CHAPTER 4: RESTRUCTURED UNDERGRADUATE MEDICO LEGAL CURRICULUM (FORENSIC MEDICINE & TOXICOLOGY) - 2007

The Medico Legal Curriculum (Forensic Medicine & Toxicology) is being revised/restructured after a gap of 10 years. The following broad principles are adopted for defining the revised/restructured Medico Legal Curriculum.

PRINCIPLES:

• Reduce information overload—stop students from learning unnecessary detail
• Define contents which have relevance even in the future with a focus for the next decade.
• Improve on traditional teaching methods—replace traditional "didactic" teaching with problem-based learning.
• Give students control over their own learning—let students determine what they need to know (and what they wish to be examined in)
• Make undergraduate training a platform for lifelong learning—becoming a Medical Practitioner is only the first stage of continuing medical education of a lifelong career.
• Improve Medical Practitioners’ interpersonal communication skills—train students to be empathic and relate better to the patients and their relatives, and their problems.

Learning Objectives

At the end of the course in, Undergraduate Medico legal curriculum (Forensic Medicine& Toxicology), the learner shall be able to:

1. Identify, examine and prepare report or certificate in medico-legal cases/situations in accordance with the law of land with particular emphasis to
   a. maintenance of medico-legal register like accident register,
b. issuance of wound certificate,
c. issuance of drunkenness certificate,
d. issuance of death certificate
e. Issuance of sickness and fitness certificate
f. estimation of age by physical, dental and radiological examination and issuance of certificate
g. Examination of victims and accused and issuance of certificates in sex related offences.

2. Perform medico-legal post-mortem examination and reasonably interpret autopsy findings and results of other relevant investigations to logically conclude the cause, manner and time since death - especially in accidents, hanging, burns, drowning and poisoning.

3. Preserve and dispatch specimens and other concerned materials in medico-legal / post-mortem cases to the appropriate Government agencies for necessary examination and report.

4. Understand and observe medical ethics, etiquette, duties, rights, medical negligence, medico-social and legal responsibilities of the physicians towards patients, profession, State and society at large.

5. Be aware of relevant legal / court procedures applicable to the medico-legal/medical practice.

6. Deal with basic aspects of diagnosis and management of poisoning (acute & chronic), and develop competence to deal with medico social and medico legal issues arising there from.

7. Recognize and deal with the general principles of environmental, occupational, and preventive aspects of toxicology.

8. Manage medico legal and medico social issues related to Mass disaster including bioterrorism

In other words the focus is on:

• **Knowledge**
  – Identify Medico Legal cases
  – Define responsibilities of physician both medico legal and socio-medical
  – Appreciate physician’s responsibilities in criminal matters
  – Describe principles of analytical toxicology
  – Diagnose, manage & document acute/chronic poisonings

• **Skills**
  – Perform, make observations in post mortems/make logical inferences,
  – Prepare proper certificates related to death, Age, wound, fitness and sickness
  – Describe and testify as an expert witness in the Court of Law
• **Integration**

  - To provide integrated approach with other allied disciplines of medicine like pathology, radiology, hospital administration, emergency medicine, dentistry, microbiology, medicine, pharmacology and psychiatry
  - To impart training regarding medico legal responsibilities of physicians at all levels of health care

**Course Curriculum:**

**UNIT I (5th Term) - 20 hours**

Themes and Topics
  I. Legal procedures
  II. Medical law and ethics

**Unit II (6th Term) - 65 hours**

Themes and Topics
  I. Inquest
  II. Identification
  III. Death and its medico legal aspects
  IV. Post mortem changes
  V. Medico legal autopsy
  VI. Mechanical injuries and wounds
  VII. Regional injuries
  VIII. Transportation injuries
  IX. Injuries/Death from heat, cold, electricity, lightning, Explosives & Radioactive substances
  X. Medico legal management of mass disaster including bioterrorism
  XI. Mechanical asphyxia
  XII. Virginity, pregnancy and delivery
  XIII. Sexual offences
  XIV. Abortion
  XV. Infant and childhood deaths
  XVI. Laboratory investigation in medico legal practice:
  XVII. Emerging technologies in Forensic Medicine
  XVIII. Forensic Psychiatry

**Unit III (7th Term) - 35 hours**

Themes and Topics **TOXICOLOGY**
  I. General Toxicology
  II. Chemical Toxicology
  III. Pharmaceutical Toxicology
  IV. Bio Toxicology
  V. Socio-medical Toxicology
## UNIT I (Total 20 hours)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Time in hours</th>
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<tbody>
<tr>
<td>1. Legal Procedures</td>
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<tr>
<td>• Define Courts in India and their powers:</td>
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<tr>
<td>Supreme Court, High Court, Sessions court, Magistrate's Court, Labour Court, Family Court, Executive Magistrate Court, Labour Court, Juvenile Court</td>
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<tr>
<td>• Describe Court procedures</td>
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<td>Summons, conduct money, oath, affirmation, types of witnesses, recording of evidence, conduct of Medical Practitioner/Medical Officer in witness box</td>
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<td>• Outline Offences in Court:</td>
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<td>Perjury; Court strictures vis-a-vis Medical Officer</td>
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<tr>
<td>• Demonstrate Medical certification and medico-legal reports</td>
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<tr>
<td>• Explain importance of documentation in medical practice - maintenance of patient case records, discharge summary, prescribed registers to be maintained in health centres</td>
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<tr>
<td>- maintenance of medico-legal register like accident register,</td>
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<td>- issuance of wound certificate,</td>
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<tr>
<td>- issuance of drunkenness certificate,</td>
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<tr>
<td>- Issuance of sickness and fitness certificate</td>
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<tr>
<td>- Procedure for issuance of death certificate</td>
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<tr>
<td>- Medical Certification of Cause of Death - Form No.4 and 4A</td>
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<td>- estimation of age by physical, dental and radiological examination and issuance of certificate</td>
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<td>- Dying Declaration</td>
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<tr>
<td>2. Medical Law and Ethics</td>
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<tr>
<td>a. Medical Jurisprudence</td>
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<tr>
<td>• Definition of Forensic Medicine and Medical Jurisprudence.</td>
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<tr>
<td>• Explain Medical Negligence; civil and criminal negligence, contributory negligence, vicarious liability, res ipsa loquitur, prevention of medical negligence and defences in medical negligence litigations</td>
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</table>
- Explain Indian Medical Council (MCI) and State Medical Councils (SMC); Provisions in the Medical Council of India Act 1956; Registration of a medical practitioner - procedure; Functions and disciplinary control of MCI and SMC.

- Describe the Consumer Protection Act, 1986; Medical Indemnity Insurance; Civil litigations and Compensations

- Describe the legal and ethical aspects of
  - Euthanasia
  - HIV and Law
  - Stem Cell research and cloning

b. Social aspects and stress management in dealing medico-legal cases

- Outline the social aspects of Medico-legal cases with respect to victims of rape, attempt suicide, homicide, domestic violence, dowry related cases

- Outline the Challenges in Managing medico legal cases
  - Develop skills in Relationship management - Human behaviour, communication skills, conflict resolution techniques
  - Outline the principles of handling Pressure - definition, types, causes, sources and skills for managing the pressure while dealing medico-legal cases by the Medical Practitioner/Medical Officer

c. Bioethics

- Define Medical Ethics and enlist its Historical Emergence

- Explain Ethical Principles: Respect for autonomy, non-malfeasance, beneficence, justice

- Explain Oath - Hippocrates, Charaka and Sushruta; Modified declaration of Geneva and its relevance; Procedure for administration of Oath - Code of Medical Ethics 2002;

- Describe codes of conduct, Professional conduct, Etiquette and Ethics in medical practice

- Enumerate rights and privileges and explain duties of a registered medical practitioner, disciplinary proceedings and penal erasure. Ethics 2002;

- Describe codes of conduct, Professional conduct, Etiquette and Ethics in
medical practice

- Enumerate rights and privileges and explain duties of a registered medical practitioner, disciplinary proceedings and penal erasure.

- Explain Medical Practitioner/Medical Officer- patient relationship - Professional secrecy, privileged communication

- Rights of a Patient

- Explain the legal issues of informed consent:
  - Types of consent and ingredients of informed consent
  - Age in relation to consent
  - In relation to mental illness and alcohol intoxication
  - Emergency and consent.

- Ethical dilemmas in medical profession in relation to consent, treatment and death

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<tr>
<th>d. Clinical research &amp; Ethics</th>
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<tr>
<td>• Human experimentation including clinical trials</td>
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<td>• Ethical committees</td>
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<td>• Ethical Guidelines for Biomedical Research on Human Subjects &amp; Animals</td>
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<th>TOTAL hours</th>
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UNIT – II (Total 65 hours)

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<tr>
<th>Topic</th>
<th>Time in hours</th>
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<tr>
<td>II. Inquest</td>
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<td>• Inquest by Police</td>
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<td>• Inquest by Magistrate</td>
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<thead>
<tr>
<th>III. Identification</th>
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<tr>
<td>• Define ‘Identification’ and enlist the medico-legal aspects related to age</td>
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<tr>
<td>• Outline the principles involved in the methods of identification of a unknown living person, dead bodies and remains of a person by age, sex, stature, scars, moles, tattoos, dactylography, foot prints, hairs, poroscopy, DNA typing and personal belonging including photographs and Superimposition techniques, dental examination including Forensic</td>
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</table>
 IV. Death and its medico legal aspects

- Define death and its types somatic, cellular and brain-death.
- Enlist Natural and unnatural deaths;
- Explain issues related to Sudden natural deaths; anaesthetic & Operative deaths
- Outline the salient features of the Organ transplantation and The Human Organ Transplant Act 1994. Discuss the ethical issues
- Describe and exemplify the conditions of suspended animation.

V. Post mortem changes

- Describe Cooling of body, lividity, rigor mortis cadaveric spasm cold stiffening and heat stiffening
- Describe Putrefaction, mummification, adipocere and maceration,
- Estimate time of death.

VI. Medico legal autopsy

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- Define medico-legal and clinical/pathological autopsies
- Describe the objectives, procedures and formalities of medico-legal autopsies including National Human Rights Commission Protocol

VII. Mechanical injuries and wounds

| 4             |

- Define, classify and differentiate – Abrasion, contusion and laceration
- Differentiate simple from grievous injuries
- Describe stab wound, incised wound, defence cut, hesitation cuts, self inflicted injuries and fabricated wounds
- Differentiate between accidental, suicidal and homicidal injuries.
- Identification of the weapon by interpretation of the wound
- Explain the causes of death in mechanical injuries
- Determine the age of injury
- Classify firearms and interpret the findings of firearm wounds.
- Explain the medico legal aspects of wounds.
- Torture and Human Rights
- Define Torture
- Identify injuries caused by torture and its sequelae
- Management of torture survivors
- Outline the National Human Rights Commission guidelines and protocols

**VIII. Regional injuries**

- Injuries of Head, Neck, thorax, Abdomen, Pelvis, Genitalia, Vertebral column and Bones
  - Enumerate types of skull fracture
  - Explain coup and counter coup injuries, intra-cranial haemorrhage and injury to brain
  - Outline the injuries to: spine and spinal cord, thoracic, abdominal and pelvic viscera, bones and joints and their medico legal importance

**IX. Transportation injuries**

- Road, Rail & Aviation
  - State the importance of primary and secondary impact, crush syndrome, Outline the medico legal importance of investigation in road, railway accident and aircraft accident

**X. Explain injuries or death due to Heat, Cold, Electricity, Lightening, Explosives & Radioactive substances**

**XI. Explain the medico legal management of mass disasters including bioterrorism**

**XII. Mechanical asphyxia**

- Define, state causes, enumerate types and describe post-mortem appearances and medico-legal significance of hanging, strangulation, suffocation, traumatic asphyxia and drowning.

**XIII. Virginity, pregnancy and delivery**

- Describe Sexual and Reproductive Rights of Women in India
- Describe medico legal aspects of virginity, pregnancy and delivery
- Explain legitimacy and medico legal aspects of pregnancy and delivery including In Vitro fertilisation and Surrogacy
- Outline Law on Reproductive Medicine
  - Impotency
  - Infertility - Male and Female
  - Assisted pregnancies and legal problems, surrogate motherhood, hormone replacement therapy and postmenopausal pregnancies
- Explain Protection of women from Domestic Violence and Domestic Violence Act 2005
- Describe Pre Conception and Pre Natal Diagnostic Techniques (PCPNDT)
### XIV. Sexual offences

- Describe the medico legal aspects of Sexual offences and outline sexual paraphilias
- Explain the objectives and procedure for examination of victim and accused in case of sexual offence.

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### XV. Abortion

- Define and classify abortion.
- Describe Medical Termination of Pregnancy Act, 1971 with amendment.
- Enumerate complications of criminal abortion
- Outline investigative procedure in deaths due to criminal abortion

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### XVI. Infant and childhood deaths

- Define still born, dead born and live born child
- Describe the signs of still born, dead born and live born child
- Describe the estimation of age of foetus
- Describe sudden infant death syndrome
- Explain Child sexual abuse and its medico legal implications

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### XVII. Laboratory investigation in medico legal practice:

- Different types of specimen and tissues to be collected both in the living and dead.
  - Body fluids - blood, urine, semen, vaginal smear, saliva, Viscera, skull, specimen for DNA, specimen for histopathological examination, blood grouping and DNA finger printing in disputed paternity and maternity
- Methods of sample collection, preservation, labelling, dispatch, and interpretation of reports

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### XVIII. Emerging technologies in Forensic Medicine

- Outline the principle and medico legal importance of:
  - DNA profiling
  - Polygraph (Lie Detector)
  - Narco analysis,
  - Brain Mapping,
  - Digital autopsy,
  - Virtual Autopsy,
  - Imaging technologies

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### XX. FORENSIC PSYCHIATRY

- Classify common mental illnesses including post traumatic stress disorder

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(PTSD)

- Define, classify and exemplify - Delusions, hallucinations, illusion, lucid
  interval and obsessions.

- Describe the civil and criminal responsibilities of a mentally ill person

- Differentiate true insanity from feigned insanity. Who can certify ‘Insanity’

- Comment on delirium tremens.

- Explain testamentary capacity and restraint of an insane.

- Outline the Indian Mental Health Act, 1987 with special reference to
  admission, care and discharge of a mental ill person.

### PRACTICALS

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<tr>
<th>Topic</th>
<th>Time in hours</th>
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<td>TOTAL hours</td>
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### UNIT III (Total 30 hours)

#### TOXICOLOGY

XXI. General Toxicology

- Describe the general principles of diagnosis and management of

  - Common poisons encountered in India, General symptoms of poisoning,
    simple bedside tests to detect poison/drug in a patient’s body fluids,
    Basic methodologies in treatment of poisoning: decontamination,
    supportive therapy, antidote therapy, procedures of enhanced
    elimination, etc.

- Explain the medico-legal considerations in case of suspected poisoning

  - Procedure of intimation of suspicious cases or actual cases of foul play
    to the police, maintenance of records, preservation and despatch of
    relevant samples for laboratory analysis.

- Outline the general principles of Analytical Toxicology and give a

  - Brief description of analytical methods available for toxicological
    analysis: Chromatography – thin layer chromatography, Gas
    chromatography, Liquid chromatography and Atomic Absorption
    Spectroscopy.
## XXII. Chemical Toxicology

- Describe the clinical features, fatal dose, fatal period, management, post-mortem appearance and medico legal aspects of poisoning by:
  
  1. **Caustics**
     - Inorganic - sulphuric, nitric, & hydrochloric acids
     - Organic - carbolic acid (phenol), oxalic, and acetylsalicylic acids
  
  2. **Inorganic Elements**
     - Phosphorus, Iodine, Barium
  
  3. **Heavy Metals**
     - Arsenic, lead, mercury, copper, iron, cadmium, thallium
  
  4. **Alcohols**
     - Ethanol, methanol, ethylene glycol
  
  5. **Hydrocarbons and Pesticides**
     - a) kerosene, petrol, benzene, methane, turpentine
     - b) Organophosphates, carbamates, organochlorines, pyrethroids, parquat, aluminium and zinc phosphide
  
  6. **Toxic Gases**
     - Ammonia, carbon monoxide, hydrogen cyanide & derivatives, methyl isocyanate, tear (riot control) gases and War gases

## XXIII. Pharmaceutical Toxicology

- Describe the clinical features, fatal dose, fatal period, management, post-mortem appearance and medico legal aspects of poisoning by:
  
  1. **Antipyretics** - Paracetamol, Salicylates
  
  2. **Anti-Infectives**
     - Common antibiotics - an overview
  
  3. **Neuropsychotoxicology**
     - Barbiturates, benzodiazepines, phenytoin, lithium, haloperidol, neuroleptics, tricyclics
  
  4. **Narcotic Analgesics, Anaesthetics, and Muscle Relaxants**
  
  5. **Cardiovascular Toxicology**
     - Cardiotoxic plants - oleander, odollam, aconite, digitalis
  
  6. **Gastro-Intestinal and Endocrinal Drugs - Insulin**

## XXIV. Bio Toxicology

- Describe the clinical features, fatal dose, fatal period, management, post-mortem appearance and medico legal aspects of poisoning by:
  
  1. **Poisonous Plants**
     - Castor, croton, calotropis, abrus, datura, strychnos
  
  2. **Food Poisoning & Food Adulterants**
     - Bacterial, viral, chemical food poisoning, toxic mushrooms and fish, Argemone
  
  3. **Venomous Bites and Stings**
     - Snakebite, scorpion sting, bee & wasp sting, spider bite.
XXV. Socio-medical Toxicology

- Describe the clinical features, fatal dose, fatal period, management, post mortem appearance and medico legal aspects of poisoning by:
  
  i. Substances of Dependence and Abuse
  Tobacco, cannabis, amphetamines, cocaine, hallucinogens, designer drugs & solvent abuse

- Enlist salient features of NDPS Act.

| PRACTICALS | 4 |
| TOTAL hours | 35 |

### SKILLS TO HANDLE MEDICO LEGAL ISSUES

<table>
<thead>
<tr>
<th>Skills</th>
<th>Able to perform independently</th>
<th>Able to perform under guidance</th>
<th>Assist</th>
<th>Observe</th>
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<tbody>
<tr>
<td>1. Prepare proper certificates of birth and death</td>
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<td>2. Prepare dying declarations</td>
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<td>3. Give evidence in a court of law as an expert witness</td>
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<td>4. Collect and do proper labelling preservation and dispatch of medico-legal specimens.</td>
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<td>5. Diagnose and manage common acute and chronic poisonings .</td>
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<td>6. Perform the medico-legal duties in case of poisoning and log 5 cases in the record book</td>
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<td>7. Observing of ten medico-legal autopsies* and enter the reports in practical record.</td>
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<td>8. Age estimation from bones, x-rays and dentition</td>
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<td>9. Examination of injuries, weapons and report writing, Draft informed consent form</td>
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<td>10. Examination of an alcohol intoxication person &amp; report writing</td>
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<td>11. Examination of victim &amp; accused in sexual offences and report writing</td>
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<td>12. Study of specimens of poisons</td>
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<td>13. Perform simple bedside tests in poisoning</td>
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<td>14. Study of wet specimens during autopsy</td>
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* Medical colleges not having autopsy facilities can depute the students to the nearest Government/Civil hospital
Course Regulations

Course duration
A total teaching time of 120 hours may be allotted for transacting the Medico Legal Curriculum (Forensic Medicine & Toxicology).

Course schedule
The principle of integration is the basis for scheduling the course contents. The topics and the timing of Medico Legal Curriculum (Forensic Medicine & Toxicology) teaching should integrate with the knowledge the students have with respect to Anatomy, Physiology, Pathology, General Medicine, General Surgery and Obstetrics and Gynaecology.

<table>
<thead>
<tr>
<th>TERM</th>
<th>CONTENTS</th>
<th>HOURS</th>
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<tbody>
<tr>
<td>5th term</td>
<td>History of Medicine and behavioural science, Medical ethics, medical etiquette, theoretical aspects of medical jurisprudence, court procedures,</td>
<td>20 hours</td>
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<tr>
<td>6th term</td>
<td>Theoretical aspects of injuries, shock, haemorrhage, asphyxia, post-mortem procedures, death and post-mortem changes and identification, sexual offences, medical termination of pregnancy, infant deaths, Forensic psychiatry,</td>
<td>65 hours</td>
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<tr>
<td>7th term</td>
<td>Toxicology</td>
<td>35 hours</td>
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Methods of instruction:

A. This course is operated on a lecture, discussion, practical including demonstration and student participation format.
B. Students may be required to present selected materials to the class.
C. Structured problem based exercises may be provided to simulate specific case examples.
D. Audio visual material and/or printed handouts will supplement reading and classroom instruction.
E. Exposure visit to:

Mandatory:

a. Court -
   i. Criminal [expert testimony of homicides]
   ii. Consumer [medical negligence cases]

b. Casualty department

Desirable

a. Forensic Science laboratory - toxicology and ballistics
b. Crime Scene
c. Exhumation
d. Prison
Methods of learning:

a) Read and study assigned and/or recommended readings.
b) Participate in class discussion.
c) Participate in group interaction and ask questions of lectures.
d) Seminars by students
e) Complete required assignments.
f) Practicals – hands on laboratory work
   • Fingerprinting
   • Clinical Forensic Medicine cases
   • Moot courts
   • Documentation: Clinical examination of patients/victims
   • Visit to Crime scenes: Inquest by police, Magistrate,
   • Collect, Pack, Label, Transport evidences
   • Visit to Casualty: Poisoning cases [Emergency Management ] - Documentation of 5 poisoning cases
   • Visit to Casualty/Inpatient wards

Methods of assessment:

Internal assessment programme:

1. Periodic objective/Problem based Tests – One at the end of each term
2. Activity – Case studies/ Seminars/ Individual and group assignments
3. Research Activity like projects with support from Department of Health Research, Government of India
4. Practical
5. Structured Oral Viva Voce

Internal assessments (a minimum of 3 in number) should be held in the 5th, 6th and 7th term in other areas of Forensic Medicine.

Evaluation:

At the end of seventh term of M.B., B.S., TWO papers of theory examination, one practical examination and viva voce to be conducted.

Paper 1 – Forensic Medicine and Forensic Psychiatry – 3 hours
Paper 2 – Medical Jurisprudence and Toxicology – 3 hours
The mark distribution for theory examination would be: Forensic medicine 40 percent; Medical Jurisprudence 20 percent; Toxicology 30 percent; Forensic psychiatry 10 percent. The total marks for the Medico legal curriculum (Forensic Medicine and Toxicology) would be 300. The distribution would be as below:

<table>
<thead>
<tr>
<th>Details of assessment</th>
<th>Marks</th>
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<tbody>
<tr>
<td>Theory Paper 1</td>
<td>80 (Forensic Medicine 70 + Forensic Psychiatry - 10)</td>
</tr>
<tr>
<td>Theory Paper 2</td>
<td>80 (Medical Jurisprudence 35 + Toxicology - 45)</td>
</tr>
<tr>
<td>Internal Assessment - Theory</td>
<td>20</td>
</tr>
<tr>
<td>Practical Examination</td>
<td>80</td>
</tr>
<tr>
<td>Internal Assessment - Practical</td>
<td>20</td>
</tr>
<tr>
<td>Viva Voce</td>
<td>20</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>300</strong></td>
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</tbody>
</table>

The assessment method to include essay question, Microscopic examination, Short answer questions, MCQs. Problem solving exercises, Objective and Structured Clinical Examination (OSCE), Objective and Structured Practical Examination (OSPE), Records Review, Checklist and Structured Oral Viva Voce.

In practical examination, the distribution of the marks shall be as follows:
  i. Spotters – 10 marks
  ii. Age estimation of subject – 10 marks
  iii. Age estimation using X-ray and issue of age certificate – 10 marks
  iv. Examination and report of bones – 10 marks
  v. ANY FOUR of the following exercises – 10 marks each
      a. Medical Certification of cause of Death
      b. Medico legal autopsy report
      c. Sickness and Fitness certificate
      d. Examination and certification of injured
      e. Examination of a case of drunkenness
      f. Examination of a case of simulated poisoning

The marks obtained in the internal assessments should be considered along with the final marks obtained in the theory and practical examination.

**Passing:**

A candidate must obtain 50 percent in aggregate with 50 percent in Theory + Viva Voce (minimum of 40% in theory), & 50 percent in practicals.
Internship:

Rotating Internship postings of 15 days to the Medico Legal department (Forensic Medicine department) to be mandatory for all interns. The postings shall include working in the Mortuary, casualty, handling Clinical forensic Medicine Cases and attending court. During the posting the candidate should assist minimum of TWO Medico Legal Autopsies and perform ONE medico legal autopsy under guidance. Medical colleges not having autopsy facilities can depute the interns to the nearest Government/Civil hospital.

Learning Resource Material

Suggested textbooks for Forensic Medicine and Toxicology


Reference Books

1. Text Book of Forensic Medicine, J.B. Mukherjee Vol 1 & 2
2. Cox’s Medical Jurisprudence & Toxicology, Bernard Knight et al
6. Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations 2002
7. Lyorn’s Medical Jurisprudence and Toxicology, Dr. Dogra, T et al.
8. Comprehensive Medical Toxicology, VV Pillay. Paras Medical Publisher, Hyderabad.
## Annexure 1: Members of the Expert Panel

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Name</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Justice M. N. Venkatachalaiah, Chairperson</td>
<td>Former Chief Justice of India, Former Chairman National Human Rights Commission, India</td>
</tr>
<tr>
<td>2.</td>
<td>Prof. P. K. Devadass</td>
<td>Head, Department of Forensic Medicine, Bangalore Medical College and Research Institute, Bangalore</td>
</tr>
<tr>
<td>3.</td>
<td>Dr. Karunakaran Mathiharan</td>
<td>Advisor, Institute of Legal Medicine, Chennai, Hon. Director, Rehabilitation Centre for Torture Victims (RCTV), Madurai</td>
</tr>
<tr>
<td>4.</td>
<td>Mr. Henry Tiphagne</td>
<td>Lawyer and Executive Director, People’s watch Tamil Nadu</td>
</tr>
<tr>
<td>5.</td>
<td>Dr.(Flt Lt).M.A.Balasubramanya</td>
<td>Anaesthesiologist and Secretary, Swami Vivekananda Youth Movement, Mysore, Karnataka</td>
</tr>
<tr>
<td>6.</td>
<td>Dr.V.Raju</td>
<td>District Surgeon, Mysore</td>
</tr>
<tr>
<td>7.</td>
<td>Mr Thimmanna Naik</td>
<td>Public Prosecutor, Mysore</td>
</tr>
<tr>
<td>8.</td>
<td>Dr.Chandrashekar Kapse</td>
<td>Professor and Head, Department of Forensic Medicine BLDE Medical College, Bijapur, Karnataka</td>
</tr>
</tbody>
</table>

## Annexure 2: Members of the National Technical Review Panel

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Name</th>
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</thead>
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<tr>
<td>2.</td>
<td>Dr. S. Krishnamurthy</td>
<td>IPS (Retd.), Bangalore</td>
</tr>
<tr>
<td>3.</td>
<td>Dr Indrajit Ray</td>
<td>Professor of Forensic Medicine, Principal, Medical College, Kolkata and Chairman, Ethics Committee and Member, Post Graduate Medical Education Committee, Medical Council of India, New Delhi.</td>
</tr>
<tr>
<td>4.</td>
<td>Dr T. D. Dogra</td>
<td>Professor and Head, Department of Forensic Medicine, All India Institute of Medical Sciences, New Delhi</td>
</tr>
<tr>
<td>5.</td>
<td>Mr P.G.Nadagouda,</td>
<td>Principal District and Sessions Judge, Haveri District, Karnataka</td>
</tr>
<tr>
<td>6.</td>
<td>Dr. V. V. Pillay</td>
<td>Chief, Poison Control Centre, Head, Analytical Toxicology &amp; DNA Typing, Professor, Forensic Medicine &amp; Toxicology, Amrita Institute of Medical Sciences, Cochin, Kerala</td>
</tr>
<tr>
<td>7.</td>
<td>Dr.Pramod Bagali</td>
<td>Senior Scientist (Forensic Medicine) &amp; Director, Digital Autopsy Project, INFOVALLEY, Kuala Lumpur, Malaysia</td>
</tr>
</tbody>
</table>