

# Division of Emergency Medicine

## MPhil in Emergency Medicine

# 2021



South Africa and Africa face many healthcare challenges. Our healthcare system is seriously overburdened with a quadruple burden, much of it presenting as acute emergencies. Emergency Medicine although well established in high income settings, remains a relatively new field in Africa and is a rapidly developing space as we develop African solutions, using the wealth of experience and evidence available. While specialist services are always required, there is a need to upgrade the knowledge and skills of all individuals working in Emergency Care environments. This programme will develop a group of highly competent Emergency Care workers with Clinical, Management and Research skills in order to promote Emergency Care in South Africa and across the continent.

We aim to produce Masters Graduates who will be able to critically appraise and assimilate the medical literature and develop evidence-based practices, and develop the key understandings and skills to evaluate and manage Emergency Care systems and be able to promote quality team-based Emergency Care. The research component will develop a foundation to promote and foster Emergency Care research, encourage evidence-based practice and develop locally appropriate policies.

## MPhil Emergency Medicine Programme Outline — 2021

### **PROGRAM COMPOSITION**

The MPhil is an NQF level 9 program, comprising taught coursework, and a research dissertation, typically undertaken over 2-3 years “part-time”. The degree entails 180 credits, each credit meaning one notional hour = 10 “real world” hours for the “average student”. Most students will do 2 courses every semester (the year is divided into two 6-month semesters). Most courses are 15 credits, so  $150 \times 2 = 300$  hours over 18 weeks = something like 16 hours a week!). This is a huge load for most working people and needs a great deal of commitment, motivation, and likely support from your employer. If concerned, consider first enrolling for individual courses rather than the whole degree!

*There is an opportunity to do this through registration initially as an “occasional student”, with the option to upgrade to the degree at a later stage and carry forward the credits you have obtained (as long as they are not more than 50% of the credits for the degree – ie 4 courses maximum as an “occasional student”).*

*This course is offered through a blended learning platform - the majority of the teaching and learning will be done online, but it will be supplemented by contact days at UCT. Not all of the contact days are compulsory, and some you can attend remotely. But you will need to write 6 monthly exams in Cape Town - so please calculate on a minimum of 3-4 trips to Cape Town every year.*

### **ADMISSION REQUIREMENTS**

The MPhil Emergency Medicine is open to Doctors, Nurses and Paramedics in Emergency Care. Occasionally, we will ask the candidate to first enrol and successfully complete one or two courses as an occasional student before being allowed onto the full programme.

**Doctors** – MB ChB or equivalent; candidates should have a minimum of 1 year Emergency Care experience post internship and ideally completed 2 of the Advanced Life Support courses (ACLS, ATLS, APLS or PALS)

**Nurses** - 4 year Bachelor of Nursing or equivalent; minimum 2 years’ experience in Emergency Care environment and completed 2 of the Advanced Life Support courses (ACLS, ATLS, APLS or PALS).

*Preference will be given to Nurses with Trauma or Critical care training*

**Paramedics** - BTech or BEMC degree; 2 years post registration as a paramedic; ideally completion of 2 of the Advanced Life Support courses (ACLS, ATLS, PHPLS or similar).

Exceptions: Only Medical Practitioners may enrol for the Global Emergency Care program.

***Candidates must have an excellent command of the English language (medical English) and need to be familiar with commonly used software platforms (e.g. Microsoft Office components, Adobe Acrobat, Skype). It is imperative to have access to a stable internet connection in order to successfully participate in the programme. It will be up to the candidate to make sure that they have the most up-to-date compatible software installed. A pre-acceptance “computer skills test” will have to be passed, as well as a motivational essay as to what you hope to achieve in the program and what makes you the ideal candidate.***

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*If you do not meet the entry requirements for the MPhil – commonly prehospital and nursing practitioners without a 4 year undergraduate degree – please consider the new Post Graduate Diploma in Emergency Care offered by the Division from 2021. See <http://www.emct.info/pg-dip.html>. This is a purely online course, potentially open to those who do not meet the MPhil entry requirements and open to possible RPL (recognition of prior learning). The PG Dip in Emergency Care will provide an extremely solid grounding and set you up for online learning and postgraduate study and if successful you would be well placed to join the MPhil program – but it won't give you credits towards the MPhil.*

### **PROGRAM STRUCTURE**

**Head of Division:**                      **Prof Lee Wallis**

**Programme Convenor:**              **A/Prof Peter Hodkinson**

We are excited to now have four Streams to choose from, including the revamped Global Emergency Care stream, offered for the first time again since 2014.

- |      |   |                          |
|------|---|--------------------------|
| I.   | Clinical Emergency Care (6 core/2 electives)                    | - 60 credit dissertation |
| II.  | Disaster Medicine (6 core/ 2 elective)                          | - 60 credit dissertation |
| III. | Patient Safety & Clinical Decision Making B (8 core courses)    | - 60 credit              |
| IV.  | Patient Safety & Clinical Decision Making A (5 core/1 elective) | - 90 credit              |
| V.   | Global Emergency Care* (7 core/1 electives)                     | - 60 credit dissertation |

Below is an outline of the course structure. There is some flexibility as to how you order most courses, although it would be to your benefit to complete core courses first. Credits listed with each course. Candidates may always do more courses than required; never fewer. Not all courses run every year – we try to accommodate everyone, but its not feasible to run courses for small numbers of students so some course only run in alternate years.

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STREAM		Clinical Emergency Care	Disaster Medicine	Patient Safety & Medical Decision Making (A or B) #	Global Emergency Care
CORE YR 1	Semester 1	Clinical Research Methods I 15	Clinical Research Methods I 15	Clinical Research Methods I 15	Clinical Research Methods I 15
		Clinical Emerg Care I 15	Disaster Medicine 15	Clinical Quality Improv 15	Disaster Medicine 15
	Semester 2	Clinical Emerg Care II 15		Patient Safety 15	Healthcare Systems 15
				Healthcare Systems 15	
CORE YR 2	Semester 1	Clinical Research Methods II 15	Clinical Research Methods II 15	Clinical Research Methods II 15	Clinical Research Methods II 15
			Writing Disaster Plans 8		
	Resuscitation and Critical Care 15	Ev Exp Med 15			
	Semester 2	Healthcare Systems 15	Disaster Medical Response Trg 15		Managmt & Leadership 15
		Practicing Disaster Plans 7			
ELECTIVE		<i>Plus two electives</i>	<i>Plus two electives</i>	<i># Plus: A: three electives; B: one elective</i>	<i>Plus one elective</i>
	Semester 1	Disaster Medicine 15		Disaster Medicine 15	
	Semester 2	Ambulatory Care & Travel Med 15	Ambulatory Care & Travel Med 15	Ambulatory Care & Travel Med 15	Education and Training 15
		Management & Leadership 15	Healthcare Systems 15	Education and Training 15	Ambulatory Care & Travel Med 15
		Education and Training 15	Management & Leadership 15	Management & Leadership 15	Disaster Medical Response Trg** 15
Disaster Medical Response Trg** 15				Pt Safety 15 CQI 15	

# Patient Safety and Clinical Quality Improvement courses run alternate years – in 2021 CQI should run in Semester 1.

\*\* DisMeRT runs alternate years – will run in 2021

**Credits – Total required for the MPhil degree is 180 credits.**

For all streams (except Patient Safety B) this entails 120 coursework credits (7 or 8 courses) and a 60 credit research dissertation

Patient Safety B entails 90 coursework credits (6 courses) and a 90 credit dissertation (slightly longer and more detailed research dissertation)

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**SEMESTER OUTLINE FOR EACH STREAM:**

**I Clinical Emergency Care (need 8 courses):**

	Semester 1	Semester 2	
Year 1	<b>CRM I CEC I</b>	<b>CEC II #</b>	<i>core</i>
Year 2	<b>CRM II RCC</b>	<b>HCS #</b>	<i>core</i>
<i># Elective 1/ 2  (*DisMert prerequisite Disaster)</i>	<b>Disaster</b>	<b>Education Leadership AC&amp;TM Manage &amp; Lead DisMeRT*</b>	<i>elective</i>

**II Disaster Medicine Stream (need 7 full courses and 2 half courses<sup>1</sup>)**

	Semester 1	Semester 2	
Year 1	<b>CRM I Disaster M</b>	<b>#</b>	<i>Core</i>
Year 2	<b>CRM II EvExp Med Writing Dis Plans<sup>1</sup></b>	<b><i>DisMert (or 1<sup>st</sup> year)</i> Practicing Dis Plans<sup>1</sup></b>	<i>Core</i>
<b># Elective</b>		<b>HCS AC&amp;TM Manage &amp; Lead</b>	<i>electives</i>

**III & IV Patient Safety & Clinical Decision Making (need 6 or 8 courses):**

	Semester 1	Semester 2	
Year 1	<b>CRM I CQI</b>	<b>HCS Patient Safety</b>	<i>core</i>
Year 2	<b>CRM II (#)</b>	<b># #</b>	<i>core</i>
<b>#Elective 1/ 2</b>	<b>Disaster</b>	<b>Education Leadership AC&amp;TM Manage &amp; Lead</b>	<i>elective (dep on stream)</i>

**V Global Emergency Care (need 7 courses)**

	Semester 1	Semester 2	
Year 1	<b>CRM I Disaster</b>	<b>HCS #</b>	<i>core</i>
Year 2	<b>CRM II</b>	<b>Manage &amp; Lead</b>	<i>core</i>
	<b>Global EC</b>		
<b># Elective Semester 2  (*DisMert prerequisite Disaster)</b>		<b>Education AC&amp;TM Pt Safety CQI DisMert*</b>	<i>elective</i>

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### **COURSES**

In-course work (assignments, etc.) will count towards at least 50% of the course mark, with the summative assessment at the end of the course counting at most 50%. A 50% sub-minimum has to be achieved in either with an overall 50% to pass a course. Unless otherwise stated, upon failure in a final assessment, no supplementary examination is available, and the course will have to be retaken when it is offered again, if allowed by the university. (Also see Book 3 – General Rules & Policies: Master’s Degrees [GM1 to GM10])

If 50% or more courses taken in a year are failed, or the candidate is absent for the examinations without timely prior communication, the candidate may not be allowed to re-register for the degree in the following year. Continuous registration at the university is a necessity to allow for completion of the programme, else a specific leave of absence needs to be applied for in special circumstances. Part-time students will only be allowed to continue beyond four years with permission. [Refer to Divisional Progression Rules.]

All courses can be enrolled for, independent of the outcome of previous courses, except for “Clinical Emergency Care 2”, and “Resuscitation & Critical Care” for which the candidates will have to have passed “Clinical Emergency Care 1” and “Clinical Emergency Care 2” respectively, and similarly Disaster and DisMert. Please make sure you register for the right courses! Checking the courses you are registered for is your responsibility – we will only communicate deadlines to you, and guide you on how to upload these forms on PeopleSoft..

The majority of the contact will be via the internet portal “Vula”: [www.vula.uct.ac.za](http://www.vula.uct.ac.za). Most resources will be available on there, communication will be through Vula and assignments are also submitted via this portal. Hence, the ability to access the internet frequently and to be able to negotiate the internet platform are a central prerequisite. It is the candidate’s responsibility to access the available information, ensure that he/ she keeps their details up to date via the preference settings and/ or informs the programme co-ordinators of any problems. The candidate also needs to ensure that he/ she puts automated messages from Vula on their email “safe senders” list, as non-receipt of messages will be the candidate’s responsibility.

Please note that we have to enforce strict deadlines for all assignments. Assignments handed in after the due date and time will be penalised by deducting 10% off the mark for every day that it is late. In all events, times mentioned refer to South African standard time (GMT +2) and are reported in a 24 hour time format. In the event of illness and other exceptional, unforeseen circumstances the course convenor may give the student an extension for the assignment submission. Again, strict deadlines need to be adhered to (see assignment submission policy).

Assignments are to reflect individual, original work and not that of a group of students working/studying together, unless it is specifically issued as a group assignment. University guidelines related to misconduct and dishonesty will apply and plagiarism will not be tolerated. The university utilises “Turnitin” for all assignments and the dissertation. Even in the event of Turnitin not being immediately available, it is still up to the student to ensure that they do not plagiarise according to the wider definition (see later in this document).

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### Short Course Descriptions

#### **Clinical Research Methods I (CRM 1) – CHM6005F**

This is a semester-based course designed to develop a coherent and basic understanding of the theory, research methodologies and techniques relevant to Emergency Medicine. Basic research methodologies, bias, confounders and basic biostatistics are covered. A DP requirement for the course exam will be the successful submission of a two-page research proposal to the Research and Ethics Committee. Final assessment will be based on coursework (50%) as well as a final examination.

*Year 1 Semester 1 — Course co-ordinators: Dr C Hendrickse, Dr C Saunders*

#### **Clinical Research Methods II (CRM 2) – CHM6006F**

This course builds on the basic epidemiology taught in CRM I (CHM6005F) and deals with specific research designs in greater detail (systematic reviews, diagnostic and screening trials, randomised controlled trials) and techniques of critical appraisal of the major types of study design. In addition, the principles of research ethics are dealt with. The course also focuses on the skills you need to write a scientific paper (literature review, scientific writing). A DP requirement for the course exam will be the successful submission of a two-page research proposal to the Research and Ethics Committee. Final assessment will be based on coursework (50%) as well as a final examination.

*Year 2 Semester 1 — Course co-ordinator: Dr C Saunders*

#### **Clinical Emergency Care I (CEC 1) – CHM6007F**

This semester-based course focuses on clinical emergency care. It will be a problem-based course with emphasis on evidence-based medicine and critical thinking. Students will be required to read prescribed reading (as well as any further reading considered relevant), followed by an assignment case or problem and will be expected to critically appraise the evidence and develop their own answers and solutions to the posed questions. Course 1 will focus on emergency medical, surgical and paediatric cases. Assessment is by virtue of completing assignments during the semester (60%) and a final summative assessment comprising MCQ and SAQ paper (40%). **Compulsory** attendance at a 2-day Fundamentals of Emergency Care (FEC) advanced life support course in February is compulsory.

*Year 1 Semester 1 — Course co-ordinators: Dr W Khan, Dr K Evans*

#### **Clinical Emergency Care II (CEC 2) - CHM6008S**

This semester-based course focuses on clinical emergency care. It will be a problem-based course with emphasis on evidence-based medicine and clinical decision-making. Students will be encouraged to critically appraise the evidence and develop their own management protocols. Course 2 will focus on Trauma, Toxicology and Environmental Medicine cases. Assessment is by virtue of completing assignments during the semester (60%) and a final summative assessment MCQ & written paper (40%).

*Year 1 Semester 2 — Course Co-ordinator: A/Prof P Hodkinson, Dr P Xafis*

#### **Resuscitation and Critical Care (RCC) – CHM6010F**

This semester-based course focuses on clinical Emergency Care in Resuscitative and Critical Care medicine. It will be a problem-based course with emphasis on evidence-based medicine and clinical decision-making. Focus will be on systems for critical care, as well as

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advanced respiratory and cardiovascular support of the critically ill and injured. Core clinical competencies in key emergency medicine related skills and procedures will be required. There may be compulsory contact sessions. Assessment is by virtue of assignments and forum discussions (60%), as well as a final formal examination (40%).

*Year 2 Semester 1 — Course co-ordinators: Dr S Rambharose, Dr A Parker, Dr W Stassen*

### **Healthcare Systems (HCS) – CHM6009S**

This is a semester-based course designed to generate an understanding of the structure and financing within Healthcare systems. The structure and function of emergency care systems including global health systems, pre-hospital and in-hospital systems will be examined. An introduction to processes and flow in emergency systems, and how these are related to error and productivity will be examined. Assessment is by virtue of coursework (60%) and a final summative assessment (40%).

*Year 1/2 Semester 2 — Course Co-ordinators: Prof L Wallis, Dr W Stassen*

### **Disaster Medicine – CHM6012F**

This is a semester-based course, encompassing the underlying principles of Disaster medicine including risk assessment, preparation and planning, communication and response. The course delineates the multiservice response required for a major incident. Students will be given practical knowledge of tools, resources and processes utilised in a medical major incident response. The assignments will involve case reports evaluating aspects of current disasters/major incidents. **Compulsory** contact session for this course is the five-day Disaster Medicine course in Cape Town (during May 2021), including a practical major incident response simulation. Assessment will be based on coursework -assignments (60%), participation during the contact course (10%) and a final oral examination (30%).

*Year 1/2, Semester 1 — Course Co-ordinator: Dr W Smith*

### **Education and Training in Emergency Care – CHM6013S**

This is a semester-based course which will cover aspects of Adult learning theory, small group teaching, use of virtual learning environments (VLE) and electronic learning resources and clinical skills-based teaching. The training course will aim to develop core teaching skills useful on a day-to-day basis when teaching undergraduates, postgraduates and paramedical students in the EC. The education section will build on the knowledge of the Clinical Research Methods Courses and focus on Evidence-based Medicine and knowledge translation in the EC. Assessment will be by coursework (40%), final project (30%) and a formal end-of-semester examination (30%).

*Year 1/2, Semester 2 — Course Co-ordinator: to be announced*

### **Ambulatory Care & Travel Medicine (AC&TM) – CHM6030S**

This course will cover aspects of the common primary health care complaints which may be managed by Emergency Care workers. The course will include clinical approaches and management of common chronic medical conditions, as well as selected topics in travel medicine, and a framework for considering rural and remote practice. The course is aimed at Nurses, Paramedics and Medical Officers who want to improve their knowledge on conditions pertinent to extra-urban placements and deployment, such as on Expeditions, Rigs or Mining Operations in Africa. Assessment will be by coursework (50%) and final assessment (50%). *Year 1/2, Semester 2 – Course co-ordinators: to be announced*

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**Management and Leadership in Healthcare – CHM6028S**

This course introduces the candidate to both the theory and practicalities of effective management and leadership in healthcare in general and the emergency department in particular. Delegates will develop an understanding of the principles of leadership and management which they can use to improve the care delivered in their own environment and beyond, focusing on managerial competencies, basic financial tools and techniques, principles of human resource management, management and leadership styles, team dynamics, conflict handling strategies and leadership in a crisis. Workplace management or leadership experience within the preceding 24 months is advantageous. A **compulsory** weeklong contact session will be held in August 2021. Assessment will be by coursework (60%), and a final examination (40%).

*Year 1/2, Semester 2 – Course co-ordinators: Dr C Cunningham*

**Continuous Quality Improvement — CHM6032F** *(runs alternate years – next in 2021)*

Candidates will be equipped to develop and run a quality improvement project at facility level. Working through 2 improvement projects, candidates will gain practical experience in improvement science, with topics including: systems thinking, prioritising focus areas, problem definition and analysis, creating an improvement project charter, selecting and testing possible solutions, using data for improvement, improvement methodology and tools (including Lean and IHI methodology), working with teams, navigating obstacles, change management and sustainability. The course will also include an introduction to quality improvement research, coaching and models for spread of initiatives beyond the facility. Assessment comprising coursework assignments (40%), improvement project (30%) and final exam (30%).

*Year 1/2 Semester 1 Course Co-ordinator: Dr H Tuffin, Dr K Cohen*

**Patient Safety — CHM6031F** *(runs alternate years)*

Candidates will develop an in-depth knowledge of the principles Patient Safety which they can use to improve the care delivered in their own Emergency Centre. Specific topics include systems thinking as it pertains to error, risk assessments, the morbidity and mortality meeting and bedside teaching of error in EM as well as the needed governance of the EC. The course also focuses on issues of flow in the EC, the safety implications of overcrowding, and explores some change concepts that can be applied to improve flow into, through and out of the EC. Assessment will be by virtue of coursework assignments (55%) and a final examination (45%).

*Year 1/2 Semester 2 Course Co-ordinator: Dr K Cohen, Dr H Tuffin*

**Global Emergency Care (AEC) – CHM6018S** *(runs only on demand from sufficient students)*

This second year, full year course is the keystone to the Global Emergency Care stream, building on the foundations of the HCS course in first year. It will cover aspects of Emergency Care epidemiology and systems both pre-hospital and in-hospital. The aim is to explore Emergency Care in low resource settings in terms of initiating, developing and maintaining appropriate and adequate systems. Aspects of cost-effectiveness, continuous quality improvement and patient safety will also be covered. Assessment will be by virtue of coursework, oral examination and assignments.

*Year 1, Semester 2 — Course co-ordinator: Prof L Wallis*

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### **Disaster Medical Response Training (DisMeRT) – CHM6029S** (*runs alternate years, next 2021*)

Medical personnel are often called upon to respond across provincial and/or international borders to offer emergency assistance and are faced with providing care in an often difficult or hostile environment. This course will address some of the issues and skills that such a response may require, including INSARAG, medical considerations in an Urban Search and Rescue environment, basic veterinary and dentistry skills as well as selective primary health care considerations, amongst others. *Entry requirement for this course is the successful completion of the Disaster Medicine course.* The **compulsory** contact session will consist of the weeklong DisMert Course (during October 2021). Assessment will be through coursework assignments (60%), a written assessment on the contact week (20%) and a final oral exam (20%). *Year 2, Semester 2 — Course co-ordinator: Dr W Smith*

### **Event & Expedition Medicine (EvExMed) – CHM6042F**

This course will focus on large event planning and on expedition and remote site medical support. Large events are becoming a regular occurrence in cosmopolitan urban centres. The correct medical preparedness and response planning is paramount to the success of these events, addressing the specific requirements per nature of event (e.g. rock concert vs. horse race) and coordination with other services, while not overcapitalising on resources. The expedition and remote site medical support component will focus on equipment for expeditions into various terrains, communication solutions, as well as evacuation planning. Compulsory attendance at several events and contact days, as well as attending several local events during the semester, will accompany the theoretical knowledge. *Year 2, Semester 1 Course Convenor: A/Prof P Hodgkinson*

### **Writing & Practising Disaster Plans – CHM6044F & CHM6043S**

These two half semester courses will run through the second year of the Disaster Stream. Candidates will learn to write and run all-hazard plans for organizations based on local hazard-risk identification and resources. They will be able to apply the resulting gap analysis in disaster preparedness to the institution, lobbying for and justifying the initial and ongoing financial commitment for plans to be lived rather than remaining pure compliance documents, as well as developing training regimens that will allow for training the plans. They will learn to schedule and run both table-top exercises, limited and full-scale physical exercises. Assessment by assignment and project (60%) and summative assessment (40%). *Year 2, Semester 1 & 2 – Course co-ordinator: Dr Wayne Smith, Prof Lee Wallis*

## **TEACHING AND LEARNING**

This is a master's level course where emphasis is placed on the student as the primary determinant of their learning. *The course does not focus on covering a knowledge-based curriculum but rather teaching the skills of critical appraisal, rational clinical decision making and knowledge translation.* The Masters student will need to learn independently to cover the required material.

A problem-based approach will be followed with an emphasis on the emergency care team and the incorporation of evidence-based medicine. Much of the learning will be web based, so access to a computer and the internet is essential.

Each course will have between 2 and 5 contact days per semester. Attendance at these contact days is obligatory in some cases or at least highly recommended in order to pass the course, unless other arrangements have been made with the respective course convenors.

## **RESEARCH**

In order to graduate with an MPhil in Emergency Medicine, each candidate must complete a research project. The grounding of the two Clinical Research courses (CRM 1 & CRM2) will assist the student through the process of developing and completing their project. [Please also see the "*General Rules for Master's Degree Studies*" in Book 8b of UCT.]

- For candidates completing a 60 credit dissertation (Clinical, Disaster, Global, and Patient Safety A streams), the completed project may take the form of a paper submitted to a peer-reviewed journal plus a comprehensive literature review of the topic. Written as a dissertation, it should not be more than 20 000 words in length.
- For candidates completing the 90-credit Patient Safety B stream, you are expected to produce a more comprehensive literature review and a substantial publication, or two smaller publications. Written as a dissertation, it should not be more than 25 000 words in length.

A DP requirement for the CRM 1 course will be the successful submission of a two-page research proposal. If candidates wish to finish by the end of year 2, it is however strongly recommended that they aim for the submission of their full research proposal by end-August of year 1, so that the document can proceed through the EMDRC, and Ethics Committees and allow time for funding applications, so that they are ready to start data collecting in year 2 (see details of the process at <http://www.emct.info/research-info.html> ).

MPhil students are only required to be registered for the Dissertation component for **one calendar year** in which they submit their research. *We suggest you plan ahead to register only when you will be able to submit by at latest the February following the year you register for the dissertation, or you will pay for this component more than once. You can do a lot of the groundwork for your dissertation before you register, including proposal and ethics submission.*

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All candidates are encouraged to apply for research grants to allow them to complete their research and possibly travel to local or overseas congresses to present their results. Further information is to be found under <http://www.students.uct.ac.za/students/fees-funding/postgraduate-degree-funding/applications-requirements> .

The Division will only fund 2-hours' worth of statistical services towards a dissertation, with the supervisor's endorsement.

For information on the Division's Research focus areas and the process of Research in the division, see the Emergency Medicine Divisional Research Policy. ([www.emct.info](http://www.emct.info))  
Please note that the following objectives should be met for the dissertation. A candidate should demonstrate:

1. The ability to independently design a research project, to obtain ethical approval, to obtain funding, to perform such a project, to present the results and conclusions in a scientific format, and to accept the responsibility and accountability for the performed work within the context of the chosen stream within the MPhil in Emergency Medicine.
2. A sound and systematic knowledge of the theoretical aspects of the subject matter as defined for the selected research project.
3. The ability to work independently on the research projects, which requires the appropriate theoretical and practical skills.
4. The ability to critically evaluate and utilise a wide range of basic and complex information to solve problems effectively using appropriate methods that are relevant to Emergency Medicine and to communicate knowledge, findings and potential implications to other people.
5. The ability to independently apply basic and advanced technical skills and scientific methods using relevant instruments and equipment to conduct sound research that conforms to the relevant legal, safety and bioethical requirements that apply to good practice in the health sciences.

### **LEARNING PORTFOLIO**

A reflective learning portfolio is to be maintained throughout the 2 years of registration. The aim of the portfolio is to encourage mature and reflective thinking about your academic and professional development during this Master's program. A good portfolio should guide your learning. The portfolios are DP requirements for the admission to the final examinations each year.

The portfolio should consist of narratives of scenarios, clinical cases or learning events. These can be both positive and negative. The key aspect should be the reflection of the event in the form of a reflective essay exploring deep understanding of the experience. The purpose of the portfolio is to demonstrate learning, not document a series of experiences.

Tips on Reflection:

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- Be specific- what went well/what went wrong/how did you solve this/what effect did this have
- Think about others involved in this incident such as patients, colleagues or teachers – what were their expectations/reactions?
- What emotions did you experience?
- Be honest – It is okay to be wrong sometimes , as long as you learn from it
- What have you learnt from the experience?
- What gaps do you have in your knowledge/skills/professionalism/teamwork/leadership?
- What are your personal goals and learning objectives?

Portfolios should consist of a minimum of 24 reflections, a minimum of 1 per month throughout the 2-year program (12 per year). This means it is advised to continue to gather reflections between the hand-in of reflections at the end of Sept in year one and the start of the new academic year (Oct to Feb) to make the quota.

The portfolio may be kept in electronic or paper-based format but has to be submitted electronically via Vula. The annual evaluation will occur <sup>6</sup>/<sub>52</sub> before the final examinations and a pass must be obtained in order to achieve the DP requirement for the final examinations for that year.

Please see the Vula tab “MPhil EM Portfolios” which you will be joined to at registration for more information, ideas and examples.

### **SUPERVISION**

Students on the MPhil will need to find their own supervisors for their topics of research, as the expertise needed for specific subject areas may not necessarily reside within the Division. The Division will however assign a university internal, or “administrative” supervisor for purposes of guiding the student through the processes required to pass this part of the Masters Dissertation, once the student has committed to a research topic, has passed the one-page summary and is busy with a full proposal write-up.

### **PROGRESSION RULES**

Candidates will have to not only follow the general rules laid out by the University (see book 3), as well as attain the DP requirements and pass subjects before being allowed to re-register in a subsequent year, they will also have to comply with the Divisional progression rules (as referred to above). Areas typically overlooked are the dissertation and the self-reflection portfolio, as well as failing more than one subject.

**PLAGIARISM<sup>1</sup>**

Plagiarism is not tolerated as it undermines the academic integrity of the degree and your learning experience. We make use of Turnitin (see more about Turnitin [here](#) ) for the submission of each and every assignment, the dissertation proposal and your dissertation. Make sure that you reference correctly by referring to the multiple guides available in all the online tabs, as well as off the UCT library site. The Division makes use of the EMJ-modification of Vancouver referencing. You will need to submit a declaration with each assignment and dissertation.

**Every student will need to read and acknowledge the UCT and Divisional plagiarism guidelines rules and information which will be made available to registering students.**

We enforce a strict policy and where significant plagiarism is detected in student work, the work will be penalized (up to 100% penalty in severe cases) and a first written warning applied. Any further instances are referred to the faculty disciplinary processes.

***In line with the University plagiarism policy, as a learning tool, in most of your MPhil assignments you will following submission of your assignment receive a “Turnitin Report” which flags any plagiarism issues. You then have an opportunity to revise and resubmit your assignment if you are still within the deadline for submissions. Check individual assignment requirements and deadlines.***

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<sup>1</sup> This section is modified from: University of Cape Town. Avoiding Plagiarism: A Guide for Students

# MPhil Emergency Medicine Programme Outline – 2021

## READING LIST

*This reading list is given partly as a prescriptive list as students have historically required, but more as a general reference source for reading material and references for each course.*

*Please keep in mind that there are countless resources available online (and in some cases through the library and as e-resources) and you may not need a textbook unless you prefer, or the course convenors stipulate that it is a requirement – many students will wait until the course starts unless you are particularly textbook bound in your learning style.*

### **Prescribed Reading (CEC 1&2)**

1. Textbook of Adult Emergency Medicine, revised 4<sup>th</sup> ed  
*Peter Cameron, George Jelinek et al*  
ISBN-13: 978-0443068195  
Available online through UCT library
2. South African Medicines Formulary, 12<sup>th</sup> edition.  
ISBN: 978-1-875098-31-6 (available <http://www.hmpg.co.za/> or <https://mdinc.co.za/store/>)

### **Prescribed Reading (CRM)**

3. Bonita R et al (2006). Basic Epidemiology, 2nd edition. World Health Organization. ISBN 978 92 4 154707 9  
Available as an open access resource from [http://apps.who.int/iris/bitstream/10665/43541/1/9241547073\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/43541/1/9241547073_eng.pdf)
4. Epidemiology: A research manual for South Africa (Paperback, 3rd Revised edition)  
*Rodney Ehrlich, Gina Joubert*  
ISBN 9780199059713  
Available from Takelot, Loot or Van Schaik

### **Prescribed Reading (Disaster Medicine) (book provided on orientation day (included in course fees))**

5. Disaster Medicine  
*Lee Wallis, Wayne Smith*  
ISBN: 978-0-7021-8670-7

### **Prescribed Reading (Patient Safety & Flow)**

6. Patient Safety in Emergency Medicine  
*Pat Croskerry, Karen S Cosby*  
ISBN: 978-0-7817-7727-8  
Available various booksellers – may be slow – a necessity for the course.

### **Prescribed Reading (Health Care Systems) Suggest wait for start of course before purchasing**

7. EMS – A Practical Global Guidebook  
Tintinalli JE, Cameron P, Holliman CJ.  
ISBN 13 9781-60795-043-1  
Chapters: 4; 9; 10

#### **AND, EITHER**

8. Textbook of International Health, 3<sup>rd</sup> Ed  
*A Birn, Y Pillay, T Holtz*  
Oxford University Press, ISBN: 978-9-19-530027-7  
Chapters 2; 12

#### **OR**

9. Essentials of International Health  
Sharma M, Atai A.  
ISBN 978-0-7637-6529-3  
Chapters 1; 11; 12

### **Prescribed Reading (RCC)**

10. Oh's Intensive Care Manual: Expert Consult, 7<sup>th</sup> Edition  
*Andrew Bersten, Neil Soni*  
Butterworth-Heinemann, ISBN: 978-0-70-204762-6  
May be available online, wait start of course before purchasing.

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### Prescribed Reading (Management & Leadership in Healthcare)

- Introduction to Business Management.  
ISBN: 9790199059829  
Authors: Erasmus B, Strydom J, Rudanski-Kloppers S  
Publisher: Oxford  
Edition: 9th (2014)
- Management Principles  
ISBN: 9780702172816  
Authors: Smit PJ, Cronje GJ, Brevis T, Vrba MJ  
Publisher: Juta  
Edition: 5th (2015)

### Prescribed Reading (Continuous Quality Improvement)

Lean Hospitals: Improving Quality, Patient Safety and Employee Engagement (2nd Edition)\*  
Author: Mark Graban  
Publisher: Productivity Press  
ISBN: 978-1439870433

\*Available from Amazon. Also available on Kindle Available through <http://www.leanhospitalsbook.com/> or various online/ kindle sources

### Prescribed Reading (Education & Training) – available via the UCT online library

11. ABC of Learning and Teaching in Medicine  
*Ed Cantillon, Hutchinson, Wood*  
BMJ Books and BMJ Journal online, ISBN 0727916785
12. Practical Teaching in Emergency Medicine, 2nd edition  
Rob Rogers, Amal Mattu et al.  
ISBN: 9780470671115  
*(While very informative, buying this book is not required for this course)*

### Prescribed Reading (Ambulatory Care & Travel Medicine)

13. WHO International Travel and Health, 2012  
*Free download available from: <http://www.who.int/ith/en/>*
14. Oxford Handbook of Tropical Medicine, 4<sup>th</sup> edition  
*Andrew Brent, Michael Eddleston, Robert Davidson*  
ISBN: 978-0199-69256-9
15. South African Medicines Formulary, 11th edition.  
ISBN: 978-1-875098-30-9

### Event & Expedition Medicine

16. Oxford Handbook of Expedition and Wilderness Medicine, 2nd Revised edition Chris Johnson, Sarah R. Anderson, Jon Dallimore, Shane Winser, David A. Warrell, Chris Imray, James Moore  
ISBN-13: 978-0-19-968841-8 Published by Oxford University Press

# MPhil Emergency Medicine Programme Outline — 2021

## Recommended Reading

### Books — CEC & RCC

1. Rosen's Emergency Medicine: concepts and clinical practice  
*John Marx, Robert Hockberger, et al*  
ISBN: 978-0-323-05472-0
2. Advanced Paediatric Life Support: The Practical Approach, 6<sup>th</sup> Edition (March 2016)  
*Advanced Life Support Group*  
ISBN: 978-1-118-94764-7
3. Practical Teaching in Emergency Medicine  
*Rob Rogers, Amal Mattu et al*  
ISBN: 978-1-4051-7622-4
4. Handbook of Paediatrics, 7<sup>th</sup> edition  
*Cassim Motala, Anthony Fugaji, Alan Davidson, Mike Levin*  
Oxford University Press, ISBN: 978-0195991178

### Recommended Books — CRM

5. Essential Epidemiology – an introduction for students and health professionals, 2<sup>nd</sup> Ed  
*Penny Webb and Chris Bail*  
Cambridge University Press, ISBN: 978-0-5211-7731-3 Available Van Schaik Books
6. How to Read a Paper: The Basics of Evidence-Based Medicine, 5<sup>th</sup> edition  
*Greenhalg P*  
ISBN: 978-1-1188-0096-6
7. Users' Guides to the Medical Literature: A Manual for Evidence-Based Clinical Practice, 3<sup>rd</sup> Ed  
*Guyatt et al.*  
ISBN: 978-0-0717-9071-0
8. Bad Pharma — How drug companies mislead doctors and harm patients  
*Ben Goldacre*  
Fourth Estate Publishing, ISBN: 978-0-0073-5074-2

### Recommended Book — Health Care Systems

EMS: A practical global guidebook  
*J Tintinalli, P Cameron, CJ Holliman*  
PMPH-USA, ISBN: 978-1-60795-043-1,

### Recommended Books — Disaster Medicine

9. Koenig and Schultz's Disaster Medicine: Comprehensive Principles and Practices  
*K Koenig, C Schultz*  
Cambridge University Press 2009, ISBN: 978-0-5218-7367-3

### Recommended Books — Patient Safety

10. Patient Safety, 2<sup>nd</sup> edition  
*Charles Vincent*  
Wiley-Blackwell / BMJ Books, ISBN: 978-1-4051-9221-7
11. The Human Contribution – unsafe acts, accidents and heroic recoveries  
*James Reason*  
Ashgate Publishing, ISBN: 978-0-7546-7402-3
12. Normal Accidents — living with high risk technologies  
*Charles Perrow*  
Princeton University Press, ISBN: 978-0-691-00412-9
13. The Goal: A Process of Ongoing Improvement, 3<sup>rd</sup> edition  
*Eliyahu M. Goldratt, Jeff Cox*  
North River Press; ISBN-13: 978-0884271956

### Books — Management & Leadership in Healthcare

14. The Opposable Mind — Winning through integrative thinking  
*Roger Martin*  
Harvard Business Press, ISBN: 978-1-4221-3977-6

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15. Management: It's not what you think  
*H. Mintzberg, B Ahlstrand, J Lampel*  
Financial Times – Prentice Hall, ISBN: 978-0-273-71967-0
16. People Management Strategy in Organisations  
*Edited by Johan Herholdt*  
ISBN: 978-1-86922-177-5 (available from [www.kr.co.za](http://www.kr.co.za))
17. Managing Performance in Organisations  
*Edited by Johan Herholdt*  
ISBN: 978-1-86922-181-2 (available from [www.kr.co.za](http://www.kr.co.za))
18. Managing Change in Organisations  
*Edited by Johan Herholdt*  
ISBN: 978-1-86922-178-2 (available from [www.kr.co.za](http://www.kr.co.za))

### Books — Continuous Quality Improvement

19. The Improvement Handbook - Models, Methods and Tools for Improvement  
Associates in Process Improvement
20. The Improvement Guide - A Practical Approach to Enhancing Organizational Performance, 2<sup>nd</sup> edition  
*GJ Langlely, RD Moen, KM Nolan, TW Nolan, CL Norman, LP Provost*  
Jossey-Bass (a Wiley Imprint); ISBN: 978-0-470-19241-2
21. The Health Care Data Guide: Learning from Data for Improvement  
*Lloyd P Provost, Sandra Murray*  
Jossey-Bass; ISBN-13: 978-0470902585

### Books – Event & Expedition Medicine

22. Auerbach's Wilderness Medicine 7th edition Paul Auerbach, Tracy Cushing, Stuart Harris. Elsevier Inc 2017. Available in full online through UCT library
23. Wilderness Medicine Society Guidelines <https://wms.org/research/guidelines>

### Recommended Reading — Journals

1. African Journal of EM (AFJEM)
2. EM Clinics of North America
3. Emergency Medicine Journal
4. Annals of Emergency Medicine
5. Academic Emergency Medicine
6. Disaster and Pre-hospital Medicine
7. Emergency Medicine Australasia

### USEFUL LINKS

[www.emct.info](http://www.emct.info)

[www.lifeinthefastlane.com](http://www.lifeinthefastlane.com)

<https://badem.co.za/>

EMT podcast

[www.emedicine.com](http://www.emedicine.com)

- all current information from the Division of EM
- great EM blog
- local South African blog and resource
- available on iTunes
- good reference site

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### **STUDENT ADMIN**

During the course of the year, you can download an official letter of enrolment, check your student fees balance, and see which course you have registered for, etc. by visiting: <http://studentonline.uct.ac.za> . Be sure to logon using your UCT credentials (student number and password; go to [www.icts.uct.ac.za](http://www.icts.uct.ac.za) if you have forgotten your password).

**You will be allocated a UCT email ([studentnumber@myuct.ac.za](mailto:studentnumber@myuct.ac.za)) and mailbox (Microsoft Office 365) at the time of registration. All UCT communications and teaching material notifications will be sent via this email and it is your responsibility to monitor this email (or set it up to forward to another email address you monitor). See [www.icts.uct.ac.za/myUCT](http://www.icts.uct.ac.za/myUCT) for details.**

*Please be aware that you are signing a financial commitment when you register at the beginning of an academic year. In that vein, you will need to be mindful of the cut-off dates for registration and re-registration of courses in the fees manual (book 12) downloadable from the main UCT website. If you miss those dates, you may be liable for fines and/or the cost of the course. It is your responsibility to check your own fees account.*

*In the same vein, if you feel you are unable to complete a course, communicate with the course convenors or programme convenor early. Again, be aware of the last deregistration dates. After that, even if you have informed us, the course will still appear on your academic transcript, with an “AB” next to it, standing for “absent” but counting as a 0%. This is important if you do not wish to contravene the progression rules. The only valid absence for the university is for medical reason. This however needs to be formally applied for in good time (“medical leave of absence”). It never helps to contact us or the university late, after the fact. **It remains your responsibility to ensure that you are registered for the correct courses within the appropriate deadlines, although we will do all we can to assist in this process.***

It is up to you to familiarise yourself with UCT’s general rules and policies (book 3), the Faculties plagiarism rules, the divisional progression rules, assignment submission rules, as well as the portfolio and dissertation guidelines.

### **EXAMINATIONS**

Nearly all the semester long courses on the MPhil program have a compulsory final examination, written in either June or November on-site at UCT in Cape Town. Please take this into consideration and the associated leave and travel expenses if you do not reside in Cape Town. *Currently UCT does not make provision for routine off-site examinations. If you have an individual, and specific motivation, and apply timeously (at least 2 months prior to exams), through the appropriate channels, in some cases UCT has granted off-site examinations in the past, but this is not a given.*

Please note that you require 180 total credits to graduate. Students who intend submitting their dissertation by the deadline (mid Feb of each year), do not need to reregister if that is the only outstanding academic item. Where a student is required to revise and resubmit a thesis or dissertation the academic fee will be charged per quarter.

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**COST OF THE MPHIL DEGREE in 2021**

FEES 2020 – see <https://www.uct.ac.za/apply/fees/> for details (2021 fees are not yet finalized)

*Every year we have students, particularly non-SADC students, who go through the application process successfully, only to discover the International course fees at the time of application which they may not be able to afford. So, for transparency, below are some approximate guidelines for the 2020 fees (likely to increase by 8-10% in 2021)*

**MPhil in Emergency Medicine**

**Coursework** over 2-3 years (depending on stream)..... R 33 070 – 46 570

**Minor Dissertation (60 credits)** .....R 20 230

**Minor Dissertation (90 credits)** .....R 30 320

**Courses only - for Occasional Students** (see weblink below)

Each course varies, most in range of..... R 5 100 – R7 570

Please note that the fees for international students are different & IAPO clearance is required for international registrations! Please see <http://www.uct.ac.za/apply/fees>

Detailed fee structures can be obtained from the UCT Fee Handbook. Above is a guideline for 2020 annual fees only. (for non-SA students, detailed fee structures can be obtained by IAPO and proforma invoices can be raised upon request)

In addition to the above course fees, non-South African students are liable for the following annually:

1. SADC students (South African Development Community)  
above course fees PLUS R4200 Admin fee which will need to be paid in full by the end of December 2020 for registration in time to join 2021 coursework (Feb 2021)
2. International students (including non-SADC African students)  
above course fees PLUS R4200 Admin fee PLUS International fee (R49 990) which will need to be paid in full by the end of December 2020 for registration in time to join 2021 coursework (Feb 2021)

**Application (by September of the preceding year)**

The easiest is to apply online through the UCT website - <http://applyonline.uct.ac.za/>  
You will receive the steps to follow from the university once you have applied. Registration follows on from successful application. Once registered, student accounts and course registrations may be checked via PeopleSoft: <http://studentonline.uct.ac.za/>

**Please do not register for the dissertation if you do not intend submitting it in that year!**

***If you cannot set aside 18-20 hours a week to work on your Master's for the two years you would be registered, please consider registering for courses only ("occasional student"), rather than the full degree. Contact us for further information!***

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**APPLICATION PROCESS** (see <http://www.emct.info/mphil.html> )

**MPhil (EM)** Applications for the full degree to start in Feb 2020 will close **strictly on 30 September 2021** - <http://applyonline.uct.ac.za>

*This is a competitive process and since our program is now well established, we have to turn away some students. We have a rigorous review process and we will review each applicant, considering the qualifications, experience, workplace and motivation. We will ask you to complete a computer literacy test online following your application.*

For your application for the full degree (submitted when you apply online) to be considered, you must include the following:

1. Curriculum Vitae
2. Motivation describing how the MPhil degree will further your career (max 1 page or 600 words)
3. Copies of your academic transcript(s) and degree certificate(s) (translated if not in English)
4. (for non-SA students - copy of passport frontpage)
5. In some cases, we may request an interview with you – could be conducted remotely (zoom/ skype)

**International (non SA) Students** - please refer to the UCT [IAPO website](#) for further information about the process.

For non-SA students you will require clearance from IAPO before you will be allowed to register - in most cases this will require pre-payment (by end Dec 2020) of a substantial fee for the year, and a copy of your passport. If you will be resident in Cape Town for more than 3 months as a student, you will likely require a study visa which has more requirements and takes longer to process - contact IAPO direct)

**International Students**

All international students will need to obtain IAPO clearance before being allowed to register. This involves full up-front payment of fees, as well as sending through a copy of the passport and a declaration of study (if only coming to Cape Town for contact sessions and exams, you will not need to obtain a student visa). Also see: <http://www.iapo.uct.ac.za/> .

As the IAPO process may take a considerable amount of time, start this early! Go through the IAPO pre-registration process ASAP: <http://www.iapo.uct.ac.za/iapo/intstud/prereg>

**DO NOT FORGET THE IAPO PRE-REGISTRATION PROCESS AS HIGHLIGHTED ABOVE!**

**CONTACT DETAILS**

**UCT postgraduate office (applications)**

Ms Salega Tape  
021 406 6340  
[Salega.tape@uct.ac.za](mailto:Salega.tape@uct.ac.za) /

**EM MPhil Divisional Administrator:**

Ms Abigail Seconds  
021 650 1828  
[Abigail.seconds@uct.ac.za](mailto:Abigail.seconds@uct.ac.za)

**IAPO Enquiries**

Ms Lindy Duncan  
021 650 5713  
[lindy.duncan@uct.ac.za](mailto:lindy.duncan@uct.ac.za)