

# UNIVERSITY OF MALAWI



## **GENERAL ACADEMIC REGULATIONS FOR POSTGRADUATE MASTERS DEGREE PROGRAMMES EFFECTIVE OCTOBER 2010**

SUBMITTED TO

THE SENATE

BY

THE POSTGRADUATE OFFICE

COLLEGE OF MEDICINE

SEPTEMBER 2010

## FOREWORD

These regulations should be read in conjunction with the general regulations of the University of Malawi (Document Number 17993: 6th Amendment 1994) and University of Malawi Postgraduate Policy Guidelines (Approved by Senate 28<sup>th</sup> July 2006).

## 1 GENERAL PROVISIONS

### 1.1 **Admission Criteria:**

The following is the general criteria for admission into the College of Medicine postgraduate programme:

#### 1.1.1 **Master's admission requirements**

The minimum admission requirement for a Master's degree is a Bachelors degree in the subject that the applicant wishes to pursue at Master's level. The relevant department or Postgraduate Administration unit should be contacted to establish specific admission requirements.

Applicants for research Master's degrees are required to submit a research proposal with the application. Prospective applicants are advised to contact the relevant Department directly in this regard.

#### 1.1.2 **Specialist training: Master of Medicine**

This programme trains medical doctors to become specialists in one of a range of disciplines. Training takes place over a minimum period of four years, full-time, and a maximum of 6 years.

In order to have their training recognized in Malawi, MMed students must have full a registration with the Malawi Medical Council and must be appointed against Ministry of Health approved training positions within the hospital or / and against College approved positions. All applicants to MMed programmes must have completed the prescribed internship period and community service (or an approved equivalent).

Specialist trainees must hold training posts (usually registrar posts/Assistant Lecturers) with their employer while they undergo their specialist training with the University. Prospective applicants may contact the Postgraduate office/Department concerned for more information.

Foreign-qualified doctors who are selected for MMed training are offered appointment as supernumerary registrars. They must register with the Malawi Medical Council annually.

## 2 **Registration**

2.1 Prior to attending to the specified programme students must complete all registration formalities of the University of Malawi College of Medicine.

2.2 Registration takes place in accordance with the arrangements prescribed each year through the office of the College Registrar. Students' registration is not confirmed until they have fulfilled all the requirements for the payment of fees.

- 2.3 Student must register at the beginning of every academic year. Normally no student is registered to the postgraduate programme more than one month after its commencement. Any exceptions to this regulation must have the written endorsement of the Dean for Postgraduate Studies and Research.
- 2.4 Students whose registration is confirmed are required to attend all sessions of the prescribed programmes. Where tutorials, seminars field attachment activities, practical sessions et cetera, are prescribed by departments, students are required to attend, complete any assignment set and hand them in to the departments.
- 2.5 Students who enter or return late to the programme are not entitled to special tuition.
- Students who are unable to attend classes or other prescribed assignments for health reasons for a duration longer than 24 hours, have to notify the relevant Head of Department(s). For absences of more than 48 hours on grounds other than health, the student must obtain prior permission from the Postgraduate tutor who shall in turn inform the Head(s) of Department concerned.
- 2.6 All registered students shall use the names with which they were registered throughout the postgraduate programme unless such names are officially altered e.g. by marriage. Any such change of names by the students will have to be submitted in writing to the College Registrar.

### 3. TYPES AND DURATION OF THE POSTGRADUATE PROGRAMMES

#### 3.1 Types of postgraduate programmes

3.1.1 The following postgraduate programmes are on offer:

Masters of Public Health

Master of Medicine in the following branches of medical practice:

- Anaesthesia
- General Surgery
- Obstetrics & Gynaecology
- Internal Medicine
- Ophthalmology
- Orthopaedic Surgery
- Paediatric and Child health

Master of Medicine (Medicine+sub-speciality)

#### 3.2 Duration of the programmes

- 3.2.1 The duration of the Master of Public Health programme is normally a minimum of 1 year and a maximum of 3 years leading to the award of the Degree of Master of Public Health (denoted by the letters MPH) of the University of Malawi.
- 3.2.2 The duration of the Master of Medicine programmes are a minimum of 2 years and a maximum of 6 years leading to the award of the Degree of Masters in Medicine (denoted by letters MMed) of the University of Malawi. In exceptional circumstances, with the approval of the Postgraduate Dean, MMed students will be allowed to take 1 year out of programme to undertake other, related studies. During this time their enrolment on the MMed course will be suspended. In which case the total time

allowed to obtain the MMed qualification will be extended to 7 years.

- 3.2.3 The duration of the Master of Medicine (Medicine+subspeciality) programme will be a minimum of 3 years and a maximum of 7 years leading to the award of the Degree of Masters in Medicine (denoted by letters MMed) of the University of Malawi.

#### 4. GENERAL EXAMINATION REGULATIONS

These regulations should be read in conjunction with the University Regulations on the control and conduct of examinations in the University of Malawi (Documents Numbers 16352: 4th Amendment 1992 and 17980 Amended 1992 and **17993 amended 2008**).

##### 4.1 Grading Scheme

The following grading scheme is adopted for all assessments:-

<u>Percent</u>	<u>Grade</u>	<u>Interpretation</u>
75-100	A	Distinction
65 - 74	B	Credit
50 – 64	C	Pass
0 - 49	D	Fail

##### 4.2 Examination for MMed Programme:

The MMed examination consists of two parts.

The examination in each of Parts 1 and 2 consists of one or more written paper/s together with such practical and/or oral examination/s as may be required.

The Part 2 candidate should submit his/her dissertation within the period of training. An extension of this period may be allowed upon approval from the Postgraduate Committee

The dissertation must be on a topic in the same branch of the medical speciality in which the candidate is registered and must be based on a study for which the work was commenced while the candidate was registered as a postgraduate student.

In general, a mark of 50% is a pass. Candidates who obtain 50% or more in all the prescribed examinations taken for the year are deemed to have passed in that year and are normally allowed to proceed to the next level provided they meet the special regulations for passing various components of a specific programme as outlined in the programme specific regulations as indicated in the appendices.

## 5. DETERMINATION OF CANDIDATES' RESULTS

### 5.1 Candidates' Results

Determined by the Senate on the recommendation of the Faculty Board of Examiners

### 5.2 Departmental or Divisional Boards of Examiners:

These are chaired by the Heads of the Department or Chairpersons of the Divisions and comprise:-

- All full-time or part-time University appointed academic members of staff in that department or division.
- The external examiner(s) for that department or division.

### 5.3 Faculty Board of Examiners

Established for each Faculty and are chaired by the Principal or his/her nominee and are as follows:-

### 5.4 Faculty Board of Examiners

Members:

The Principal (Chairperson)

The Vice Principal

All Deans or Deputy Deans

All Professors

All Heads of Department or Postgraduate Tutor

The Registrar (Secretary to the Board)

External Examiner(s)

### 5.5 Procedure for determining candidates' results

#### 5.5.1 The Departmental or Divisional Board (s) of Examiners

Agree on grading of each candidate for the continuous assessment and for the final level/ module examination

Recommend to the Faculty Board of Examiners whether a candidate should pass or fail relevant assessment(s) or examination(s) taken during that level/module.

Make recommendations for the award(s) of subject/course prize(s) where these are available for award.

#### 5.5.2 The Faculty Board(s) of Examiners:

Consider the recommendations of the Departmental or Divisional Board(s) of

Examiners and recommend to Senate, through the Faculty Board of Examiners, whether a candidate:

Passes

Passes with a special award

## 6. **FAILURE TO SATISFY THE EXAMINERS**

- 6.1 A candidate who fails to satisfy the Board(s) of Examiners in terms of the College Regulations may be required by Senate to “repeat the module / rotation” or “withdraw” or “write supplementary examination(s)”.
- 6.2 “Repeat the module / rotation” means that the student is not allowed to proceed to the next level of study but instead repeats the module / rotation in which he/she failed to satisfy the Board(s) of Examiners.
- 6.3 “Withdraw” means that the student must leave the programme.
- 6.4 “Write supplementary examination (s)”
  - 6.4.1 The Senate may, on the recommendation of the Faculty Board of Examiners, allow a candidate to write a supplementary examination to enable him/her pass a module in order to proceed.
  - 6.4.2 To be eligible for a supplementary examination, a student must satisfy and comply with the College Specific Regulation(s) which are stated in the appendices for each specific programme of study; and the consequences thereof.
  - 6.4.3 Normally, supplementary examinations are written approximately within 3 after the results have been released. This is at the discretion of the Board(s) of Examiners.
  - 6.4.4 Where supplementary examination(s) have been granted within 3 months, the original continuous assessment mark shall, remain valid for the student taking his/her supplementary examination(s).
  - 6.4.5 Continuous assessment for MMed students who have been offered repeat of a rotation will not be valid. Student's performance during the supplementary rotation period will contribute to the overall Assessment mark.
  - 6.4.6 Supplementary examinations are graded as “Pass” or “Fail” and the overall maximum mark awarded and recorded in a supplementary examination is 50%.
  - 6.4.7 If a student is required to write a supplementary examination, this fact and the result obtained in the supplementary examination in terms of “Pass” or “Fail” is recorded on the official transcript of his/her academic results.
  - 6.4.8 Students who are eligible for supplementary examination(s) are entitled to special

tuition and departments or divisions need to make arrangements for their candidates.

7. **CONDITIONS FOR THE STUDENTS WHO ARE REPEATING A MODULE / ROTATION**

- 7.1 Student who are repeating a module are permitted to proceed to the following level if they achieve a pass mark in the subject(s) of the examinations.
- 7.2 For MMed programmes, students are allowed to repeat a rotation twice. Any student repeating a module or rotation on academic grounds is on probation during that module or rotation. The repetition of a module or module is equivalent to a "serious warning" and a student can be withdrawn by the University without any further warning at any time if his/her work is judged to be unsatisfactory.
- 7.3 For programmes offering supplementary examinations, no student repeating a module or course is entitled to supplementary examinations.

8. **FAILURE TO TAKE EXAMINATIONS**

- 8.1 Normally the accepted valid reason(s) for failure to take examination(s) are illness of the candidate and bereavement of the immediate family (first degree relationship). Under those circumstances, permission has to be obtained from the Registrar prior to the examination; and in the case of illness a medical certificate must be submitted to the Postgraduate Dean from a practitioner approved by the College.
- 8.2 Extra-curricular or extramural activities, misreading of the examination time-table(s) et cetera are not accepted as valid reasons.
- 8.3 Only in very exceptional circumstances e.g. a student incapacitated by sudden illness or accident while officially away from College may, on production of a medical certificate from a practitioner approved by the College, be excused for failure to write examinations.
- 8.4 A student who fails to take examination(s) without acceptable reason(s) is awarded a mark of "zero" which is a "Fail" for that examination.

9. **WITHDRAWAL**

- 9.1 Students who fail s in their assessment or examination(s) are withdrawn if they have been "seriously warned" by the College during the course of the level / year that their work was unsatisfactory

9.2 **Serious Warning**

Any one of the following shall constitute a serious warning:

- 9.2.1: Failure in any examination

- 9.2.2: A letter of warning from the Head of Department/Postgraduate tutor/Postgraduate Deans office concerning poor academic performance.
  - 9.2.3: Repeated a module / rotation before
  - 9.2.4: Failure to appear for examination(s) without valid reason(s)
- 9.3 Any appeals against withdrawal on academic grounds should be directed to the University Wide Appeals Committee through the Vice Chancellor.
- 9.4 **Withdrawal on grounds of misconduct**
- The College Postgraduate Committee has the power to investigate and exercise authority in respect of misconduct by any student and then make recommendations to the College Principal.
- 9.5 **Withdrawal from the College on other grounds**
- Any other withdrawal e.g. on grounds of pregnancy or ill health is interpreted by the College as Temporary withdrawal. Candidates on temporary withdraw may be readmitted to the program upon applying for readmission.

## 10. **DEFERRED EXAMINATIONS**

- 10.1 Students who fail to take examinations due to reasons deemed acceptable by the Board of Examiners may be considered eligible for deferred examination(s).
- 10.2 Deferred examination(s) shall be considered as the candidate's first attempt and therefore a candidate sitting a deferred examination may, on the recommendation of the Board(s) of Examiners, be eligible for a supplementary examination.

## 11. **FINAL AWARD OF THE DEGREE**

- 11.1 The grade of the final award is normally based on all courses in the programme except in the MMed programme where the final award is based on performance during part II of the training.
- 11.2 The criteria used is that of academic performance based on **completion of course work** and marks scored in the various components of the Assessment..
- 11.3 Successful candidates are awarded the degree as indicated in section 2.
- 11.4 A candidate may graduate with a special award of the MMed degree indicated in section 2 with provided that:-
  - 11.4.1 They pass part I of the MMed programme at first attempt
  - 11.4.2 They pass with a minimum of distinction in all sections of the part II examination for which they will be awarded an MMed degree with distinction, or



11.4.3 They pass with a minimum of credit in all sections of the part II examinations for which they will be awarded an MMed degree with credit.

12. **PUBLICATION OF RESULTS**

- 12.1 The Vice Chancellor is responsible for the publication of results of all formal end of year examinations as approved by the Senate.
- 12.2 Results lists are posted to each candidate at his/her registered address, a copy of his/her individual results.
- 12.3 Results for candidates from each academic department are also provided to each department, Dean for Postgraduate Studies and Faculty Dean by the Registrar.
- 12.4 Results will be withheld for candidates who are indebted to the College until all debts are cleared.

## **APPENDIX I    SPECIFIC REGULATIONS FOR MMED ANAESTHESIA**

These regulations should be read in conjunction with the general College of Medicine Examination regulations.

The duration of the programme, which shall normally commence each January, shall be four years full time. It shall be divided into two parts Part I and Part II. Candidates shall normally be employed in the appropriate posts in the department or hospitals approved by the postgraduate committee of the college of Medicine for the purposes of the degree throughout the programme.

### **A.    PART I OF THE MMED (ANAESTHESIA) PROGRAMME**

#### **13.    REGULATIONS PART I OF THE MMED (ANAESTHESIA) PROGRAMME**

##### **13.1    Structure of Part I Course**

Part I shall take place in the first two years of the programme and consist of studies in the following areas:

13.1.1    Applied Physiology

13.1.2    Applied Pharmacology

13.1.3    There shall be a Masters in Medicine Basic Sciences Core Course covering areas of Anatomy, Physiology and Biochemistry, Pathology and Clinical Pharmacology

13.1.4    Statistical Methods

13.1.5    Safe Anaesthesia covering the following areas:

- Preoperative assessment of patients and premedication
- Anaesthesia administration equipment and maintenance
- Understanding of monitoring equipment
- Function and use of resuscitation equipment
- Induction and maintenance of safe anaesthesia
- Postoperative and Recovery Care
- Cardiopulmonary resuscitation
- Regional Anaesthesia
- Intensive and high dependency care – Adults
- Obstetric Anaesthesia and analgesia
- Paediatric Anaesthesia for children over 1 year of age
- Primary Trauma Care
- Transport of a critically ill patient
- Infection control
- Anaesthesia for burns

##### **13.2    Assessment Methods for Part I**

Assessment during part I consists of courses covered in that part.

### 13.2.1 Continuous Assessment (CA)

Continuous assessment will take the form of a logbook of cases performed and under what supervision, and the completion of a competency based assessment. Candidates will also be required to undertake presentations of cases and theoretical work. Satisfactory completion of this continuous assessment is a prerequisite for sitting part I exams.

### 13.2.2 Six monthly reports

Every six months throughout the course the student and their designated tutor will provide a progress report to the postgraduate committee.

## 13.3 Assessment of Part I:

Is made up as follows:-

Course Title	Course Code	Method of assessment	Notes	Total % of Part I Mark	
Basic Sciences	Anaes 110	Knowledge Based MCQ	May be taken at end of year 1	13.34%	
Introduction to Safe Anaesthesia	Anaes 120	Clinical Examination		20%	
Safe Anaesthesia	Anaes 210	Knowledge Based		26.67%	
		Oral Exam			26.67%
		MCQ			13.34%
		OSPE		26.67%	

## 13.4 Grading of Results

The following grading scheme is adopted for all assessments:-

<u>Percent</u>	<u>Interpretation</u>	<u>Grade</u>
75-100	Distinction	A
65 - 74	Credit	B
50 - 64	Pass	C
0 - 49	Failure	D

### 13.5 Performance Expected

- 13.5.1 The pass mark in each subject is 50%. Students are expected to pass all part I examinations individually and those who do, will proceed to part II of the programme.
- 13.5.2 Students will be awarded credit or distinction in the part I examinations if their mark is between 65 and 74 (Credit) and 75 and over (Distinction). Credit or distinction cannot be obtained in a supplementary examination or when repeating the year.
- 13.5.3 Distinctions in part I exams is a not pre-requisite for the award of MMed(Anaes) with Honours.

### 13.6 The consequences of failing to meet the expected performance:

- 13.6.1 Students who fail marginally (45-49%) in one examination will be allowed to take a supplementary pass/fail oral examination in the course that the student failed before the start of the new academic year. This is subject to approval by the University Senate.
- 13.6.2 Students who fail marginally (45-49%) in two examinations will be allowed to repeat a year. This is subject to approval by the University Senate.
- 13.6.3 Students who fail in all part I examinations and their average mark from the exams is below 45% will be recommended to withdraw. Such recommendations shall be subject to approval by the University Senate.
- 13.6.4 In the instance when a student has taken either or both of the basic sciences or the introduction to safe anaesthesia examinations at the end of the first year and has not obtained the pass mark in either or both of the exams, the student may proceed to the second year without impediment.

### 13.7 The consequences of failing to pass the supplementary examination(s):

- 13.7.1 Students who fail in any supplementary examination(s) in part I will be recommended by the Faculty Board of Examiners to Senate to repeat a year.

### 13.8 Students repeating the year who fail the repeat examinations will be recommended to withdraw.

**B. PART II OF THE MMED (ANAESTHESIA) PROGRAMME**

**14. REGULATIONS OF MMED (Anaesthesia)**

**14.1 Structure of Part II Course**

Part II shall take place in the subsequent two years of the programme and consist of studies in the following areas:

Advanced Obstetric Anaesthesia

- Advanced Trauma Life Support
- Diverse and complex regional blockades
- Anaesthesia for paediatric and neonatal surgery
- Urology
- Shared airway anaesthesia – ENT & Dental Anaesthesia
- Ethics, Medico-Legal issues, Clinical Governance, Quality Assurance
- Anaesthesia for neurosurgery
- Anaesthesia for cardiothoracic surgery
- Anaesthesia for major vascular surgery
- Advanced intensive care including Paediatric

**14.2 Assessment Methods for Part II**

Assessment during Part II consists of:

**14.2.1 Continuous Assessment (CA)**

Continuous assessment will take the form of a logbook of cases performed and under what supervision, and the completion of a competency based assessment. During part II of the programme the candidate shall be required to submit three course assignments of between 3,000 and 5,000 words. Satisfactory completion of this continuous assessment is a prerequisite for sitting part II exams.

**14.2.2 Six monthly reports**

Every six months throughout the course the student and their designated tutor will provide a progress report to the postgraduate committee.

### 14.3 Assessment of Part II:

Is made up as follows:-

Course Title	Course Code	Method of assessment	Notes	Total % of Part II Mark
Specialist Anaesthesia & Intensive Care	Anaes 310	Continuous Assessment	To be assessed in years 3 & 4	0% , Prerequisite
Elective study in Anaesthesia & Intensive Care	Anaes 410	Knowledge Based		
		Oral Exam		20%
		MCQ		20%
		Clinical OSCE		40%

### 14.4 Dissertation

The research component of the programme shall be assessed by a dissertation of 10,000 – 15,000 words, on a subject which has been approved by the department of anaesthetics. The dissertation will contribute 20% to the overall Part II mark.

### 14.5 Final Grading in Part II

Satisfactory completion of the continuous assessment of years 3 & 4 will be a prerequisite for sitting part II exams. Knowledge based exams will make up 40% of the overall marks, while a clinical examination will make up 40%. The dissertation will account for the final 20%.

The following grading scheme is adopted for assessments:-

<u>Percent</u>	<u>Interpretation</u>	<u>Grade</u>
75-100	Distinction	A
65 - 74	Credit	B
50 - 64	Pass	C
0 - 49	Failure	D

#### 14.6 Performance Expected

- 14.6.1 The pass mark in each subject is 50%. Students are expected to pass all part II examinations individually.
- 14.6.2 Students will be awarded credit or distinction in the semester examinations if their mark is between 65 and 74 (Credit) and 75 and over (Distinction). Credit or distinction cannot be obtained in a supplementary examination or when repeating the year.
- 14.6.3 Distinctions in at least two of the part II exams will result in the award of MMed (Anaes) with Honours.

#### 14.7 The consequences of failing to meet the expected performance:

- 14.7.1 Students who fail marginally (45-49%) in up to two examinations will be allowed to take a supplementary pass/fail oral examination in the course(s) that the student failed before the start of the new academic year. This is subject to approval by the University Senate.
- 14.7.2 Students who fail in all part II examinations and their average mark from the exams is below 45% will be recommended to repeat a year. Such recommendations shall be subject to approval by the University Senate.

#### 14.8 The consequences of failing to pass the supplementary examination(s):

- 14.8.1 Students who fail in any supplementary examination(s) in part II will be recommended by the Faculty Board of Examiners to Senate to repeat a year.

#### 14.9 Students repeating the year who fail the repeat examinations will be recommended to withdraw.

## Appendix III : REGULATIONS FOR MMED (MEDICINE)/ MMED (MEDICINE+SUB-SPECIALITY)

### 15.1 Structure Year 1 and 2 of MMED (Medicine)/MMED (Medicine+sub-speciality) course

#### 15.1.1 Years one and two of the MMED in medicine (±sub-speciality) comprise:

##### 15.1.1.1 supervised clinical training

Two years of clinical attachments as a registrar in the Department of Medicine at the College of Medicine in Blantyre. Rotations will usually last 3 or 6 months and will include rotations through diabetic, chest, general medical, neurology, renal and Kaposi's sarcoma clinic as well as ART clinic. In- patient activity will include a one month rotation in the Intensive Care Unit.

##### 15.1.1.2 post graduate educational activity

Attendance at specific MMed postgraduate teaching; (compulsory). Course content to include biochemistry, physiology, anatomy, immunology, microbiology, pathology and pharmacology as it applies to medicine. Themes of study will include presentations of HIV related illness and their management, pathological principles underlying common diseases seen in Malawi, deviation from the norm and disease states, homeostasis and restoration of bodily function. Students will also be taught research skills in preparation for the MMed dissertation. Topics covered will include research ethics, study design and statistical methods.

Attendance at general academic activities of the department including: journal club, grand round, research-in-progress meeting, any impromptu lecture by visiting experts or other, writing of case reports or contributing otherwise to publications for the Malawi Medical journal or other journals

##### 15.1.1.3 participation in a research project.

It is expected that preparation will begin on a research project that will be submitted as the MMed dissertation. All students should also participate in clinical audit.

### 15.2 Assessment Years 1 and 2 MMED (Medicine) /MMED (Medicine+sub-speciality) course



15.2.1 The assessment consists of three parts:

- A continuous assessment
- A written examination (MMED Part 1 written) taken approximately 24 months after the beginning of the course
- A clinical examination (MMED Part 1 clinical) taken approximately 24 months after the beginning of the course

15.2.2 Continuous assessment:

The student must show ongoing satisfactory acquisition of clinical skills and knowledge. This shall be assessed by means of:

- Reports from each clinical rotation completed by the consultant supervisor. A structured reporting format will be used (see appendices III)
- Review of the student's portfolio of practice. The portfolio will consist of sections summarizing and providing examples of the student's progress in the following areas:
  - Assessment and appraisal information
  - Audit
  - Clinical practice (including a logbook of procedures, case-based discussions, summaries of clinical experience gained in each rotation)
  - Formal teaching (CPD) sessions attended.
  - Research
  - Presentations at local, national and international meetings
  - Teaching they have provided
  - Management activities
  - Other as deemed relevant by the student and their mentor

At the end of each 12 months of training the head of department and the postgraduate tutor (or equivalent) will meet, review the above documents, and decide if the candidate has made satisfactory progress such that they may progress to the next year of the course.

The continuous assessment component is not graded, but each year of study must be completed to the satisfaction of the head of department and postgraduate tutor before the student can attempt the part 1 examinations

15.2.3 Consequences of unsatisfactory continuous assessment report:

The student will undertake supplementary training - repeating as many clinical rotations as are deemed necessary by the head of department and postgraduate tutor up to a maximum of an extra 12 months of training. At the end of this supplementary training, the head of department and postgraduate tutor will decide if the student has satisfied the continuous assessment component of the course.

A student will only be permitted a total of 12 months of supplementary training in years 1 and 2 of the course. If at the end of this training, the student is deemed NOT to have made satisfactory progress, they will NOT be permitted to sit the part 1 examination and will be asked to withdraw from the course.

A student given a report of unsatisfactory performance at any stage of this process has the right to appeal the decision to the College of Medicine postgraduate committee through the office of the postgraduate dean.

15.2.4 MMED Part 1 Written examination (contributing 80% of Part 1 total mark):

This consists of a 3 hour MCQ examination (not negatively marked)

15.2.5 MMED Part 1 Clinical examination (contributing 20% of Part 1 total mark):

This will consist of an OSCE style clinical examination.

15.2.6 The following grading system will be used

<u>Percent</u>	<u>Interpretation</u>
75-100	Distinction
65 - 74	Credit
50 - 64	Pass
0 - 49	Failure

15.2.7 Considering that different components of the examination test different competencies, students are required to pass all components of the examinations independently in order for them to be deemed to have passed.

15.2.8 Supplementary examinations for the written and / or clinical components shall be held in accordance with the General Academic Regulations at the discretion of the Faculty of Board of Examiners. Students shall be permitted up to 2 supplementary examinations for Part 1 MMED.

### 15.3 Entry Criteria Years 3 and 4 of MMED (Medicine), Years 3-5 MMED (Medicine+sub-speciality) course

15.3.1 The entry criteria are:

- Satisfactory completion of 2 years of postgraduate training in internal medicine at QECH (or an equivalent institution with the approval of the head of department and postgraduate committee)  
*AND*
- Pass MMED Part 1 written and clinical examinations (or the equivalent postgraduate qualification approved by the postgraduate committee)

### 15.4 Structure Years 3 and 4 of MMED (Medicine) course

15.4.1 Years 3 and 4 comprise

#### 15.4.1.1 supervised clinical training

Two years of clinical attachments in general and subspecialty medicine. These attachments are undertaken at either University of Witwatersrand (Johannesburg), University of Cape Town (Groote Schuur) Hospital, or another suitable institution with the approval of the head of department and the postgraduate committee. Memoranda of Understanding guide the collaboration between the CoM and these partner institutions. During their rotations the students should meet the standards that apply to their local counterparts and have the same duties and responsibilities. Rotations should include 50% general internal medicine and 50% special units (usually 3 month rotations in cardiology, pulmonology, respiratory ICU, infectious diseases, endocrinology, rheumatology, hepatology, gastro-enterology, haematology, geriatrics, nephrology, or neurology).

#### 15.4.1.2 post graduate educational activity

Students are expected to participate in the educational programme of their host institution.

#### 15.4.1.3 participation in a research project.

During the 3<sup>rd</sup> and 4<sup>th</sup> year of the programme students must complete their Masters dissertation.

## 15.5 Structure Years 3-5 of MMED (Medicine+sub-speciality) course

### 15.5.1 Years 3 -5 comprise

#### 15.5.1.1 supervised clinical training

Three years of clinical attachments in general and subspecialty medicine. These attachments are undertaken at either University of Witwatersrand (Johannesburg), University of Cape Town (Groote Schuur) Hospital, or another suitable institution with the approval of the head of department and the postgraduate committee. Memoranda of Understanding guide the collaboration between the CoM and these partner institutions. During their rotations the students should meet the standards that apply to their local counterparts and have the same duties and responsibilities. Rotations should include 1 year of general internal medicine and special units (usually 3 month rotations unrelated to the sub-speciality) and 2 years of rotations relevant to the sub-speciality.

#### 15.5.1.2 post graduate educational activity

Students are expected to participate in the educational programme of their host institution.

#### 15.5.1.3 participation in a research project.

During the 3<sup>rd</sup>-5<sup>th</sup> years of the programme students must complete their Masters dissertation.

## 15.6 Assessment Years 3 and 4 MMED (Medicine), Years 3-5 MMED (Medicine+sub-speciality) course

### 15.6.1 The assessment consists of 4 parts:

- Continuous assessment
- Research dissertation
- Written examination (MMED Part 2 Written)
- Clinical examination (MMED Part 2 Clinical)

### 15.6.2 Continuous assessment – the regulations for years 3 and 4 are as per those contained in sections 13.2.2 and 13.2.3.

The continuous assessment component is not graded, but each year of study must be completed to the satisfaction of the head of department and postgraduate tutor before the student can attempt the part 2 examinations

15.6.3 Research dissertation:

The research dissertation shall contribute 20% of the final Part 2 MMED mark.

The candidate is not eligible to sit the Part 2 MMED written and clinical examinations until the research dissertation is completed and presented in a form consistent with the General Academic Regulations.

15.6.4 MMED Part 2 Written (Knowledge) examination:

This contributes 40% of the final Part 2 MMED mark.

The examination comprises 2 written papers and an oral. Details are included in the course handbook

15.6.5 MMED Part 2 Clinical examination:

This contributes 40% of the final Part 2 MMED mark.

Details are included in the course handbook.

15.6.6 The following grading system will be used

<u>Percent</u>	<u>Interpretation</u>
75-100	Distinction
65 - 74	Credit

50 - 64	Pass
0 - 49	Failure

15.6.7 Considering that different components of the examination test different competencies, students are required to pass all components of the examinations independently in order for them to be deemed to have passed.

15.6.8 Supplementary examinations for the written and / or clinical components shall be held in accordance with the General Academic Regulations at the discretion of the Faculty of Board of Examiners. Students shall be permitted up to 2 supplementary examinations for Part 2 MMED.

### **APPENDIX III: SPECIFIC REGULATIONS FOR MMED PAEDIATRICS AND CHILD HEALTH.**

#### **16.1 Structure Year 1 and 2 of MMED (Paediatrics and Child Health) course**

16.1.1 Years one and two of the MMED in paediatrics and child health comprise:

16.1.1.1 Teaching in biochemistry, physiology, anatomy, pharmacology and embryology as it applies to the care of neonates and children

16.1.1.2 Two years of clinical attachments as a registrar in the department of paediatrics in QECH.

Each rotation will usually last 3 months and the student will rotate through all the clinical paediatric departments at QECH.

Topics of study will include:

Normal growth and development

Abnormalities of growth and development

Deviation from the norm and disease states

Homeostasis and restoration of bodily function

The organisation of child healthcare

Paediatric therapeutics

The epidemiology of childhood disease

Core professional skills to be acquired include:

- Broad clinical competencies, including communication with children, families and colleagues
- Problem solving skills
- Counselling skills
- Professional behaviours
- Basic technical competencies
- Life support / resuscitation
- Teaching skills

#### **16.2 Assessment Years 1 and 2 MMED (Paediatrics and Child Health) course**

16.2.1 The assessment consists of three parts:

- A continuous assessment
- A written examination (MMED Part 1 written) taken approximately 24 months after the beginning of the course
- A clinical examination (MMED Part 1 clinical) taken approximately 24 months after the beginning of the course at the same time as the written exam.

### 16.2.2 Continuous assessment:

The student must show ongoing satisfactory acquisition of clinical skills and knowledge. This shall be assessed by means of:

- Reports from each clinical rotation completed by the consultant supervisor. A structured reporting format will be used (see appendices IIIa and IIIb)
- Review of the student's portfolio of practice. The portfolio will consist of sections summarizing and providing examples of the student's progress in the following areas:
  - Assessment and appraisal information
  - Audit
  - Clinical practice (including a logbook of procedures, case-based discussions, summaries of clinical experience gained in each rotation)
  - Formal teaching (CPD) sessions attended. By the end of year 2, the student must satisfactorily complete an approved paediatric life support course (e.g. APLS, ETAT or equivalent)
  - Research
  - Presentations at local, national and international meetings
  - Teaching they have provided
  - Management activities
  - Other as deemed relevant by the student and their mentor

At the end of each 12 months of training the head of department and the postgraduate tutor (or equivalent) will meet, review the above documents, and decide if the candidate has made satisfactory progress such that they may progress to the next year of the course.

The continuous assessment component is not graded, but each year of study must be completed to the satisfaction of the head of department and postgraduate tutor before the student can attempt the part 1 examinations

### 16.2.3 Consequences of unsatisfactory continuous assessment report:

The student will undertake supplementary training - repeating as many clinical rotations as are deemed necessary by the head of department and postgraduate tutor up to a maximum of an extra 12 months of training. At the end of this supplementary training, the head of department and postgraduate tutor will decide if the student has satisfied the continuous assessment component of the course.

A student will only be permitted a total of 12 months of supplementary training in years 1 and 2 of the course. If at the end of this training, the student is deemed NOT to have made satisfactory progress, they will NOT be permitted to sit the part 1 examination and will be asked to withdraw from the course.

A student given a report of unsatisfactory performance at any stage of this process has the right to appeal the decision through the office of the postgraduate dean.

### 16.2.4 MMED Part 1 Written examination (contributing 80% of Part 1 total mark):



This consists of a 3 hour MCQ examination (not negatively marked) usually held in March and September each year.

16.2.5 MMED Part 1 Clinical examination (contributing 20% of Part 1 total mark):

This will consist of an OSCE style clinical examination.

16.2.6 The following grading system will be used

<u>Percent</u>	<u>Interpretation</u>
75-100	Distinction
65 - 74	Credit
50 - 64	Pass
0 - 49	Failure

16.2.7 Considering that different components of the examination test different competencies, students are required to pass all components of the examinations independently in order for them to be deemed to have passed.

16.2.8 Supplementary examinations for the written and / or clinical components shall be held in accordance with the General Academic Regulations at the discretion of the Faculty of Board of Examiners.

16.2.9 Consequences of failing the Part 1 written and / or clinical exam.

The student will continue rotations in clinical paediatrics and re-sit both exams at the next opportunity. There is no limit to the number of times the candidate may re-sit the exams, but as per the general MMED regulations, the candidate must complete the entire program in 6 years.

### 16.3 Entry Criteria Years 3 and 4 of MMED (Paediatric and Child Health) course

16.3.1 The entry criteria are:

- Satisfactory completion of 2 years of postgraduate paediatric training at QECH (or an equivalent institution with the approval of the head of department and postgraduate committee)  
*AND*
- Pass MMED Part 1 written and clinical examinations (or the equivalent postgraduate paediatric qualification approved by the postgraduate committee)

### 16.4 Structure Years 3 and 4 of MMED (Paediatrics and Child Health) course

16.4.1 Years 3 and 4 comprise

16.4.1.1 Two years of clinical attachments in general and subspecialty paediatrics including neonatal and paediatric intensive care. These attachments are undertaken at either

Durban (RN Mandela Medical School University of KwaZulu Natal) or Cape Town (Red Cross Children's Memorial Hospital University), or another suitable institution with the approval of the head of department and the postgraduate committee. Memoranda of Understanding guide the collaboration between the CoM and these partner institutions.

16.4.1.2 Topics of study include the following as they apply to the care of children (details of curriculum are included in the course handbook)

- Community Health
- Accidents/poisoning
- Developmental paediatrics
- Genetics & congenital malformations
- Growth
- Development
- Adolescent health
- Neuromuscular disease
- Learning difficulties
- Behavioural/psychological problems
- Nutrition
- Audiology
- Child abuse
- Palliative care
- Neonatology
- Cardiology
- Endocrinology
- Gastroenterology/Hepatology
- Nephrology
- Haematology
- Oncology
- Metabolic disease
- Musculoskeletal inc. orthopaedics/rheumatology
- Ophthalmology
- Respiratory/ENT
- Dermatology
- Infectious disease/immunology/allergy
- Pharmacology/therapeutics
- Surgery
- Radiology

Allied competencies to be acquired include:

Management (service provision and training), medical ethics, research, audit, service evaluation, statistics, epidemiology, teaching and learning methods inc. literature searches, critical appraisal of literature.

16.4.1.3 A research dissertation

## 16.5 Assessment Years 3 and 4 MMED (Paediatrics and Child Health) course

16.5.1 The assessment consists of 4 parts:

- Continuous assessment
- Research dissertation
- Written examination (MMED Part 2 Written)
- Clinical examination (MMED Part 2 Clinical)

16.5.2 Continuous assessment – the regulations for years 3 and 4 are as per those contained in sections 13.2.2 and 13.2.3.

The continuous assessment component is not graded, but each year of study must be completed to the satisfaction of the head of department and postgraduate tutor before the student can attempt the part 2 examinations

16.5.3 Research dissertation:

The research dissertation shall contribute 20% of the final Part 2 MMED mark.

The candidate is not eligible to sit the Part 2 MMED written and clinical examinations until the research dissertation is completed and presented in a form consistent with the General Academic Regulations.

16.5.4 MMED Part 2 Written (Knowledge) examination:

This contributes 40% of the final Part 2 MMED mark.

The examination comprises 2 written papers and an oral. The written papers consist of MCQs, data interpretation and short notes. Details are included in the course handbook. The exam is usually held in March and September each year.

16.5.5 MMED Part 2 Clinical examination:

This contributes 40% of the final Part 2 MMED mark.

The examination comprises 2 clinical examinations. Details are included in the course handbook. The exam is held at the same time as the written examination.

16.5.6 The following grading system will be used

<u>Percent</u>	<u>Interpretation</u>
75-100	Distinction
65 - 74	Credit
50 - 64	Pass
0 - 49	Failure

16.5.7 Considering that different components of the examination test different competencies, students are required to pass all components of the examinations independently in order for them to be deemed to have passed.

16.5.8 Supplementary examinations for the written and / or clinical components shall be held in accordance with the General Academic Regulations at the discretion of the Faculty of Board of Examiners.

16.5.9 Consequences of failing the Part 2 written and / or clinical exam.

The student will continue rotations in clinical paediatrics and re-sit both exams at the next opportunity. There is no limit to the number of times the candidate may re-sit the exams, but as per the general MMED regulations, the candidate must complete the entire program in 6 years.

## APPENDIX IV: SPECIFIC REGULATIONS FOR MMED OPHTHALMOLOGY

### 17 REGULATIONS FOR MMED OPHTHALMOLOGY

The following regulations are to be read in conjunction with the general College of Medicine Examination regulations.

#### 17.1 STRUCTURE OF THE MMED (OPHTHALMOLOGY)

##### 17.1.1 PROGRAMME SYNOPSIS

###### **Duration**

The duration of the M.MMED course in Ophthalmology shall be for 4 years full time. It shall be divided into two parts: Part 1 comprising years 1 and 2 and Part 2 comprising years 3 and 4.

The trainee shall normally work as an Eye surgeon in training (registrar) mainly at Queen Elizabeth Central Hospital, the main teaching hospital of the College of Medicine, and at other approved teaching hospitals both in Malawi and outside Malawi to ensure a total training period of 4 years.

The programme is divided into two parts: Candidates will enter the programme at the beginning of the academic year and shall be eligible to sit Part 1 examinations from 18 to 24 months of the running of the program. Candidates shall be eligible to sit Part 2 examinations at the end of year 4.

**Part I:** This comprises year 1 and 2. This period will be spent mainly in the Department of

Ophthalmology at the College of Medicine in Blantyre with 6 weeks elective term in a partner Institution abroad every year.

Each trainee will spend 6 weeks elective study abroad annually in a University Institution where ophthalmology is practiced at the highest level to learn the Hi-tech equipment and fundamental investigations and procedures that are not locally available in Malawi.

**Part II:** This comprises year 3 and 4. It will involve specialty training in Ophthalmology with at least 6 Weeks elective term abroad annually in an institution where Ophthalmology is practiced at the highest level, and 6 weeks elective in ocular surgery at a local tertiary ophthalmic institution where high volume high quality eye surgery is practiced.

### **Supervised clinical training**

The M.Med Ophthalmology trainee shall have the academic rank of assistant lecturer in the College of Medicine and shall function as a registrar (trainee specialist) in the Department.

#### **17.1.2 ORGANIZATION OF LEARNING:**

The training will be in the form of formal structured tutorials, in-service practical training, and research leading to writing of a dissertation.

Attendance at all teaching activities and clinical duties is compulsory.

Every working day in the morning (*when minds are still fresh*) a class room tutorial or lecture is delivered for 1H20 for all the years (I to IV), followed by clinical services in the Out patients Clinics or in the Ward, and surgical hands-on practice in the operating theatre. For the year one only a class room tutorial or lecture is delivered for 1H20 in the afternoon every alternate working day.

Trainee shall prepare and present tutorials on topic selected from the list of topics.

Lecturers from within Malawi will cover topics on Principles and practice of ophthalmology.

Lecturers from abroad will cover selected state of the art sub-specialties topics.

#### **Trainees will have the following clinical duties:**

- Participate in out-patients clinics; ward work, and operating theatre.
- Assist and learn from consultants in surgical procedures and clinical management
- Perform surgery under supervision
- Perform selected surgical procedures independently after appropriate training
- report to the Consultant for advice/supervision
- do on calls duties in the department in the registrar group
- Teach undergraduates medical students clinical skills and procedures in Ophthalmology.
- participate in the ophthalmic outreach programme

#### **The trainees are expected to participate in academic activities**

- Regular organized teaching / tutorials
- Journal Club
- participation in clinical audit
- Grand Round
- research meeting

- lecture by visiting experts
- Take part in undergraduate student teaching as well as teaching of peers
- Trainee is expected to write at least 1 case report per year or contribute otherwise to publications.

**The principle learning objectives of the programme are:**

- To demonstrate an understanding of the principles and practice of ophthalmic surgery.
- To acquire, and to be able to teach others, technical skills in minor as well as major ophthalmic procedures.
- To practice evidence based ophthalmology and be able to discuss publications and research findings that have an influence on the management of ophthalmic conditions
- To develop knowledge, skills and attitudes which promote lifelong learning and continuing professional development.

**Trainees are required to acquire core professional competencies**

- General interviewing skills
- History taking
- Physical examination
- Communication with patient and colleagues
- Counselling skills
- Problem solving (identification and management)
- Basic technical and ophthalmic surgical skills
- Teaching skills
- Professional attitude
- Integration into the existing system

### 17.1.3 STRUCTURE OF M. MED. PART I COURSE

17.1.3.1 The M.Med Ophthalmology Part I shall take place in the first two years of the programme and shall consist of studies of the **fundamentals and principles of Ophthalmology, including** biochemistry, physiology, anatomy, pharmacology, genetics and embryology, and pathology as it applies to the eye.

17.1.3.2 **In the first year, the course will cover the following** areas: (details of curriculum are included in the course handbook):

- Anatomy and Embryology of the eye and adnexa
- Biochemistry and Physiology of the eye and extra-ocular muscles

- Optics and Refraction,
- Epidemiology and Statistics
- Ocular examination techniques and Ophthalmic instruments

**17.1.3.3** In the Second year, **the course will cover the following** areas (*details of curriculum are included in the course handbook*):

- Ocular Pharmacology
- Ocular Pathology and Microbiology
- Ocular Genetics
- Advanced Ocular examination techniques and Ophthalmic instruments
- External eye diseases
- Diseases of the uveal tract
- Ocular medical and surgical emergencies
- Basic techniques of ocular microsurgery

**17.1.3.4** **Participation in a research project:**

The trainees may participate in an on-going research project or develop their own research project; as much as possible a separate research question will be identified that they will address under supervision of the principal investigator of the project.

## **17.2 ASSESSMENT FOR PART I**

**17.2.1** The assessment consists of three parts:

- A continuous assessment
- A written examination (MMED Part 1 written) taken 18 to 24 months from the beginning of the course
- A clinical examination (MMED Part 1 clinical) taken 18 to 24 months from the beginning of the course

**17.2.2** **Continuous Assessment (CA)** will comprise the following:

The student must show ongoing satisfactory acquisition of clinical skills and knowledge. This shall be assessed by means of:

- Reports from each clinical rotation completed by the consultant supervisor.
- Faculty evaluations of the student's portfolio of practice consisting of sections summarizing and providing examples of the student's progress in the following areas:
  - Audit, Grand Rounds and Journal Club participation
  - Faculty evaluations of core competencies
  - Tutorials and Cases presentations at local, national and international meetings



- attendance to formal Lectures and tutorials
- Contribution to research work or scientific publication.
- M.Med. Ophthalmology trainees Skills Checklist , (*logbook of surgical & clinical procedures*)
- Participation in the community ophthalmic work
- Elective term attachments reports ( both local and abroad)
- **mock or aptitude Test for year one at the end of every first six months,**
- **Assessment and appraisal information**
- Other as deemed relevant by the student and their mentor

At the end of each 12 months of training the head of department and the postgraduate tutor (or equivalent) will meet, review the above documents, and decide if the candidate has made satisfactory progress such that they may progress to the next year of the course.

**The continuous assessment component is not graded, but each year of study must be completed to the satisfaction of the head of department and postgraduate tutor before the student can attempt the part 1 examinations**

#### 17.2.3 Consequences of unsatisfactory continuous assessment report:

The student will undertake supplementary training - repeating as many clinical rotations as are deemed necessary by the head of department and postgraduate tutor up to a maximum of an extra 12 months of training. At the end of this supplementary training, the head of department and postgraduate tutor will decide if the student has satisfied the continuous assessment component of the course.

A student will only be permitted a total of 12 months of supplementary training in the Part I (years 1 and 2) of the course. If at the end of this supplementary training period, the student is deemed NOT to have made satisfactory progress, they will NOT be permitted to sit the part 1 examination and will be asked to withdraw from the course.

A student given a report of unsatisfactory performance at any stage of this process has the right to appeal the decision through the office of the postgraduate dean.

#### 17.2.4 Six monthly reports

- *Candidate appraisal.* Every 6 months throughout the course there will be an appraisal of the candidate by the Department of Ophthalmology under the direction of Departmental Postgraduate Tutor and the Head of Department (College of Medicine).

- *Results of appraisal.* The results of this appraisal will be discussed with the candidate; in the same meeting the student will be given the opportunity to comment on any aspect of the program. a progress report will be provided to the postgraduate committee
- *Warnings.* At any point in time the Tutor and the Head of Department (College of Medicine) may issue a warning in case of serious shortcomings. Initially this may be verbal followed by a written warning in case of insufficient improvement. The written warning will be copied to the Postgraduate Dean in line with General Academic Regulations of the MMed programmes for all specialists.

### 17.2.5 Assessment of the Part I: Part One Examinations

The Part I of the examination shall be held from 18 to 24 months of the running of the program: that is in March or September of the second year of the programme and shall consist of three Written papers contributing 80% of Part 1 total mark, and Clinical examination (contributing 20% of Part 1 total mark):

**Paper I: Ophth 110:** Basic Ophthalmic Sciences Course examination: *Anatomy of the eye and adnexa, Physiology of the eye and extraocular muscles*, a paper of three hours duration shall comprise a combination of multiple-choice questions format (MCQ *single best answer*) *extended matching items* and short answers.

**Paper II:** There shall be a paper of three hours duration shall comprise a combination of multiple-choice questions format (MCQ *single best answer*) *extended matching items* and short notes in *Clinical Optics, Refraction, and Epidemiology and Statistics*

**Paper III: Ophth 210:** Basic Ophthalmic Sciences Course examination: *Pathology and Microbiology, Pharmacology, Genetics and Embryology of the eye and adnexa, Ophthalmic Examination Techniques*. A paper of three hours duration shall comprise a combination of multiple-choice questions format (MCQ *single best answer*) *extended matching items* and short answers.

**Clinical examination** This shall consist of an OSCE on selected clinical cases, of 60 minutes duration.

**Structured Oral Viva Voce Examination:** This shall be an in-depth examination on the fundamentals and principles of ophthalmology, normally of 20-30 minutes duration.

*The Distribution of Marks for the Part I will be:*

- Paper I 30
- Paper II 30
- Paper II 30
- Clinical Examination 10
- Oral Viva Voce Examinations 10
- Continuous Assessments 0 = Prerequisite
- **Maximum Total** 100

Summary

Course Title	Course Code	Assessment Method	Total % of Part I Mark	Notes
Continuous Assessment		Continuous Assessment Log Book	Not graded	Prerequisite
Basic Sciences 1 Basic Sciences 2	Ophth 110 & Ophth 210	Written : Knowledge Based	80%	The Part I of the examination shall be held from 18 <sup>th</sup> to 24 <sup>th</sup> months of the running of the program:
Ophthalmic Clinical Examination	Ophth 120	Clinical Examination OSCE & Oral Exam	20%	

## Grading of Results

The following grading scheme is adopted for all assessments:-

Percentage	Interpretation	Grade	Criteria
75-100	Distinction	A	Outstanding achievement. A comprehensive discussion of the topic presenting all the relevant information, showing in-depth critical understanding of the topic, going beyond conventional answers and bringing in additional ideas or materials
65 – 74	Credit	B	A full discussion of the topic that includes all relevant information and critical evaluation.
50 – 64	Pass	C	
45 - 49	Marginal fail	D	A few points are included but insufficient understanding shown and often use irrelevant points
0 - 44	Clear fail	E	None of the major points present, many irrelevant points included serious lack of understanding or not submitted.

### 17.2.6 Performance Expected

17.2.6.1 Considering that different components of the examination test different competencies, students are required to pass all components of the examinations independently in order for them to be deemed to have passed.

17.2.6.2 The pass mark in each subject is 50%. A Candidate is expected to pass all the Part I examinations individually and those who do, will be recommended to proceed to part II of the programme.

17.2.6.3 Candidates will be awarded credit or distinction in the part I examinations if their mark is between 65 and 74 (Credit) and 75 and over (Distinction). Credit or distinction cannot be obtained in a supplementary examination or when repeating the year.

17.2.6.4 Distinctions in part I exams is a not pre-requisite for the award of M.Med. Ophthalmology with Honours in the Final Part II

### 17.2.7 The consequences of failing to meet the expected performance:

17.2.7.1 A Candidate who fail marginally (45-49%) in one examination will be allowed to take a supplementary pass/fail examinations in **SIX MONTHS** for the courses that the Candidate failed before the start of the new academic year. This is subject to approval by the University Senate.

17.2.7.2 A Candidate who fail marginally (45-49%) in **MORE THAN ONE** examinations will be allowed to repeat a year. However such Candidate should be Exempted for the subjects where (s)he performed well, including the Continuous Assessment. This is subject to approval by the University Senate.

17.2.7.3 Supplementary examinations for the written and / or clinical components shall be held in accordance with the General Academic Regulations at the discretion of the Faculty or Board of Examiners.

17.2.7.4 The student will continue rotations in clinical ophthalmology and re-sit both written papers and clinical exams at the next opportunity.

17.2.7.5 A candidate who obtains a clear fail (less than 45%) in one examination will be allowed to repeat a year. However such Candidate should be Exempted for the subjects where (s)he performed well, including the Continuous Assessment. This is subject to approval by the University Senate.

17.2.7.6 In the instance when a Candidate has taken either or both of the basic sciences examinations at the end of the 18<sup>th</sup> months, the results are as valid as if exams were written at 24 month of the program.

17.2.7.7 A Candidate who fails in all part I examinations and their average mark is below 45% will be recommended to withdraw. Such recommendations shall be subject to approval by the University Senate.

**17.2.8 The consequences of failing to pass the supplementary examination(s):**

17.2.8.1 Candidate who fail in any supplementary examination(s) in Part I will be recommended by the Faculty Board of Examiners to Senate to repeat a year.

17.2.8.2 A Candidate who repeats a year and fail the repeat examinations will be recommended to withdraw.

**17.3 Entry Criteria Years 3 and 4 of MMED (Ophthalmology ) course**

17.3.1 The entry criteria are:

- Satisfactory completion of 2 years of postgraduate training in Ophthalmology (or an equivalent with the approval of the head of department and postgraduate committee)  
*AND*
- Pass MMED Part 1 written and clinical examinations (or the equivalent postgraduate qualification approved by the postgraduate committee)

#### 17.4 STRUCTURE OF M. MED PART II (Year 3 and 4: Specialty training in Ophthalmology)

17.4.1 In the third and Fourth years, the course will cover advanced ophthalmology practice of ophthalmology in clinical and surgical training consolidating knowledge in principles and fundamentals of ophthalmology; Trainees will be exposed to ophthalmic sub-specialties. Such sub-specialties may be undertaken for a period up to 6 weeks each year at an approved institution outside Malawi where Ophthalmology is practiced at the highest level.

Topics of study include the following (*details of curriculum are included in the course handbook*):

- Advanced Clinical Ophthalmology
  - Ophthalmology and Systemic diseases
  - Retina and systemic medical ophthalmology
  - Neuro-Ophthalmology
  - Chorio-retinal and vitreous diseases:
  - The eye and the working place
  - The eye and learning disability
- Advanced ocular and orbital surgeries
  - Advanced Glaucoma Surgery
  - Advanced Cataract Surgery
  - Refractive surgery
  - Strabismus Surgery
  - Laser Surgery
  - Lid Surgery
  - Orbital surgery
- The Community ophthalmology: Epidemiology and Outreach clinical & surgical organization
- Elective term 2x 6 weeks out of Station (*one abroad and one within Malawi*)

#### 17.4.2 A research Dissertation

- **Participation in a research project:** The trainees may develop their own research project or participate in an on-going research project; as much as possible a separate research question will be identified that they will address under supervision of the principal investigator of the project.
- **Dissertation:** The trainees are expected to develop and complete research project from which a dissertation will be submitted. Failure to submit the dissertation would bar the candidate from sitting final examinations.

**Allied competencies to be acquired include:**

Management (service provision and training), medical ethics, research, service evaluation, statistics, audit, epidemiology, teaching and learning methods, literature searches, critical appraisal of literature.

**17.5 Assessment Years 3 and 4 MMED (Ophthalmology) course**

**17.5.1 The assessment consists of 4 parts:**

- Continuous assessment
- Research dissertation
- Written examination (MMED Part 2 Written)
- Clinical examination (MMED Part 2 Clinical)

**17.5.2 Continuous assessment**

The regulations for years 3 and 4 are as per those contained in sections 15.2.2 and 15.2.3. with year 1 and 2 changed to year 3 and 4.

**The continuous assessment component is not graded, but each year of study must be completed to the satisfaction of the head of department and postgraduate tutor before the student can attempt the part 2 examinations**

**17.5.3 Research Dissertation**

The research dissertation shall contribute 20% of the final Part 2 MMED marks.

During Part II of the programme, candidates shall be required to submit research work of between 10 000 and 15 000 words as a dissertation. This dissertation shall be submitted to the Postgraduate Dean in final form not later than **60 days before the exams date**.

The candidate is not eligible to sit the Part 2 MMED written and clinical examinations until the research dissertation is completed and presented in a form consistent with the General Academic Regulations.

#### 17.5.4 MMED Part 2 Written Examination:

This contributes 40% of the final Part 2 MMED marks.

The Part II examinations shall be held in September of the fourth year of the programme and shall comprise 3 written papers each of two to three hours duration:

**Paper I** shall be of 3 hours duration and shall comprise a combination of multiple-choice questions (MCQ *single best answer*) *extended matching items* and short answers format on **Principles** of Ophthalmology, and pathology

**Paper II** shall be of 3 hours duration and shall comprise a combination of multiple-choice questions (MCQ *single best answer*) *extended matching items* and short answers format on **Practice** of Ophthalmology

**Paper III:** shall be of 2 hours duration and consist of short notes questions on **Community** Ophthalmology

#### 17.5.5 MMED Part 2 Clinical examination:

This contributes 40% of the final Part 2 MMED marks.

The examination comprises 2 clinical examinations.

- 5 OSCE stations (2 long and 3 short cases) of 60 minutes
- 3 Viva Voce examinations stations each of 15 min duration.



The Distribution of Marks for the Part II will be:

- Paper I 15
- Paper II 15
- Paper II 10
- Clinical Examination 20
- Oral :Viva Voce Examinations 20
- Dissertation 20
- Continuous Assessments 0 = Prerequisite
- *Maximum Total* 100

SUMMARY

Course Title	Course Code	Method of assessment	Total % of Part II Mark	Notes
Continuous Assessment		Continuous Assessment Log Book	Not graded	Prerequisite
Dissertation	Ophth 420		20%	Prerequisite & To be readily bound 60 days before the final exams
Principles of Ophthalmology Practice of Ophthalmology.	Ophth 310 Ophth 410	Written Knowledge Based	40%	
Ophthalmic Clinical Examination		Clinical Examination OSCE & Oral Exam	40%	

17.5.6 Considering that different components of the examination test different competencies, students are required to pass all components of the examinations independently in order for them to be deemed to have passed.

17.5.7 Supplementary examinations for the written and / or clinical components shall be held in accordance with the General Academic Regulations at the discretion of the Faculty of Board of Examiners.

17.5.8 Supplementary examinations for the written and / or clinical components shall be held in accordance with the General Academic Regulations at the discretion of the Faculty of Board of Examiners. **Students shall be permitted up to 2 supplementary examinations for Part 2 MMED.**

**17.6 Consequences of failing the Part 2 written and / or clinical exam.**

17.6.1 Students who fail marginally (45-49%) in up to two examinations will continue rotations in Ophthalmology and will be allowed to take a supplementary pass/fail oral examination in the course(s) that the student failed before the start of the new academic year. This is subject to approval by the University Senate.

17.6.2 Students who fail in all part II examinations and their average mark from the exams is below 45% will be recommended to repeat a year. Such recommendations shall be subject to approval by the University Senate.

**17.7 The consequences of failing to pass the supplementary examination(s):**

17.7.1 Candidate who fails in any supplementary examination(s) in Part II will be recommended by the Faculty Board of Examiners to Senate to repeat a year. However such Candidate should (if applied for) be Exempted for the subjects where (s)he performed well, including the Continuous Assessment. Such recommendations shall be subject to approval by the University Senate

17.7.2 A Candidate who repeats a year and fail the repeat examinations will be recommended to withdraw.

## APPENDIX V: SPECIFIC REGULATIONS FOR MMED ORTHOPAEDICS

### 18. DURATION

The M.MMED course in Orthopaedics will be for 4 years full time. The trainee will work as a surgeon in training (registrar) mainly at Queen Elizabeth Central Hospital, the main teaching hospital of the College of Medicine, and at other approved teaching hospitals both in Malawi and outside Malawi to ensure a total training period of 4 years.

### 18.1 STRUCTURE OF THE MMED (ORTHOPAEDICS)

### 18.2 Programme Synopsis

The programme is divided into two parts: Part 1 comprising years 1 and 2 and Part 2 comprising years 3 and 4. Candidates will enter the programme at the beginning of the academic year and would be eligible to sit Part 1 examinations at the end of the year 2. Candidates will be eligible to sit Part 2 examinations at the end of year 4.

The training will be in the form of in-service practical training, formal structured tutorials, and research leading to writing of a dissertation. Attendance at all teaching activities and clinical duties is compulsory.

The postgraduate student will have the academic rank of assistant lecturer in the College of Medicine and will function as a registrar (trainee specialist) in the teaching hospital(s).

The postgraduate trainee will have the following clinical duties:

- Teach intern doctors clinical skills and procedures and supervise them in their clinical work
- Assist and learn from consultants in surgical procedures and clinical management
- Perform surgery under supervision
- Perform selected surgical procedures independently after appropriate training
- Report to the consultant for advice/supervision
- Participate in outpatient clinics
- Do on-call duties in the hospitals
- Participate in the district hospital specialist visit programme

The trainee will be expected to participate in academic activities such as:

- Regular organized teaching / tutorials
- Journal Club
- Morbidity / Mortality meeting
- Grand rounds
- Research meetings
- Lectures by visiting experts
- Contribute articles for publications to the Malawi Medical Journal or other peer reviewed journals.

- Audit meetings / activities
- Take part in undergraduate student teaching as well as teaching of peers

The principle learning objectives of the programme are:

- To demonstrate, an understanding of the principles and practice of surgery in general and orthopaedic surgery in particular.
- To acquire, and to be able to teach others, technical skills in common general surgery operations and minor as well as major orthopaedic surgery operations.
- To practice evidence based surgery and be able to discuss publications and research findings that have an influence on the management of surgical conditions
- To develop knowledge, skills and attitudes which promote lifelong learning and continuing professional development.

### 18.3 Part 1

#### 18.3.1 Subjects of study

Part I of the programme shall consist of studies in the following areas

- Basic Surgical Sciences including: Surgical Anatomy; Applied Physiology; and Surgical Pathology
- Principles of General Surgery and Orthopaedic and Trauma Surgery
- Basic Sciences in Orthopaedics
- Basic General Surgery and Basic Orthopaedic and Trauma Surgery
- Research Methodology
- Basic Surgical Courses including: Basic Surgical Skills; Advanced Trauma Course; Critical Care Course.

Evidence of attendance of approved Basic Surgical Courses prior to the commencement of the MMED programme will be taken into account; however this would not reduce the 4 year training period.

**During the first 2 years, and before the end of year 2, trainees are strongly advised to develop their research project proposal for submission to the Post Graduate Dean and the College of Medicine Research and Ethics Committee (COMREC). This will lead to the dissertation that will be a crucial part of assessment in Part 2 of the programme. In discussion with the department of surgery students will identify a topic of research or participate in an on-going research project. In the latter case a separate research question will be identified which they can address under supervision of the principal investigator of the project.**

#### 18.3.2 Surgical Posts / Rotations

During Part I of the programme candidates will spend an appropriate time in posts in surgery and other relevant disciplines as detailed below:

- Year 1
  - 6 months in general surgery with emergency work

- 6 months in orthopaedics with trauma
- Year 2
  - 3 months in Intensive Care Unit (ICU)
  - 3 months in a recognized surgical post in any of the following specialties: plastic surgery including burns; urology; neurosurgery; accidents and emergency / trauma; vascular surgery; ENT; or paediatric surgery.
  - 6 months in general orthopaedics and trauma

### 18.3.3 Assessment

The assessment consists of three parts:

- A continuous assessment
- A written examination (MMED Part 1 written) taken at the end of year 2.
- A clinical examination (MMED Part 1 clinical) taken at the end of year 2.

### 18.3.4 Continuous assessment:

The student must show ongoing satisfactory acquisition of clinical skills and knowledge. This shall be assessed by means of:

- Reports from each clinical rotation completed by the consultant supervisor. A structured reporting format will be used.
- Review of the student's portfolio of practice. The portfolio will consist of sections summarizing and providing examples of the student's progress in the following areas:
  - Assessment and appraisal information
  - Audit
  - Clinical practice (including a logbook of procedures, case-based discussions, summaries of clinical experience gained in each rotation)
  - Formal teaching (CPD) sessions attended.
  - Research
  - Presentations at local, national and international meetings
  - Teaching they have provided
  - Management activities
  - Other as deemed relevant by the student and their mentor

At the end of each rotation / posting the head of department and the postgraduate tutor (or equivalent) will meet, review the above documents, and decide if the candidate has made satisfactory progress such that they may progress to the next year of the course.

The continuous assessment component is not graded, but each posting / rotation and year of study must be completed to the satisfaction of the head of department and postgraduate tutor before the student can attempt the part 1 examinations

#### 18.3.5 Consequences of unsatisfactory continuous assessment report

The student will undertake supplementary training - repeating as many clinical rotations as are deemed necessary by the head of department and postgraduate tutor up to a maximum of an extra 12 months of training. At the end of this supplementary training, the head of department and postgraduate tutor will decide if the student has satisfied the continuous assessment component of the course.

A student will only be permitted a total of 12 months of supplementary training in years 1 and 2 of the course. If at the end of supplementary training, the student is deemed NOT to have made satisfactory progress, they will NOT be permitted to sit the part 1 examination and will be asked to withdraw from the course.

A student given a report of unsatisfactory performance at any stage of this process has the right to appeal the decision to the College of Medicine postgraduate committee through the office of the postgraduate dean.

#### 18.3.6 MMED Part 1 Examinations

Part I exams must be completed by the end of the second year as failure to complete the exams precludes progression to the final two years. Candidates will not be allowed to sit Part 1 examinations without certificates of attendance of Basic Surgical Courses or if they are deemed not to have satisfied continuous assessment criteria.

Part 1 examinations will have two parts: a written examination and a clinical examination

#### 18.3.7 Written examination (contributing 60% of Part 1 total mark):

This consists of three MCQ format papers, each of 2 hours duration. MCQ format of single best answer not negatively marked.

- Paper 1:
  - Basic Surgical Sciences including: Surgical Anatomy; Applied Physiology; and Surgical Pathology
  - Principles of General Surgery and Orthopaedic and Trauma Surgery
- Paper 2:
  - Basic Sciences in Orthopaedics
- Paper 3:
  - Basic General Surgery and Basic Orthopaedic and Trauma Surgery

**18.3.8** MMED Part 1 Clinical examination (contributing 40% of Part 1 total marks):

This will consist of

- An OSCE style clinical examination with 6 to 10 clinical stations of approximately 10 minutes each.
- Three Viva Voce Examinations of 30 minutes each in:
  - Surgical anatomy
  - Principles of Surgery
  - Surgical Pathology

**18.3.9** Grading System for MMED Part 1

The following grading system will be used

<u>Percent</u>	<u>Interpretation</u>
75-100	Distinction
65 - 74	Credit
50 - 64	Pass
0 - 49	Failure

**18.3.10** Considering that different components of the examination test different competencies, students are required to pass both the written and clinical sections independently in order for them to be deemed to have passed the examination overall.

**18.3.11** Supplementary examinations for the written and / or clinical components shall be held in accordance with the General Academic Regulations at the discretion of the Faculty of Board of Examiners. Students shall be permitted up to 2 supplementary examinations for Part 1 MMED

**18.4** Part 2

Only candidates who have successfully completed the Part 1 examinations will be allowed to proceed to Part 2 of the programme.

Years 3 and 4 will cover higher orthopaedic surgical training consolidating knowledge in principles of orthopaedic surgery; operative orthopaedic surgery and surgical anatomy; and orthopaedic surgical pathology. Trainees will be exposed to orthopaedic sub-specialties. Such sub specialties may be undertaken at approved training centres outside Malawi for periods up to 6 to 12 months. The candidate will be expected to complete a research project from which a dissertation will be submitted. Failure to submit the dissertation would bar the candidate from sitting final examinations. The candidate would be eligible to sit the final Part 2 exam at the end of year 4.

**18.4.1** Surgical Posts / Rotations

During Part 2 of the programme candidates will spend an appropriate time in posts in orthopaedic surgery and other relevant disciplines as detailed below:

- Year III
  - 6 months paediatric orthopaedics
  - 3 months in general orthopaedics
  - 3 months rotation in a local or regional institution for orthopaedic sub-specialties. Recognised specialties are: Paediatric orthopaedics; Spine Surgery; Joint arthroplasty; Arthroscopy; Hand surgery; Orthopaedic oncology; Trauma / reconstruction surgery; or in a clinical research post.
  
- Year IV
  - 12 months in general orthopaedics.

#### 18.4.2 Assessment

The assessment of Part 2 will consist of 4 parts:

- Continuous assessment
- Research dissertation
- Written examination (MMED Part 2 Written)
- Clinical examination (MMED Part 2 Clinical)

#### 18.4.3 Continuous assessment

The regulations for years 3 and 4 are as per those contained in sections 17.2.4 and 17.2.5. with year 1 and 2 changed to year 3 and 4.

**The continuous assessment component is not graded, but each year of study must be completed to the satisfaction of the head of department and postgraduate tutor before the student can attempt the part 2 examinations**

#### 18.4.4 Research Dissertation

The research dissertation shall contribute 20% of the final Part 2 MMED marks.

During Part II of the programme, candidates shall be required to submit research work of between 10 000 and 15 000 words as a dissertation. This dissertation shall be submitted to the Postgraduate Dean in final form by the middle of year 4 (final year) of the course.

**The candidate is not eligible to sit the Part 2 MMED written and clinical examinations until the research dissertation is completed and presented in a form consistent with the General Academic Regulations.**

#### 18.4.5 MMed Part 2 Written Examination:

This contributes 40% of the final Part 2 MMED marks.



The written examination shall comprise 3 written papers each of two hours duration. The format will be MCQs (single best answer) and short answer format.

- Paper 1: Principles of Orthopaedic Surgery.
- Paper 2: Operative Orthopaedic Surgery and Surgical Anatomy.
- Paper 3: Orthopaedic Surgical Pathology.

#### 18.4.6 MMed Part 2 Clinical examination:

This contributes 40% of the final Part 2 MMED marks.

The examination comprises 2 clinical examinations.

- 3 Viva Voce examinations each of 30 min duration in:
  - Principles of Orthopaedic Surgery.
  - Operative Orthopaedic Surgery and Surgical Anatomy
  - Orthopaedic Surgical Pathology.
- An OSCE style clinical examination with 6 to 10 clinical stations of approximately 10 minutes each.

#### 18.4.7 Grading System for MMED Part 2 Examination.

The following grading system will be used

<u>Percent</u>	<u>Interpretation</u>
75-100	Distinction
65 - 74	Credit
50 - 64	Pass
0 - 49	Failure

18.4.8 Considering that different components of the examination test different competencies, students are required to pass all components of the examinations independently in order for them to be deemed to have passed the Part 2 examinations.

18.4.9 Supplementary examinations for the written and / or clinical components shall be held in accordance with the General Academic Regulations at the discretion of the Faculty of Board of Examiners. Students shall be permitted up to 2 supplementary examinations for Part 2 MMED.

## APPENDIX VI: SPECIFIC REGULATIONS FOR MASTERS OF PUBLIC HEALTH

### 19. Structure of the programme

The MPH is a two-year course, starting in January each year. The course is run on a modular rather than semester basis with students attending classes for two weeks every two months. It is equivalent to a two-year full-time course.

19.1 The MPH Programme consists of:

- 19.1.1 Six core modules making up 36% of the course
- 19.1.2 16 elective modules making up 36% of the course
- 19.1.3 Two integrated case studies making up 5% of the course
- 19.1.4 One practical assignment making up 5% of the course
- 19.1.5 A dissertation making up 18% of the course

### 19.2 Assessment structure of students

Each student is required to successfully complete all the five areas of the Programme as outlined in 19.1.

#### 19.2.1 Core modules

There are six core modules within the MPH Programme. Core modules are compulsory for all MPH students. The Orientation programme is considered a core module and is also compulsory.

**Table 1: A list of core modules**

Core Courses			
	Course Code	Course	Total hours
	MPH001	Orientation	200
	MPH002	Epidemiology	100
	MPH003	Biostatistics	100
	MPH004	Health Systems - Health Economics & Health Policy	100
	MPH005	Health Management - Health, Development and Globalization & Organizational Theory	100
	MPH006	Disease Prevention - Health Promotion and Environmental Health	100
	MPH007	Social Sciences for Public Health	100
Total Core modules		800 Hours	

### **19.3 Assessment procedures of core modules**

19.3.1 Compulsory modules are assessed by unseen written examination to be held at the start of the following module.

19.3.2 Students have to pass all compulsory elements of the course.

### **19.4 Grading system of core modules**

19.4.1 A mark of 50% is a pass. A mark of 75% or more is a distinction. Table 1 outlines a complete grading scheme of core modules

Table 1: Grading scheme

<u>Percent</u>	<u>Interpretation</u>	<u>Point grade</u>
75-100	Excellent	5
65 - 74	Very good	4
55 - 64	Good	3
50 – 54	Satisfactory	2
45 - 49	Boarder line fail	1
0 - 44	Out right fail	0

## 19.5 Elective Courses

Students will have to select 800 hours of elective modules (currently from more than 40 offered modules). An elective course which is valued at 50 hours constitutes 1 module, 100 hrs is equivalent to 2 modules and 200 hrs is equivalent to 4 modules. Each student is permitted to take 1000 hours of elective modules ONLY as part of the course. Modules over this limit can be taken but at an additional charge. Refer to MPH Course Handbook for a list of all elective modules.

### 19.5.1 Assessment procedures of elective courses

19.5.1.1 Elective modules can be assessed in different ways at the discretion of the MPH Course Director. Students must submit a typed electronic copy of all written assignments by the first day of the succeeding module to the MPH administrator

19.5.1.2 Students who fail to submit assessments and project work by the set date will have 10% of the marks subtracted if the work is up to 72 hours late and 25% of the marks deducted if the work is 72 hours to one week late. If the assessment is more than a week late the student will be assumed to have withdrawn from the module. Students may not withdraw from a module after they have submitted the assignment.

19.5.1.3 Students will be permitted to ask for extensions in advance of the deadline (more than 48 hours) and these extensions will be given at the discretion of the MPH coordinator and lodged on the personal file of the student

### 19.5.2 Grading scheme of elective courses

A mark of 50% is a pass. A mark of 75% or more is a distinction. Refer to table 1 for a complete grading scheme

## 19.6 Case studies

19.6.1 There are two integrated case studies making up to 5% of the course. The case studies are compulsory for all students. Their purpose is to ensure that students can identify and solve health and health system problem in a comprehensive manner.

### 19.6.2 Assessment procedures of case studies

Case studies will be done in group. Each case study has an academic supervisor appointed by the Community Health Research and Postgraduate Committee. Each group submits a joint case study report to the academic supervisor who assesses the submission.

### 19.6.3 Grading scheme of case studies

A mark of 50% is a pass. A mark of 75% or more is a distinction. Refer to table 1 for a complete grading scheme

## 19.7 Practical Assignment

19.7.1. Each candidate will undertake a practical assignment at the place of work or in a nearby health facility in the second year of the course. The practical assignment must be a task required by employer or local health institution, demonstrating a mixture of at least three of the following competencies: Health needs assessment; promoting and protecting the population's health and well-being; Developing quality and risk management within an evaluative culture; Collaborative working for health; Developing health programmes and services and reducing inequalities; policy and strategy development and implementation; working with and for communities.

### 19.7.2 Assessment procedures of practical assignment

The service supervisor will sign off the assignment on its satisfactory completion, when the competency has been achieved to the standard expected of a newly appointed public health specialist.

### 19.7.3 Grading scheme of practical assignment

A mark of 50% is a pass. A mark of 75% or more is a distinction. Refer to table 1 for a complete grading scheme

## 19.8 Dissertation

Students are expected to complete a dissertation, which make 18% of the course.

## 19.9 Grading of dissertation

A mark of 50% is a pass. A mark of 75% or more is a distinction. Refer to table 1 for a complete grading scheme

## 19.10 Final grading

A student completes the MPH Programme upon successful completion of Core modules, elective modules, one practical assignment, two case studies and a dissertation in line with the requirements of each component. For each category, an average grade point of 2 is a pass and 5 is a distinction.

## 19.11 Supplementary Examinations

19.11.1 Supplementary examinations are written within two months after writing examinations of the last set of core modules. Students who fail one or two core modules sit for a supplementary exam. If a candidate fails three or more core modules they are withdrawn.

## 19.12 Withdraw

Students who fail three or more core modules are withdrawn if they have been "seriously warned" by the College. Any one of the following shall constitute a serious warning

- Failure in a core module
- Having to sit a supplementary examination(s)
- Failure to appear for examination(s) without valid reason(s)

A student who fails a supplementary examination is withdrawn.

Students who fail more than 25% of elective modules are withdrawn.

## **APPENDIX VII: SPECIFIC REGULATIONS FOR MMED SURGERY**

### **20 DURATION**

The MMED course in Surgery will be for 4-5 years full time. The trainee will work as a surgeon in training (registrar) mainly at the Queen Elizabeth Central Hospital; the main teaching hospital of the College of Medicine and at other approved teaching hospitals both in Malawi and outside Malawi to ensure a total training period of not less than 4 years.

### **20.1 STRUCTURE OF THE MMED (SURGERY)**

#### **20.1.1 Programme Synopsis**

The programme is divided into two parts: Part 1 comprising years 1 and 2 and Part 2 comprising years 3 and 4. Candidates will enter the programme at the beginning of the academic year and would be eligible to sit Part 1 examinations at the end of the year 2. Candidates will be eligible to sit Part 2 examinations at the end of year 4.

The training will be in the form of in-service practical training, formal structured tutorials, and research leading to writing of a dissertation. Attendance at all teaching activities and clinical duties is compulsory.

The postgraduate student will have the academic rank of assistant lecturer in the College of Medicine and will function as a registrar (trainee specialist) in the teaching hospital(s).

The postgraduate trainee will have the following clinical duties:

- Assist and learn from consultants in surgical procedures and clinical management
- Perform surgery under supervision
- Perform selected surgical procedures independently after appropriate training
- Report to the consultant for advice/supervision
- Participate in outpatient clinics
- Do on-call duties in the hospitals
- Teach intern doctors clinical skills and procedures and supervise them in their clinical work
- Participate in the district hospital specialist visit programme

The trainee will be expected to participate in academic activities such as:

- Regularly organized teaching / tutorials
- Journal Club
- Morbidity / Mortality meeting
- Grand rounds
- Research meetings
- Lectures by visiting experts
- Contribute to articles for publications to the Malawi Medical Journal or other peer-reviewed journals.
- Audit meetings / activities

- Take part in undergraduate student teaching as well as teaching of peers

The principal *learning objectives* of the programme are:

- To demonstrate an understanding of the **principles and practice of surgery**.
- To attain a level of self-motivation and pro-activeness in clinical activities that will enable the acquisition of the **essential technical expertise** necessary for the practice of surgery
- To acquire, and to be able to teach to others, **technical skills** used in common surgical operations.
- To practice **evidence based surgery** and be able to discuss publications and research findings that have an influence on the management of surgical conditions
- To develop knowledge, skills and attitudes which promote **lifelong learning** and continuing professional development.

## 20.1.2 Part 1

### 20.1.2.1 Subjects of study

Part I of the programme shall consist of studies in the following areas

- Basic Surgical Sciences including: Surgical Anatomy; Applied Physiology; and Surgical Pathology
- Principles of Surgery in General
- Systematic Surgery
- Trauma Surgery
- Research Methodology
- Basic Surgical Courses including: Basic Surgical Skills; Advanced Trauma Course; Critical Care Course.

Evidence of attendance of approved Basic Surgical Courses prior to the commencement of the MMED programme will be taken into account; however this would not reduce the 4 year training period.

*During the first 2 years, and before the end of year 2, trainees are strongly advised to develop their research project proposal for submission to the Post Graduate Dean and the College of Medicine Research and Ethics Committee (COMREC). This will lead to the dissertation that will be a crucial part of assessment in Part 2 of the programme. In discussion with the department of surgery students will identify a topic of research or participate in an on-going research project. In the latter case a separate research question will be identified which they can address under supervision of the principal investigator of the project.*

### 20.1.3 Surgical Posts / Rotations

During Part I of the programme candidates will spend an appropriate time in posts in surgery and other relevant disciplines as detailed below:

- Year 1



- 6 months in general surgery with emergency work
- 6 months in orthopaedics with trauma
- Year 2
  - 3 months in Intensive Care Unit (ICU)
  - 3 months in a recognized surgical post in any of the following specialties: plastic surgery including burns, urology, neurosurgery, accident and emergency / trauma; vascular surgery, ENT or paediatric surgery.
  - 6 months in general surgery

#### 20.1.4 Assessment

The assessment consists of three parts:

- Continuous assessment
- A written examination (MMED Part 1 written) taken at the end of year 2.
- A clinical examination (MMED Part 1 clinical) taken at the end of year 2.

#### 20.1.5 Continuous assessment:

The student must show ongoing satisfactory acquisition of clinical skills and knowledge. This shall be assessed by means of:

- Reports from each clinical rotation completed by the consultant supervisor. A structured reporting format will be used.
- Review of the student's **portfolio of practice**. The portfolio will consist of sections summarizing and providing examples of the student's progress in the following areas:
  - Assessment and appraisal
  - Audit
  - Clinical practice (including a logbook of procedures, case-based discussions, summaries of clinical experience gained in each rotation)
  - Formal teaching (CPD) sessions attended.
  - Research
  - Presentations at local, national and international meetings
  - Teaching provided
  - Management activities
  - Other as deemed relevant by the student and his or her mentor

At the end of each non-examination year the head of department and the postgraduate tutor (or equivalent) will meet and review the rotation reports and the portfolio of practice. If on the basis of these the candidate's performance is satisfactory he or she may progress to the next year of the course.

*The continuous assessment component is not graded, but each posting / rotation and year of study must be completed to the satisfaction of the head of department and postgraduate tutor before the student can attempt the part 1 examinations*

#### 20.1.6 Consequences of unsatisfactory continuous assessment report

The student will undertake supplementary training - repeating as many clinical rotations as are deemed necessary by the head of department and postgraduate tutor up to a maximum of an extra 12 months of training. At the end of this supplementary training, the head of department and postgraduate tutor will decide if the student has satisfied the continuous assessment component of the course.

*A student will only be permitted a total of 12 months of supplementary training in years 1 and 2 of the course. If at the end of supplementary training, the student is deemed NOT to have made satisfactory progress, he or she will NOT be permitted to sit the part 1 examination and will be asked to withdraw from the course.*

A student given a report of unsatisfactory performance at any stage of this process has the right to appeal the decision to the College of Medicine postgraduate committee through the office of the postgraduate dean.

#### 20.1.7 MMED Part 1 Examinations

Part I exams must be completed by the end of the second year as failure to complete the exams precludes progression to the final two years. Candidates will not be allowed to sit Part 1 examinations without certificates of attendance of the Basic Surgical Courses or if they are deemed not to have satisfied the continuous assessment criteria.

Part 1 examinations will have two parts: a written examination and a clinical examination

#### 20.1.8 Written examination (contributing 60% of Part 1 total mark):

This consists of two MCQ/EMQ/SAQ format papers, each of 3 hours duration.

- Paper 1:
  - Basic Surgical Sciences including: Surgical Anatomy; Applied Physiology; and Surgical Pathology
- Paper 2:
  - Principles of Surgery and Operative Surgery

#### 20.1.9 MMED Part 1 Clinical examination (contributing 40% of Part 1 total marks):

This will consist of

- An OSCE style clinical examination with 6 to 10 clinical stations of approximately 10 minutes each.
- Two Viva Voce Examinations of 30 minutes each in:
  - Surgical anatomy and Operative surgery
  - Principles of Surgery and Surgical Pathology

#### 20.1.10 Grading System for MMED Part 1.

The following grading system will be used

<u>Percent</u>	<u>Interpretation</u>
75-100	Distinction
65 - 74	Credit
50 - 64	Pass
0 - 49	Failure

20.1.11 Considering that different components of the examination test different competencies, students are required to pass both the written and clinical sections independently in order for them to be deemed to have passed the examination overall.

*20.1.12 Supplementary examinations for the written and/or clinical components shall be held in accordance with the General Academic Regulations at the discretion of the Faculty of Board of Examiners. Students shall be permitted up to 2 supplementary examinations for Part 1 MMED*

#### 20.2 Part 2

Only candidates who have successfully completed the Part 1 examinations will be allowed to proceed to Part 2 of the programme.

Years 3 and 4 will cover Higher Surgical Training; consolidating knowledge in the principles of surgery, operative surgery, surgical anatomy, physiology and pathology. Trainees will be exposed to surgical sub-specialties. Such sub-specialties may be undertaken at approved training centres outside Malawi for periods up to 6 to 12 months. The candidate will be expected to complete a research project from which a dissertation will be submitted. Failure to submit the dissertation will bar the candidate from sitting final examinations. The candidate would be eligible to sit the final Part 2 examination at the end of year 4.

##### 20.2.1 Surgical Posts / Rotations

During Part 2 of the programme candidates will spend an appropriate time in posts in surgery and other relevant disciplines as detailed below:

#### Year III

- 1) Six months in General Surgery
- 2) Six months in a local or regional rotation in General Surgery (including an adequately supervised post in another Central Hospital) or six months in a recognized specialty or subspecialty.

Recognized specialties or subspecialties are:-

- Urology
- Neurosurgery
- Paediatric surgery
- Endocrine surgery
- Breast surgery
- Upper GI surgery
- Hepatobiliary surgery
- Colorectal surgery
- Endoscopic surgery
- Vascular surgery
- Trauma surgery

#### Year IV

Will be spent in further general surgical rotations.

There will be time for:

- 1) Completion of dissertation
- 2) Preparation for examinations

During Part II there will be further exposure to Principles of Surgery, Surgical pathology, the Art of Surgery and Systematic Surgery.

#### 20.2.2 Assessment

The assessment of **Part 2** will consist of 4 parts:

- Continuous assessment
- Research dissertation
- Written examination (MMED Part 2 Written)
- Clinical examination (MMED Part 2 Clinical)

#### 20.2.3 Continuous assessment

The regulations for years 3 and 4 are as per those contained in sections 18.2.4 and 18.2.5. with year 1 and 2 changed to year 3 and 4.

*The continuous assessment component is not graded, but each year of study must be completed to the satisfaction of the head of department and postgraduate tutor before the student can attempt the part 2 examinations*

#### 20.2.4 Research Dissertation

The research dissertation shall contribute 20% of the final Part 2 MMED marks.

During Part II of the programme, candidates shall be required to submit research work of between 10 000 and 15 000 words as a dissertation. This dissertation shall be submitted to the Postgraduate Dean in final form by the middle of year 4 (final year) of the course.

*The candidate is not eligible to sit the Part 2 MMED written and clinical examinations until the research dissertation is completed and presented in a form consistent with the General Academic Regulations.*

#### 20.2.5 MMED Part 2 Written Examination:

This contributes 40% of the final Part 2 MMED marks.

The written examination shall comprise 2 written papers each of three hours duration. The format will be MCQs (single best answer), EMQ and short answer format.

- Paper 1: Principles of Surgery and Surgical Pathology
- Paper 2: Operative Surgery and Surgical Anatomy.

#### 20.2.6 MMED Part 2 Clinical examination:

This contributes 40% of the final Part 2 MMED marks.

The examination comprises 2 clinical examinations.

- 4 Viva Voce examinations each of 30 min duration in:
  - Principles of Surgery.
  - Operative Surgery and Surgical Anatomy
  - Surgical Pathology.
  - Surgical Specialties for the General Surgeon
- An OSCE style clinical examination with 6 clinical stations of approximately 20 minutes each.

#### 20.2.7 **Grading System for MMED Part 2 Examination.**

The following grading system will be used

<u>Percent</u>	<u>Interpretation</u>
----------------	-----------------------

75-100	Distinction
65 - 74	Credit
50 - 64	Pass
0 - 49	Failure

20.2.8 Considering that different components of the examination test different competencies, students are required to pass all components of the examinations independently in order for them to be deemed to have passed the Part 2 examinations.

*20.2.9 Supplementary examinations for the written and / or clinical components shall be held in accordance with the General Academic Regulations at the discretion of the Faculty of Board of Examiners. Students shall be permitted up to 2 supplementary examinations for Part 2 MMED.*