

THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY
No. 69, ANNA SALAI, GUINDY, CHENNAI – 600 032.

M.D. / M.S.
POST GRADUATE DEGREE COURSES



SYLLABUS AND CURRICULUM
2021 - 2022

M.S. GENERAL SURGERY

THE TAMIL NADU Dr. M.G.R MEDICAL UNIVERSITY, CHENNAI

M.S. GENERAL SURGERY

1. GOAL / OBJECTIVES

- To practice surgery safely and effectively, backed by scientific knowledge and sound skills.
- To have a keen interest in patient care and develop caring attitude.
- To maintain high ethical standards.
- To have sufficient understanding of basic sciences related to surgery to diagnose and manage majority of the surgical conditions clinically and with the help of relevant investigations through comprehensive training and experience necessary for independence practice.
- To exhibit competence in the basic concepts of research methodology and teaching skills.

2. COMPONENTS OF THE POSTGRADUATE CURRICULUM

- THEORETICAL KNOWLEDGE
 - PRACTICAL AND CLINICAL SKILLS
 - WRITING THESIS / RESEARCH ARTICLES
 - ATTITUDES INCLUDING COMMUNICATION SKILLS
 - TRAINING IN RESEARCH METHODOLOGY MEDICAL ETHICS BIO ETHICS AND MEDICOLEGAL ASPECTS
- Students should compulsorily attend the research Methodology workshop conducted by the University within first six months of the M.S course.
- Students are encouraged to attend workshops/CME's on Bioethics conducted by the University and other reputed Institutions.
- Medical ethics, Bioethics, moral and legal issues and medical audit are part and parcel of the curriculum and syllabus.

3. THEORY SYLLABUS

POST GRADUATE M.S. DEGREE COURSE IN GENERAL SURGERY – BRANCH -I

ANAESTHESIA

- Premedication.
- Cardio Pulmonary resuscitation.
- Various types of regional anaesthesia.
- General anaesthesia – Intubation, maintenance and extubation.
- Anaesthesia in special circumstances like emergency, surgery metabolic derangements, Trauma etc.
- Management of Intractable pain.

RADIOLOGY AND RADIO THERAPY

- Technique of commonly done investigations in the Radiology department like plane x-ray both for bone and soft tissue.
- Technique of contrast x-rays in various systems in the body and their interpretation.
- Ultrasonogram.
- C.T. Scan.
- Practical Knowledge of Radio Therapy.
- Practical knowledge of telecobalt and other Linear accelerator and other types of irradiation.

ORTHO AND TRAUMA

(one month in Ortho and one month in Trauma Ward under Orthopaedic Surgeon)

- Principles and management of common fracture.
- Immobilization and plaster Technique.
- Correction of deformities of limbs.
- Diseases of bone and joints including tumours and infections
- Management, nerve, tendon and vascular injury.
- Management of Polytrauma.

CARDIO THORACIC

- Thoraco abdominal injuries.
- Intercostal drain.
- Thoracotomy and closure.
- Surgery of oesophagus, lung and pericardium
- Management of empyema.
- Fundamentals of open heart surgery and Bypass surgery.

NEURO SURGERY

- Management of head injury.
- Diagnosis and management of intra cranial tension
- Practical experience in burrhole and craniotomy.

UROLOGY

- Basic knowledge of endourology.
- Trauma related to Urology.
- Basic investigative aspects of uro-dynamics

PLASTIC SURGERY

- Facio Maxillary injuries.
- Various methods of Raw area coverage including Myocutaneous flap
- Reconstructive surgery for Breast and head and neck cancer.
- Cosmetic reconstructive surgery.
- Management of Burns.
- Bed Sore – prevention and management.

PAEDIATRIC SURGERY

One short note of 7 marks to be made mandatory in Paper 2

- Congenital anomalies – gastro intestinal, ano-rectal genitourinary tract etc.
- Management of intestinal obstruction in new born.
- Childhood malignancies.

GENERAL SURGERY

All facets of General Surgery including Endocrine Surgery (Viz. Thyroids, Adrenals etc. breast surgery, surgical Gastroenterology)

General Surgery including Surgical Pathology and applied aspects and Basic Medical Sciences.

4. TEACHING LEARNING METHODS

1. Lectures
2. Case based Discussions
3. Ward Rounds
4. Seminars
5. Journal Clubs
6. Bed side clinics
7. Interdepartmental meetings(Weekly with Radiology and pathology departments)
8. Clinical Society Meetings
9. Surgeon's Club

All Postgraduates should attend the Clinico-Pathological Conference (CPC) held every month and Clinical combined rounds and Clinical Grand rounds (CGR) which are held weekly. They are also encouraged to attend CME's, conferences and skill workshops

All the activities should be entered in a log book which should be signed by the authorized teacher and head of the department

5. STRUCTURED TRAINING PROGRAM

1. Inter-unit rotation of residents for upto 1 year

-Rotation of residents can be done for a period of 2 months in a different unit three times a year in the first year and second year(exclusive of speciality rotation)

Total time spent in rotation will be 6 months in first year and 6 months in second year. However in final year , residents are to spend all 12 months in their parent unit.

2. Rotation in sub-specialities for 6 months.

First year:

Time spent in parent surgical unit- 3 months
Time spent in interunit rotation- 6 months
Orthopedics and Trauma- 1 month
Neurosurgery- 15 days
Radiodiagnosis- 15 days
Plastic surgery- 15 days
Anesthesia- 15 days

Second year:

During IInd year, the Students are encouraged to undergo special postings for learning new advanced techniques / procedure / skills in institutions of higher repute where the requisite facilities are available without affecting the duties of the parent department.

Time spent in parent surgical unit- 3 months Time
 spent in interunit rotation- 6 months Pediatric
 Surgery- 1 month
 Urology- 1 month
 Cardiology- 15 days Vascular
 Surgery- 15 days

Third year

Time spent in parent surgical unit- 12 months

a) General Surgery	... 9 Months
b) Intensive Coaching	... 3 Months

Total	12 Months

Surgical Oncology, Vascular surgery, Endocrine surgery and Surgical Intensive care has to be taught by general surgery where concerned super specialty is not available

6. Evaluation of the candidates in both theory and practical aspects will help the candidate in improvement of his/her knowledge, skills and attitude.

7. COMPETENCY ASSESSMENT:

• OVERALL:		
a) Communication / commitment / Contribution /	0	
Compassion towards patients and Innovation	0	- 5 Marks
b) Implementation of newly learnt techniques/skills	0	
• Number of cases presented in Clinical Meetings/ Journal clubs/seminars		
		- 5 marks
• Number of Posters/Papers presented in Conferences/ Publications and Research Projects		
		- 5 marks
• No. of Medals / Certificates won in the conference / Quiz competitions and other academic meetings with details.		
		- 5 marks

Total		20 Marks

PG CLINICAL COURSES

VIVA including Competency Assessment	- 80 Marks (60 + 20)
Log Book	- 20 marks

ASSESSMENT SCHEDULE IS AS FOLLOWS

Year of study	Period				Total Max.20 marks
I year	Upto Dec	10 marks	Upto June	10 marks	20 Marks
II year	Upto Dec	10 marks	Upto June	10 marks	20 Marks
III year	Upto Oct	10 marks	Upto Feb	10 marks	20 Marks
	AVERAGE				20 Marks

8. DISSERTATION AND UNIVERSITY JOURNAL OF MEDICAL SCIENCES

As per the 49th SAB Resolution under Point No. 2 and in the 52nd SAB it was reiterated regarding the topic for dissertation

The topic for the dissertation should be registered and sent to the University after Ethics Committee approval before 31st of December of the first Post Graduate Year. Only one change of topic with proper justification from the Head of the Department is permitted before 31st March of the first Post Graduate Year. The change of dissertation title will not be permitted after 31st March of the First Post Graduate Year. This modification in regulation will be scrupulously followed from the academic year 2015-16 admission onwards.

As per Medical Council of India Post Graduate Medical Education Regulations 2000 (amended upto 10th August 2016) clause 13.9 A Postgraduate student of a Postgraduate degree Course in broad specialties/Super Specialties would be required to present one poster presentation to read one paper at a National/State conference and to present one Research paper which should be published/accepted for publication/sent for publication during the period of his Postgraduate studies so as to make him eligible to appear at the Postgraduate Degree Examination.

As per MCI Clause 14 (4)(a), thesis shall be submitted atleast 6 Months before the Theory and Clinical/Practical Examination.

A candidate shall be allowed to appear for the Theory and Practical/Clinical Examination only after the acceptance of the Thesis by the Examiners.

The periodical evaluation of dissertation/log book should be done by the guide / HOD once in every six months. The HOD should ensure about the submission of dissertation within the stipulated time.

Regarding submission of articles to the University Journal of Medical Sciences for all the PG Degree/Diploma courses, it is mandatory that the students have to submit at-least one research paper. Case Reports are not considered as Research Paper

9. THEORY EXAMINATION

PAPER I – Basic Sciences

PAPER II – Principles and Practice of Surgery

PAPER III – Principles and Practice of Operative Surgery

PAPER IV – Recent Advances in Surgery

Question paper Pattern:

Paper I :	Write notes on	
i.	Anatomy	4 x 5 = 20
ii.	Physiology	4 x 5 = 20
iii.	Biochemistry	3 x 5 = 15
iv.	Pharmacology	3 x 5 = 15
v.	Pathology	3 x 5 = 15
vi.	Microbiology	3 x 5 = 15
Total =		100 marks

Paper II, III & IV :		
i.	Elaborate on :	2 x 15 = 30
ii.	Write notes on	10 x 7 = 70
Total =		100marks

10. PRACTICAL EXAMINATION

LONG CASE - (CASE SHEET WRITING + EXAMINATION- 30 MIN) (1 X 70 MARKS)	70 MARKS
SHORT CASE – (15 MIN EACH) (2 X 40 MARKS EACH)	80 MARKS
WARD ROUNDS (4 CASES X 10 MARKS EACH) (3 MIN EACH CANDIDATE)	40 MARKS
OSCE (5 STATIONS X 2 MARKS EACH) (3 MIN EACH CANDIDATE)	10 MARKS
TOTAL	200 MARKS (A)
VIVA VOCE (15 MIN EACH)	80 MARKS (B)

LOG BOOK (15 MIN EACH)	20 MARKS (c)
AGGREGATE (CLINICAL + VIVA) TOTAL	300 MARKS (A+B+C)
MINIMUM REQUIRED FOR PASS (50%)	150 MARKS
DISSERTATION	APPROVED / NOT APPROVED

Ward Rounds:

In Ward Rounds, two preoperative cases and two post operative cases to be discussed

11. Log Book:

The Post Graduates students shall maintain a record (Log) book of the work carried out by them and the training Programme undergone during the period of training.

Periodic review of Log book and Dissertation have to be done in the Department by guide/HOD once in every 6 months

12. VIVA including Competency Assessment

VIVA including Competency Assessment - 80 Marks (60 + 20)

Note : 3 stations each 20 Marks

- Radiology and Specimens
- Surgical Instruments and operative surgery
- Reason Advances

13. OSCE: 5 Stations to be attended

- Lab investigations
- Drugs and Suture material
- Clinical Scenario
- Surgical anatomy
- Communication skills - Ethics

14. RECOMMENDED LIST OF TEXT BOOKS & JOURNALS

- 1) Bailey and Love's Short Practice of Surgery
- 2) Book of Surgery (SABISTON) Volume I and II
- 3) Principles of Surgery by SCHWARTZ
- 4) Abdominal Surgery by MainGOT
- 5) Operative Surgery Charles Rob
- 6) Farquharson's Text Book of Operative Surgery
- 7) New Airds Companion to Surgical Studies
- 8) Jamieson and Key's Text Book of Surgical Physiology
- 9) Surgical Pathology by Boyd.
- 10) General Pathology by Waltair Isreal.
- 11) Last's Anatomy
- 12) Clinical Pharmacology by Laurence.
- 13) Clinical Pharmacology by Satoskar
- 14) Mastery of Surgery.
- 15) Ackerman's Surgical Pathology
- 16) Wilson: Watson – Jones Fractures and Joint injuries.
- 17) Surgical Pathology – By Illing Worth and Dick.
- 18) Clinical Bio-chemistry – Harper
- 19) Clinical Microbiology – Panikar
- 20) Minimal Invasive surgery by Dr. Palanivel
- 21) Emergency Surgery by Hamilton Bailey

**** Note :** The editions are as applicable and the latest editions shall be the part of the syllabi.

15. JOURNALS / WEBSITES

- 1) British Journal of Surgery
- 2) Annals of Surgery.
- 3) American Journal of Surgery.
- 4) Surgical Clinics of North America.
- 5) Diseases of Colon and Rectum.
- 6) Annals of Royal College of Surgeons.
- 7) Indian Journal of Surgery.
- 8) NCCN
- 9) upto date
- 10) Medscape
- 11) National Institute of Clinical Education
