



MGM INSTITUTE OF HEALTH SCIENCES
(Deemed University u/s 3 of UGC Act, 1956)

Curriculum Of MD Forensic Medicine

Approved in Bom 35/2014, Resolution No. - 3.2(a), dated 26.06.2014

Signature - 2

MGM UNIVERSITY OF HEALTH SCIENCES, NAVI MUMBAI

CURRICULUM & EXAMINATION PATTERN FOR THE POSTGRADUATE DEGREE (MD) COURSE IN FORENSIC MEDICINE.

CURRICULUM & EXAMINATION PATTERN FOR THE POSTGRADUATE DEGREE (MD) COURSE IN FORENSIC MEDICINE.

I. GOAL:-

The broad goal of the teaching of postgraduate students in Forensic Medicine is to produce a competent Specialist who is able to provide basic and Specialized Services in relation with Medico Legal responsibilities in the practice of Medicine and process of crime investigation. He/She must also be capable of setting inquiries on right track in criminal matters and connected medico legal problems. It is also expected that they will serve as future Teacher, Trainer, Researcher and leader in the field. They must acquire knowledge of law in relation to practice of medicine, medical negligence and investigation of crime against Human beings. Respect for the codes of medical ethics consistent with national health policy and Law of the land as a citizen of India is offcourse mandatory for them.

II. EDUCATIONAL OBJECTIVES:-

A:-KNOWLEDGE At the end of the course, the candidate shall be able to

- 1:-Conduct a competent Medico legal Autopsy, collect appropriate evidence pertaining to Cause-Mode-Manner of death and identification of deceased and assailant. They must also be able to understand and interpret other important medico-legal aspects of death due to natural and unnatural conditions and poisonings.

2:- They must be able to visit scene of crime and shall detect, describe, interpret the observations and conclude the procedure in a technically competent manner.

3:- Have fundamental knowledge of all branches of medical disciplines related to their medico-legal applications. They must also be able to refer and understand relevant

application of few other branches of science like botany, zoology, chemistry, physics. It is also

expected that they must be reasonably aware of using computer.

4:- Be aware of laws in relation to medico-legal work, medical practice and be acquainted with related relevant amendments and also related judgments passed by constitutional courts.

5:- Understand the important procedures and applicability of the general principles of analytical toxicology, ballistics, immunology, occupational and environmental hazards.

6:- Serve as a future teacher, trainer, researcher and leader in the field of medicolegal

faculty. They must also be able to offer technically competent consultancy services to the

health, home and law depts in connection with medico-legal work, crime investigation process and courts.

B:-SKILLS

At the end of course the candidate shall be able to

1. Provide the basic and specialized medico-legal services in relation to practice of medicine and process of crime investigation as a competent specialist.

2. Must be able to conduct, interpret and report medico-legal autopsies in common, complicated and referred cases like those of NHRC, CID or second autopsy and exhumation.

3. Identify, diagnose and manage common acute and chronic poisonings.

4. Be able to examine, interpret, report and if required give expert opinion in various clinical medico-legal matters like age estimation, alcoholics, sexual offences, injuries,

abortion, sex determination, paternity, disability evaluation etc.

5. Teach the undergraduate medical students the subject of forensic medicine and also to actively participate in the training and re-orientation programmes of interns, pg students,

medical officers, police officers and legal professionals.

C:- INTEGRATION

The department shall provide integrated approach towards allied medical

disciplines like pre, para and clinical subjects and other faculties like hospital administration and forensic science. It is also desired that they must be trained in the medico-legal responsibilities at all levels of health care, crime investigation and administration of justice. The candidates must be even adequate exposures to important setups like critical care, casualty and clinical toxicology.

III. PERIOD OF TRAINING

- a- M.D. It will be three academic years that is JR-I, JR-II, JR-III. And each year shall commence from 2nd May and complete on 30th April.
- b- The training period of MD course for MCI recognised diploma holders will be 2 yrs.
- c- No extra exemption / concession in the above mentioned period of training shall be granted.
- d- A candidate has to score not less than 50% marks in each head of passing namely theory, practical and internal assessment.
- e- Dissertation will be compulsorily a part of MD course in addition to theory and practical.
- f- on a moderate level research project and the said work will have to be published in an indexed journal.
- g- The general rules and regulations pertaining to PG teacher-ship, examiner-ship, examination pattern and training methodology with period shall be in accordance with guidelines prescribed by Medical Council of India.

IV. TEACHING AND LEARNING OPPORTUNITIES:-

a- EDUCATION TRAINING

Teaching skills will be observed and evaluated from the assignments given in the form of lectures, tutorials, practicals and demonstrations. The participatory and small group learning skills will be encouraged. The candidates are also expected to be aware of basics of medical

education teaching technology principals and use of audio-visual aids in the same.

b- SELF DIRECTED LEARNING

Learning needs assessment, literature searches, evaluating evidences and adequate use of computers.

To index and efficiently manage the data using internationally accepted methods.
To be aware of the computer applications within the laboratory and library i.e. in the

form of data base, spread sheets, internet etc.

c- COMMUNICATION

The candidates will be regularly involved in the teaching of undergraduates and training / re-orientation programmes / communication with nursing students, interns, pg students, medical officers, police officers and legal professionals.

d- RESEARCH METHODS:- For MD postgraduate courses only

The candidate should be able to identify, plan, perform and report on specifically assigned research projects. The critical assessment of original and / or published research work are important to allow them to contribute as a technical expert and also as a member of team to the important services rendered by the faculty.

V.METHOD OF TRAINING :-

1. The training programme must mainly aim at practical service element exposure & not merely on didactic lectures. Candidates must actively participate in PM Examination , Clinical Medico legal cases , Laboratory work , Clinico-pathological Conferences , Seminars , Journal Clubs , Group Discussions , Visit to Scene of crime , Court Evidence & Research work. The facilities offered by other Clinical & Basic Science Departments be made available to them.
2. All the Post Graduate students shall work as Full time residents during their tenure. They shall be given full time assignments with responsibility and opportunity of participation in all facets of the Educational & Application process.
3. The training programme must be arranged in such a manner that the candidate gets maximum exposure to variety of required cases & assignments mentioned at Sr. No. 1 above. The purpose is to ensure that candidate acquires the Sufficient knowledge , approach & Skills so that he/she can independently work as a Specialist after the end of their PG tenure.
4. The postgraduate Student must perform round o clock duties in relation to Autopsies ,

Clinical Medico legal work , Cases in wards & Academic work as per the assignments

given by the Head of the Department

5. The postgraduate Student shall be required to actively participate in the Teaching /

Training programmes of undergraduates, nursing students, interns, pg students, medical officers, police officers and legal professionals.

6. During the period of training , The postgraduate Student should be in regular contact

with his PG Guide & Head of the Department & should continue research work during

the performance of the assigned Departmental Duties.

7. Training in medical audit, management, Health economics, Health information system, biostatistics , Human behavioural studies , Pharmaco economics & Non linear

mathematics shall be imparted.

8. A The postgraduate Student should maintain a Log Book of the work assigned to him.

This log book will be assessed by the postgraduate Guide of the Student will be jointly evaluated by the Guide & Head of the Department. The log book must be kept

in the Dept.

9. The postgraduate Student should preferably posted for two six months terms in case

of a Degree in the unit of concerned Guide

to enable him / her complete the Dissertation work.

10. 50 % marks in internal assessment & 85 % attendance is mandatory for grant of the

term/s & also for appearing for the University Examination.

11. It is desired that the postgraduate Students participate in the research work & attend

Conferences / or Seminars & / or Work shops for the professional excellence.

12. It is necessary that The postgraduate Students are well versed with relevant basic &

appropriate applied aspects of allied Pre, Para - Clinical Disciplines & also with the

set up of Forensic Science Laboratory. The rotatory postings of The postgraduate Students will be arranged to make them a Comprehensively Competent Medico legal

Expert in anticipation of their quality contribution to the cause of Productive Crime

Investigation & Good Health care of the Community. The field application of the Faculty of Forensic Medicine is very vast & by the same time Medico legal cases take

a complicated / Sensitive turn at number of occasions . Parent Department , Home Department , Judiciary & Society expect a certain positive approach from Medico legal experts , which always is not possible. The rotatory training programme must be

intelligently arranged to make them Competent Experts with required wisdom.

**TABLE SHOWING TENURE WISE DURATION & ASSIGNMENTS OF
ROTATIONAL
POSTINGS OF DEGREE (MD) STUDENTS.**

DEPARTMENT PERIOD OF POSTING

ASSIGNMENT / CONTENTS OF THE POSTING

Anatomy 2 Weeks Dissection techniques, Gross & Histological appearances of Vital Organs & Endocrines.

Forensic Osteology, Anthropometry, Embalming & Relevant Embryology.

Physiology &

Biochemistry(CCL)

1 Week Functional aspects of Vital Organs & endocrines,

Physiology & Biochemistry of Blood, Semen,

Saliva, Sweat, CSV , P.M.Biochemistry of B.Fluids

Pathology &

Microbiology

3 Weeks Injury,Inflammation,Repair,Thrombo Embolism,

Shock,Gross & Microscopic Appearances of Vital

Organs & Endocrines,Imp.Staining Techniques,

Museum Procedures,Infection,Immunology,

HIV,Anaphylaxis,Insulin, Penicilins,Observation-

Collection-Preservation & Forwarding Of

Pathological & Microbial Evidence

Medicine+Paediatrics

+Psychiatry+Pharmac

+Medical Record

Section

3 Weeks Awareness Of Diagnosis,ML Aspects &

Management of Critical Care,Poisoning &

Psychiatry cases,Visit to MICU Set Up,imp.

**Pediatric Procedures +NICU Set Up,
Pharmacology & Detection Of Drugs of
Dependance,
Casualty 3+4 Weeks First Aid , Examination, Diagnosis & Medical +
Medico Legal Management of Clinical Medicolegal
cases, Dyeing Declaration,Gastric Lavage, Parental
Injections,Emergency Tray, Casualty
Adminstration in Mass Disasters.**

**Surgery +
Orthopedics
+Dentistry +
Radiology +
Anesthesiology.**

**3 Weeks Awareness regarding Examination, Diagnosis &
Medical + Medico Legal Management of cases Of
Imp. Regional Injuries (Poly trauma &
Burns),Injury certification & Disability
Evaluation,X-ray findings in Bony Trauma Age
determination cases Visit to Surgical ICU &
Operation Theatre, Awareness of imp Anesthetic
Procedures,Important OT Instruments &
Equipments,**

**Obstetrics &
Gynaecology**

**1Week Abortion , Sterilization Techniques, Introduction to
Major ObGy Procedures,Prenatal Diagnostic
Techniques,**

Forensic Science

Laboratory

**2Weeks Introduction to various sections of the FSL Setup &
Instrumentation,Introduction to & relevant
awareness of imp Qualitative & Quantitative
Detection & Analytical Techniques. Introduction to
& relevant awareness of Identification, Biology,
Chemistry, Toxicology & Ballistics Divisions.**

Note:-The Casualty Posting should be split in to two periods. The initial 3 Weeks posting during First Year is introductory type. The Second Casualty posting is during Second year. This posting

is major one & it is expected that students must be exposed to maximum quantity & Variety of cases. Their ability to manage the casualty in major casualties can be observed during this period.

**TABLE SHOWING DETAILS OF THEORY PAPER CURRICULUM,
TITLES & MARKS
DISTRIBUTION**

***BOOKS RECOMMENDED ***

1. Modi's text book of medical Jurisprudence & Toxicology.
2. The essentials of forensic medicine & toxicology by K.S.N.Reddy.
3. The textbook of Forensic Medicine , J.B.Mukharjee , Vol. 1 & 2.
4. Bernard Knight et.all : Cox's Medical Jurisprudence & Toxicology.
5. Russel S.Fisher & Charles S. Petty :Forensic Pathology.
6. Keith Simpson's Forensic Medicine.
7. Principles of .A.Nandy.
8. Jurgen Ludwig , Current methods of autopsy practice.
9. Camps F.E.Gradwohls- Legal Medicine , Bristol Wright.
10. Simpson's : A Doctors guide to Court.
11. Polson C.J. : The essentials of Forensic Medicine.
12. Adelson L. : The pathology of Homicide.
13. Atlas of Legal Medicine : Tomio Watanabe.
14. Spitz W.U. , & Fisher R.S. , Medici Legal Investigation of Death.
15. A.Keith Mant , Taylor's principles & practice of Medical Jurisprudence.Churchil Lvng.
16. Justice Hidayatullah & V.R.Manohar , Ratanlal & Dhirajlal : The Indian Penal Code.
17. Justice Hidayatullah & S.P.Sathe : Ratanlal & Dhirajlal ; The Code of Crm.Procdr.
18. Justice Hidayatullah & V.R.Manohar , Ratanlal & Dhirajlal : The Law of Evidence.
19. H.S.Mehata : Medical Law & Ethics in India.
20. Bernard Knight ; Forensic Pathology.
21. Code of Medical Ethics , Medical Council of India , approved by Central Govt. U/S 33(m)of IMC Act 1956 (Oct. 1970).
22. Krogman W.M. : The Human Skeleton in Legal Medicine.
23. F.E.Camps, J.M.Cameren , David Lanham : Practical Forensic Medicine.
24. V.V.Pillay , Modern Medical Toxicology.
25. Krishan Vij :A Textbook of Forensic Medicine & Toxicology , Principles &

Practice.

26. Textbook of Forensic Medicine & Toxicology V.V.Pillay.
27. Dr.B.V.Subrahmanyam , Textbook of Forensic Medicine & Toxicology.
28. Vincent J.M. Di Maio & Suzzanna E. Dana : Handbook of Forensic Pathology.
29. The Medical Profession & Law , Dr.R.D.Lele.(IMA , Mumbai Publication).
30. R.N.Karmarkar , Forensic Medicine & Toxicology , Oral , Practical & Mcq.
31. Guharaj : Forensic Medicine.
32. Gordon & Shapiro : Forensic Medicine.
33. J.K.Mason : Pediatric Forensic Medicine & Pathology, Chopraman & Hall Medical.
34. J.K.Mason : Forensic Medicine & Pathology, Chopraman & Hall Medical.
35. Keith Simpson's Modern Trends in Forensic Medicine. Vol. 1 & 2.
36. C.G.Tedeshi : Forensic Medicine. Physical Trauma.Vol.1,2,3.
37. Francis C.J.Mehata : Gradwohl's Legal Medicine.
38. Allen Moritz : Pathology Of Trauma.
39. Gresham & Turner : Post Mortem Procedures , Wolf Medical Publications.
40. Francis C.M. : Medical Ethics , J.P.Publications , Bangalore.

RECOMMENDED JOURNALS.

1. Journal Of Forensic Sciences.
2. Journal Of Legal Medicine (Of American College Medicine.).
3. Journal Of Forensic Science Society.
4. Medico-legal Journal.
5. American Journal Of Law & Medicine.
6. American Journal of Forensic Medicine.
7. Forensic Science International.
8. Journal Of Clinical Forensic Medicine.
9. Medicine Science & Law.
10. Science & Justice.
11. Journal Of Indian Academy Of Forensic Medicine.
12. Journal Of Forensic Medicine & Toxicology , (Medico-legal Society.)
13. Medico-legal Update , An International Journal.
14. Journal Of Clinical Forensic Medicine.
15. Journal Of Medico-legal Association Of Maharashtra.
16. Journal Of Karnataka Medico-legal Society.

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10. Prof. Dr.A.N.Keoliya, prof & head,FM IGMC Nagpur
11. Prof. Dr.P.G.Dixit, prof & head,FM,GMC, Nagpur.
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MD forensic medicine

Approved in Bom 35/2014, dated 25.04.2014 Resolution No 3.2.(b)

Resolution No. 3.2(c) : Resolved to request the chairperson of BOS Paraclinical and HOD's of FMT (Navi Mumbai and Aurangabad) to prepare a note regarding the role of doctors (Medical Officers) in the correct implementation of the following Acts ;

- i) The Criminal Law (Amendment) Act, 2013 No. 13 of 2013.
- ii) The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013, No. 14 of 2013

and what is expected from doctors in the concerned areas. In addition, they should train the UG students to tackle all medico-legal cases effectively.

Resolution No. 3.2(d) : Resolved to continue Animal experimentation with the permission of CPCSEA (Ethics Committee) for PG only.

MGM INSTITUTE OF HEALTH SCIENCES, NAVI MUMBAI

MARKLIST FOR PRACTICAL AND VIVA-VOCE EXAMINATION

EXAM CENTRE: _____ COURSE / EXAM: PG –

DATE OF EXAMINATION: _____ EXAMINATION FOR: MD FORENSIC MEDICINE

Seat No	Autopsy	5 Medico Legal Major Exercise					Total	5 Medico Legal Lab					Total	Spots					Total	Table Viva	Dissertation Viva	VIVA	Final total 400 Marks
	75	30	30	30	30	30	150	10	10	10	10	10	50	5	5	5	5	5	25	90	10	100	

NAME OF EXAMINER	COLLEGE	SIGNATURE WITH DATE
1.		
2.		
3.		
4.		

Resolution passed in BOM – 48/2017, dated 24/01/2017

Resolution No. 5.25: Resolved to institute 6 monthly progress Report for PG Students of all Courses from the batches admitted in 2016-17. **[Annexure-XVII of BOM-48/2017]**

**Mahatma Gandhi Mission's Medical College and Hospital
Navi Mumbai**

Six monthly Progress Report for Postgraduate Students

PART A

Name of the PG student: _____

Department: _____

Admitted in (Month and Year): _____

Name of the PG guide: _____

Report for the period: _____ to _____

Attendance: _____ days (_____ %)

PART B

Grading as per performance

Grade	Percentage
A	80% and above
B	65% to 79%
C	50% to 64%
D	Below 50%

1. OPD work:
2. Ward work:
3. Lab work:
4. OT work:
5. ICU work:
6. Teaching assignments:

PART C

Progress of Thesis

PART D

Activities from serial No. 1 to 5 should be rated on a scale of 0 to 10.

1. Case Presentations

Sr. No.	Topic	Date	Guide	Marks

2. Microteaching

Sr. No.	Topic	Date	Guide	Marks

3. Recent Advances

Sr. No.	Topic	Date	Guide	Marks

PART E

1. Papers presented

Sr. No.	Title of Paper	Authors	Event	Date

2. Posters presented

Sr. No.	Title of Poster	Authors	Event	Date

3. Publications

(Note: Mention only those publications that are published or are accepted for publication during the said period only)

Sr. No.	Title of Paper	Authors	Journal	Year/Vol/ Issue	Page Nos	Indexed/ Non-Indexed	Status

4. Seminars

Sr. No.	Topic	Date	Guide	Marks

5. Journal Clubs

Sr. No.	Journal	Title of Paper	Date	Guide	Marks

6. Marks obtained in tests

Sr. No.	Date	Theory / Practical	Marks obtained

7. Any other academic activity conducted:

PART E

1. Papers presented

Sr. No.	Title of Paper	Authors	Event	Date

2. Posters presented

Sr. No.	Title of Poster	Authors	Event	Date

3. Publications

(Note: Mention only those publications that are published or are accepted for publication during the said period only)

Sr. No.	Title of Paper	Authors	Journal	Year/Vol/ Issue	Page Nos	Indexed/ Non-Indexed	Status

PART E

1. Papers presented

Sr. No.	Title of Paper	Authors	Event	Date

2. Posters presented

Sr. No.	Title of Poster	Authors	Event	Date

3. Publications

(Note: Mention only those publications that are published or are accepted for publication during the said period only)

Sr. No.	Title of Paper	Authors	Journal	Year/Vol/ Issue	Page Nos	Indexed/ Non-Indexed	Status

Certificate by the PG Guide

This is to certify that Dr. _____ has an attendance of _____% , during the period _____ to _____. His /Her performance during the said period has been **satisfactory/ average / unsatisfactory**.

Overall Grading: _____

Date: _____

Name and Signature of PG guide:

Certificate by the Head of Department

This is to certify that the performance of Dr. _____, during the period _____ to _____, has been **satisfactory/ average / unsatisfactory**.

Overall Grading: _____

Date: _____

Name and Signature of HOD:

Final Remarks

Satisfactory / Average / Unsatisfactory

Director (Academics)

Dean

Date:

Resolution No. 1.3.7.11 (i) of BOM-51/2017: Resolved that the following Bioethics topics in PG Curriculum are to be included for PG students of all specialization and a sensitization of these topics can be done during PG Induction programme:

- Concept of Autonomy
- Informed Consent
- Confidentiality
- Communication Skills
- Patient rights
- Withholding / Withdrawing life-saving treatment
- Palliative Care
- Issues related to Organ Transplantation
- Surgical Research and Surgical Innovation
- Hospital Ethics Committee
- Doctor-Patient relationship

2011 PG.

30 copies

Resolution No. 1.3.23 of POM-51/2017: Resolved to implement a Structured Induction programme (07 days) for PG students. [Annexure-XI, IV]

MGM INSTITUTE OF MEDICAL SCIENCES
Navi Mumbai

Induction Program for newly admitted Postgraduate students

Day 1	• Address by Dean, Medical Suptd, Director (Academics) • Pre-test • Communication Skills • Universal Safety Precautions • Biomedical Waste Management • Infection Control Policy
Day 2	• Emergency services • Laboratory services ✓ • Blood Bank services • Medicolegal issues • Prescription writing • Adverse Drug Reaction • Handling surgical specimens
Day 3	• Principles of Ethics • Professionalism • Research Ethics • Informed Consent • Confidentiality • Doctor-Patient relationship
Day 4	• Research Methodology • Synopsis writing • Dissertation writing • Statistics
Day 5	
Day 6	
Day 7	• ATLS • Post-test

The Induction Program will be conducted in the first week of June.
Timing: 9.30 am to 3.30 pm

(Prof. Dr. Siddharth P. Dubhashi)
Director (Academics)

Resolution No. 4.5.4.2 of BOM-55/2018: Resolved to have 10 short notes out of 11 (10 marks each) in all the papers in university examination for PG courses including superspeciality. To be implemented from batch appearing in April/May 2019 examination onwards for MD/MS/Diploma and August/September 2019 examination onwards for superspeciality.