

SISR 603 (4833) Basic Surgical Endoscopy

(Code: 4833, 1st~2nd year, 1 units)

(Course ID: GS-c4833-L)

1. Instructors

| Name | Position | Department | Contact Information |
|---------------------------|--|---|------------------------------|
| Jirawat Swangsri | Chief Instructor/ Assistant Professor Dr. | Division of General Surgery, Department of Surgery | Jirawat.swa@mahidol.ac.th |
| Vitoon Chinswangwatanakul | Associate Professor Dr. | Division of General Surgery, Department of Surgery | Vitoon.chi@mahidol.ac.th |
| Asada Methasate | Associate Professor Dr. | Division of General Surgery, Department of Surgery | asada.met@mahidol.ac.th |
| Thawatchai Akaraviputh | Professor | Division of General Surgery, Department of Surgery | Thawatchai.aka@mahidol.ac.th |
| Nonthalee Pausawasdi | Associate Professor | GI Med unit, Department of Medicine | Nonthalee.pau@mahidol.ac.th |
| Prasit Mahawongkajit | Assistant Professor | GI Med unit, Department of Medicine | |
| Atthaphorn Trakarnsanga | Associate Professor | Division of General Surgery, Department of Surgery | atthaphornt@gmail.com |

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| Thammawat Parakonthun | Associate Professor | Division of General Surgery, Department of Surgery | t.parakonthun@gmail.com |
| Voraboot Taweerutchana | Lecturer | Division of General Surgery, Department of Surgery | Voraboot.taw@mehidol.ac.th |
| Chainarong Phalanusitthepha | Lecturer | Division of General Surgery, Department of Surgery | Chainaraong.pha@mahidol.ac.th |
| Julajak Limsrivilai | Instructor | GI Med unit, Department of Medicine | |
| Manus Rujivarodom | Instructor | GI Med unit, Department of Medicine | |
| Kotchakorn maipeng | Instructor | GI Med unit, Department of Medicine | |
| Nicha Srisuvoranan | Instructor | GI Med unit, Department of Medicine | |
| Uayporn Siriyuyuen | Instructor | GI Med unit, Department of Medicine | |
| Kawada Kenro | Junior Associate Professor | Esophageal Surgery, TMDU | kawada.srg1@tmd.ac.jp |

2. Classroom/Lab Lecture

Lecture: Division of General Surgery, 12th floor Syamindra Building, Siriraj Hospital

Ward round: Surgical ward, 7th floor 72th year Building, Siriraj Hospital

Operating theatre: 5th floor Syamindra Building, Siriraj Hospital

3. Course Purpose and Outline

At the end of the course, students will be able to:

- Understand common diseases in the field of Endoscopic and minimally invasive surgery
- Understand treatment and operations Endoscopic and minimally invasive surgery
- Develop research questions relating to Endoscopic and minimally invasive surgery and their treatment.
- Generate idea in innovations relating treatment of Endoscopic and minimally invasive surgery.
- Obtain view of basic sciences including molecular biology and metabolomics methods in applying for research in Endoscopic and minimally invasive surgery.

4. Course objectives

This course provides a general introduction to Endoscopic and minimally invasive surgery. Common

Endoscopic and minimally invasive surgery conditions will be thoroughly explored by means of lecture and

clinical experience. Common Endoscopic and minimally invasive operations and procedures will be

demonstrated through the course. Selected case studies will be discussed during group discussion.

Integration of basic knowledge and innovative procedure including Advanced imaging endoscopy and high

technology procedure such as endoscopic surgery, laparoscopic until Robotic assisted for implement to

cancer related research.

5. Format

- Lecture: essential topics in Endoscopic and minimally invasive surgery
- Clinical practice: participate in operating theatre, ward round and out-patient encounters in Minimally invasive Surgery Unit, Siriraj Hospital
- Conference and journal club: presentation and participation in discussion
- Group discussion: in-depth discussion with supervisors

6. Course Details

Ward round (7th floor 72yr building): Monday - Friday 7.00-8.00

Operating theater (OR, 5th floor Syamindra building): Monday – Thursday 9.00-16.00

Grand round (12th fl Syamindra building): Thursday 14.00-16.00

Conference and group discussion: to be announced

| NO | Date | Topic/Details | Instructors |
|----|------|--|--|
| 1 | TBD | Principle of laparoscopic and robotic surgery | Assoc. Prof. Dr. Vitoon Chinswangwatanakul |
| 2 | TBD | Basic principle of endoscopy and innovation | Prof. Thawatchai Akaraviput |
| 3 | TBD | Minimally invasive of hernia surgery | Assoc. Prof. Dr. Asada Methasate |
| 4 | TBD | History and principle of esophageal cancer treatment | Assist. Prof. Dr. Jirawat Swangsri |
| 5 | TBD | Early upper GI cancer detection | Dr. Kumagai Youichi |
| 6 | TBD | Role of AI in GI malignancy detection | Dr. Hirasawa Toshiaki |
| 7 | TBD | Principle of ESD for early cancer treatment | Dr. Kawada Kenro |
| 8 | TBD | Minimally invasive surgery for esophageal cancer | Dr. Yutaka Tokairin |
| 9 | TBD | Minimally invasive surgery for gastric cancer | Assist. Prof. Thammawat Parakonthun |
| 10 | TBD | Principle of EUS for subepithelial tumor detection | Assoc. Prof. Nonthalee Pausawasdi |
| | | Midterm Examination | |
| 11 | TBD | Management of GI subepithelial tumor | Assoc. Prof. Prasit Mahawongkajit |
| 12 | TBD | Approach to small bowel lesion | Lecturer Julajak Limsrivilai |
| 13 | TBD | ERCP and innovation | Lecturer Manus Rujivarodom |
| 14 | TBD | Principle of bariatric endoscopy | Dr. Kotchakorn |
| 15 | TBD | Role of minimally invasive bariatric surgery | Assist. Prof. Voraboot Taweerutchanan |
| 16 | TBD | Role of minimally invasive endocrine surgery | Lecturer Nicha Srisuvoranan |
| 17 | TBD | IEE for colon lesion detection | Dr. Uayporn Siriyuyuen |
| 18 | TBD | Minimally invasive for pelvic floor | Lecturer Siriluck Prapasrivorakul |

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| 19 | TBD | Principle of laparoscopic treatment of colon cancer | Assoc. Prof. Auttaporn Trakarnsanga |
| 20 | TBD | Minimally invasive for Linear surgery | Assist Prof. Wethit Dumronggittigule |
| 21 | TBD | Minimally invasive for Pancreatic surgery | Lecturer Pholasith Sangserestid |
| | | Final Examination | |

7. Assessment

Grades are based on attendance of lectures, performances on assignments, and levels of attitude, skills and knowledge

8. Prerequisite Reading

When reading materials are distributed or specified in advance, participants are expected to read those materials beforehand.

9. Reference Materials

Jarnagin WR, Allen PJ, Chapman WC, D'Angelica MI, DeMatteo RP, Do RKG, Vauthey JN. Blumgart's Surgery of the Liver, Biliary Tract, and Pancreas. 6th Edition. Philadelphia, PA: Elsevier, 2017.

Further reference will be announced before class.

10. Language used

All classes are conducted in English.

11. Office Hours

Mon – Fri: 9:00 AM – 17:00 PM

Contact: Assistant Professor Dr. Jirawat Swangsri Tel: +662-419-8005

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Please contact the instructor regarding questions or consultations.

12. Note(s) to Students

None.