
**FELLOWSHIP IN
GASTROINTESTINAL
ENDOSCOPY**

D Y PATIL UNIVERSITY,
KOLHAPUR

DEPARTMENT OF GENERAL SURGERY
D Y PATIL MEDICAL
COLLEGE, KOLHAPUR

- A. **Proper name of the course :** Fellowship in Gastrointestinal Endoscopy
- B. **Duration of the course:** One year
- C. **Eligibility criteria admission:** MS (Surgery)
- D. **Number of seats :** As prescribed by the University
- E. **Selection process:**

A total of 2 candidates per will be selected. Selection will be based on performance at interview 30%, University level academic merits (20%) publications if any (20%) and recommendations from teacher PG teacher (30%)

F. **Program Objectives:**

The GI Endoscopy fellowship is designed to :

- a) Provide comprehensive training and acquisition of skills in diagnostic and therapeutic endoscopy procedures
- b) Help in integration of endoscopy in diagnosis and management of gastrointestinal and hepatobiliary disorders
- c) Training in research
- d) Inculcate appreciation of humanistic (cost conscious, caring) and ethical (accountability, integrity) aspects of medicine.
- e) Develop ability to work as part of a multidisciplinary team

G. **Complete curriculum of the course**

- i) Understanding basic physics and principles of endoscopy
- ii) Understand the features of various types of endoscopes and accessories
 - i) Reprocessing and maintenance of endoscopes and accessories
 - ii) Understanding the principles, techniques and complications of conscious sedation /analgesia as well as patient monitoring during and after endoscopy
- iii) Obtain familiarity with informed consent and medical ethics, and explaining risk of endoscopy to patients
- iv) Antibiotic prophylaxis
- v) Cognitive understanding of diagnostic /therapeutic procedures interpreting the findings and understanding the clinical indications / contraindications as well as complications.
- vi) Integrate endoscopic Knowledge with patient care
- vii) Motility studies – Esophageal & anorectal 24 hr pH study

H) **Teaching Scheme:**

1. Acquire technical skills in performing the following diagnostic/therapeutic procedures, interpreting findings, recognizing and treating complications:

- a) Management of **gastrointestinal bleed**: lesion identification and appropriate therapy – adrenaline injection, APC, variceal sclerotherapy, variceal Band ligation and cyanoacrylate injection of fundal varices
- b) **Luminal dilatation** (strictures, achalasia cardia ,webs): Savary Guillard, pneumatic, CRE
- c) **Stent placement** – esophageal, small bowel, colonic

- d) Percutaneous endoscopic gastrostomy tube placement and exchange
- e) Nasogastric and nasojejunal tube placement
- f) **Foreign body removal**
- g) **polypectomy**
- h) Pancreatic pseudocyst drainage
- i) **Side viewing endoscopy, Stent Removal And Check Cholangiogram.**
- j) **ERCP-** biliary and pancreatic duct cannulation, biliary and pancreatic sphincterotomy, biliary and pancreatic and pancreatic stent placement, stone removal, biliary stricture dilatation, nasobiliary drainage tube placement.

k) Gastro Intestinal Scopy

A) Diagnostic Endoscopy

- 1) Diagnostic Gastroscopy
- 2) Diagnostic Sigmoidoscopy
- 3) Diagnostic Ileo-Colonoscopy

2) Minimum number of procedures for minimum competence:

- | | |
|------------------|-----|
| a) Gastroscopy | 500 |
| b) Sigmoidoscopy | 100 |
| c) Colonoscopy | 80 |
| d) Biopsy | 100 |

B) Therapeutic Endoscopy

i) Therapy of gastrointestinal bleed

- | | |
|------------------|----|
| i. Variceal | 25 |
| ii. Non variceal | 15 |

- ii) Esophageal dilatation 10
- iii) Esophageal stenting 8
- iv) PEG 5
- v) Naso –jejunal tube placement 10
- vi) Preoperative enteroscopy 4 to5
- vii)Extractionof Foreign body 10
- viii)Injection Therapy of Internal Piles
- ix)ERCP

- | | |
|---------------------------------------|----|
| a. Biliary sphincterotomy | 10 |
| b. Biliary / pancreatic stenting/ NBD | 10 |
| c. Stone extraction (bile duct) | 5 |

x) Paediatric procedures once a month

- xi)Motility studies (esophageal/anorectal)
 - xii)24hr pH monitoring to be Procured
- } Equipmentsyet

- 3) Night call on rotation for observing/assisting/performing emergency endoscopies
- 4) See consultations for endoscopy procedures and follow up patients after the procedures
- 5) Supervising and teaching basic endoscopy skills to M.S trainees
- 6) Regular discussion with radiologists ,pathologists

- 7) Regular presentation in journal articles and seminars in the departmental Weekly academic meetings.
- 8) Integrate endoscopic knowledge with patient care
- 9) Research presentation at national conferences
- 10) Clinical research in endoscopy and evidence based practice. Regular Meeting will be held between fellows and faculty members to design and Conduct research .The fellows are required to complete a minimum of one research project in endoscopy during the one year training under the supervising of faculty members. The project proposal should be submitted within a month of joining the fellowship to the project proposal should joining the fellowship to institute review board for obtaining ethical clearance and funding if required

Elective subjects:

1. Endoscopic Therapy in GI Bleed.
2. Diagnosis and Endoscopic therapy of Dysphagia.

1) **Suggested reading:**

Books:

- a. Practical gastrointestinal endoscopy :The Fundamentals -6th edition , P .B. Cotton, C. Williams
- b. Endoscopy related topics from Sleisenger and Fordtran' s Gastrointestinal and liver disease. 7th edition,
- c. Robert H, Hawes : Endosonography (Elsevier , Saunder)
- d. Sugano K Double balloon endoscopy – Therapy and practice (Springer)
- e. M .Classon. Gastroenterological endoscopy (Thieme)
- f. Tytgat GWK. Practice of therapeutic endoscopy W.W.Saunders)
- g. Sivak Gastroenterologic endoscopy (W.B. Saunders)
- h. J. H. Siegal . Endoscopic Retrograde Cholangiopancreatography
- i. Barkin . Advanced therapeutic endoscopy (Raven press)
- j. Van Dam , Sivak . GI Endosonography (w. B. Saunders)
- 4) Wilcox Atlas Of Clinical G.I. Endoscopy (Saunders)
- 5) Keefe E.B. Atlas of G.I. Endoscopy (Current Med. Ins)
- 6) Klaus . Atlas of G.I. Endoscopy and pathology (Blackwell)
- 7) Kenchel Atlas of video capsule endoscopy (Springer)
- 8) Messmann H. Atlas of colonoscopy (Thieme)
- 16) Advanced therapy in gastrointestinal and liver disease.
- 17) Sohendre . Colour atlas of prerative techniques – Therapeutic endoscopy

Journals:

1. Endoscopy
2. G. I Endoscopy
3. Endoscopy

I) Evaluation process:

- i. The performance of the fellow will be monitored carefully during the course of training
- ii. Formal evaluation by the faculty members on a regular basis. This include the performance of procedure. of findings and planning/ performance of appropriate therapy. These will be recorded in the log book maintained by the candidate.

Procedure	Number done	Documentation of competence by faculty member the

iii) At the end of the semester there will be:

- a) Written exam
- b) Practical test: Skill assessment in performing endoscopies ,
- c) Orals: radiology/instruments, clinical reasoning and selection of endoscopic procedures in different case scenarios. The candidate should secure a minimum of 50%marks each in written 5% practical tests and 50% in orals to pass the examination.Evaluation of research project

J) To successfully complete the fellowship

- a. The research project should be complete an approved by external Faculty
- b. The log book containing documented competence in endoscopic procedures should be approved by the external faculty.

K) **Faculty:** Professor; Honorary Interventional Endoscopist to D.Y.Patil University.

L) **Selection:** Selection will be based on performance at interview.

M) Pattern of Exam Each year an examination coordination committee (ECC) consisting of two teachers running Fellowship / certificate courses will be nominated by the director of the Institute. Both theory and practical Examinations will be concluded within 15 days of the end of the course. Examination will be conducted in D.Y.Patil University. Each examination will have one internal and one external (approved by the ECC.)

Theory

100 marks 10 short of marks each to be attempted from 12 questions .

Practicals

Each candidate will examined by both examiners simultaneously for between 60 and 90 mins. This will cover a viva – voce and practical. Details will be dependent on the subspeciality – please write this. passing marks 50% Candidates have to pass individually in both and practical

Announcement of results

Results will be announced on the Website and Notice board within one within one week of the conclusion of the examination. The result will be only

“Fellowship granted/Denied and marks will not be displayed. Repeats will be at the end of on earlier then 3 -6 months depending on the length of the course.

Award of Fellowship

Certificates will be awarded by the D.Y.Patil University after the results will be sent to the D.Y. Patil University. The University (with signature of the Registrar) will award the certificate.

Note – The decision of the Examination Co- ordination Committee will be binding on all matters pertaining to the examinations.

TITLE OF PROGRAM: Fellowship course in Gastro-intestinal Endoscopy

Duration of Program: One year

Number of Semesters: 2

Number of Papers: 4

Core Papers: (60% weightage of marks)[List syllabus for each paper]

1. Endoscopy of upper G.I. tract
2. Endoscopy of lower G.I. tract.

Elective Papers: (25% weightage of marks)

Discipline-related: (Allied specialty, Diagnostic modalities, Sub-specialty)

1. Endoscopic therapy in G.I. Bleed.
2. Diagnosis and endoscopic therapy of Dysphasia.

Foundation Papers: (15% weightage of marks – only compulsory)

- Compulsory:
1. Research Methodology
 2. Medical Ethics

- Value-based (any1):
1. ATCOM
 2. Computer skill
 3. Marathi language

Semester wise Paper distribution (Core, Elective & foundations as may be applicable):

1. Semester 1:

Core: Endoscopy of upper G.I. tract

Foundation (compulsory 1): Research Methodology/Medical Ethics

2. Semester 2:

Core: Endoscopy of lower G.I. tract

Elective: Endoscopic therapy in G.I. Bleed, Diagnosis and endoscopic therapy of Dysphasia.

1 Semester = 450 Hours / 90 Days / minimum 15-18 weeks

	SEMESTER 1			SEMESTER 2		
	Hours	Per Week	Credits	Hours	Per Week	Credits
Core	45	2	3	45	2	3
Elective- Discipline	-	-	-	30	2	2
Elective- Generic	-	-	-	-	-	-
Foundation – Compulsory	45	2	3	-	-	-
Foundation – Value Based	10	1	-	10	1	-
Practicals	350	16	11	365	17	12

Assessment for credit courses (Absolute grading method):

Marks	93%	84%	77%	70%	63%	56%	49%
Letter grade	A+	A	B+	B	C+	C	F
Grade point	10	09	08	07	06	05	00

