop	2 hrs	3

THEME BASED CURRICULUM CLASS 2024 MED 5710 / MED 6750 / MED 7710

Introduction and Foundations: Phase 1 Aug 31st – Oct 2nd 2020 / Exam Oct 5th 2020 **Content, in order of sequence, delivered by:** Anatomy, Biochemistry, Embryology, Endocrinology, Histology, Genetics, Physiology

Session	Content Area
DNA and gene expression	Genetics
Proteins 1: Amino acids	Biochemistry
Proteins 2: Protein structure	Biochemistry
Beginning of human development 1: Fertilization and implantation	Embryology
Introduction to physiology I	Physiology
Enzymes 1: General properties	Biochemistry
Enzymes 2: Mechanisms and kinetics	Biochemistry
Proteins in diagnostic testing: Plasma proteins	Biochemistry
Case study 1: Diagnostic enzymology	Biochemistry
Chromosome and cell division	Genetics
Introduction to metabolism	Biochemistry
Introduction to physiology II	Physiology
Introduction to the endocrine system	Endocrinology
Carbohydrate metabolism 1: Digestion, absorption, glycolysis	Biochemistry
Carbohydrate metabolism 2: Kreb's cycle and oxidative phosphorylation	Biochemistry
Carbohydrate metabolism 3: Gluconeogenesis and glycogen metabolism	Biochemistry
Carbohydrate metabolism 4: Pentose phosphate pathway	Biochemistry
Lipid metabolism 1: Fatty acids and lipid digestion	Biochemistry
Lipid metabolism 2: Fatty acid metabolism	Biochemistry
Case study 2: Glycogen storage defect	Biochemistry
Lipid metabolism 3: Cholesterol synthesis and utilization	Biochemistry
Beginning of human development 2: Early embryonic development I	Embryology
Case study 3: Abnormal lipids	Biochemistry
Beginning of human development 3: Early embryonic development II	Embryology
Tissue Examination	Histology
Epithelia	Histology

Blood Flow and Oxygenation I: Phase 1 Oct 5th 2020 – Oct 23rd 2020 / Exam Oct 26th 2020 Content, in order of sequence, delivered by: Anatomy, Embryology, Emergency Medicine, Biochemistry, Hematology, Histology, Respirology, Radiology

Session	Content Area
Introduction to anatomy	Anatomy
Introduction to point of care ultrasound	Emergency Medicine
Cardiovascular system organogenesis	Embryology
Thorax 1: Thoracic wall, pleura, lungs and trachea	Anatomy
Blood and connective tissue	Histology
Hematopoiesis	Hematology
Amino acid metabolism 1: Protein digestion and turnover	Biochemistry
Imaging of the body	Radiology
Amino acid metabolism 2: Amino acid catabolism and urea cycle	Biochemistry
Thorax lab 1: Thoracic wall, pleura, lungs and trachea	Anatomy
Amino acid metabolism 3: Amino acid synthesis and other roles	Biochemistry
Thorax 2: Heart and vasculature	Anatomy
Respiratory histology	Histology
Amino acid metabolism 4: Nucleotide metabolism	Biochemistry
Cardiovascular and lymphatic histology	Histology
Lung volumes and mechanisms of breathing	Respirology
Thorax lab 2: Heart and vasculature	Anatomy
Physiology of skeletal, smooth and cardiac muscle	Physiology
Case study 4: Compromised urea cycle	Biochemistry
Physiology of oxygen transportation and CO ₂ removal from tissues	Respirology
Physiology of control of ventilation	Respirology
Energy utilization	Biochemistry
Case study 5: Energy utilization during exercise	Biochemistry
Radiologic anatomy of the thorax	Radiology

Blood Flow and Oxygenation II: Phase 1 Oct 27th 2020 – Nov 20th 2020 / Exam Nov 23rd 2020 **Content, in order of sequence, delivered by:** Anatomy, Biochemistry, Physiology

Session	Content Area
Digestive system organogenesis	Embryology
Abdomen 1: Abdominal wall and disposition of viscera	Anatomy
Abdomen lab 1: Anterolateral abdominal wall, peritoneum and viscera	Anatomy
Abdomen 2: Abdominal viscera	Anatomy
Normal lab values and interpretations independent learning module	Hematology
Basic electrophysiology of the heart	Physiology
Abdomen lab 2: Abdominal viscera and posterior abdominal wall	Anatomy
Abdomen radiologic anatomy	Radiology
Integration of metabolism 1	Biochemistry
Integration of metabolism 2	Biochemistry
Physiology of the cardiac cycle	Physiology
Physiology of blood pressure	Physiology
Physiology of blood flow	Physiology
Microcirculation	Physiology
Normal lab values and interpretations lecture	Hematology
Case study 6: Metabolic derangements in diabetes	Biochemistry
Control of systemic blood flow	Physiology
Cardiovascular response to exercise	Physiology
Physiology and anatomy of the kidney	Physiology
Blood pressure demonstration	Physiology
Physiology of blood loss	Physiology
Physiology of the cardiac cycle lab half class	Physiology
Renal and essential hypertension	Physiology
Physiology of blood pressure lab half class	Physiology

Host Defense and Immune Mediated Disorders: Phase 1 Nov 24th – Dec 11th 2020 / Exam Dec 14th 2020 **Content, in order of sequence, delivered by:** Immunology, Pathology, Pediatrics

Session	Content Area
Components of the immune system	Immunology
Immunogens, antigens and antibodies	Immunology
Development of B lymphocytes	Immunology
Injury and cell death	Pathology
Role of major histocompatibility complex in antigen presentation	Immunology
T lymphocytes and T cell receptors	Immunology
Control mechanisms and regulation of the immune system	Immunology
Tetanus immunity tutorial	Immunology
Activation, function and interaction of T and B lymphocytes	Immunology
Immune cell markers, flow cytometry and blood typing lab half class	Immunology
Innate immunity	Immunology
Cytokines	Immunology
Complement pathways	Immunology
Acute inflammation	Pathology
Regeneration and repair	Pathology
Overview of hypersensitivity reactions	Immunology
Chronic and granulomatous inflammation	Pathology
Allergic disorders	Pediatrics
Autoimmunity and autoimmune disorders	Immunology
Hypersensitivity reactions type I-IV case studies	Immunology

Infections and Fever: Phase 2 Jan 5th – Jan 29th 2021 / Exam Feb 1st 2021 **Content, in order of sequence, delivered by:** Community Health, Immunology, Infectious Diseases, Microbiology, Pediatrics, Pharmacology

Session	Content Area
General microbiology	Microbiology
Gram positive cocci	Microbiology
Gram positive bacilli and anaerobic bacteria	Microbiology
Immunity to infections and inflammation	Immunology
Enterobacteriacea	Microbiology
Other gram negative bacteria	Microbiology
Mycobacteria	Microbiology
Antibiotics	Infectious Diseases
Antimicrobial stewardship	Infectious Diseases
Mycology	Microbiology
Parasitology	Microbiology
Physiology and pathogenesis of viruses	Microbiology
RNA viruses	Microbiology
DNA viruses	Microbiology
Epidemiology of infectious diseases	Community Health
Immunology of HIV infection	Immunology
HIV epidemiology, treatment and prevention	Pharmacology
Outbreak management	Community Health
Opportunistic infections	Pharmacology
Vaccine development	Immunology
Principles of vaccination	Community Health
Emerging viruses	Microbiology
Approach to a febrile traveller	Infectious Diseases
Primary immunodeficiences	Pediatrics
Emerging viruses tutorial	Microbiology
Infection control	Infectious Diseases
Vaccination tutorial	Community Health
Visual demonstration and microbiology review	Microbiology
Travel case studies tutorial	Community Health
Emerging infectious diseases tutorial	Community Health

Cough and Dyspnea: Phase 2 Feb 2nd – Mar 5th 2021 / Exam Mar 8th 2021 **Content, in order of sequence, delivered by:** Cardiology, Histology, Infectious Diseases, Occupational Health, Pathology, Pediatrics, Pharmacology, Radiology, Respirology

Session	Content Area
Respiratory and lymphatic histology lab	Histology
Respiratory diagnostics	Respirology
Chest X-Ray	Radiology
Chest X-Ray independent learning module	Radiology
Ears, nose and throat infections	Pediatrics
Cough	Respirology
Respiratory tract infections with pathology	Respirology
Obstructive lung disease	Respirology
Pediatric asthma	Pediatrics
Obstructive lung disease pathology	Pathology
Approach to tuberculosis with pathology and infectious diseases	Respirology
Approach to acute hypoxia	Respirology
Respiratory pharmacology: Histamine, asthma, and OTC drugs	Pharmacology
Acute dyspnea	Respirology
Clinical aspects of lung cancer	Respirology
Disorders of the pleura	Respirology
Cystic fibrosis	Pediatrics
Occupational health and safety	Occupational Health
Introduction to cardiovascular medicine	Cardiology
Interstitial lung disease with pathology	Respirology
Interstitial lung disease tutorial	Respirology
Physiology of spirometry lab	Respirology
Smoking cessation	Respirology
Neoplasia 1	Pathology
Neoplasia 2	Pathology
Neoplasia 3	Pathology
Lung cancer pathology	Pathology
Ischemic heart disease	Cardiology
Pathophysiology of congestive heart failure	Cardiology
Clinical aspects of congestive heart failure	Cardiology
Cardiovascular drugs congestive heart failure	Pharmacology
Cardio/renal diuretics 1	Pharmacology
Cardio/renal diuretics 2	Pharmacology
Acute pulmonary edema and cardiogenic shock	Cardiology
Edema case based discussion	Cardiology
Diagnostic procedures congestive heart failure	Cardiology
Pediatric heart murmurs	Pediatrics
Valvular heart disease	Cardiology
Endocarditis and rheumatic fever	Infectious Diseases
Valves	Pathology
Valvular heart disease tutorial	Cardiology
Congestive heart failure tutorial	Cardiology
Work related health issues	Occupational Health

Abdominal Pain and Jaundice: Phase 2 Mar 9th – Mar 31st 2021 / Exam Apr 1st 2021 **Content, in order of sequence, delivered by:** Anatomy, Embryology, Gastroenterology, Histology, Infectious Diseases, Pathology, Pediatrics, Physiology, Radiology, Surgery

Session	Content Area
Urogenital system organogenesis	Embryology
GU 1: Urinary system and pelvis	Anatomy
Physiology of gut hormone secretion	Physiology
Digestive system histology	Histology
Physiology of gut motility	Physiology
GU 2: Reproductive system	Anatomy
GU lab 1: Urinary system and pelvis	Anatomy
Digestion and absorption	Physiology
GU lab 2: Reproductive system lab	Anatomy
Approach to abnormal liver enzymes	Gastroenterology
Liver disease	Gastroenterology
Gastroesophageal reflux disease and dyspepsia	Gastroenterology
Gastroesophageal disease in infants and children	Pediatrics
GI cancer screening	Gastroenterology
Liver disease problem based learning preparation 1	Gastroenterology
Dysphagia and motility disorders	Gastroenterology
Upper GI pathology	Pathology
GI nutrition	Gastroenterology
Liver disease problem based learning tutorial 1	Gastroenterology
Malabsorption	Gastroenterology
GI infections	Infectious Diseases
Chronic diarrhea	Gastroenterology
Inflammatory bowel disease with radiology	Gastroenterology
Perianal disease	Surgery
Introduction to ultrasound independent learning module	Radiology
Imaging of the GI and renal tract	Radiology
Applied anatomy abdomen and renal half class	Radiology
Pancreatitis with radiology	Gastroenterology
Lower gut tutorial	Gastroenterology
Jaundice	Gastroenterology
Upper gut tutorial	Gastroenterology
GI cancer	Surgery
Liver disease problem based learning preparation 2	Gastroenterology
Liver disease problem based learning tutorial 2	Gastroenterology
Neoplasms of the small and large bowel	Pathology
GI infection tutorial	Infectious Diseases
Non neoplastic disease of the liver	Pathology
Inflammatory bowel tutorial	Gastroenterology
Non neoplastic diseases of the bowels	Pathology
Cirrhosis	Gastroenterology
Functional abdominal pain	Pediatrics
Liver, gallbladder and pancreas	Pathology

Joint Pain: Phase 2 May 11th – Jun 2nd 2021 / Exam Jun 4th 2021 **Content, in order of sequence, delivered by:** Anatomy, Endocrinology, Histology, Infectious Diseases, Orthopedics, Pathology, Pediatrics, Pharmacology, Radiology, Rheumatology

Session	Content Area
MSK 1: Introduction to MSK system	Anatomy
MSK lab 1: Surface anatomy of the upper and lower limbs	Anatomy
MSK 2: Skeletal system and articulations	Anatomy
Cartilage and bone histology	Histology
Approach to patient with arthritis	Rheumatology
MSK lab 2: Skeletal system and articulation	Anatomy
MSK 3: Upper limb musculature	Anatomy
Calcium homeostasis	Endocrinology
Hypercalcemia and hypocalcemia	Endocrinology
MSK 4: Lower limb musculature	Anatomy
Rheumatoid arthritis	Rheumatology
MSK radiologic anatomy	Radiology
Metabolic bone disease	Endocrinology
Bone and joint infections	Radiology
MSK lab 3: Upper limb musculature	Anatomy
Skin and soft tissue infections	Infectious Diseases
MSK lab 4: Lower limb musculature	Anatomy
Acute presentation of inflammatory arthropathies	Rheumatology
Rheumatoid arthritis patient demonstration	Rheumatology
Seronegative spondyloarthropathy	Rheumatology
Approach to bone tumors	Orthopedics
Common pediatric orthopaedic problems	Pediatrics
Osteoarthritis	Rheumatology
Seronegative spondyloarthropathy patient demonstration	Rheumatology
Analgesic, antipyretic, anti-inflammatory drugs	Pharmacology
Pediatric rheumatology	Pediatrics
Osteoarthritis patient demonstration	Rheumatology
Crystalline arthropathy	Rheumatology
Soft tissue rheumatisim	Rheumatology
Metabolic bone diseases tutorial	Endocrinology
Approach to a child with a limp	Pediatrics
Rheumatologic approach to back and neck	Rheumatology
Musculoskeletal system pathology 1	Pathology
Musculoskeletal system pathology 2	Pathology

Headaches, Dizziness and Vertigo: Phase 2 Jun 7th – Jun 24th 2021 / Exam Jun 25th 2021 **Content, in order of sequence, delivered by:** Anatomy, ENT, Infectious Diseases, Neurology, Pediatrics, Radiology

Session	Content Area
Introduction to the nervous system	Neurology
PNS 1: Organization of the peripheral nervous system	Anatomy
PNS 2: Brachial plexus and clinical correlations	Anatomy
PNS 3: Lumbar, sacral plexus and clinical correlations	Anatomy
PNS lab 1, 2 & 3: Upper and lower limb innervation	Anatomy
H&N 1: Osteology independent learning modules	Anatomy
H&N 2: Vasculature and cranial nerves of head and neck	Anatomy
H&N 3: Face, TMJ and scalp	Anatomy
Anatomy and function of the spinal cord	Neurology
H&N 4: Mouth, nose and larynx	Anatomy
Anatomy and function of the brain	Neurology
Neuroanatomy lab 1	Neurology
H&N 5: Pharynx and neck	Anatomy
H&N lab 1 & 2: Osteology, vasculature and cranial nerves	Anatomy
Audition, taste and olfaction	ENT
H&N lab 3 & 4: Face, TMJ, nose and mouth	Anatomy
Neuroanatomy lab 2	Neurology
Head and neck radiology anatomy	Radiology
H&N lab 4 & 5: Pharynx and neck	Anatomy
Neuroanatomy lab 3	Neurology
Headache	Neurology
Headaches in children	Pediatrics
Hypothalamus and homeostasis	Neurology
Dizziness, syncope and vertigo	Neurology
CNS infections	Infectious Diseases
Headache tutorial	Neurology
Nasal congestion	ENT

Weakness, Abnormal Movements and Visual Disturbances: Phase 3 Content, in order of sequence, delivered by: Histology, Neurology, Pathology, Pediatrics, Physiology, Radiology, Rheumatology

Session	Content Area
Physiology of the autonomic nervous system	Physiology
Resting membrane potential	Physiology
Nervous system histology	Histology
Action potential	Physiology
Synaptic transmission	Physiology
Nervous system histology lab	Histology
Sensory system and pain	Neurology
Vision with Neurology	Histology
Vision lab	Histology
Pediatric eye disorders	Pediatrics
Strabismus, ocular motility and amblyopia	Pediatrics
Peripheral motor sensory defects 1	Neurology
Weakness	Neurology
Seizures	Neurology
Pediatric seizures	Pediatrics
Peripheral sensory motor defects 2	Neurology
Seizure tutorial	Neurology
Stroke clinical syndromes	Neurology
Stroke diagnosis and management	Neurology
Cerebrovascular anatomy	Radiology
Vascular diseases of the central nervous system	Pathology
Stroke tutorial	Neurology
Principles of neuro rehabilitation	Neurology
Gait and coordination	Neurology
Movement disorders	Neurology
Multiple sclerosis	Neurology
Neurodegenerative diseases	Pathology
Common medical complication post spinal cord injury	Neurology
Demyelinating diseases	Pathology
Coma	Neurology
Neoplasms of the CNS	Pathology
CT head independent learning module	Radiology
Systemic lupus erythematosus and scleroderma	Rheumatology
Vasculitis	Rheumatology
Myositis	Rheumatology

Cognitive Impairment and Mood Disturbances: Phase 3
Content, in order of sequence, delivered by: Geriatrics, Neurology, Psychiatry, Respirology

Session	Content Area
Memory	Neurology
Language	Neurology
Limbic system	Neurology
Introduction to cognitive impairment	Geriatrics
Introduction to psychiatry	Psychiatry
Cognitive impairment independent learning module	Geriatrics
Mental health	Psychiatry
Mood disorders	Psychiatry
Anxiety disorders	Psychiatry
Psychotic disorders	Psychiatry
Delirium	Psychiatry
Psychotherapy	Psychiatry
Psychopharmacology	Psychiatry
Mood disorders tutorial	Psychiatry
Psychotic and anxiety tutorial	Psychiatry
Personality disorders	Psychiatry
Child and adolescent psychiatry	Psychiatry
Somatoform disorders	Psychiatry
Maladaptive behaviours in childhood	Psychiatry
Post traumatic stress disorder	Psychiatry
Obsessive compulsive disorder	Psychiatry
Sexual disorders	Psychiatry
Sleep and sleep disorders	Psychiatry
Sleep disordered breathing	Respirology

Hormone and Blood Disorders: Phase 3 **Content, in order of sequence, delivered by:** Biochemistry, Endocrinology, Hematology, Histology, Pathology, Pediatrics

Session	Content Area
Endocrine control system	Endocrinology
Metabolism of xenobiotics	Biochemistry
Anterior pituitary physiology	Endocrinology
Posterior pituitary physiology and disorder of water balance	Endocrinology
Pituitary disease	Endocrinology
Pituitary pathology independent learning module	Pathology
Pituitary, head and neck	Histology
Pituitary head and neck tutorial	Histology
Adrenal physiology	Endocrinology
Adrenal disease	Endocrinology
Adrenal pathology	Pathology
Pituitary and adrenal tutorial	Endocrinology
Thyroid physiology	Endocrinology
Thyroid disease	Endocrinology
Parathyroid / thyroid pathology	Pathology
Thyroid disease tutorial	Endocrinology
Steroid therapy	Endocrinology
Parathyroid / thyroid tutorial	Pathology
Normal red cell structure and function	Hematology
Approach to anemia lecture	Hematology
Nutritional anemia	Hematology
Heme metabolism	Biochemistry
Iron overload and chronic anemia	Hematology
Hemolytic anemia	Hematology
Pediatric hematology	Pediatrics
Congenital haemolytic anemia	Pediatrics
Approach to anemia tutorial	Hematology
Approach to thrombocytopenia	Hematology
Approach to thrombocytopenia online module	Hematology
Understanding blood grouping 1	Hematology
Understanding blood grouping 2	Hematology
Transfusion medicine	Hematology
Normal hemostasis	Hematology
Approach to bleeding disorders	Pediatrics
Congenital bleeding disorders	Pediatrics
Introduction to venous thromboembolism	Hematology
Thrombosis	Hematology
Pathology of thrombosis	Pathology
Anticoagulation	Hematology
Infarction	Pathology

Pregnancy, Delivery and Newborns: Phase 3 **Content, in order of sequence, delivered by:** Biochemistry, Embryology, Endocrinology, Histology, Pediatrics, Physiology, Radiology, Women's Health

Session	Content Area
HPO axis and physiology of menstrual cycle	Women's Health
Male reproductive physiology	Physiology
Fetal development	Embryology
Contraception	Women's Health
Placenta and fetal membranes	Embryology
Reproductive histology	Histology
Physiology of pregnancy independent learning module	Women's Health
Antepartum care	Women's Health
Bleeding in pregnancy < 20 weeks	Women's Health
Bleeding in pregnancy > 20 weeks	Women's Health
Hypertension in pregnancy	Women's Health
Diabetes in pregnancy	Women's Health
Antepartum fetal surveillance, multiple pregnancy and fetal growth restriction	Women's Health
Infections in pregnancy	Women's Health
Placenta and fetal membrane lab	Embryology
Preterm labour and premature rupture of membranes	Women's Health
Adolescent pregnancy	Pediatrics
Imaging in obstetrics	Radiology
Labor, intrapartum and postpartum care	Women's Health
Recurrent pregnancy loss	Women's Health
Termination of pregnancy	Women's Health
Infertility and amenorrhea	Women's Health
Male reproduction physiology and hypogonadism	Endocrinology
Abnormal menstrual periods	Women's Health
Hirsuitism, virilisation and polycystic ovarian diseases	Women's Health
Newborn 1	Pediatrics
Newborn 2	Pediatrics
Breast development and histology	Histology
Physiology of breastfeeding tutorial and demo	Physiology
Breastfeeding	Pediatrics
Breast development and histology lab	Histology
Neonate 1 transitional care and issues in the newborn	Pediatrics
Newborn screening: Biochemical testing	Biochemistry
Neonatal 2 common problems in newborns	Pediatrics
Neonatal 3 medical issues	Pediatrics

Genetic Disorders, Growth and Development: Phase 3

Content, in order of sequence, delivered by: Dermatology, Family Medicine, Genetics, Geriatrics, Pediatrics, Psychiatry, Women's Health

Session	Content Area
Introduction to genetics	Genetics
Cytogenetics	Genetics
6 month well baby visit independent learning module	Pediatrics
Cyanotic heart disease	Pediatrics
Acyanotic heart defects	Pediatrics
Variation in human genome	Genetics
Cytogenetics tutorial	Genetics
Pediatric surgery	Pediatrics
Mendelian genetics	Genetics
Pediatric urology	Pediatrics
Atypical modes of inheritance	Genetics
Multifactorial inheritance	Genetics
Population genetics	Genetics
Molecular diagnosis and genetic testing	Genetics
Pedigree analysis and construction tutorial	Genetics
Congenital anomalies of the GI tract	Pediatrics
Growth	Pediatrics
Genetic screening, counselling and ethical issues	Genetics
Growth hormone	Pediatrics
Integration of genetic concepts 1	Genetics
Growth in childhood	Pediatrics
Puberty	Pediatrics
Delayed and precocious puberty	Pediatrics
Living with genetic diseases tutorial	Genetics
Future of genetics	Genetics
Normal growth and development	Pediatrics
Eating disorders	Psychiatry
Adolescent eating disorders	Pediatrics
Global developmental delay	Pediatrics
Malformations of the CNS / delay, regression and neurologic problems	Pediatrics
Cerebral palsy / neuromuscular disease	Pediatrics
School and learning problems, speech and communication	Pediatrics
Learning problems	Psychiatry
Common pediatric dermatologic conditions	Dermatology
Transgender health	Family Medicine
Enuresis	Pediatrics
Approach to oral conditions and pruritus	Dermatology
Introduction to medical dermatology	Dermatology
Obesity in childhood	Pediatrics
Lifestyle modification	Pediatrics
Healthy aging	Geriatrics
Menopausal syndrome	Women's Health
Normal aging	Family Medicine

Pelvic Pain and Masses: Phase 3

Content, in order of sequence, delivered by: Geriatrics, Histology, Infectious Diseases, Nephrology, Pathology, Pharmacology, Radiology, Urology, Women's Health

Session	Content Area
Urogenital radiological anatomy	Radiology
Dysmenorrhea / PMS / endometriosis and adenomyosis 1	Women's Health
Dysmenorrhea / PMS / endometriosis and adenomyosis 2	Women's Health
Urinary histology	Histology
Nephrolithiasis	Nephrology
Stone disease, trauma and scrotal disease	Urology
Urinary tract infections with Family Medicine	Infectious Diseases
Sexually transmitted infections with Family Medicine	Infectious Diseases
Voiding, dysfunction, BPH, penile disease	Urology
Urinary prolapse	Women's Health
Urinary incontinence	Geriatrics
Infertility, erectile dysfunction, interstitial cystitis	Urology
Cervix and HPV related lower genital tract diseases	Women's Health
Pediatric and adolescent gynecology	Women's Health
GTN / malignant and premalignant diseases of the vulva	Women's Health
Uterine cancer	Women's Health
Pathology of the cervix, vulva and vagina	Pathology
Pathology of the uterus and fallopian tube	Pathology
Ovarian masses and neoplasms	Women's Health
Pathology of ovary	Pathology
Ultrasound in gynecology	Radiology
Urology cancer	Urology
Prostate, kidney and bladder cancer	Pathology
Radiology and urology	Urology
Therapeutics 1: Considering medication characteristics	Pharmacology
Therapeutics 2: Pharmacokinetics and pharmacodynamics	Pharmacology
Adverse drug reactions independent learning module	Pharmacology

Syncope and Chest Pain: Phase 3
Content, in order of sequence, delivered by: Cardiology, Endocrinology, Genetics, Pathology, Pediatrics, Pharmacology

Session	Content Area
Introduction to ECG	Cardiology
Introduction to abnormal ECG	Cardiology
ECG independent learning module	Cardiology
Abnormal ECG independent learning modules	Cardiology
Atrial and ventricular arrhythmias	Cardiology
Diagnostic procedures for arrhythmias and pacemakers	Cardiology
Introduction to genetic diseases of the heart	Genetics
Abnormal ECG arrhythmia tutorial	Cardiology
Chest pain, syncope, arrhythmia	Pediatrics
Syncope tutorial	Cardiology
Lipid physiology	Endocrinology
Lipid disorders	Endocrinology
Hypertension	Cardiology
Vascular disease and hypertension	Pathology
Hypertension tutorial	Cardiology
Antihypertensives	Pharmacology
Lipid disorders tutorial	Endocrinology
Acute coronary artery disease	Cardiology
Vascular disease prevention	Cardiology
Chronic coronary artery disease	Cardiology
Pericardial and myocardial disease	Cardiology
PVD, aortic aneurysm, aortic dissection, stroke, carotid disease	Cardiology
Antianginal drugs	Pharmacology
Ischemic heart disease	Pathology
Pericardial disease and chest pain tutorial	Cardiology
Abnormal ECG ischemic heart disease tutorial	Cardiology
Myocardial infarction tutorial	Cardiology

Renal Failure and Diabetes: Phase 3
Content, in order of sequence, delivered by: Biochemistry, Endocrinology, Nephrology, Pathology,

Pediatrics

Session	Content Area
Assessment of kidney function	Nephrology
Fluid compartments	Nephrology
Water and sodium	Nephrology
Potassium	Nephrology
Clinical approach to sodium disorders	Nephrology
Approach to acid base	Nephrology
Acute kidney injury	Nephrology
Proteinuria	Nephrology
Hematuria	Nephrology
Acute kidney injury tutorial	Nephrology
Approach to chronic kidney diseases	Nephrology
Pediatric nephrology	Pediatrics
Drugs and the kidney	Nephrology
Pathophysiologic effects of chronic kidney disease	Nephrology
Glomerular diseases 1	Pathology
Glomerular diseases 2	Pathology
Renal problem based tutorial 1	Nephrology
Pancreatic hormones	Endocrinology
Blood glucose regulation	Biochemistry
Type 1 diabetes	Pediatrics
Type 2 diabetes with Family Medicine	Endocrinology
Renal problem based tutorial 2	Nephrology
Insulin therapy	Endocrinology
Hypoglycemia	Endocrinology
Renal problem based tutorial 3	Nephrology
Renal problem based tutorial 4	Nephrology
Management and screening of diabetes complications	Endocrinology
Metabolic syndrome and obesity	Endocrinology
Diabetes tutorial	Endocrinology
Diabetes workshop	Endocrinology
Point of care testing	Biochemistry

Trauma and Emergencies: Phase 3

Content, in order of sequence, delivered by: Emergency Medicine, Gastroenterology, Geriatrics, Neurology, Orthopedics, Pathology, Pediatrics, Psychiatry, Radiology, Surgery

Session	Content Area
Approach to trauma and MSK injury	Orthopedics
Shock	Emergency Medicine
Psychiatric emergencies	Psychiatry
Crisis intervention	Psychiatry
Acute sports injury	Orthopedics
Clinical correlations of the abdomen	Surgery
Surgical causes of acute abdominal pain	Surgery
Surgery of the biliary tract	Surgery
Upper GI bleeding	Gastroenterology
Common hand injuries	Orthopedics
Fractures of the upper extremity	Orthopedics
Lower GI bleeding with radiology	Gastroenterology
Abdominal pain tutorial	Surgery
Sepsis	Emergency Medicine
Fractures of the lower extremity	Orthopedics
Upper GI bleeding tutorial	Gastroenterology
Poisoning	Emergency Medicine
Substance use disorders	Psychiatry
Intoxication and withdrawal	Psychiatry
Toxicology	Emergency Medicine
Pelvic and acetabula trauma and hip fractures	Orthopedics
Burns	Emergency Medicine
Approach to febrile child	Pediatrics
Acute back pain and spinal injury	Orthopedics
Complications of fractures	Orthopedics
Acute MSK injury radiology	Radiology
Child abuse	Pediatrics
Elder abuse	Geriatrics
Recognition of critically ill child	Pediatrics
Traumatic brain injury	Neurology
Pathology of head injuries	Pathology

Lymphadenopathy, Splenomegaly and Cancer: Phase 3

Content, in order of sequence, delivered by: Genetics, Hematology, Immunology, Oncology, Pathology, Pediatrics, Surgery

Session	Content Area
Tumor immunology	Immunology
Cancer and genetics DNA integrity and repair	Genetics
Approach to lymphadenopathy and splenomegaly	Hematology
Hematologic neoplasia 1 and 2	Hematology
Pharmocogenomics	Genetics
Integration of genetic concepts 2	Genetics
Introduction to adult cancer	Oncology
Hematologic neoplasia 3	Hematology
Hematologic neoplasia 4	Hematology
Pathology of lymphoma	Pathology
Laboratory diagnosis of lymphoma	Pathology
Childhood cancer	Pediatrics
Pediatric cancer	Pathology
Breast disease	Surgery
Breast disease pathology	Pathology
Hematology transplant independent learning module	Hematology

Care of the Elderly: Phase 3

Content, in order of sequence, delivered by: Geriatrics, Psychiatry

Session	Content Area
Pharmacology and polypharmacy	Geriatrics
Comprehensive geriatric assessment	Geriatrics
Falls and gait disturbance assessment	Geriatrics
Transition of care online module	Geriatrics
Adverse events	Geriatrics
Geriatric psychiatry	Psychiatry
Transition of care case based	Geriatrics

Palliative Care: Phase 3

Content, in order of sequence, delivered by: Emergency Medicine, Palliative Care, Pharmacology

Session	Content Area
Introduction to palliative care concepts	Palliative Care
Symptom management 1	Palliative Care
Symptom management 2	Palliative Care
Opioids	Pharmacology
Drugs to treat neuropathic pain	Pharmacology
Symptom management 1 tutorial	Palliative Care
Symptom management 3	Palliative Care
Symptom management 2 tutorial	Palliative Care
Palliative care in different populations	Palliative Care
Pediatric palliative care	Palliative Care
Organ donation	Emergency Medicine
Last days and hours	Palliative Care

PHASE 1 COURSE GOALS MATRIX BACK TO MINUTES

MED 5710 – Patient I

Description:

The Patient I course introduces learners to themes with both horizontal and vertical integration of physician competencies, clinical skills and basic and clinical sciences as they relate to common clinical encounters and patient symptoms.

Course Goal / CanMEDS Role /		Med	ical E	al Expert (ME)				Com	munio	cator	(CM)		Coll	labora	ator (CO)	Lea	der (1	L D)	A	Healtl dvoca (HA)	ite	Scho	olar (SC)	Pro	fessio	onal (P	'R)
Program Objective	ME-	ME-	ME-	ME-	ME- 5	ME-	CM- 1	CM- 2	CM-	CM- 4	CM- 5	CM- 6	CO- 1	CO- 2	CO- 3	CO- 4	LD- 1	LD- 2	LD- 3		HA- 2	HA- 3	SC-1	SC-2	SC-3	PR- 1	PR- 2	PR-	PR-
Integrate basic and clinical sciences as they relate to common						37																							
clinical encounters and patient symptoms.						X																							
Identify health care resources available for the investigation,			37	37	37	37																							
diagnosis, treatment and management of the patient.			X	X	X	X																							
Demonstrate effective collaboration with peers in group													v	v															
learning sessions.													X	X															
Develop a plan for personal continued education to achieve																	v						V	v					
session objectives.																	X						X	X					
Demonstrate accountability and commitment to the profession																										v	v	X	v
by adhering to professional standards.																										X	Λ	$ \Lambda $	X
Demonstrate leadership skills in group learning sessions.																	X												
Identify risk factors for illness and disease prevention.																				X	X								
Collect and synthesize accurate and relevant information	X	X	X	X	X	X		X																					
related to common clinical encounters and patient symptoms.	Λ	Λ	Λ	Λ	Λ	Λ		Λ																					

MED 5720 – Clinical Skills I

Description:

Clinical Skills I course introduces learners to the main elements and techniques of the medical interview. Communication and collaboration skills will be developed in the context of patient-centered care and working with other health care professionals.

Course Goal / CanMEDS Role /		Med	ical E	xpert	(ME))		Com	muni	cator	· (CM)	ı	Coll	labora	ator (CO)	Lea	ıder (1	L D)	A	Healtl dvoca (HA)	ite	Sch	olar (SC)	Pro	ofessio	onal ('R)
Program Objective	ME-	ME-	ME-	ME-	ME- 5	ME- 6	CM- 1	CM- 2	CM-	CM-	CM- 5	CM- 6	CO- 1	CO- 2	CO- 3	CO- 4	LD-	LD- 2	LD-	HA- 1	HA- 2		SC-1	SC-2	SC-3	PR-	PR-	PR-	PR-
Perform a complete and accurate patient-centred history.	X																												
Demonstrate the attributes of an effective small group															V	v													
learning environment.															X	Λ													
Identify the importance of an interdisciplinary team approach													X	v	X														
to patient-centered care and its importance in patient safety.													Λ	Λ	Λ														
Discuss the evidence for effective communication skills.																								X					
Explain the principles of doctor-patient relationships without																										v	v	W	v
compromising patient care and well-being.																										X	Λ	X	X
Demonstrate a commitment to the profession by adhering to																										v	v	X	X
professional standards.																										X	Λ	Λ	Λ

MED 5730 – Physician Competencies I

Description:

Physician Competencies I course introduces learners to competencies in the non-medical expert physician roles of scholar, communicator, collaborator, health advocate, leader and professional in the context of the patient, family and physician within health care systems.

Course Goal / CanMEDS Role /		Medical Expert (ME)						muni	cator	(CM)	١	Coll	labor	ator ((CO)	Leader (LD)			Health Advocate (HA)			Sch	olar (SC)	Pro	ofessi	onal (PR)
Program Objective	ME-	ME-	ME- ME- 3 4	ME- 5	ME-	CM- 1	CM- 2	CM- 3	CM- 4	CM- 5	CM- 6	CO- 1	CO- 2	CO- 3	CO- 4	LD- 1	LD- 2	LD- 3	HA- 1	HA- 2	HA- 3	SC-1	SC-2 SC-3	PR- 1	PR- 2	PR-	PR-
Explain the roles of the various professional groups and other												X	X	X	X												
stakeholders on the healthcare team.												Λ	Λ	Λ	Λ												
Discuss the role of the physician as a leader and health care																	v	W						V	v	V	v
manager in the health care system.																	X	X						X	X	X	X
Apply principles of biostatistics and epidemiology to																							37				
measuring health status of patients and communities.																							X				
Conduct a literature review and develop a research question.																							X			1	
Identify the principles of ethical research and the policies and																							X				
guidelines governing health research.																							A				
Discuss ethical and legal issues for decision making in clinical																								X	v	X	X
encounters and the health care system.																								Λ	X	Λ	$ \Lambda $
Identify strategies for career planning and physician wellness.																X											
Integrate the principles of the CanMEDS roles into clinical					v						v	v	X			v			v				v	V	v	X	v
reasoning relating to patients and communities.					X						X	X	Λ			X			X				X	X	X	A	X
Apply the principles of self-directed and lifelong learning.																						X					
Identify the professional roles of the physician to self,																											
patients, communities, medical profession, other professionals																								X	X	X	X
and the health care system.																											
Identify the professional roles of the physician in relation to																		37									
quality improvement in health care and patient safety.																		X									
Demonstrate a commitment to the profession by adhering to																-			-					X	X	X	X
professional standards.																								Λ	Λ	Λ	Λ

MED 5740 - Community Engagement I

Description:

Community Engagement I course introduces learners to the knowledge and skills necessary for the understanding of contemporary issues in community health and the integration of population health principles into clinical practice settings through academic work and early clinical experiences.

Course Goal / CanMEDS Role /	Medical Expert (ME)							Com	munic	cator	· (CM)		Coll	labora	ator ((CO)				A	Health dvocate (HA)	Scholar (SC)			Pro	ofessio	onal (l	PR)
Program Objective	ME-	ME-	ME-	ME-	ME- 5	ME-	CM- 1	CM-	CM-	CM-	CM- 5	CM- 6	CO- 1	CO- 2	CO- 3	CO- 4	LD-	LD- 2	LD-		HA- HA- 2 3	SC-1	SC-2	SC-3	PR-	PR-	PR-	PR-
Describe the roles, activities and interaction of the family																												
physician in their own practice, healthcare system and local														X	X													1
community.																												1
Identify social determinants of health, risk factors for illness																												
and the interaction between behavioural, socioeconomic,																				v								1
environmental and cultural factors influencing the health of																				X								1
the community.																												1
Describe the public policies and interaction among physicians,																												
health institutions and health programs to promote health in a																			X									ı
community setting.																												1
Apply interview and physical examination skills in a practice	X	X	X	X	X	X																						
setting.	Λ	Λ	Λ	Λ	Λ	Λ																						
Demonstrate a commitment to the profession by adhering to																									X	X	X	X
professional standards.																									Λ	Λ	Λ	Λ
Discuss barriers to health care access for populations,																												
including persons with disabilities, the underserved and the																				X	X							.
marginalized.																												<u>. </u>

Faculty Phase 1	Date of Submission	Session	Change Type	COWG Review	Phase Review
Amanda Pendergast	Jun 15th 2020	Introduction to Early Clinical Experiences	Reduce session by 30 mins	Jun 16th 2020	Aug 7th 2020
Amanda Pendergast	Jun 15th 2020	Professional Expectations of Medical Students	Remove session	Jun 16th 2020	Aug 7th 2020
Helene Paradis	Jun 22nd 2020	Krebs Cycle and Oxidative Phosphorylation	Increase time	Jun 16th 2020	Aug 7th 2020
Qi Yuan	Jun 25th 2020	Biological Membranes, Electrolyte Transport and H2O Movement	Remove session	Jun 16th 2020	Aug 7th 2020
June Harris	Jun 29th 2020	Introduction to Anatomy	Reduce session by 30 mins	Jun 16th 2020	Aug 7th 2020
June Harris	Jun 29th 2020	Introduction to Point of Care Ultrasound	Increase session by 30 mins	Jun 16th 2020	Aug 7th 2020
June Harris	Jul 16th 2020	Thorax Lab 1: Pleura, Lungs and Trachea	Add objectives	Jul 22nd 2020	Aug 7th 2020
June Harris	Jul 17th 202	Thorax Lab 2: Heart and Vasculature	Add objectives	Jul 22nd 2020	Aug 7th 2020
June Harris	Jul 18th 2020	Abdomen Lab 1: Anterolateral Abdominal Wall, Peritoneum, Viscera	Rewording objectives Title change	Jul 22nd 2020	Aug 7th 2020
June Harris	Jul 18th 2020	Abdomen Lab 2: Abdominal Viscera, Posterior Abdominal Wall	Rewording objectives Title change	Jul 22nd 2020	Aug 7th 2020
Laura Gillespie	Jun 18th 2020	Introduction to Metabolism	Remove objective	Jul 22nd 2020	Aug 7th 2020