PRE-CLERKSHIP (Years 1 and 2)

STUDENT HANDBOOK

UNDERGRADUATE MEDICAL EDUCATION

Class of 2023
# Table of Contents

DEAN'S WELCOME .................................................................................................................. 3  
MESSAGE FROM THE ASSOCIATE DEAN ........................................................................... 4  
MESSAGE FROM THE ASSOCIATE DEAN, PRE-CLERKSHIP ........................................... 5  
MESSAGE FROM THE ASSOCIATE DEAN, CLERKSHIP .................................................. 6  
MESSAGE FROM THE ASSOCIATE DEAN, EVALUATIONS AND RESEARCH .................. 7  
MESSAGE FROM THE DIRECTOR OF STUDENT ADVISING AND WELLNESS (SAW) .......... 8  
MISSION STATEMENT ........................................................................................................... 9  
GOALS, OBJECTIVES AND OPERATING PHILOSOPHY .................................................... 10  
OPERATING PHILOSOPHY ..................................................................................................... 11  
GRADUATION EDUCATIONAL OBJECTIVES ....................................................................... 12  
COMPETENCIES LEADING TO ............................................................................................. 13  
ACHIEVEMENT OF GRADUATION EDUCATIONAL OBJECTIVES ................................ 13  
APPENDIX 1: OUTCOME MEASURES .................................................................................. 19  
THE UNDERGRADUATE MEDICAL CURRICULUM AT THE UNIVERSITY OF CALGARY .... 20  
INTRODUCTION .................................................................................................................. 20  
CURRICULAR CONTENT ....................................................................................................... 20  
YEARLY SCHEDULE ............................................................................................................ 21  
TIMETABLES ........................................................................................................................ 21  
OSLER .................................................................................................................................. 21  
TEACHING METHODS IN CLINICAL PRESENTATION CURRICULUM .............................. 22  
CLINICAL PRESENTATION ................................................................................................. 22  
LECTURES, PODCASTS & PATIENT PRESENTATIONS ......................................................... 23  
SMALL GROUP SESSIONS .................................................................................................... 23  
CLINICAL CORRELATION ..................................................................................................... 24  
INDEPENDENT STUDY TIME (IST) .................................................................................... 24  
PRE-CLERKSHIP (YEARS 1 AND 2) .................................................................................... 25  
CLERKSHIP (YEAR 3) ......................................................................................................... 25  
SHADOWING ....................................................................................................................... 26  
CANADIAN RESIDENT MATCHING SERVICE (CaRMS) ..................................................... 26  
A GUIDE TO PROFESSIONAL BEHAVIOUR FOR STUDENT PHYSICIANS .................... 27  
UNIVERSITY OF CALGARY MEDICAL SCHOOL STUDENT CODE OF CONDUCT .......... 31  
THE STUDENT PROFESSIONALISM COMMITTEE TERMS OF REFERENCE ................ 32  
STEPS TO RESOLVING ISSUES OF UNPROFESSIONALISM ....................................... 34  
ATTENDANCE ...................................................................................................................... 35  
THE MASTER TEACHER PROGRAM .................................................................................... 35  
VISITORS ............................................................................................................................. 36  
COURSE QUESTIONNAIRES ............................................................................................... 36  
FUNDING FOR PRESENTATION OF PAPERS AT CONFERENCES OUTSIDE OF U OF C ...... 36  
ACADEMIC ACCOMMODATIONS FOR STUDENTS .......................................................... 36  
RECORDINGS OF LECTURES .............................................................................................. 37  
CONFLICTS OF INTEREST ................................................................................................. 37  
USE OF SOCIAL MEDIA ........................................................................................................ 37  
HEALTH SCIENCE CENTRE LIBRARY SERVICES .............................................................. 37  
STUDENT EVALUATION POLICIES .................................................................................... 38  
PURPOSE OF STUDENT EVALUATIONS ............................................................................ 38  
TYPES OF FORMAL STUDENT EVALUATIONS ................................................................. 38  
THE STUDENT FILE ........................................................................................................... 39  
ASSOCIATE DEAN’S TESTS (ADTs) ................................................................................... 40  
PEER FEEDBACK SELF-ASSessment PROCESS ................................................................. 41  
THE MEDICAL COUNCIL OF CANADA (MCC) EXAMINATIONS .................................... 41  
PROMOTION ....................................................................................................................... 41  
OTHER INFORMATION ........................................................................................................ 42
Welcome to the University of Calgary’s Cumming School of Medicine. You have worked hard to become students in our MD program. We want you to continue successfully on the career path you’ve chosen, which is why we’re providing you with this road map. Our hope is that the overview and information our UME Student Handbook provides will help you navigate successfully through the next three years.

You have chosen to study at an innovative medical school, one offering patient-centered learning and hands-on experience, introduced early in your training; one offering “on-the-job training” in both rural and urban settings throughout Alberta; one grounded in solid basic science; and, as you likely know, one of only two medical schools in Canada distinguishing itself by offering a three-year MD program. We’re proud of your medical school and hope you will be too.

Innovation is important to us. I challenge you to be innovative in your approach to learning. Be open to thinking critically about what your teachers and classmates are presenting. Be mindful of what the medical profession you are entering into can offer you, but also be equally aware of the responsibilities you are taking on.

Working as a physician is both a privilege and an obligation to our society. You will give and gain medical knowledge throughout your career. I encourage you to share what you will learn with those who will come behind you.

Your course load will be heavy and the learning curve is steep in Medicine. However, please take a long range view of your learning experience and take advantage of the many opportunities in the School that are not part of your ‘formal’ curriculum. Special lectures and events occur frequently, often with notable guests, including Nobel Prize winners. I assure you that you will remember your experience when you attend these special events and listen to leading experts on research, health policy or medical affairs. Many students find this exposure to be stimulating and potentially influential in their ultimate choice of careers.

Welcome to the Cumming School of Medicine community. No doubt the next three years will be among the most challenging of your lives. We intend them to also be among the most rewarding. Work hard, have fun, and welcome to the University of Calgary.

Jon Meddings, MD
Dean, Cumming School of Medicine
University of Calgary
Welcome to The Cumming School of Medicine and to the profession of Medicine. You are about to enter a transformative period of your life, a period filled with challenge, new friendships, and personal growth. Today you enter the study of medicine with excitement and possibly some trepidation. In 3 short years your hard work, experiences and practice will have transformed you into a physician.

You are entering medical school during a time of great technological change and shifting societal expectations. This will create both challenges and tremendous opportunities. Be open to new experiences, seek out mentors and maintain a school/life balance. Remember that being a physician gives you the incredible privilege of touching the lives of countless others. Approach this experience with kindness and humility and your patients will teach you more than you could imagine.

This handbook will provide a general roadmap for navigating your time at the Cumming School of Medicine. Please familiarize yourself with its contents and use it as a reference throughout your time in medical school.

Rest assured that the entire UME team is dedicated to providing you with the highest quality educational experience, one that embraces scholarship, innovation and leadership.

I look forward to meeting each of you, and again, welcome to the Cumming School of Medicine!

Dr. Christopher Naugler
Associate Dean
Welcome to the Cumming School of Medicine. You made it!

You are embarking on a three-year exciting adventure that includes personal connections, expanding horizons and of course, hard work. You are here for a reason; because you have the skills and attributes to be a competent physician. Each of you bring unique life experiences and educational backgrounds.

For many, you will be gaining knowledge and skills in a different way than ever before. The faculty and staff in UME are here to support you through our unique curriculum.

I remember my first day of orientation at the University of Calgary being filled with nervous excitement. Medical school was one of my most favorite times. I was challenged intellectually, made amazing friends and had exciting opportunities.

This is not to say that it is always smooth. There will be hurdles to overcome, personal or academic. When struggles occur, please reach out to UME (staff and leadership) to help support you to be successful through this journey.

You are now a member of the medical profession. With that comes great responsibility. We are all privileged to be trusted with the health of Albertans and beyond.

Please take the time to review this handbook; a guide to important information and policies. We are so happy you are here and look forward to working together.

Dr. Sarah Weeks
Assistant Dean, Pre-clerkship
Welcome to Medical School! Your next three years as a student in the Undergraduate Medical Education (UME) program of the Cumming School of Medicine will be three of the greatest years of your life.

You are embarking on a fantastic journey: medical school itself, while it may be challenging at times, is a great experience. You will learn many new things, in ways that are different from how you have learned in the past. You will be expected to not only acquire new knowledge but to apply that factual knowledge in clinical situations. You will be expected to develop and practice skills and attitudes required by a practicing physician. While you will have to work hard to achieve all of this, our program has an innovative curriculum supported by incredibly dedicated faculty and staff.

Medical school represents a first step on an unbelievably satisfying career. I consider myself incredibly fortunate: I get up nearly every single day looking forward to going to work as a doctor. I have a job where I get to interact with interesting people (my patients, my colleagues, my students) on a daily basis. I have relationships with all of these people that are awe inspiring and fulfilling. I get to stretch my brain and think about interesting clinical problems. I’m entrusted with my patients’ secrets, their fears and their health. With this career comes a great deal of responsibility; a willingness to accept this responsibility is part of what it means to be a professional.

During the next three years you may face personal and academic challenges. When this happens, you should feel comfortable coming to meet with us in UME. You have been accepted to the program because we feel that you are the right people to be here and we will work hard to support you in achieving your goal of becoming a physician. Please know that you can come and talk with us at any time.

This handbook contains a lot of useful information and links to policy documents that will be important to you as you complete the UME program. I encourage you to familiarize yourself with the information contained within this document and the policies that are referenced within.

Again, welcome to med school and the profession!

Dr. Kevin Busche
Assistant Dean, Clerkship
Welcome to the Cumming School of Medicine and congratulations! The journey through medical school is stimulating, challenging, and fun. I am a proud graduate of the Cumming School of Medicine, Class of 2011 (Kakapos) and met some of my closest lifelong friends during my medical school career.

I am so grateful to have joined the UME team in my current role in 2019. I truly believe that we have the most welcoming, amazing group of people running our program and feel so privileged to be able to work with this team every day.

I know that the thought of writing examinations and being tested regularly can cause some anxiety amongst new students, but I want to assure you that we have put in a tremendous amount of work to ensure that our assessment process is not only fair, but that it will help prepare you for a lifelong career in medicine.

I will be giving an introductory session on our evaluation system during your O-week, but please know that my office door is always open for more discussion or questions on this matter.

Good luck and all the best in your journey as a medical student!

Dr. Janeve Desy
Assistant Dean, Evaluations and Research
MESSAGE FROM THE DIRECTOR OF STUDENT ADVISING AND WELLNESS (SAW)

Welcome to the Cumming School of Medicine!

The Student Advising and Wellness (SAW) Team is here to support you through the duration of your journey to become a doctor. The journey is both challenging and rewarding. Everyone’s path is unique, yet completely interconnected with the experience as a whole. We are here to listen, reflect and advise you in a confidential and nonjudgmental way.

We encourage you to strive for balance in your academic and personal lives.

The SAW TEAM offers support and guidance in:

- Emotional counselling & psychology/psychiatric referrals
- Academic assistance & study strategies
- Career planning
- Support with elective selection
- CaRMS guidance
- Therapy dog program
- Wellness Initiatives

Meet the SAW Team:

Dr. Carol Hutchison, Director
Dr. Teresa Killam, Associate Director
Johanna Holm, Student Guidance and Wellness Specialist
Janine Low, Administrative Assistant

Enjoy your journey!

Dr. Carol Hutchison, BSc, MD, MEd, FRCSC.
Director, Student Advising and Wellness (SAW)
University of Calgary
Cumming School of Medicine

MISSION STATEMENT

An innovative medical school committed to excellence and leadership in education, research and service to society.
Goals, Objectives and Operating Philosophy

Goals

The Undergraduate Medical Education Program at the Cumming School of Medicine strives to:

1. Be an innovative and progressive three-year program that educates its students to become compassionate, competent and well-rounded physicians prepared for supervised practice.

2. Provide an environment that fosters collegiality, ethical practice and professionalism among students, faculty and allied health professionals to produce future physicians capable of working cooperatively within a team of health care providers, able to provide comprehensive, socially competent health care to our socioculturally diverse population with a goal of social accountability to all global citizens.

3. Facilitate the acquisition of clinical problem-solving skills through the use of clinical presentations as the foundation of its curriculum, early contact with patients and integration of basic and clinical sciences.

4. Prepare students to remain competent throughout their career, being able to appraise new scientific medical information and thoughtfully modify their practice accordingly.

5. Maintain an active learning environment by incorporating research opportunities, scheduled independent study time and a balance of traditional and innovative instructional modalities, including, but not limited to: small group learning, problem-based learning, interactive lectures, simulated patient encounters and bedside teaching.

6. Communicate clear performance expectations to students through the use of outcome-based objectives assessed in an ongoing fashion with formative and summative evaluations.

7. Provide a safe learning environment for students, an environment free of intimidation and harassment.

Approved by Curriculum Committee: 99/12/03.
Reviewed by Curriculum Committee 04/02/20
Revised by Undergraduate Medical Education Committee 10/04/09
Revised by UMEC June 4th, 2010 and November 21 2014
Approved by Faculty Council March 11, 2015
Operating Philosophy

The program will support the goals and objectives of the Undergraduate Medical Education Program and will be characterized by:

1. An innovative three-year program with clinical presentations as the foundation of the curriculum. The curriculum provides:
   a) An approach to clinical presentations.
   b) Development of knowledge, skills and behaviours required to approach clinical presentations.
   c) Experiences in a variety of clinical settings with clinical presentations in ambulatory, emergency, long term and acute health care delivery situations.

2. Objectives for each clinical presentation developed by faculty and containing a clinical reasoning pathway and relevant diagnostic classification schemes.

3. A curriculum that integrates basic and clinical sciences, which are introduced in an organized fashion as they relate to the clinical presentations.

4. A curriculum that maintains an active learning environment with more than 25% of scheduled instructional activities spent in small group, interactive learning sessions.

5. Small group case-based learning sessions that provide an essential and unique learning activity for the students. These sessions promote:
   a) Creation of an approach to clinical problem solving.
   b) In depth analysis of the objectives and content of clinical problems presented in the course.
   c) Diagnostic classification schemes and their active reinforcement in solving clinical problems.
   d) Correction of student misperceptions.
   e) Development of communication and collaboration skills.

6. Early and ongoing exposure to real, standardized and simulated patients to increase relevance of course material; demonstrate appropriate professional behaviour, and to emphasize the importance of communication skills.

7. Electronic access to educational materials relating to the curricular content.

8. Opportunities for students to explore medical topics in greater depth than presented in course work including, but not limited to, involvement in research, selection of clinical electives and completion of individual course projects.

9. Independent study time (IST) so that the student can actively process knowledge and construct their understanding. In order to facilitate this deeper approach to learning, scheduled IST, comprising 30% of weekly scheduled time, is organized within the pre clerkship curriculum. This time is intended for:
   a) Preparation for small group learning.
   b) Completion of assigned reading.
   c) Study around course objectives and presentations.
   d) Pursuing research or career sampling opportunities (time permitting).

   IST may be exchanged to facilitate scheduling of clinical correlation sessions and other small group activities which are dependent on clinic schedules not determined by UME.

10. An assessment and feedback process that:
    a) Measures clinical problem solving, medical skills, professional behaviour, and general content knowledge.
    b) Clearly communicates performance expectations through the use of outcome-based learning objectives.
    c) Includes peer assessment of the attainment of educational and professional objectives.
    d) Provides students with an examination blueprint.
    e) Provides ongoing formative and summative evaluations throughout the three years of the curriculum.
    f) Actively facilitates ongoing program evaluation.

Approved by Curriculum Committee: 99/12/03. Reviewed and approved by Curriculum Committee: 04/02/20.
Approved by Faculty Council: 04/12/08.
Revised by Undergraduate Medical Education Committee 10/04/09. Revised by UMEC June 4th, 2010 and November 21 2014
Approved by Faculty Council March 11, 2015
Graduation Educational Objectives

A student at the time of graduation will be able to:

1. Demonstrate the basic science and clinical science knowledge and skills necessary for the supervised practice of medicine, and use knowledge efficiently in the analysis and solution of clinical presentations.

2. Evaluate patients and properly manage their medical problems by:
   a) Conducting a comprehensive medical history and thorough physical examination; reliably eliciting appropriate information in the history and detecting abnormal findings on the physical examination.
   b) Correctly identifying the patient's diagnosis, differential diagnosis, and medical problems.
   c) Applying an appropriate clinical reasoning process to the patient's problems.
   d) Advocating for patients while formulating and implementing a resource-conscious management plan to deal effectively with patient problems.
   e) Applying basic patient safety principles

3. Apply a comprehensive patient-centered approach in the evaluation and care of patients including sensitivity to differing: sexual orientation and gender identity, cultural and spiritual beliefs, attitudes and behaviours, economic situations.

4. Demonstrate knowledge of the fundamental concepts of disease prevention and health promotion for individual patients and populations and incorporate them into treatment plans as appropriate.

5. Communicate and interact effectively with patients, families, medical staff and others involved in the delivery of health services.

6. Describe and apply ethical principles and high standards in all aspects of medical practice.

7. Exhibit appropriate professional behaviour, including awareness of personal wellness and limitations.

8. Formulate clear clinical questions and apply an evidence-based approach to solving these questions.

9. Demonstrate educational initiative and self-directed life-long learning skills.

10. Describe the basic principles of clinical and translational research, including how such research is conducted, evaluated, explained to patients and applied to patient care.

These educational objectives will be achieved through the competencies listed on the next pages.

Approved by Curriculum Committee: 99/12/03.
Reviewed by Curriculum Committee 04/02/20
Revised by Undergraduate Medical Education Committee 10/04/09
Revised by UMEC June 4th, 2010 and November 21 2014
Approved by Faculty Council March 11, 2015
### Competencies Leading to Achievement of Graduation Educational Objectives

See Appendix 1 for List of Outcomes Measures

1. **Medical Expert role:** graduating medical students will be able to provide supervised patient-centered medical care. The subcomponents of this competency are as follows:

   **A. Ability to maintain an appropriate body of medical knowledge**

<table>
<thead>
<tr>
<th>Main Graduation Educational Objective(s)</th>
<th>Clerkship-ready milestone/relevant outcome measure(s)</th>
<th>Residency-ready milestone/relevant outcome measure(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2</td>
<td>Understands foundational basic science concepts for each clinical presentation within pre-clerkship courses (A1, A2, A8, A10, A11)</td>
<td>Applies clinically-relevant basic science concepts in solving problems (A5, A7, A8,B1, B3, B4,B5,B6)</td>
</tr>
<tr>
<td></td>
<td>Describes and begins to apply foundational clinical concepts for each clinical presentation within pre-clerkship courses (A1, A2, A8, A10, A11)</td>
<td>Consistently applies clinical diagnostic knowledge to solving clinical problems (A5, A6, A7, A8, B1, B2, B3, B4, B5)</td>
</tr>
<tr>
<td></td>
<td>Is able to demonstrate an appropriate approach to common laboratory/radiological tests (A1, A2,B2, A8)</td>
<td>Interprets typical results for common diagnostic tests accurately, while using statistical concepts such as sensitivity, specificity, likelihood ratios, predictive value (A5, A6, A7, A8, B1, B4,B6)</td>
</tr>
</tbody>
</table>

   **B. Ability to gather and synthesize essential and accurate information to define each patient’s clinical problems**

<table>
<thead>
<tr>
<th>Main Graduation Educational Objective(s)</th>
<th>Clerkship-ready milestone/relevant outcome measure(s)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>2,3,5,8</td>
<td>Conducts a patient-centered history that illuminates the health issues, social context and illness experience for each patient (A3, A4, A9,A11)</td>
<td>Consistently conducts a patient-centered history that illuminates the health issues, social context and illness experience for each patient. This includes, when relevant, obtaining collateral history from family, other health care professionals (A5, A6, A7, B3, B4, B5,B6)</td>
</tr>
<tr>
<td></td>
<td>Consistently performs the necessary steps for a normal physical examination of each system. Is sometimes able to recognize abnormal findings. (A1, A3, A11)</td>
<td>Consistently and accurately performs the necessary steps for physical examination of each system, in a manner directed to the patient’s historical data. Is usually able to identify abnormal findings. (A5, A6, A7, B4, B5,B6)</td>
</tr>
<tr>
<td></td>
<td>Is able to recognize patients’ central clinical problem and develops limited differential diagnoses (A1, A2, A8, A11)</td>
<td>Consistently identifies the patient’s primary diagnosis and 3-5 differential diagnoses. Can list the patient’s current health problems, while recognizing and acting on “red flags” (A5, A6, A8, B1, B3,B4, B5,B6)</td>
</tr>
<tr>
<td></td>
<td>Can provide an organizational approach or scheme to most clinical presentations (B2, B3)</td>
<td>Can apply an organizational approach or scheme to most clinical presentations, as well as occasionally use non-analytical reasoning or pattern recognition (A5, A6, A7, B3, B4,B6)</td>
</tr>
</tbody>
</table>
C. Ability to propose a safe, appropriate (supervised) patient-centered investigation and treatment plan

<table>
<thead>
<tr>
<th>Main Graduation Educational Objective(s)</th>
<th>Clerkship-ready milestone/relevant outcome measure(s)</th>
<th>Residency-ready milestone/relevant outcome measure(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,3</td>
<td>Given typical scenarios, is able to provide investigation and management options (A1, A2, A8)</td>
<td>Consistently applies an appropriate investigation and management plan, recognizing limited health care resources (A5, A6, A7, A8, B1, B3, B4, B5, B6)</td>
</tr>
<tr>
<td></td>
<td>Provides safe patient care under direct supervision (A12)</td>
<td>Conducts aspects of patient care without direct supervision. Asks for help when encounters uncertainty or limits to competency (B3, B4, B5, B6)</td>
</tr>
<tr>
<td></td>
<td>Describes indications for basic procedures (from procedural skills course) and can perform them on mannequins (A1, A8)</td>
<td>Can perform, with supervision, basic investigative procedures (A6, A7, B5)</td>
</tr>
</tbody>
</table>

2. **Communicator role**: graduating medical students will demonstrate excellent communication skills that are attentive to patient/family needs and respectful. Subcomponents of this competency are as follows:

A. Ability to elicit and record accurate information from patients and families

<table>
<thead>
<tr>
<th>Main Graduation Educational Objective(s)</th>
<th>Clerkship-ready milestone/relevant outcome measure(s)</th>
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<tr>
<td>2,5</td>
<td>Gathers and synthesizes essential and accurate information to define each patient's clinical problems as per expectations outlined above in section 1b (A4)</td>
<td>In addition to what is outlined in 1b, recognizes the need to conduct a patient-centered history that includes collateral history (from family, friends, other health care providers) and/or additional information from documents (A5, A6, A7, B3, B4, B5, B6)</td>
</tr>
<tr>
<td></td>
<td>Can describe the elements required for effective patient-care documentation (within the patient record) (A4, A9)</td>
<td>Demonstrates the ability to provide organized, comprehensive, accurate and reflective patient-care documentation. This includes patient records capturing multidisciplinary care (A7, B4)</td>
</tr>
</tbody>
</table>

B. Ability to discuss and convey an investigation/treatment plan with patients and families

<table>
<thead>
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<th>Residency-ready milestone/relevant outcome measure(s)</th>
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</thead>
<tbody>
<tr>
<td>2,3,5</td>
<td>Is aware of the need to ask patients to declare their opinions or preferences regarding current medical problem/plan (A1, A4, A9)</td>
<td>Consistently seeks to understand patient opinions or preferences regarding current medical problem/plan (B3, B4)</td>
</tr>
<tr>
<td></td>
<td>Can discuss the importance of engaging patient/family in decision making (A1, A4, A9)</td>
<td>Engages patient/family in decision-making for simple problems, with assistance for complex/ambiguous situations (B3, B4)</td>
</tr>
</tbody>
</table>
C. Ability to communicate important and serious news to patients and families

<table>
<thead>
<tr>
<th>Main Graduation Educational Objective(s)</th>
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<tbody>
<tr>
<td>5,7</td>
<td>Can describe the general principles of communicating serious news to patients, including importance of empathy, honesty and sincerity (A1, A4, A11)</td>
<td>Communicates with empathy, honesty and sincerity, and can participate (with supervision) in important patient discussions (A6, A7, B4, B5)</td>
</tr>
</tbody>
</table>

3. **Collaborator role**: graduating medical students will be effective within health care teams. Subcomponents of this competency are as follows:
   A. Ability to work with other members of the interprofessional healthcare team to provide an integrated patient health plan

<table>
<thead>
<tr>
<th>Main Graduation Educational Objective(s)</th>
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<tr>
<td>5,7</td>
<td>Is able to identify the roles of other team members (A13)</td>
<td>Recognizes the unique skills, roles and responsibilities of all members of the team. Treats other members of the health care team with respect (A7, B1, B4)</td>
</tr>
<tr>
<td></td>
<td>Identifies the potential reasons for consulting other health providers for different patient scenarios (A12)</td>
<td>Makes clear and effective requests for consultations to other health providers (A7)</td>
</tr>
</tbody>
</table>

B. Is a respectful member of the interprofessional health care team

<table>
<thead>
<tr>
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<tr>
<td>5,7</td>
<td>Can describe and discuss the principles involved in respectful interactions with other health care professionals (A13)</td>
<td>Consistently respectful in interactions with other health care professionals</td>
</tr>
<tr>
<td></td>
<td>Employs verbal, non-verbal, and written communication strategies that facilitate collaborative care (A4, A13)</td>
<td>Actively engages in collaborative communication with all members of the team (A7, course 8 teaching, B4)</td>
</tr>
</tbody>
</table>

4. **Manager role**: graduating medical students will be able to manage the care of the patients and populations they serve, as well as their own wellness. Subcomponents of this competency are as follows:
   A. Ability to advocate for systemic quality improvement related to patient health and safety

<table>
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<tr>
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<tbody>
<tr>
<td>2,5</td>
<td>Can identify some risks to patient safety during health care provision and describe strategies to mitigate these risks (intro to clinical practice course lectures/small groups)</td>
<td>Can identify risks to patient safety during health care provision and apply strategies to mitigate these risks (B1, B4, course 8 teaching)</td>
</tr>
</tbody>
</table>
B. Ability to manage time to balance physician responsibilities with personal life

<table>
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<tr>
<td>7</td>
<td>Can identify principles of physician wellness and identify ways to improve work-life balance (A1, B3)</td>
<td>Can apply the principles of physician wellness to better manage their residency work-life balance (B1, B3)</td>
</tr>
</tbody>
</table>

C. Ability to balance the needs of a single patient with the just allocation of global healthcare resources

<table>
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<tr>
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<tbody>
<tr>
<td>2</td>
<td>Can identify the major stakeholders in the health care system (A1) Can describe and evaluate the need for cost-awareness in a system with limited resources (teaching during course small groups)</td>
<td>Can apply knowledge of the major stakeholders in the health care system (A1, B1, B4) Can at times apply cost-awareness to decisions related to investigation and therapy (B1, B5)</td>
</tr>
</tbody>
</table>

5. **Health Advocate**: graduating medical students will be able to advocate for needed services for specific patients and for systemic change that will advance population health. Subcomponents of this competency are as follows:

A. Ability to advocate for health promotion and disease prevention in the community-at-large

<table>
<thead>
<tr>
<th>Main Graduation Educational Objective(s)</th>
<th>Clerkship-ready milestone/relevant outcome measure(s)</th>
<th>Residency-ready milestone/relevant outcome measure(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Can describe the general principles of health promotion and disease prevention (A1, A8, B3)</td>
<td>Applies relevant concepts to recommend appropriate screening and healthy lifestyle promotion (A5,A6, A8, B1, B4, B6)</td>
</tr>
</tbody>
</table>

B. Ability to identify the determinants of health and barriers to health care access, especially for the vulnerable/marginalized populations B1, b4, a9

<table>
<thead>
<tr>
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<th>Residency-ready milestone/relevant outcome measure(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Is sensitive to and has basic awareness of differences related to culture, ethnicity, gender, race, age and religion when caring for a patient (A1, A8, A9) Describes the principles of the determinants of health as they relate to patient care and potential healthcare gaps and barriers (A1). Aware of potential need to advocate for patients when barriers to care exist.</td>
<td>Seeks to understand and modify care plan to account for patients’ culture, ethnicity, gender, race, age and religion (A5, A6, B1, B3, B4, B5, B6) Given specific patients facing barriers to care, be able to describe advocacy options to resolve these barriers (B4)</td>
</tr>
</tbody>
</table>
6. **Scholar:** graduating medical students will be able to effectively develop self-learning plans to address gaps in knowledge and skill when they become apparent, as part of life-long learning. Subcomponents of this competency are as follows:

   A. Ability to integrate evidence-based medicine and information technology into daily patient/colleague interactions

<table>
<thead>
<tr>
<th>Main Graduation Educational Objective(s)</th>
<th>Clerkship-ready milestone/relevant outcome measure(s)</th>
<th>Residency-ready milestone/relevant outcome measure(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,10</td>
<td>Lists the steps to formulating and conducting a focused search to answer health care questions (A1, A8, A9, A10)</td>
<td>Can formulate a clear question, and conduct the necessary steps to answer that question, related to a real clinical encounter (A5, B1, B3, B4, B6)</td>
</tr>
</tbody>
</table>

   B. Describe the basic principles of clinical and translational research, including how such research is conducted, evaluated, explained to patients and applied to patient care.

<table>
<thead>
<tr>
<th>Main Graduation Educational Objective(s)</th>
<th>Clerkship-ready milestone/relevant outcome measure(s)</th>
<th>Residency-ready milestone/relevant outcome measure(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8, 10</td>
<td>Describes how clinical and translational research is conducted and evaluated (A1, A9, A10)</td>
<td>Can seek, evaluate, and discuss with supervisors, evidence provided in clinical and translational research to improve patient care (B3, B4, B6)</td>
</tr>
</tbody>
</table>

   C. Demonstrates strategies to remain current on new knowledge and apply evidence-based medicine at point of care

<table>
<thead>
<tr>
<th>Main Graduation Educational Objective(s)</th>
<th>Clerkship-ready milestone/relevant outcome measure(s)</th>
<th>Residency-ready milestone/relevant outcome measure(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,9,10</td>
<td>Can describe the need to reflect and seek out new information/solutions by using a variety of medical information sources (A1)</td>
<td>Seeks out new information/solutions based on reflection related to problems encountered in clinical rotations (A7, B3, B4, B6)</td>
</tr>
</tbody>
</table>

7. **Professional:** graduating students will behave in an ethical and professional manner. Subcomponents of this competency are as follows:

   A. Ability to appreciate and integrate the professional, legal and ethical codes of practice

<table>
<thead>
<tr>
<th>Main Graduation Educational Objective(s)</th>
<th>Clerkship-ready milestone/relevant outcome measure(s)</th>
<th>Residency-ready milestone/relevant outcome measure(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Can identify and describe elements of the professional code of conduct, including principles of informed consent. (A1, A2, A3, A11, A12)</td>
<td>Can apply (including obtaining informed consent) the principles of ethical and professional behavior to patient, family, and medical team interactions (A7, B1, B3, B4, B5, B6)</td>
</tr>
</tbody>
</table>
B. Ability to accept responsibility for patient care while recognizing personal limitations

<table>
<thead>
<tr>
<th>Main Graduation Educational Objective(s)</th>
<th>Clerkship-ready milestone/relevant outcome measure (s)</th>
<th>Residency-ready milestone/relevant outcome measure (s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Accepts professional responsibility when assigned (A12). Aware and respectful of limitations.</td>
<td>Diligent in completing assigned professional responsibilities, without the need for reminders. Recognizes personal limitations and the need to safely and meaningfully consult more senior residents, faculty, other medical specialists, or allied health care professionals (A7, B3, B5)</td>
</tr>
</tbody>
</table>

C. Ability to receive feedback and demonstrate insightful reflection to improve performance

<table>
<thead>
<tr>
<th>Main Graduation Educational Objective(s)</th>
<th>Clerkship-ready milestone/relevant outcome measure (s)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Demonstrates awareness of the need to solicit and act on feedback from peers and preceptors.</td>
<td>Consistently solicits feedback from patients and all members of health care team. Consistently reflects upon, and incorporates, the feedback to enhance performance (A7, B5)</td>
</tr>
</tbody>
</table>

References

3. The Internal Medicine Milestone Project, from ACGME/ABIM collaboration
Appendix 1: Outcome Measures

A: Student evaluations

End of pre-clerkship course examinations (including medical skills OSCE examinations)
Pre-clerkship small group evaluations
Pre-clerkship clinical correlation evaluations
Pre-clerkship communication skills formative evaluation
End of clerkship examinations
End of clerkship OSCE
Clerkship rotation ITERs including clerkship electives
Associate Dean’s formative examinations
Pre-clerkship assignments evaluations (Course IV, evidence-based medicine, Course V)
MED 330/430 ITER evaluations
MED 440 (AEBM) ITER evaluations
Integrative course ITER evaluations
Pre-clerkship electives ITER evaluations
Student feedback on MD Program-Nursing inter-professional education session

B: Program Evaluation

MCC Part I results
End of pre-clerkship and clerkship course evaluations
End of year (I, II, III) student feedback
CGQ
PGME program director survey
Alumni survey
The Undergraduate Medical Curriculum at the University of Calgary

Introduction

When the University of Calgary Medical School was founded in 1970, the ‘Systems-Based’ curricular model was adopted, and produced highly qualified physicians over its 30 years of existence. Building on the strengths of this curricular model, the University of Calgary Medical School modified its curriculum in the mid 1990s to what is called a ‘Clinical Presentation’ curriculum. This innovative model, which has now been adopted by over 15 other medical schools worldwide, aims to organize teaching around the 120+/5 ways a patient can present to a physician. These clinical presentations can take the form of historical points (e.g. chest pain), physical examination signs (e.g. hypertension), or laboratory abnormalities (e.g. elevated serum lipids). This structure thus takes the diagnostic entities known in medicine and organizes them within this framework.

When the clinical presentation curriculum was adopted, University of Calgary faculty members were asked to develop their course objectives in a logical and structured fashion. What spontaneously emanated from the minds of these skilled teachers were classification systems, unique to each clinical presentation, that have subsequently been called ‘schemes’. These schemes provide scaffolding onto which basic and clinical sciences knowledge can be both structured and integrated, while also aiding in clinical problem solving. This use of schemes, or clinical problem-solving pathways, has been widely supported in medical education and cognitive psychology literature, including studies originating at the University of Calgary. The clinical presentation curriculum teaches the basic science and clinical knowledge pertinent to each clinical presentation and provides an approach to the solution of the clinical problems.

The schemes for all of the clinical presentations have now been compiled into one book, the University of Calgary “Black Book”, which will be given to you upon entering medical school. It is also available here https://blackbook.ucalgary.ca/. Each class will be expected to continue the process of modifying and improving the new editions of this compilation.

Curricular Content

After 10 years of experience with the clinical presentation curriculum, faculty and students recommended changes beginning in August 2006 that further strengthened our curriculum. As of August 2006, the pre-clerkship curriculum was reorganized. Traditional “systems” with overlapping clinical presentations were linked into one longer course (e.g. Cardio-Respiratory, which share the “chest pain” and “dyspnea” clinical presentations). This reorganization was built on the identified strengths of the clinical presentation curriculum, while satisfying a number of practical and pedagogical concerns raised over the first 10 years of the clinical presentation curriculum. Highlights of the advantages were:

- Courses were linked to graduation objectives and UME program philosophy of teaching, learning and evaluation. Linkage of courses better integrated clinical presentations across systems (horizontal integration), emphasized schemes as a powerful knowledge organization teaching tool, and reduced redundancies.
- Students received 2 weeks off during the clerkship year without academic penalty to attend CaRMS interviews.
- Teaching of procedural skills started in Year I with additional instruction and evaluation time prior to entering clerkship, as part of a new “introduction to clerkship course”.
- Linkage of courses allowed teachers to teach in a less concentrated time period, and presented less disruption to clinical responsibilities.
- Linkage improved interdisciplinary cooperation and interaction.
- Significant changes occurred to the evaluation process, with reduced frequency of summative examinations in the pre-clerkship, increased frequency of formative examinations, and specific time allotted for faculty assisted review or independent study prior to each summative exam for most pre-clerkship courses.
The UME constantly re-evaluates its curricular content and delivery methods and has made additions and changes more recently as well. These include, but are not limited to:

- Addition of a longitudinal pre-clerkship Family Medicine Clinical Experience course (MDCN330 and MDCN430)
- Addition of the Intro to Clinical Practice course
- Less is More task force review of the curriculum
- A curricular task force
- Shift of more time to clerkship
- Dedicated Anatomy course

**Yearly Schedule**

Here is an overview map of the UME curriculum that shows you when courses happen in a given year of the program.

[https://cumming.ucalgary.ca/mdprogram/about/our-program/curriculum-structure](https://cumming.ucalgary.ca/mdprogram/about/our-program/curriculum-structure)

**Timetables**

The overall schedule of when each of your pre-clerkship courses happens, when you have exams, study time, breaks and more is provided in the timetable. The timetables for Year 1 and 2 are loaded on the UME website here:

[https://cumming.ucalgary.ca/mdprogram/current-students/pre-clerkship-year-1-2/timetable](https://cumming.ucalgary.ca/mdprogram/current-students/pre-clerkship-year-1-2/timetable)

These are updated once in a while so please be sure to check this website for the latest version before using it to plan.

**OSLER**

Your detailed day-to-day schedule and learning materials are uploaded to our curriculum management system - Osler. You will get access and instruction on using Osler during orientation. Course schedules are entered into Osler by the program coordinators by 2 months prior to the start of each course.

If you have any questions about a specific course or are planning farther than 2 months ahead please contact the program supervisor for pre-clerkship or the program coordinator for that course. Their emails can be found in the Welcome Manual you will be emailed.
Teaching Methods in Clinical Presentation Curriculum

There are three key factors that influence learning and retrieval of information from memory (Regehr, Norman: Acad Med 1996).

- Does it have meaning?
- How is it encoded? (process, context)
- Has there been opportunity to practice its retrieval?

Teaching methods in the curriculum should reflect these lessons learned from cognitive psychology and the educational literature. The advantage of learning around clinical presentations is that new knowledge is added to some existing knowledge networks related to the clinical problems. As knowledge is always directed to better understanding or solving the clinical problem, it takes on significant meaning to a motivated learner. Gold Star teachers in our Faculty often present a real patient to the class during lecture to provide relevance and meaning to the knowledge learned up until that point. Attendance at Patient Presentations is mandatory and students have universally rated these sessions very highly.

The context that knowledge is stored in memory adds to the individual's ability to retrieve it. The probability and efficiency of retrieving information from memory depends on the similarity between the conditions of encoding and the conditions of retrieval. (A phenomenon referred to as encoding specificity.) It therefore makes sense to learn medicine as much outside the classroom as possible and as close to the clinical context as possible. Similarly, if the student is taught diseases of the liver and gallbladder in his/her preclinical years, it may become difficult to access the knowledge as patients present in the clerkship with a problem (e.g. jaundice) rather than a known disease. By "encoding" a classification system or problem-solving strategy (scheme) unique to each clinical presentation early in medical school, this problem would be lessened.

Lastly, the effect of "practice" greatly impacts on memory. The greater number of times a piece of information is recalled, the easier it can be retrieved again. The more opportunities available to solve clinical problems, the greater the opportunity for knowledge to be gained and for a problem-solving strategy (scheme) to be enhanced. Learning in interactive small groups, bedside clinical correlation sessions, problem-based learning of the integrative course and the clerkship experience itself allows the student the opportunity to practice.

The Curriculum Committee struck a working group to report on teaching methods most appropriate in our clinical presentation curriculum.

The most important feature of the clinical presentation curriculum is the structuring of the content around a clinical presentation. As teachers present new content it is vital that they constantly refer to the relevant clinical presentations and demonstrate the usefulness of the new material (basic science, clinical) in solving these cases.

Clinical Presentation

Definition of a Clinical Presentation:

A clinical presentation must:
Represent a common or important way in which a patient, group of patients, community or population actually presents to the physician and which a graduate would be expected to handle.

Be important and substantive enough to warrant interdisciplinary input and cover a broad content area so that Faculty objectives can be met. Less substantive clinical presentations are probably best included under a broader category. For example, "epistaxis" is probably best included under bleeding tendency/bruising.

A complete list of the clinical presentations can be found at:
http://apps.mcc.ca/Objectives_Online/objectives.pl?lanq=english&loc=contents
Lectures, Podcasts & Patient Presentations

Lectures are used primarily to 1) introduce and provide an overview of topics to cover, and 2) explain important and complex content areas. The purpose of a lecture at the beginning of a section or clinical presentation is to stimulate interest and provide a structure for the content material that will follow. In the clinical presentation curriculum, this structure is the clinical problem-solving scheme.

The lecturer may present cases at the beginning and demonstrate the use of the clinical-problem solving scheme. The lecture is also an efficient way to present concepts to a whole group of students and ensure some uniformity in their level of understanding. Completely new domains of knowledge can be introduced with the use of a lecture to provide rapid understanding of the basic concepts and their inherent structure.

The process of delivering a lecture is constantly being renewed and re-examined. The Director of Teaching Innovations in UME, is always looking into innovative means of delivering lectures, such as “flipped” classroom or “cards” with patient cases. UME is always striving to deliver lectures in a way that improves immediate memory storage, and later memory recall.

Podcasts are made available for many lectures. However, presenters may or may not consent to podcasts of their lectures. Lecture presentations may be further augmented by the presentation of actual patients during the lecture who provide personal insight into their conditions in a way that no other learning experience can duplicate.

Sessions involving patient presentations are mandatory and attendance will be taken. Patient presentations, or sometimes other material such as patient information or videos, are not podcasted.

Please note: During patient presentations students must maintain respect for patients by remaining in the room for the duration of the session and refraining from eating, drinking or using electronic devices (i.e. phones, laptops) while the patient is present.

Some lecturers will use an interactive audience response system to involve the students in a direct and meaningful way to encourage active learning.

COVID-19 curriculum delivery: Due to the circumstances of the COVID-19 pandemic, the Class of 2023 will begin their curriculum in a modified online format. Lectures will be delivered via either live Zoom sessions or viewing of podcasts recorded from previous years.

Students will receive a schedule via Osler so they know what to attend live, what to watch in podcast form and the timeline for both. Patient presentations will be limited or not possible, depending on the topic, until we are able to return to in person lectures. If a patient presentation is arranged via Zoom, it will be mandatory and attendance will be taken. Patient presentations will not be recorded.

Small Group Sessions

Student attendance at small group sessions is mandatory and attendance will be taken. Small group sessions should be used to allow students to attempt to solve a clinical problem as a group. The clinical problem should illustrate the use of a clinical-problem solving scheme. It is also used as an opportunity for students to learn additional content material not covered in other learning activities but considered part of the course objectives. A case should provide an opportunity for students to study independently and report to the group on their learning activities at a future session.

The major reasons for small group learning include: 1) in depth analysis of content, 2) reinforcement of the clinical problem-solving scheme. 3) practice other skills, such as communication, collaboration, and literature searches.
Clinical problems studied in small group sessions provide a context for exploring new knowledge and reinforcing acquired knowledge. Once the clinical problem-solving approach has been presented, small group teaching sessions allow students to acquire finer conceptual details in a more self directed manner. The group, the preceptor, the material provided and structure of the activity will guide the students in the desired direction. Learning requires repeated practice and opportunities to receive feedback. When adequately structured and lead by an effective facilitator small groups are an ideal format for this activity. Many of our small group sessions are taught by our “master teachers”. This group of highly-skilled teachers has been specially trained to be process experts in the teaching of small groups. You will interact many times with this enthusiastic group of UME teachers during your training.

COVID-19 curriculum delivery: Small groups will be delivered live via Zoom. They are still mandatory. Students will attend small groups ½ class at a time. They will be given a clear schedule of when each small group occurs, the link to join, as well as what podcasted lectures or other material needs to be viewed in advance of each small group. Once student leaders are being used (usually a bit into Course 1) the student leaders will be given Host and Co-Host status once they arrive in the session. This allows them to share screens and the Host can create breakout rooms if they choose to use them. The preceptor is made Co-Host as well.

Attendance is taken by 10 minutes into the session by the UME coordinator/supervisor team member who starts the sessions for that group so please be on time. If a student is not there by 10 minutes past the start of the session, they will be marked absent. They will need to either have an approved excused absence/flex day as per the attendance policy "https://cumming.ucalgary.ca/sites/default/files/teams/4/Policies/A/Attendance%20Medical%20Students%20-%20Updated%20January%202021%2C%20202020.pdf" or they will need to apply this small group to their 10% of allowed small groups, also please refer to the attendance policy, if the course they are missing applies (i.e. only the numbered courses 1 through 7).

One group per session will be recorded for posting to the secure podcast server to allow students who must miss due to childcare or other approved reasons to watch the recording. Once they have taken attendance, the UME staff member will leave the session unless they are with the group recording that day.

Zoom rules: all students are expected to have their video on and microphones enabled and muted when not speaking. These are interactive sessions and participation is necessary for the group to function well and learn properly. Students are expected to be professional and respectful at all times, including on the chat function. If something happens during a recorded small group that someone wishes to have edited out of the session, please contact Sue-Ann Facchini, supervisor for pre-clerkship, at safacchi@ucalgary.ca.

Clinical Correlation

Bedside clinical sessions in an inpatient or outpatient setting will occur in each of the systems courses with the primary goal of reinforcing the clinical features of a patient presentation. Knowledge learned in the context of a lecture or a small group session needs to be transposed to the clinical situation. The clinical correlation sessions allow students to review their knowledge with a real patient. Clinical correlations preceptors should receive the relevant clinical-problem solving schemes and learning objectives so they can identify appropriate patients for the sessions. They should also be aware of which presentations have been studied at the time of the session.

COVID-19 curriculum delivery: clinical correlation will be resumed once students are allowed back into healthcare settings, likely after September 1. More information will be sent once this is allowed.

Independent Study Time (IST)

Teaching effectiveness depends not on what the teacher does but rather on what the student does. A significant objective of our school is to prepare students to continue learning after leaving the classroom and the university. In medicine, most student learning occurs outside the classroom. Ask any clerk, resident or alumnus! At the University of Calgary we do not see students as passive recipients of teaching, rather we see them as actively processing knowledge and constructing their own understanding. In order to facilitate this deeper approach to learning (rather than rote memorization), scheduled independent study time of three half-days per week (average) is organized within the curriculum. During this time students usually (i) prepare their
small group assignments either working alone or in teams, (ii) do assigned reading, (iii) study around objectives or, if time, (iv) pursue research or career sampling opportunities.

No interstitial curriculum will be scheduled into IST unless formally approved by Pre-clerkship Committee. Formal times for Clinical Skills, Clinical Correlations, Med 330 and Med 440 sessions may be exchanged for part of IST scheduled time. This is often necessary to meet the schedules of clinician teachers. The absolute amount of IST time per week is not compromised when these arrangements are made. In the 3rd year no specific IST is set aside in Clerkship rotations.

Pre-clerkship (Years 1 and 2)

The pre-clerkship curriculum consists of the following courses.

**Year 1**
- Course 1: Introduction to Medicine, Blood and Gastrointestinal Course (MDCN 350)
- Course 2: Integrated Musculoskeletal and Dermatology Course (MDCN 360)
- Course 3: Integrated Cardiovascular and Respiratory Course (MDCN 370)
- Medical Skills I (MDCN 320)
- Family Medicine Clinical Experience (MDCN 330)
- Population Health (incl. Community Engagement) (MDCN 340)
- Applied Evidence Based Medicine (MDCN 345)
- Anatomy (MDCN 300)
- Career Exploration Program

**Year 2**
- Course 4: Integrated Renal-Electrolyte and Endocrine-Metabolic Course (MDCN 410)
- Course 5: Integrated Neurosciences, Special Senses and Aging Course (MDCN 450)
- Course 6: Children’s and Women’s Health (MDCN 460)
- Course 7: Psychiatry (MDCN 470)
- Medical Skills II (MDCN 420)
- Family Medicine Clinical Experience (MDCN 430)
- Applied Evidence Based Medicine (MDCN 445)
- Introduction to Clinical Practice (MDCN 490)
- Introduction to Clinical Practice (MDCN 495)
- Pre-Clerkship Electives (MDCN 402)
- Integrative Course (MDCN 480)
- Integrative Course (MDCN 485)

The course outlines for each of these courses is available here: [https://cumming.ucalgary.ca/mdprogram/current-students/pre-clerkship-year-1-2/course-outlines](https://cumming.ucalgary.ca/mdprogram/current-students/pre-clerkship-year-1-2/course-outlines)

Clerkship (Year 3)

The clinical clerkship year consists of 58 weeks of mandatory rotations. In addition to this time, students have 2 weeks of holidays over the Christmas break, 1 week of CaRMS application preparation time in the Fall and 3 weeks in February for the National Interview Period for residency.

Early in second year, the Clerkship Electives Core Document and a U of C Medical Electives Catalogue are posted in OSLER for second year students to assist in planning and setting up elective time. A group session for the students will be held early in second year to discuss career planning and strategies for optimal use of elective time and to discuss strategies for selection of clerkship rotation schedule.

Applications for out-of-town electives often need to be arranged four to six months in advance. A session on setting up electives will be held in early in second year to assist in the application process.

For further details on the clinical clerkship year and the lottery process please refer to the Clerkship Student Handbook that can be found in OSLER or on the UME website.
Shadowing

Shadowing is not a part of the curriculum. Students can shadow if they wish but it is not a requirement. The shadowing policy is loaded here [https://cumming.ucalgary.ca/mdprogram/about/governance/policies](https://cumming.ucalgary.ca/mdprogram/about/governance/policies) under S.

Students generally use word of mouth or approach preceptors who teach them to seek out shadowing opportunities. Your medical student colleagues are a good source of this information.

PLEASE NOTE:

Shadowing is limited to Pre-Clerkship students only. Clerkship students are not permitted to shadow. Students must log all shadowing sessions on OSLER prior to their shadowing session. The UME recommends that Pre-Clerkship students shadow no more than 1 time per month. Shadowing is not permitted during mandatory curriculum hours. The UME supports shadowing during IST hours, evenings, and weekends. Students may shadow during non-mandatory lecture hours 1 day per month. The UME strongly recommends that students attend to their wellness on flex days and during breaks. However, shadowing is permitted on flex days and during breaks. Students are encouraged to limit their shadowing to two to three days during breaks in order to prevent burnout. There are a number of ways to find preceptors to shadow so how you do it will depend on what area you want to shadow in. Some students have given the following advice:

Rural: Using the DLRI, you can be added to the rural interest list and they will send you a monthly update about available spots. Preceptors and faculty mentors: you will encounter many physicians teaching you in your courses and will be assigned a faculty mentor. You can approach them regarding shadowing them or recommendations on how to best secure shadowing opportunities in their department/area. Students in your class or other classes: your peers in all classes are excellent sources of information and experience regarding setting up shadowing opportunities. Contact the CMSA Interest Group for that discipline. Cold-emailing preceptors you have identified through other means.

Canadian Resident Matching Service (CaRMS)

About CaRMS

CaRMS - The Canadian Resident Matching Service is a not-for-profit organization that works in close cooperation with the medical education community, medical schools and residents/students, to provide an electronic application service and a computer match for entry into postgraduate medical training throughout Canada.

CaRMS provides an orderly and transparent way for applicants to decide where to train and for program directors to decide which applicants they wish to enroll in postgraduate medical training.

To this date, CaRMS administers the matching process for: postgraduate Year 1 entry residency positions; Year 3 Family Medicine - Emergency Medicine residency positions; Medicine subspecialty residency positions; Pediatric subspecialty residency positions; as well as the Canadian access to the US electronic application system for postgraduate medical training (ERAS).
What Do We Do?

CaRMS provides an orderly way for applicants to decide where to train and for program directors to decide which applicants they wish to enrol in postgraduate medical training.

The match is carried out using a computer program that, in only a few minutes, makes a series of decisions that would otherwise require hours of time for both applicants and program directors. This system guarantees that decisions about residency selection will be made by both applicants and program directors by a specific date, without pressure being placed on applicants to make decisions before exploring all options.

A Guide to Professional Behaviour for Student Physicians

Upon entering medical school, new students are rapidly faced with situations that may be novel to them and may require a re-evaluation of the student’s stand on an issue. This guide to professional behaviour is an attempt to help the student physician deal with the myriad of complex and potentially controversial situations that may arise.

Ethics and Morals are words that convey an amorphous sense of an individual’s core being; these elements of an individual’s character are gradually formed over the course of a person’s lifetime and are modified by the stresses of experience. They cannot be learned from a textbook or in a lecture theatre. They are the products of an infinite variety of cultural, social, familial and interpersonal influences that every human being integrates in his or her own fashion. As future doctors, you have a particular responsibility to evaluate carefully and to assess your own values and ethical systems, because your decisions seriously affect other people’s lives. Few other occupational or social groups function from such a standpoint.

As future doctors, you are sometimes expected to fill shoes that may feel too big rather early in your careers. The purpose of this document is to get you thinking now about some of the issues you may face in the continuum of the next few years of medical school and the practice years that follow. A second purpose is as a reference to use in dealing with issues that are not clearly defined as black or white, but that require some thought and self-evaluation.

You will probably find that your level of understanding of some of the items in the GUIDE will change with time and experience – that is a sign of growth; for along with all the academic growth you will experience over the course of your years as a student physician, there comes a great deal of spiritual growth that is necessary for you to become a competent and humane physician.

Relationships with Colleagues

1. Student physicians should realize that their colleagues have a diversity of knowledge and backgrounds. Each will bring his or her own expertise to bear on a problem and recognize that, whatever the emphasis, colleagues share a common goal of becoming effective and humane physicians.

2. Student physicians should give criticism or feedback to colleagues considerately and constructively. In turn, they should accept criticism graciously, using peer assessment as an important part of the evaluative process.
3. Motivation for medical education should be the aspiration for excellence rather than for external recognition, prestige or financial reward. Student physicians are expected to establish their own educational goals and standards, which should exceed the minimum levels of performance required by the Faculty.

4. Achievement of educational goals should be assessed by self- and peer-evaluation in addition to formal summative evaluations.

5. Student physicians, together with faculty, are responsible for establishing a supportive environment of cooperation in their learning endeavours. They should refrain from any behaviour that obstructs or detracts from the learning opportunities for their colleagues. Many of the areas covered in this document may raise issues for group discussion among students and with faculty. This is encouraged and can be used as another learning resource.

6. Student physicians must be vigilant in their concern for the physical and emotional well-being and professional conduct of their colleagues. Where concerns surface and the subject of concern does not respond to a discussion of the problem, the concern(s) should be raised confidentially with appropriate authorities. Self-destructive behaviour or breech of the standards of the profession supercedes an individual's right to privacy. Hold in confidence opinions expressed to you about colleagues, junior or senior. Use discretion in deciding if the nature of these opinions necessitates raising them with the subject.

7. The relationship between student physicians and faculty members should be one of collegiality. The junior members should respect the superior knowledge and experience of their seniors who, in turn, should appreciate the limitations of their juniors but respect their desire for knowledge. Should this relationship break down, either junior or senior should be prepared to approach the other and discuss the problem.

8. As partners with faculty in the educational program, student physicians are obliged to provide feedback about all aspects of the curriculum in order that it may be continually improved. Conversely, the Faculty is obliged to provide student physicians with as much information about their performance in meeting the objectives of the MD degree.

9. In a clinical situation where the student physician objects to either the practical or ethical aspects of patient management, the student must always defer to the physician who is responsible for care of the patient. The collegial relationship should permit subsequent private discussion during which the student's concerns can be resolved.

**Relationships with Patients and their Families**

1. Clarify your status as a student in medical school. Don't give the patient unrealistic expectations of your abilities or title.

2. Show consideration for the feelings of the patient; do not cause unnecessary emotional or physical discomfort.

3. Perform on patients only those procedures that are appropriate, taking into account the nature of the problem and the comfort and safety of the patient, colleague or bystander with the appropriate supervision when necessary.

4. Appreciate that the patient is assisting you in your education as well as requiring your best efforts at excellent care. In recognition of the patient's contribution to the relationship, reciprocate by providing extra attention in the form of support, explanation or even just a sympathetic ear.
5. Know your limitations and seek help from others more skilled. Recognize that professional behaviour is dictated by law and the regulations of individual institutions and organizations, as well as by ethical considerations.

6. Ensure that your behaviour is not influenced by the patient’s ethnic origin, age, gender, cultural background or value system, except where these factors specifically have medical significance.

7. In the event of an ethical conflict with a patient, which has ramifications for patient care, the student physician’s responsibility is to refer quickly and efficiently to a colleague who does not perceive such a conflict. Your ethical code must not be imposed on patients.

8. Refrain from inappropriately divulging confidential information concerning patients.
Intellectual Honesty

1. From the University of Calgary Calendar:  [http://www.ucalgary.ca/pubs/calendar/current/k-1.html](http://www.ucalgary.ca/pubs/calendar/current/k-1.html)
   “Intellectual honesty is the cornerstone of the development and acquisition of knowledge. Knowledge is cumulative and further advances are predicated on the contributions of others. In the normal course of scholarship these contributions are apprehended, critically evaluated and utilized as a foundation for further inquiry. Intellectual honesty demands that the contribution of others be acknowledged. To do less is to cheat. To pass off contributions and ideas of another as one’s own is to deprive oneself of the opportunity and challenge to learn and to participate in the scholarly process of acquisition and development of knowledge. Not only will the cheater or intellectually dishonest individual be ultimately his/her own victim, but also the general quality of activity will be seriously undermined. It is for these reasons that the University insists on intellectual honesty in scholarship. The control of intellectual dishonesty begins with the individual’s recognition of standards of honesty expected generally and compliance with those exceptions.”

   Intellectual dishonesty may take many forms, e.g. unauthorized use of material in examinations and tests and unauthorized copying of the work (published and unpublished) of others, falsification in the results of reports and laboratory experiments and use of commercially prepared essays in place of one’s own work.

2. Intellectual dishonesty in a student physician has serious implications for quality of patient care. For example, cheating on evaluations as a student may evolve into such behaviour as a physician who cheats by reporting as negative the results of procedures that were actually omitted.

3. Before entry to the medical profession, a student may have felt able to justify intellectual dishonesty by the flawed rationalization that it was a “means to an end” (i.e. entry to Medical School). Such thinking is absolutely unacceptable in a student physician. The “end” now is not the MD degree but excellence in patient care, and intellectual dishonesty at any stage of medical education detracts from attainment of the goal.

4. Student physicians have extraordinary obligations to maintain the highest standards of integrity. Society and the Profession demand nothing less, recognizing the serious consequences of dishonesty in a physician.

More detailed and important information regarding medical ethics will be provided during the Medical Skills Course. Students are also required to follow the “Canadian Medical Association Code of Ethics” [http://policybase.cma.ca/dbtw-wpd/PolicyPDF/PD04-06.pdf](http://policybase.cma.ca/dbtw-wpd/PolicyPDF/PD04-06.pdf)

In 1998 the Calgary Medical Students Association, the student body and the Curriculum Committee of the Cumming School of Medicine approved the Student Code of Conduct. Following its approval, the student body developed the Student Professionalism Committee to provide a mechanism to enforce concerns raised regarding student professionalism. The primary focus of the Student Professionalism Committee is to prevent problems/difficulties related to ethics and professionalism and to be supportive of students who may be experiencing/encountering problems, difficulties or obstacles relating to these matters.
University of Calgary Medical School Student Code of Conduct

As a student in the Cumming School of Medicine at the University of Calgary, I assume the responsibility for the health and well being of others. This undertaking requires that I maintain the highest standards of ethical behaviour. Accordingly, I have adopted the following as principles to guide me throughout my academic, clinical and research work. I will uphold both the spirit and the letter of this code.

Honesty

- I will maintain the highest standards of academic honesty.
- I will record accurately all historical and physical findings, test results and other information pertinent to the care of my patient to the best of my ability.
- I will conduct research in an unbiased manner, report results truthfully and credit ideas developed and work done by others.
- I will admit to errors I have made.

Confidentiality

- I will regard confidentiality as a central obligation of patient care.
- I will limit discussions of patients to members of the health care team in appropriate settings.
- I will respect the privacy, rights and dignity of patients.

Respect for others

- I will not discriminate on such grounds as age, gender, medical condition, national or ethnic origin, physical or mental disability, political affiliation, race, religion, sexual orientation, disability or socioeconomic status.
- I will interact in a considerate manner with all others providing patient care.
- I will uphold, protect and promote a classroom atmosphere conducive to learning.
- I will provide feedback in an appropriate manner and language.
- I will not subject my peers to unwanted romantic or sexual overtures.
- I will treat institutional staff and representatives, as well as faculty and patients, respectfully in all circumstances.

Responsibility and Accountability

- I will set patient care as the highest priority in the clinical setting.
- I will recognize my own limitations and will seek help when my level of experience is inadequate to handle a situation.
- I will not exploit my relationships with my patients or their families for educational, emotional, financial or sexual purposes.
- In my demeanor, use of language and appearances, I will conduct myself professionally in a health care setting and in the classroom.
- I will not use alcohol or drugs in any way that could interfere with my academic, professional and clinical responsibilities.
- I will respect the reputations of members of the health care team including my classmates; however, I will report unprofessional conduct to an appropriate group or individual.
- I will not misuse faculty resources, e.g., computers.
- I will inform the appropriate people when I am not available to fulfill my responsibilities.
- I will arrive to teaching sessions, including small group sessions, on time and take responsibility for my share of work.

Expectations of Faculty, Residents and Fellows

- I have the right to expect clear guidelines regarding assignments and examinations as well as to have testing environments that are conducive to academic honesty.
- I cannot be compelled to perform procedures or examinations that I feel are unethical or beyond the level of my training.
- I have the right not to be subjected to romantic or sexual overtures from those who are supervising my work.
- I have the right to be challenged to learn, but not abused, harassed or humiliated.
- I have the right to expect prompt, frequent and constructive feedback from faculty and supervisors.
- I have the right to have my research contributions appropriately represented and acknowledged.


The Student Code of Conduct was developed in 1998 and outlines the expectations of a medical student’s behaviour in both clinical and academic settings. All incoming students are made aware of this document through a professionalism workshop early in their first year and in the annual Introduction to the Profession of Medicine Ceremony. The Code of Conduct is a living document which is updated and modified by students.
The Cumming School of Medicine has an Equity and Professionalism Office. Please see their website for more information as well as faculty policies, procedures and guidelines
https://cumming.ucalgary.ca/office/professionalism-equity-diversity

The Student Professionalism Committee Terms of Reference

The Student Professionalism Committee (the “SPC”) is a student committee which works to resolve concerns and provide student input about professional behaviour in the medical school. The SPC mainly receives concerns about student professional behaviour from the student body itself, but can receive these from community members, faculty or staff. SPC is a potential alternative to a complaint being made to the offices of the UME or Student Advising and Wellness (SAW). Specifics on the complaint process are discussed below.

The idea for the SPC peer review process originated with the development of the Student Code of Conduct in 1998. The Code of Conduct guides the SPC in determining whether behaviour is unprofessional or concerning. The Student Professionalism Committee (the “SPC”) is composed of two students from each of the three classes. Students are elected for a three year term at the beginning of year 1. Members of the SPC also act as class representatives for meetings with faculty committees.

Process for SPC Involvement:

Complaints or concerns about unprofessional behaviour of students or faculty members may be made to the SPC by students, faculty or community members (“Complainants”). Complaints may be made to the SPC by contacting one or more members of the committee in person or in writing. If in writing, it may be delivered personally or directed to the medical school email address of a committee member. Upon receipt of the complaint, one or more members from the SPC will consult with the Complainant about the appropriate initial action to be taken. The Complainant will be updated upon completion of the SPC involvement, or as may be appropriate if the matter is ongoing. If necessary, the Student Professionalism Committee will confidentially consult with other class representatives.

In the event SPC receives two legitimate complaints about a matter which remain unsatisfactorily resolved, the SPC may, if deemed appropriate, forward its concerns about the matter to the SAW office.

In all instances, the SPC shall use its best efforts to maintain the confidentiality of the concern and the parties involved. In certain instances however, such as where the matter is deemed appropriate required to be referred to SAW, the confidentiality of all parties may not be maintained.

The SPC review process is designed to make an individual aware of his/her behaviour, its impact upon others and to provide guidance to that individual without punitive repercussions. In general, the SPC serves to facilitate resolution of concerns about professional behaviour. It does not serve a surveillance or policing function, nor is it concerned with matters of an academic nature.

Historically, students have expressed concern that unprofessional behavior may go unaddressed after concerns are brought to the SPC’s attention. This is never the case, but the confidentiality of the student involved is always protected during the process of assessment and management of the unprofessional concern. Thus, students will not be informed in any detail about the repercussions of their colleagues unprofessional acts.

Although, every effort is made to resolve issues of unprofessional student behavior without involving the office of undergraduate medical education, this is not always possible. In cases where a student is brought to the attention of the associate or assistant dean of undergraduate medical education, the concern will be carefully scrutinized. Depending on the issues involved the student may require to appear before the Student Academic Review Committee (SARC) for his/her unprofessional behaviour. The Undergraduate Medical Education (UME) office will endeavor to provide all possible supports to the student to ensure that future unprofessional behaviors do not recur.
Documentation:

As matters brought forward to the SPC are often of a sensitive nature, keeping confidential records is of utmost importance. All complaints and resolutions will be documented for a file, however in such a way that the complainant and subject of the complaint cannot be identified. This file will be handed on to the next year’s SPC members for the purposes of education, and tracking activity. In the event that a complaint is judged by the SPC to require faculty involvement, the documents identifying parties involved will be handed over if necessary.

Descriptors of Unprofessionalism

As part of the prerequisite clinical competency for the University of Calgary, Cumming School of Medicine, students are expected to demonstrate professionalism. Since most of the attributes of professionalism cannot be tested on a written examination - patterns of behaviour, as observed throughout the continuum of training and within the educational environment - play an important role in making these determinations. The following descriptors serve to identify behaviour that is unacceptable for meeting the standards of professionalism inherent in a graduate of the University of Calgary, Cumming School of Medicine.

Unmet Professional Responsibility
• Needs continual reminders about fulfilling responsibilities to patients, teachers, University staff, and to other health care professionals.
• Cannot be relied upon to complete tasks.
• Misrepresents or falsifies actions and/or information, for example, regarding patients, self, laboratory tests, etc.

Lack of Effort Towards Self-Improvement and Adaptability
• Is resistant or defensive in accepting performance feedback that is critical.
• Demonstrates inability to self-assess, as judged by failing to make changes to correct performance failures.
• Resists considering or making changes to appropriate feedback.
• Does not accept responsibility for errors or failure.
• Is overly critical and/or verbally abusive especially during times of stress.
• Demonstrates arrogance in dealing with peers, patients, nursing staff, teachers and University staff.

Diminished Relationships with Patients and Families
• Lacks empathy and is often insensitive to patients’ needs, feelings, and wishes or to those of the family.
• Lacks rapport with the patients and families.
• Displays inadequate commitment to honouring the wishes and wants of the patient.

Diminished Relationships with Teachers and Health Care Professionals
• Demonstrates the inability to function within a health care team.
• Lacks sensitivity to the needs, feelings, and wishes of fellow students and of the health care team.
• Inappropriate conduct in class or small group teaching sessions.

Mistreatment

The faculty has made great efforts (with tremendous help from students) to highlight the issue of student mistreatment, in hopes of completely eliminating mistreatment. Realizing that this is an aspirational goal that will likely not be fully met, the school put together a task force in 2015-16 (co-led by students and faculty) that created the following website:

http://mistreatment.ucalgary.ca

At this website, you will find resources such as: definition of mistreatment, process for reporting, “report card” of previous years’ issues, and perhaps most importantly information on how to contact our “student mistreatment advisors” who can help you through this difficult process.
**NOTE:**
1. The intent of the flowchart below is to address minor professionalism concerns with the student body.
2. This is **NOT** intended to replace other processes (such as the Student Academic Review Committee) which exist when serious concerns are reported directly to UME.

**Student Professionalism Committee**

**Steps to Resolving Issues of Unprofessionalism**

1. **Concern brought forward to one or more members of the SPC**

2. **Meeting with concerned individual (the complainant):**
   - Discussion of concern
   - Suggestions made of how to resolve concern

3. **Student Professionalism Committee involvement:**
   - One or more SPC members meet with the subject of complaint

   - **No resolution of concern**

   - Refer to **Student Professionalism Committee Executive**

   - **Involvement of Student Professionalism Committee Executive**

   - **No resolution of concern**

   - Refer to **UME**

4. **No Student Professionalism Committee involvement:**
   - Individual resolution
   - Review with the complainant

   - **Resolution of concern:**
   - Review with complainant

   - Refer to **Student Affairs Committee**

   - **No resolution required as per complainant and SPC**

   - Refer to other appropriate committee
**Attendance**

Attendance is mandatory at (a) summative and formative evaluations, (b) learning experiences at which patients will be present, (c) small group learning experiences, (d) other courses as listed in the Attendance Policy – Medical Students, and (e) throughout clerkship. The reasons for (a) are obvious. A student who is absent from an evaluation without cause will be graded "Unsatisfactory". If a student needs to defer an exam they must first discuss with the Assistant Dean or Supervisor for either pre-clerkship or clerkship and they will be advised as to the appropriate procedure and necessary forms. Deferrals must meet the criteria of the University of Calgary and be approved by the appropriate Assistant Dean or designate.

The reasons for (b) are, first, that patient contact gives you an experience that cannot be duplicated by independent study and second, as a courtesy to the patients who have given freely of their time in order to improve your medical education. Not withstanding the above, any instructor may take attendance if he/she wishes at any learning experience. In some cases evaluation is based on student participation, and in such cases, failure to attend may result in an unsatisfactory course evaluation. e.g. Integrative Course, Medical Skills Course.

Current Attendance and other policies can be viewed here:
[https://cumming.ucalgary.ca/mdprogram/about/governance/policies](https://cumming.ucalgary.ca/mdprogram/about/governance/policies)

**The Master Teacher Program**

During your next three years at the University of Calgary, you will be taught by literally thousands of physicians. However, there is a group of teachers that you will be encountering on a far more regular basis. They are collectively known as Master Teachers.

- From 2007-2009, our medical school class size increased dramatically. In the same timeframe, the population of Calgary expanded to the point that the practicing physicians who typically performed the bulk of teaching in the medical school were struggling to deal with patient loads, let alone additional teaching responsibilities. In addition, it was recognized that a small group “process” expert was at least equivalent (and in some studies better) than small group “content” expert. Rather than sacrifice the quality of education by increasing the student to teacher ratio, the decision was made to hire a dedicated group of teachers that could fill in the gaps.

Given the challenges of potentially being asked to teach any topic within any field of medicine, each Master Teacher has been selected to be a part of the Program because of their proven track record for excellence in teaching. There are approx. 40 Master Teachers who are paid a salary to teach throughout all three years of the UME curriculum. Master teachers teach on average 30% of the small group sessions. While some traditionalists feel that only an expert in the topic being discussed should be allowed to teach students, a prospective randomized trial has shown that students taught by Master Teachers achieve scores on their end-of-course multiple choice examinations that are equivalent, if not better, than those taught exclusively by Specialists. (Peets A, Cooke L, Wright B, Coderre S, McLaughlin K. A prospective randomized trial of content expertise versus process expertise in small group teaching. BMC Medical Education 2010;10:70.) This highlights the fact that it is not only important to know what to teach, but it is equally, if not more, important to know how to teach.

In keeping with the innovative nature of our medical school, this is the first program of its kind in the world. We would encourage you to use the members of the Master Teacher Program as a resource and conceive of ways in which to use their talents beyond their established roles as teachers, formal or informal mentors, research advisors and career counselors. The Master Teachers look forward to getting to know you over the next 3 years!
Visitors

Persons not registered in the MD program are not permitted to attend any learning experiences or have access to or review UME evaluations without the express permission of the Associate Dean (Undergraduate Medical Education) and the instructor of the learning experience.

Course Questionnaires

Students are asked for feedback regarding the UME program at a variety of intervals. These will take the form of session-by-session ratings, end of course surveys and year end questionnaires. The results of student feedback are used by individual teachers, course committees and UME administration as part of ongoing Program Evaluation and Curriculum Improvement. Student feedback is collected anonymously and rude or unprofessional comments may be deleted.

Funding for Presentation of Papers at Conferences Outside Of U of C

Students are encouraged to take the opportunity to present their research at conferences outside the University of Calgary whenever possible. Funding for travel to these conferences (if unavailable via research grant funding) is available through the Office of Undergraduate Medical Education as well as through the Students' Union. Applications for funding must be done well in advance of the conference, so please have everything prepared at least one month prior to the conference. When you are finalizing plans to attend a conference please put an absence request in Osler and wait until its approval before confirming plans or booking flights. If this absence will affect an evaluation please speak with the Supervisor or Assistant Dean for pre-clerkship.

Academic Accommodations for Students

The University of Calgary will provide academic accommodations to students who have provided documentation of disability to the satisfaction of the Student Accessibility Services (SAS) to the extent that the accommodation does not cause undue hardship to the University of Calgary or lower the performance standards of any given academic program.

Please refer to the Student Accessibility Services website at the following link for more information regarding mandated accommodations.

http://www.ucalgary.ca/access/

If you wish to be assessed for accommodations, please contact the University of Calgary Student Accessibility Services at (403) 220-8237. Details outlining the necessary assessments and documentation required before exam accommodations can be granted are located on the University of Calgary website at:

https://live-ucalgary.ucalgary.ca/student-services/access/prospective-students/how-to-register

Students with pre-existing disabilities must be registered and assessed by the Student Accessibility Services before the first summative exam in Year 1. The letter outlining the accommodations granted to the student will be sent to UME from SAS.

Students who request accommodations for a disability that the student did not declare in the first year (ie. develops during medical school), will have the possibility to defer all summative exams until the student is assessed by the Student Accessibility Services and the accommodation letter is provided to UME.

Please note that any exam accommodations must be approved by the Associate Dean prior to implementation.
Recordings Of Lectures

University of Calgary Academic Calendar Regulations, Section E. Course Information regarding the Tape recording of Lectures can be reviewed online. Please visit the following link for further information.

http://www.ucalgary.ca/pubs/calendar/current/e-6.html

In addition to the below regulations, the Undergraduate Medical Education Program requires that students obtain written approval from Standardized Patients when they are present during recordings.

Conflicts of Interest

If you find yourself assigned a preceptor who you feel has a conflict of interest and should not be supervising or evaluating you (i.e. your spouse, your parent, your own family physician) please bring this to the attention of the appropriate course/clerkship coordinator or supervisor. You may also disclose conflicts of interest with patients assigned to your care. If this happens please advise your preceptor.

Use of Social Media

CFMS Guide to Medical Professionalism: Recommendations For Social Media


Health Science Centre Library Services

The Health Sciences Library connects you with information services, resources, and assistance to support your learning, research, and clinical practice needs. We are located on the 1st floor of the Health Sciences Centre.

They have:

- Computer workstations with access to University Library online resources, internet, MS Office, and laser printing
- Wireless internet access and wireless printing
- Self-serve scanning
- Bookable seminar rooms

The Health Sciences Library can be reached at 403-220-6855 or at hslibr@ucalgary.ca.

Contact them to:

- Assist you with library research for your course assignments
- Enhance your skill in locating clinical literature to support evidence-based practice
- Recommend electronic books and clinical decision support tools for your practice
- Help you conduct comprehensive literature searches for your research projects or for systematic reviews
- Provide an orientation to the resources and services of the Health Sciences Library

More information about the Health Sciences Library is available through the Library tab in the OSLER dashboard or through the Library’s website at https://library.ucalgary.ca/hsl/?group_id=14769
Or just drop by the Information Desk - we want to help you succeed in your next three years of medical school!
Student Evaluation Policies

Please refer to the following policy documents for details on student evaluations:
https://cumming.ucalgary.ca/mdprogram/about/governance/policies

- Student Evaluation Development and Maintenance Policy
- Academic Assessment Reappraisal Policy

If you need to request to defer an exam, please contact the UME Supervisor for pre-clerkship to discuss the criteria for approval and the process PRIOR to the start of the examination.

Purpose of Student Evaluations

Student evaluations are governed by the Terms of Reference of the Undergraduate Medical Education Committee (UMEC). The Student Evaluation Committee (SEC) is a subcommittee of UMEC which shall develop policy on all matters regarding the planning, presentation and evaluation of the undergraduate medical curriculum, and regarding the evaluation of students. Student evaluations serve several purposes including:

- assessment of student performance and achievement of curricular objectives
- feedback to students and faculty regarding student learning needs
- program evaluation including identification of strengths and weaknesses in the education program

Types of Formal Student Evaluations

Generally, UME evaluations can be categorized as either formative (practice) or summative (counts for grades). The purpose of the formative evaluation is to 1) provide students with a sampling of the question-format to be used on the summative evaluation and, 2) allow students to monitor their learning progress.

Summative evaluations will be designed to ensure that the student has satisfactorily met the objectives of the Undergraduate Medical Education Program. Individual evaluations are based upon learning objectives for the relevant course or clerkship.

Each course or clerkship committee is responsible for preparing formative and summative student evaluations. Each course and clerkship in the UME program has at least one summative student evaluation. Examination blueprinting, development/review of questions and standard setting are required. The course may have one or more evaluation components, but a single final grade is then compiled for each course. Examples of examination formats include:

- Multiple choice questions, which are written in the “single best response” format
- Peripatetic examinations, also known as “bell ringers”, typically given for such content areas as anatomy, histology, pathology.
- OSCE examinations, which are typically 6-10 station examinations (each station is usually 10-18 minutes). These usually test clinical skills such as: history taking, physical examination, diagnosis, procedural or communication skills. OSCEs are found in the medical skills courses, some clerkships, and the clerkship summative OSCE.

Preceptor evaluations are also used in the pre-clerkship curriculum (e.g. evaluations of small group activity, Med 440 preceptor evaluations, summer evaluations) and the clerkship (so called “ITERs” or In-training Evaluation reports).

Blueprint
A blueprint or table of specifications is required for each course and clerkship evaluation in the Undergraduate Medical Curriculum. The blueprint will be consistent with the Clinical Presentation Curriculum philosophy and thus should be organized by clinical presentations and reflect tasks to be evaluated. The blueprint should be distributed to the students and teachers at the beginning of the course or clerkship.

Content tested in a given evaluation may include any material previously covered in the UME curriculum, provided that this is reflected in the blueprint. As with all components of the UME program, evaluation content and format should reflect non-prejudicial language and attitudes. Parallel format examinations are acceptable if each version follows the same blueprint, resulting in similar sampling.

Other Evaluation Methods

Other methods of student evaluation may be used as components of a course or clerkship evaluation. These may include measurements of student participation, completion of specified assignments, clinical reasoning questions, small group iRATs (individual rapid assessment tool) and gRATs (group rapid assessment tool), logbook completion for clinical clerkship, etc.

Examinations may be delivered using either a paper-pencil or an online format.

Deferral Process for Examinations in Pre-clerkship

If a student needs to request an exam deferral during the pre-clerkship courses, they must communicate this request by email to the program supervisor and/or Assistant Dean for pre-clerkship PRIOR to the scheduled exam.

The approveable reasons to defer an examination can be found on the University of Calgary website (https://www.ucalgary.ca/registrar/exams/deferred-final-examinations) and include illness or medical emergency, religious observance/conviction, domestic affliction, or having 3 examinations within 24 hours. The Assistant Dean for pre-clerkship will determine if the request is approved and communicate this to the student and the program supervisor.

The written Application for Deferred Final Examinations form must be submitted by the student to the program supervisor who will get the signature of the Assistant Dean for pre-clerkship and then file the signed form in the student file.

If the deferred exam is a midterm MCQ exam or quiz, the student does not write the exam at a later date. Instead, the weight of the exam will be transferred to the final MCQ exam. If the exam is an OSCE, peripatetic or final MCQ exam, or a type of exam that cannot be transferred to the final MCQ exam (e.g. Course 3 ECG exam), or if there is no final exam to transfer the weight to (e.g. AEBM) the exam will be deferred to the UME scheduled deferral timeframe as listed on the appropriate year's timetable. The exact date, time and location of the deferred exam will be communicated by email to the student once the schedule is determined.

The Student File

The Undergraduate Medical Education office maintains a file for each student. Kept in the file are examination performance records, for example, student examination results, reports (ITERs) submitted by preceptors/instructors for Electives, Medical Skills, Integrative, Clerkship rotations and more. Other items of interest pertaining academically to a student, e.g. awards, letters of praise, etc. may also be included.

The file is accessible to a student for review during normal office hours but is not accessible to anyone else outside the Undergraduate Admissions Office and Student Academic Review Committee unless written authorization is provided by the student (e.g. Faculty Advisor). A student may have a Faculty Advisor, Legal representative or other representative accompany them when they review their file. Under no circumstances
may any item from the Student’s File be destroyed or removed. Individual student results on formative evaluations will be included in the student’s permanent file, but will not be used to calculate final course mark and/or reported in the Medical Student Performance Record (MSPR).

A student may request, or request a representative, to review their file by completing a ‘Request to Review File’ Form (https://cumming.ucalgary.ca/sites/default/files/teams/4/Student%20forms/request-to-review-student-file-form-july-22-2011.pdf) and submitting it to the Undergraduate Medical Education Office at least 24 hours prior to reviewing the file. A student who has received a ‘Notice to Appear’ before SARC is not required to submit a ‘Request to Review File’ Form unless they would like a representative to review their file on their behalf.

**Associate Dean’s Tests (ADTs)**

There are four mandatory on-line formative examinations testing a student’s cumulative knowledge of objectives over time, rather than focussing on objectives restricted to only one course. ADT 1 & 2 are closely aligned to concurrent pre-clerkship courses. ADT 3 is a basic science examination, while ADT 4 is a general review aimed to prepare students for the Medical Council of Canada Part I licensing examination.

The Associate Dean’s test is mandatory therefore all students must participate. Policies of deferral and those related to misconduct are the same as for a summative examination at the University of Calgary.

Students will have a one-month window of time during which to complete each ADT. The window of time for each ADT can be found in the yearly timetable.

**Providing Access for an online exam:** at least one day prior to the exam opening online, students will receive an email to their @ucalgary.ca address, providing instructions on how to use the system, a link to the exam, and a username. Students will also receive a second email providing the password (only good for current exam; new password is issued per exam). Separate emails for username and password are used to ensure students’ individual entry into the exam is not compromised by providing both pieces of information in the same email. The link to the system that is sent to students will not allow students to start the exam until the specified exam start time. Likewise, the link will not allow students to access the exam once the end time of the exam has passed.

Only the official student email address (___@ucalgary.ca) may be entered into the system. No other email addresses will be used or accepted for students. Students that do not receive the pre-exam email by 1pm should email ume.exams@ucalgary.ca

Access to an exam may be linked to completion of an evaluation of the course or curriculum.

**Student Conduct at Online Evaluations**

Students are expected to abide by the Student Conduct Policy of the UME. Students **are strictly prohibited from capturing or recording questions in any way** for either personal or widespread use. UME students or staff who discover any suspicious evaluation materials are expected to report the matter immediately to the Associate Dean (UME). The Student Conduct Policy is included in each examination booklet.

**Results of ADT 1 & 2**

Students will be able to view their score immediately. Individual student results will be included in the student’s permanent file, but will not be used to calculate final course marks nor reported in the Medical Student Performance Record (MSPR).
Peer Feedback Self-Assessment Process

A peer feedback process will be used to provide students information for self-reflection on “non-cognitive domains” such as professionalism. Medical student peers are in a unique position to assess each other in situations that a preceptor may not have an opportunity to observe. Peer evaluation has been shown to be an excellent method of providing students with formative feedback on their behaviors. Students benefit from learning how to give feedback as well as receive feedback. It is an LCME accreditation requirement that students receive feedback related to “non-cognitive domains”, such as professionalism and related behaviours. Similarly, it is the philosophy of this medical school that achievement of educational goals should be assessed by self- and peer-evaluation in addition to formal summative evaluations. Participation in the Peer Feedback and Self Assessment process will be mandatory.

The Medical Council of Canada (MCC) Examinations

A graduating student may not practice medicine independently in any of the Provinces of Canada without first performing “satisfactory” on the examinations of the Medical Council of Canada.

There are 2 parts to the MCC exams. Part I is an online 1-day exam offered at the end of Medical School. The first half is made up of approximately 200 multi-choice questions (MCQ) questions whereas the second half is made up of clinical decision-making (CDM) component. Part II is a clinical examination (OSCE).

Traditionally, our school has had a pass rate of close to 100% on this examination. In 2015, the MCC elevated the pass score from 390 to 427, resulting in a 10% failure rate in our school (5.7% nationally). Many changes have been way in order to improve this performance, including: introduction of CDM questions in the ADT exams, clarifying predictors of unsuccessful scores and intervening on an individual basis, MCC practice examinations, and a formal two-week review course at the end of Year 3 (Clerkship). In 2017, our class surpassed the national pass rate on this examination.

Promotion

On behalf of the Faculty Council, Student Academic Review Committee (SARC) determines whether or not students should be promoted to the next stage of the MD program, and ultimately receive the MD degree. Please refer to SARC’s terms of reference for more details about this committee.

The Terms of Reference of the Student Academic Review Committee are located on the MD Programs website at https://cumming.ucalgary.ca/mdprogram/about/governance/reports. Students experiencing any academic difficulty should refer to this document and become fluent with the Faculty rules regarding policies and procedure of promotion. Guidance regarding an appearance is available from Student Affairs, Faculty Advisors and the UME office.
Other information

**Lockers**
Lockers are assigned by the Undergraduate Medical Education (UME) office. Lockers will be assigned and locks handed out to the Year 1 students during Orientation. Please note that use of our locks is mandatory and students keep them for all three years.

**iClickers**
The iClicker will be used in various lectures and learning events throughout your program. UME has a set of iClickers that will be brought to the lecture theatre when the lecturer has advised that they are going to use them. The student representative for each course is responsible to pick them up and return them to storage. The course coordinator will get in touch with the student representative for each course to let them know when they expect the lecturer wants to use iClickers.

**Letters of enrollment**
MD program students can request letters of enrollment here
https://www.ucalgary.ca/mdprogram/current-students/letter-enrollment-requests

**Upass**
The MD Program curriculum does not follow the main U of C calendar so our terms do not line up. Your first tuition will not be paid until Fall term which means you cannot get a UPass sticker for transit until September. Please arrange for alternate transportation or buy tickets or a pass for July and August. As of September you will be able to get a sticker for your UCID. You can go to main campus to get it or there will be dates they come to Health Sciences published here https://www.ucalgary.ca/unicard/upass/upass-hours-and-locations. These dates will be emailed to you by the UME office as well.

**Alberta Health Services photo ID**
You will pick up your Alberta Health Services ID from the AHS Parking office in the basement of the North Tower. They are generally available in your second week. Please ask your program supervisor for pre-clerkship if this is not communicated by then.

**Transcripts**
Transcripts can be requested as follows:
https://www.ucalgary.ca/registrar/student-centre/transcripts

**Prayer spaces on Main Campus and Foothills Campus**
http://www.ucalgary.ca/fsc/resources/prayer_space