

## UGME Research and Evidence Based Medicine (EBM) Vertical Theme Outline

	Year One	Year Two	Year Three	Year Four
<b>Term One</b>	<i>Scientific Method &amp; Overview of core research methodologies</i>	<b>Qualitative Research (implementation: 2018-19)</b>	<i>Selected Topics in Medicine: Mixed Methods Research (implementation: 2019-20)</i>	Research Elective Block
	<b>Medicine &amp; Society I (1 hour)</b>	<i>Medicine &amp; Society III (Term One)</i>		
	Information Literacy	Information Literacy	<b>Critical Appraisal</b>	<b>Quality Improvement/Quality Assurance on-line modules (IHI)</b>
	Clinical Integration I (3.5 hours)	Clinical Integration III (3 hours)	<b>Core Rotations: IM, Psych.</b>	
	Ethics (large & small group sessions)	<b>Qualitative Research Project Data Collection Small Group Sessions (implementation:2018-19)</b>		
	Clinical Integration I (4 hours)	<b>Medicine &amp; Society (Term One)</b>		
	<b>Quantitative Research Medicine &amp; Society I (2 hours)</b>	<b>Applied epidemiology</b>		
<b>Quantitative Research Project Data: Hands on Quantitative Research and Critical Appraisal Session</b>	<b>Foundations of Clinical Medicine II: (MSK)</b>			
<b>Medicine &amp; Society I (2 hours)</b>	Critical Appraisal			
	Foundations of Clinical Medicine II: (KUT)			
	Introduction to Quality Improvement Process and Proposal Development			
	Medicine & Society III (Term One)			
<b>Term Two</b>	Epidemiology	Information Literacy		
	Medicine & Society II (2 hours)	Clinical Integration IV (2 hours)		
	Public Health Ethics	Knowledge Translation and Patient Education		
	Medicine & Society II (2 hours)	Medicine & Society (Term Two)		
	Biostatistics	<b>Patient Safety online modules (IHI)</b>		
	Medicine & Society II (1 hour)	<b>Medicine &amp; Society III &amp; IV (Terms One and Two)</b>		
	<b>Quantitative Research Project Data Analysis Small Group Sessions</b>	<b>Qualitative Research Project Data Analysis Small Group Sessions</b>		
	<b>Medicine &amp; Society II (2 hours)</b>	<b>Medicine &amp; Society IV (Term 4)</b>		
Information Literacy	Critical Appraisal			
Clinical Integration II (4 hours)	Foundations of Clinical Medicine III (Mental Health)			
Applied epidemiology				
Foundations of Clinical Medicine I (1 hour) (NNT in CV)				



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	<i>Tutorial on the Tri-council policy statement: ethical conduct for research involving humans</i>			
	<i>McMaster University On-Line Chart Review Tutorial</i>			
	<i>Medicine &amp; Society II (3 hours)</i>			
	<b>Dean's Summer Research Projects</b>	<b>Dean's Summer Research Projects</b>		

Note: There are three sessions for which implementation will be staggered. This is indicated and highlighted in those cells.

**are bolded and italicized in the table above.**

The vertical research theme aims to: Build capacity for students to demonstrate an understanding of the scientific principles of research and scholarly inquiry and the role of research evidence in health care.

Through:

1. Exposing students to different fields of research and research methodologies
2. Supporting students in the development of rudimentary research knowledge and skills
3. Encouraging students to gain confidence with participating in research during their UGME program
4. Involving students in knowledge translation relevant to patient care

Research Theme Sessions fall into the following sub-theme categories: **1. Research Questions and Study Methodologies, 2. Ethics, 3. Information Literacy and Critical Appraisal, 4. Quality Assurance/Improvement and 5. Knowledge Translation.**

During the first year of the vertical theme, the focus is on fundamental scientific methods with development of research questions, understanding basic research study designs/analysis strategies and participation in a quantitative research exercise with data collection, analysis and interpretation. During the second year the focus shifts towards learning about and participating in a qualitative research exercise. The summers following Years One and Two, students are eligible to apply for Dean's Summer Studentship Research Awards. Learning around research methodologies encourages participation in experiential research activities, but also supports acquisition of skills in critical appraisal of medical literature and promotes development of evidence based medicine approaches for clinical practice.

Within the Clerkship Years, the application of a mixed methods approach to research is the topic of a seminar in Year Three, and all students are eligible to undertake a supervised research elective in Year Four. Students are introduced to Quality Assurance/Quality Improvement/Patient Safety concepts and research applications in Year Two with additional exposure in Year 4 as part of a spiraled curriculum.

**Assessment:**

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**For each of the first two years, Student teams will prepare a research question/hypothesis, collect and analyze data and prepare a report on the same. The report will be due at the end of Term 2.**