

KERALA UNIVERSITY OF HEALTH SCIENCES

THRISSUR - 680 596, KERALA



REGULATIONS, CURRICULUM, AND SYLLABUS OF

SUPER SPECIALITY COURSES (D.M./M Ch)

(2010 -11 admission onwards)

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1. Introduction

1.1. Preamble

The D.M./M Ch Super Speciality courses are the highest degrees under the Faculty of Medicine in the Kerala University of Health Sciences. In this section, an attempt has been made to organize the regulations of all the super speciality (D.M./M Ch) courses being conducted in the Kerala University of Health Sciences, keeping in mind the recommendations of the Medical Council of India on Super speciality Medical Education as amended by the Indian Medical Council in 2009.

1.2. Nomenclature of the Degree

i) DOCTOR OF MEDICINE

DM: DOCTOR OF MEDICINE

DM:

- i) Cardiology
- ii) Gastroenterology
- iii) Medical Oncology
- iv) Nephrology
- v) Neurology
- vi) Pulmonary Medicine
- vii) Paediatric Oncology
- viii) Neonatology

ii) Master of Chirurgery

M Ch: MASTER OF CHIRURGERY

- i) Cardiovascular and thoracic surgery
- ii) Plastic and Reconstructive Surgery
- iii) Paediatric surgery
- iv) Gastro Intestinal Surgery
- v) Genito-urinary Surgery
- vi) Surgical Oncology
- vii) Neurosurgery

2. Aims and Objectives of D.M./M Ch courses

2.1. Goal

The goal of postgraduate medical education shall be to produce competent specialists and/or Medical teachers.

- i. Who shall recognize the health needs of the community, and carry out professional obligations ethically and in keeping with the objectives of the national health policy
- ii. Who shall have mastered most of the competencies, pertaining to the speciality, that are required to be practiced at the secondary and the tertiary levels of the health care delivery system;
- iii. Who shall be aware of the contemporary advances and developments in the discipline concerned.
- iv. Who shall have acquired a spirit of scientific inquiry and is oriented to the principles of research methodology and epidemiology
- v. Who shall have acquired the basic skills in teaching of the medical and paramedical professionals.

2.2. General objectives of Super Speciality training

At the end of the super speciality training in the discipline concerned, the student shall be able to:

- i. Recognize the importance to the concerned speciality in the context of the health needs of the community and the national priorities in the health section.
- ii. Practice the speciality concerned ethically and in step with the principles of primary health care.
- iii. Demonstrate sufficient understanding of the basic sciences relevant to the concerned speciality.
- iv. Identify social, economic, environmental, biological and emotional determinants of health in a given case, and take them into account while planning therapeutic, rehabilitative, preventive and promotive measure/strategies.
- v. Diagnose and manage majority of the conditions in the speciality concerned on the basis of clinical assessment, and appropriately selected and conducted investigations.
- vi. Plan and advice measures for the prevention and rehabilitation of patients suffering from disease and disability related to the speciality.
- vii. Demonstrate skills in documentation of individual case details as well as morbidity and mortality rate relevant to the assigned situation.

viii. Demonstrate empathy and humane approach towards patients and their families and exhibit interpersonal behaviour in accordance with the societal norms and expectations.

ix. Play the assigned role in the implementation of national health programme, effectively and responsibly.

x. Organize and supervise the chosen/assigned health care services demonstrating adequate managerial skills in the clinic/hospital or the field situation.

xi. Develop skills as a self-directed learner, recognize continuing education needs; select and use appropriate learning resources.

xii. Demonstrate competence in basic concepts of research methodology and epidemiology, and be able to critically analyze relevant published research literature.

xiii. Develop skills in using educational methods and techniques as applicable to the teaching of medical/nursing students, general physicians and paramedical health workers.

xiv. Function as an effective leader of a health team engaged in health care, research or training.

2.3. Statement of the competencies

Keeping in view the general objectives of super speciality training, each discipline shall aim at development of specific competencies which shall be defined and spelt out in clear terms. Each student shall go through the statement of competencies of the university curriculum at the beginning of the programme so that he or she can direct the efforts towards the attainment of these competencies.

2.4. Components of Super Speciality Curriculum

The major components of the Super Speciality curriculum shall be:

i. Theoretical knowledge

ii. Practical and clinical skills

iii. Research skills

iv. Attitudes including communication skills

v. Knowledge and skill in research methodology, Medical ethics and medico legal aspects

The students undergoing super speciality courses shall be exposed to the following:-

i. Basics of statistics to understand and critically evaluate published research paper and

appropriately use in practice and research.

ii. Few lectures or other type of exposure to human behavior studies.

iii. Basic understanding of pharmaco-economics.

3. Regulations

3.1. Academic eligibility for admission

The candidate applying for a post doctoral course, shall have obtained the degree of M.D/M.S. related feeder subjects as decided upon by the MCI and recognised by MCI. Membership of the National Academy of Medical Sciences (M.N.A.M.S) or Diplomat of National Board (DNB) shall be considered equivalent qualification, only if it has been granted on the basis of the results of a duly held examination and the candidate has worked in same or related speciality in a hospital attached to a medical college for at least one year during or after the completion of the training period prescribed by the National Board of Examiners.

3.2. Selection of students

The Selection of students for the D.M./M Ch course shall be made based strictly on merit as decided by the entrance examination and such other reservation for service candidates as decided by the competent authority from time to time.

3.3. Registration

A candidate on admission to D.M./M Ch course shall apply to the University through college within the stipulated date prescribed by the University from time to time for registration. A candidate should complete the course and pass the examination within a period of 6 years after registration as a super speciality student in the concerned specialty, failing which his/her registration shall be cancelled.

3.4. Duration of course

Every candidate seeking admission to the training programme to qualify for the degree of D.M./M Ch in the subjects shall pursue a regular course as a full time student, in the concerned Department under the guidance of a recognized super speciality teacher for a period of three years. Ordinarily, this duration of course shall be not be curtailed. The course commences from the date on which the first candidate joins the course.

3.5. Medium of instruction

The medium of instruction is English.

3.6. Attendance

All the candidates joining the Super Speciality training programme shall work as full time resident during the period of training and shall attend not less than 80% (Eighty percent) of the imparted training.

The student will be permitted to avail casual leave for 20 days, but not more than 10 days at a stretch. The candidate will also be eligible for leave supported by medical certificates (subject to verification by medical board) and other "leave under exceptional circumstances" recommended by the Head of Department and sanctioned by the Head of the Institution concerned subject to a maximum of 73 days per year inclusive of Sundays and Holidays without affecting the training programme. No stipend will be paid during this leave period. Any leave over and above 73 days in a year (20% of 365 days of the year) availed by the candidate will have to be compensated by adequate extension of the duration of the course. 365 days of the year are working days for Super Speciality students. Any other leave will entail extension of course. No stipend will be paid during the extension period. If the candidate is unauthorizedly absent for more than 10 days, he / she will be terminated from the course and liquidated damages will be levied. No candidate shall be admitted 73 days after the date of admission of the first candidate.

3.7. Super Speciality Department

Only a department, defined as an independent academic entity of a teaching institution, having the minimum facilities as per norms of the Medical Council of India and KUHS regulations shall be permitted to commence a super speciality training programme to qualify for the award of the D.M./M Ch degrees.

Minimum requirements for a super speciality department, bed strength in clinical department, out-patient departments, laboratory facilities, equipments, number of students to be admitted and general aspects of training programme are as according to the MCI and KUHS regulations.

D.M./M Ch courses to be started only in departments with all infrastructural and full time faculties, infrastructure and equipments as per the MCI/KUHS norms.

3.8. Faculty

In a department, training candidates for Super Speciality, there shall be a minimum of three regular faculty members (full time teachers) with requisite super speciality qualification and experience as per MCI/KUHS norms, minimum of one Professor, One Associate Professor / Reader and one Assistant Professor / Lecturer. Provided that the second or subsequent unit may be headed by an Associate Professor along with two Assistant Professors /Lecturers.

Of these, only those faculty members who possess eight years teaching experience of which at least five years teaching experience as Assistant Professor/Lecturer or above gained after obtaining the concerned super speciality degree shall be recognised as super speciality teachers .

Further, no teacher shall be considered as a super speciality teacher in any other institution during the period till the super speciality course at the institute which has been granted permission considering him as a super speciality teacher is recognized u/s 11(2) of the Indian Medical Council Act, 1956.

No other super speciality courses under any other streams like National Board of Examinations, College of Physicians & Surgeons etc. are permitted against the very same units, teaching personnel and infrastructure.

3.9. Student Teacher Ratio

The ratio of super speciality teacher to the number of students to be admitted for D.M/M Ch. course shall be 1:2 for Professor/Assoc. Professor and 1:1 for remaining cadre. A maximum of 4 students can be admitted for each super speciality course per academic year .

3.10. Out station training

Outstation training may be given if required. It should not exceed 2 months, the duration, center etc: - will be at the discretion of the Head of the department.

3.11. Log Book

A log book has to be maintained by all students and this has to be reviewed by a HOD of the department periodically. Minimum number of each of the academic activities to be performed by the candidate should be outlined for each speciality. Model check list for journal review/seminars/topic presentation/ teaching skill etc: - is shown in the appendix. Periodic formative assessment has also to be done in the department by the super speciality teachers. Log book with the periodic formative assessment may be shown to the external examiners at the time of practical examination. *(Check Lists appended)*

3.12. Teaching

All D.M/M Ch students should take part in the teaching of the post graduate degree students of related subjects, undergraduate medical students and paramedical students and allied health science students posted in the department by rotation.

3.13. Research

Dissertation is an absolute requirement for D.M./M Ch course and the candidate has to register the dissertation synopsis in the University through proper channel within 6 months of admission. Dissertation has to be submitted to the university for evaluation at least 6 months prior to the conduct of final examination. Modifications and resubmission should be done before writing the examination. Even if the guide is transferred/ retired, the dissertation has to be continued under his/her guidance or entrust to another guide in case the original person is not willing to continue. In extra ordinary situations change of guide and change of dissertation topic is permissible with prior permission from the University. Only after accepting the dissertation, the candidate will be eligible for writing the examination. In addition to this, the student has to present at least one paper/poster in a regional /national / international conference of the concerned speciality during his three year course or at least one publication in a peer reviewed journal. Research paper should be approved by the Institutional Review Board/ Institutional Ethical Committee.

This will be applicable from the 2013-14 admission onwards.

3.14. Evaluation of Dissertation

The dissertation shall be evaluated by a minimum of three experts; one internal and two external experts, who shall not be the examiners for the Theory and Clinical examination of the concerned candidates and it may be accepted/ accepted with modifications/rejected. Only on the acceptance of the dissertation by two experts out of three, the candidate shall be permitted to appear for the University examination. If the dissertation is not accepted on evaluation by at least two experts, it shall be resubmitted with suggested modifications along with prescribed fees within the prescribed time stipulated by the University from time to time and it shall be re-evaluated by the same experts. If dissertation is rejected by two experts, the candidate will lose first chance for appearing in the University examination and has to redo a fresh dissertation for further evaluation.

3.15. Examinations

The examinations shall be organised on the basis of marking system to evaluate and certify candidate's level of knowledge, skill and competence at the end of the training. A candidate should appear for all the theory examinations and obtaining a minimum aggregate of 50% marks in theory part and practical part (Practical & Viva) separately shall be mandatory for passing the whole examination

ELIGIBILITY FOR APPEARING IN FINAL EXAMINATION

- i. A minimum of 80% attendance during the entire course of three years
- ii. Should have passed the Part I examination. ***(This is applicable from 2013-14 admission onwards).***

iii. Submission of completed logbook- both institutional and outside posting logbook

iv. Submission of approved Dissertation. ***(This is applicable from 2013-14 admission onwards.)***

v. At least two International/ National/ Zonal conferences or workshops concerned with the area of specialization should be attended and at least one presentation should be made in one of them. ***(This is applicable from 2013-14 admission onwards.)***

vi. At least one publication in a peer reviewed journal or at least two research papers or original works should be submitted for publication in peer reviewed journals. ***(This is applicable from 2013-14 admission onwards.)***

vii. The prescribed form (annexure 3) for each candidate should be filled up by concerned department and sent to KUHS for issuing hall ticket for the candidate to appear for the examination. If the candidate fails to meet the criteria, he will not be permitted to appear for the examination.

There will be a separate theory examination on basic sciences at the end of eighteen months. One theory paper with one Essay of 20 marks and 8 short essays of 10 marks each with duration of 3 hrs focusing on the concerned speciality. ***(This is applicable from 2013-14 admission onwards.)*** For candidates admitted before 2013-14 admission the examination in basic sciences will be conducted along with the other three papers in the speciality concerned at the end of the course.

Generally there shall be two university examinations in a year, one regular and one supplementary examinations with a usual gap of six months.

There shall be a theory, a practical examination including viva voce at the end of the three year course. Theory examination shall consist of three papers (3 hours duration) including one on recent advances. The questions shall consists of one essay question of 20 marks and 8 short essays of 10 marks each. There shall be a multiple evaluation of theory papers by two internal examiners and two external examiners and the average mark for each paper is taken as the final marks.

Practical/Clinical examination shall consist of:

- i. 1 long case – 30 marks
- ii. 2 short cases – 15 marks each = 30 marks
- iii. Ward rounds – 20 marks
- iv. Viva voce – 20 marks

Total Marks Practicals & Viva Voce - 100

Long case discussion may take a maximum of 1 hr, short cases (total cases 2) - maximum 1 hr, ward rounds – maximum 30 minutes and Viva voce maximum of 1 hr. Maximum number of candidates that can be examined per day may be restricted to 3.

Theory examination shall consist of:

Basic Sciences concerned to the particular speciality	:	100
Speciality papers including recent advances	:	3 x 100 = 300
Total marks	:	400

The result of the whole examination is passed / failed. Best outgoing student is decided by the marks in the practical examination and the aggregate of theory examinations and presentation/publications in indexed journals. A candidate should complete the course and pass the examination within a period of 6 years after registration as a postgraduate student in the concerned specialty, failing which his/her registration shall be cancelled.

Examiners

1. All Examiners shall be a recognised super speciality teacher as per MCI norms. There shall be two internal examiners (from affiliated colleges of KUHS) and two external examiners (exclusively from outside the state). In departments where there are more than 2 professors, the head of the department preferably be a constant member of the board of examiners, and the other professors shall be posted as internal examiners on rotation basis.
2. Under exceptional circumstances, examinations may be held with 3 (three) examiners provided two of them are external examiners.
3. In the event of there being more than one centre in one city, the external examiners at all the centres in that city shall be the same. Where there is more than one centre of examination, the University shall appoint a Co-ordinator/Convenor to coordinate the examination on its behalf.

3.16. Criteria for pass

A candidate should obtain minimum 50% marks in theory part and 50% marks in Clinical including Viva Voce separately. If a candidate fails in either theory or practical examination including Viva, he or she should reappear for the entire examination of that specific subject i.e. theory and Clinical including Viva voce.

3.17. Award of Degree

A candidate who has passed in all subjects of D.M/MCh will be eligible for award of degree during the ensuing convocation.

3.18. Model of Log Book

ANNEXURE - 1

CHECK LIST 1 - EVALUATION OF CLINICAL WORK

Name of the Trainee:

Date:

Name of the Faculty:

Sl. No.	Items for observation during evaluation	<i>Poor</i> 0	<i>Below Average</i> 1	<i>Average</i> 2	<i>Good</i> 3	<i>Very Good</i> 4
1.	<i>Regularity of attendance</i>					
2.	<i>Punctuality</i>					
3.	<i>Interaction with colleagues and supportive staff</i>					
4.	<i>Maintenance of case records</i>					
5.	<i>Presentation of cases</i>					
6.	<i>Investigations work -up</i>					
7.	<i>Bed - side manners</i>					
8.	<i>Rapport with patients</i>					

9.	<i>Counseling patients relatives for interventional procedures</i>					
10.	<i>Overall quality of clinical work</i>					
	<i>Total score</i>					

ANNEXURE - 1

CHECK LIST 2 EVALUATION OF CLINICAL CASE PRESENTATION

Name of the Trainee:

Date:

Name of the faculty:

SI. No	Items for observation during presentation	<i>Poor</i>	<i>Below Average</i>	<i>Average</i>	<i>Good</i>	<i>Very Good</i>
		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
1.	Completeness of history					
2.	Whether all relevant points elicited					
3.	Clarity of presentation					
4.	Logical order					
5.	Mentioned all positive and negative points of importance					
6.	Accuracy of general physical examination					
7.	Whether all physical signs elicited correctly					

8.	Diagnosis: whether it follows logically					
9.	Investigations required In Relevant order					
10	Interpretation of Investigations					
11	Ability to discuss differential diagnosis.					
12	Discussion on management					
	Grand Total					

ANNEXURE 1

CHECKLIST 3

EVALUATION OF SEMINAR PRESENTATION

Name of the Trainee:

Date:

Name of the Faculty:

Sl no	Items for observation during presentation	<i>Poor</i>	<i>Below Average</i>	<i>Average</i>	<i>Good</i>	<i>Very Good</i>
		0	1	2	3	4
1	<i>Whether other relevant publications consulted</i>					
2	<i>Whether cross - references have been consulted</i>					
3	<i>Completeness of Preparation</i>					
4	<i>Clarity of Presentation</i>					

5	<i>Understanding of subject</i>					
6	<i>Ability to answer the questions</i>					
7	<i>Time scheduling</i>					
8	<i>Appropriate use of Audio - Visual aids</i>					
9	<i>Overall performance</i>					
10	<i>Any other observation</i>					
	<i>Total score</i>					

ANNEXURE - 1

CHECK LIST 4

EVALUATION OF JOURNAL REVIEW PRESENTATIONS

Name of the Trainee:

Date:

Name of the Faculty:

SI. No	Items for observation during presentation	<i>Poor</i>	<i>Below Average</i>	<i>Average</i>	<i>Good</i>	<i>Very Good</i>
		<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
1.	<i>Article chosen</i>					
2.	<i>Extent of understanding of scope & objectives of the paper by the candidate</i>					
3.	<i>Whether cross-references have been consulted</i>					
4.	<i>Whether other relevant publications consulted</i>					

5.	<i>Ability to respond to questions on the paper/ subject</i>					
6.	<i>Audio - Visual aids used</i>					
7.	<i>Ability to discuss the paper</i>					
8.	<i>Clarity of presentation</i>					
9.	<i>Any other observation</i>					
	<i>Total Score</i>					

ANNEXURE - 1

CHECKLIST 15

EVALUATION OF TEACHING SKILL

Name of the Trainee:

Date:

Name of the faculty:

Sl. No	Items for observation	Strong Points	Weak Points
1.	<i>Communication of the purpose of the talk</i>		
2.	<i>Evokes audience interest in the subject</i>		
3.	<i>The introduction</i>		
4.	<i>The sequence of ideas</i>		
5.	<i>The use of practical examples and / or illustrations</i>		
6.	<i>Speaking style (enjoyable, monotonous, etc. Specify)</i>		

7.	<i>Attempts audience participation</i>		
8.	<i>Summary of the main points at the end</i>		
9.	<i>Ask questions</i>		
10.	<i>Answer questions asked by the audience</i>		
11.	<i>Rapport of speaker with his audience</i>		
12.	<i>Effectiveness of the talk</i>		
13.	<i>Uses AV aids appropriately</i>		

ANNEXURE - 1

CHECKLIST 6

EVALUATION OF DISSERTATION PRESENTATION

Name of the Trainee:

Date:

Name of the faculty / Observer:

Sl.No	Points to be considered	Poor <i>0</i>	<i>Below Average</i> <i>1</i>	<i>Average</i> <i>2</i>	<i>Good</i> <i>3</i>	<i>Very Good</i> <i>4</i>
1.	<i>Interest shown in selecting topic</i>					
2.	<i>Appropriate review</i>					
3.	<i>Discussion with guide and other faculty</i>					

4.	<i>Quality of protocol</i>					
5.	<i>Preparation of Proforma</i>					
<i>Total Score</i>						

ANNEXURE - 1

CHECKLIST 7

CONTINUOUS EVALUATION OF DISSERTATION WORK

Name of the Trainee:

Date

Name of the Faculty:

SI. No.	Items for observation during presentation	Poor	<i>Below Average</i>	<i>Average</i>	<i>Good</i>	<i>Very Good</i>
		0	1	2	3	4
1.	<i>Periodic consultation with guide / co- guide</i>					
2.	<i>Regular collection of case material</i>					
3.	<i>Depth of Analysis / Discussion</i>					

4.	<i>Department presentation of findings</i>					
5.	<i>Quality of final output</i>					
6.	<i>Others</i>					
	<i>Total score</i>					

ANNEXURE - 1

CHECKLIST 8

OVERALL ASSESSMENT SHEET

Name of the College:

Date:

<i>Check list no</i>	<i>Particulars</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
<i>1</i>	<i>Clinical work</i>					
<i>2</i>	<i>Clinical presentation</i>					
<i>3</i>	<i>Seminars</i>					
<i>4</i>	<i>Journal review</i>					
<i>5</i>	<i>Teaching skill</i>					
<i>6</i>	<i>Dissertation work</i>					

	<i>TOTAL</i>					
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0-
good

Poor 1- Below average 2- Average 3- Good 4- Very

Signature of HOD

Signature of Principal

ANNEXURE - 1 1

TABLE 1

ACADEMIC ACTIVITIES ATTENDED

Name:

Admission Year:

College:

Date	Type of activity - Specify Seminar, Journal club, Presentation, UG teaching	Particulars

Key:**O - OBSERVED****A - ASSISTED A MORE SENIOR SURGEON****PA - PERFORMED PROCEDURE UNDER SUPERVISION****PI - PERFORMED INDEPENDENTLY****APPENDIX 111 - FINAL EXAMINATION ELIGIBILITY FORM****(To be filled up the candidate)**

Name of the candidate :
Date of Joining :
Identification number or
registration number
of university :
Course :
Institution :
Eligibility criteria :

Sl No	Parameter	Details	Proof enclosure
1.	Attendance	-/ total number of days (%)	
2.	Part I examination	Passed / yet to pass	
3.	Dissertation	Submitted/ not submitted	
4.	Log book	A] Internal: Submitted/ yet to submit	

		B] External: submitted/ yet to submit	
5.	Conferences	Number attended: Number of presentations:	
6.	Publications	Number published: Number submitted:	

All the informations provided above are true to the best of my knowledge and if found contrary, I am clearly aware that strict disciplinary actions will be initiated including debarring from examination.

Date _____ Signature of the candidate :
Place _____ Name of the candidate :

Countersigned by:
Faculty as guide:
Name:
Designation:

APPROVAL OF HEAD OF THE DEPARTMENT

I , Dr....., herewith approve that the above candidate is eligible to appear for the final examination as per the documentary evidences provided and best of the knowledge and documents of the department.

Date _____ Signature :
Place _____ Name :
Designation :

