|  |  |  |
| --- | --- | --- |
| **Course Title:**  | Gastrointestinal tract Course |  |
| **Course Code:** | 392 GIT‎-6 |  |
| **Program:** | Bachelor of Medicine and Bachelor of Surgery (MBBS) |  |
| **Department:**  | N/A |  |
| **College:** | Medicine |  |
| **Institution:** | Najran University |  |

# Course Identification

|  |  |
| --- | --- |
|  **Credit hours: 6**  (4+2) |  |
| **2. Course type** |
| **a.** | University |  | College |  | Department |  | Others (Program) | **√** |  |
| **b.** | Required | **√** | Elective |  |  |
| **3. Level/year at which this course is offered:** Year 3 - Semester-2 (level 9) |  |
| **4. Pre-requisites for this course** (if any)**:** Phase 1 blocks are prerequisites for Phase 2 |
| **5. Co-requisites for this course** (if any)**:**None |
|  |

## 6. Mode of Instruction (mark all that apply)

| **No** | **Mode of Instruction** | **Contact Hours** | **Percentage**  |
| --- | --- | --- | --- |
| **1** | **Traditional classroom** | ‎**69**‎ | **49.64 %** |
| **2** | **Blended**  |  |  |
| **3** | **E-learning** |  |  |
| **4** | **Distance learning**  |  |  |
| **5** | **Other**  | ‎**70**‎ | **50.36%** |

**7. Contact Hours** (based on academic semester)

|  |  |  |
| --- | --- | --- |
| **No** | **Activity** | **Contact Hours** |
| **1** | **Lecture** | **51** |
| **2** | **Laboratory/DR** | **40** |
| **3** | **Tutorial** | **2** |
| **4** | **Others** (specify) |  |
| **5** | **BPL** | **12** |
| **6** | **TBL** | **4** |
| **7** | **SKILLS LAB** | 12 |
| **8** | **BEDSIDE TEACHING** | 18 |
|  | **Total** | **139** |

# B. Course Objectives

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| --- |
| 1. Course DescriptionThis course is delivered to the medical students at the level 6/3rd year. It has been designed to achieve horizontal and vertical integration of gastrointestinal system structure, functions, its common relevant disorders, and their diagnosis and management. The students are expected to develop a problem-solving approach to the relevant gastrointestinal system disorders, their diagnoses, and non- pharmacological and pharmacological management  |
|  |
| 2. Course Main Objective**By the end of this course, the students are expected to:**1) **Relate** the structure to functions of the gastrointestinal system.2) **Interpret** the symptoms and signs of most common diseases, injuries and disturbances.3) **Discuss** the pathogenesis of various gastrointestinal system diseases presentation, investigations (laboratory, radiological, etc.), and management. 4) **Apply** a problem-solving approach to the common gastrointestinal system disorders. 5) **Examine** clinically patients with gastrointestinal system disorders. |
|  |

# Course Content

|  |  |  |
| --- | --- | --- |
|  | **List of Topics** | **Contact Hours** |
|  | Introduction to the Block  |  |
|  | PBL 1  | 2 |
|  | Anatomy of the Ant. & Post. Abdominal Walls - (Anat) L | 1 |
|  | Anatomy of the Peritoneum DR | 2 |
|  | Anatomy of the Ant. & Post. Abdominal Walls – (Anat.) (DR) | 2 |
|  | Anatomy of the oral cavity and salivary glands –(Anat) L | 1 |
|  | Anatomy of the Pharynx & Oesophagus and Stomach –(Anat) L | 1 |
|  | Anatomy of the oral cavity, salivary glands, pharynx, esophagus, & Stomach (DR) | 2 |
|  | Histology of oral cavity and salivary glands-L | 1 |
|  | Histology of oral cavity and salivary glands (LAB) | 2 |
|  | Histology of the Pharynx, oesophagus, and stomach –(Anat) L | 1 |
|  | Histology of the Pharynx, Oesophagus, and stomach -(Hist.) (LAB) | 2 |
|  | Function & control of Salivary Glands (Phys) -L | 1 |
|  | Physiology of Mastication & Deglutition (Phys)- L | 1 |
|  | Anatomy of the liver, and Pancreas (Anat) L | 1 |
|  | Anatomy of the Small intestine, large intestine (Appendix, Rectum, Anal canal & ischioanal fossa) (Anat.)- L | 1 |
|  | Anatomy of the Small intestine, and Large intestine (Appendix, Rectum, Anal canal & ischioanal fossa)-(Anat.) (DR) | 2 |
|  | Anatomy of the Liver and Pancreas- (Anat.)- L | 1 |
|  | Anatomy of the Liver, Spleen, and Pancreas- (Anat.) (DR) | 2 |
|  | Histology of Liver, Pancreas - (Anat.)- L | 1 |
|  | Histology of liver and Pancreas (Histo.) (LAB) | 2 |
|  | Anatomy of the Blood supply and lymphatic of the GIT- (Anat.)- L | 1 |
|  | Anatomy of the Blood supply and lymphatic of the GIT, (Anat.) (DR) | 2 |
|  | Histology of small and large intestine- (Anat.)- L | 1 |
|  | Histology of small and large intestine (Hist) (LAB) | 2 |
|  | Surface Anatomy of the GIT- (Anat) L | 1 |
|  | Dysphagia (Med.) - L | 1 |
|  | Secretory & Motor function of the stomach –(Phys) L | 1 |
|  | Esophagus Pathology (Path.) - L | 1 |
|  | Peritoneal & Stomach Pathology (Path.) - L | 1 |
|  | PBL 1  | 2 |
|  | Mucosal protective agents & Antisecretory drugs (Pharma ) - L | 1 |
|  | Physiology of Vomiting - (Phys) L | 1 |
|  | Dyspepsia (Med.) - L | 1 |
|  | Small and Large intestines; motility & secretion- (Phys.) -L | 1 |
|  | PBL-2  | 2 |
|  | Defecation – (Phys.)-L | 1 |
|  | Digestion & absorption of proteins & carbohydrates – (Phy)-L | 1 |
|  | TBL-1- Infectious causes of Gastroenteritis (Dept. of Micro.) | 2 |
|  | Physiology of the GIT Motility- (Phys.) LAB | 2 |
|  | Digestion & absorption of lipids – (Phy)-L | 1 |
|  | Intestinal Pathology infectious and inflammatory diseases (Path.) - L | 1 |
|  | Viral causes of diarrhea, Water, and milk borne infections1 – (Micro)- L | 1 |
|  | Vibrios, Campylobacter, helicobacter - (Micro)- L | 1 |
|  | Enterobacteriacea 1 | 1 |
|  | Amebiasis, balantidiasis | 1 |
|  | Giardiasis, cryptosporidiosis, isosporiasis | 1 |
|  | Intestinal cestodes | 1 |
|  | Nematodes | 1 |
|  | Trematodes | 1 |
|  | Microbiology Lab – (Micro.) LAB | 2 |
|  | PBL 2 | 2 |
|  | Antihelminthic, antiprotozoal | 1 |
|  | Intestinal Pathology Malabsorption | 1 |
|  | Diarrhea & Constipation (Med) | 1 |
|  | PBL 3 | 2 |
|  | Diagnostic workup of a case of diarrhea and diagnostic methods of cholera lab | 2 |
|  | Antiemetic, Ant diarrheal drugs & laxatives | 1 |
|  | Upper and lower GIT bleeding. | 1 |
|  | Diagnostic methods of Enterobacteriaceae Practical | 2 |
|  | Jaundice – Medicine Skill-Lab | 3 |
|  | Medicine-Skills-Lab | 3 |
|  | Pediatrics Skills-Lab | 3 |
|  | Surgery- Skills-Lab | 3 |
|  | Gall Bladder Pathology | 1 |
|  | Functions of the Liver and biliary secretion (Phys.)-L | 1 |
|  | Intestinal Nematodes, Trematodes (Mic) L | 1 |
|  | Hepatic infections & Helminthes affecting the liver (Mic) L | 1 |
|  | Viral Hepatitis | 1 |
|  | Chronic Liver disease  | 1 |
|  | Function and control of Pancreatic juice (Phys.)-L | 1 |
|  |  Practical session GIT tract (Pathology) – LAB-1 \_ (Path.) – (Lab) | 2 |
|  | Practical session GIT tract (Pathology) – LAB-2\_ (Path.) – (Lab) | 2 |
|  | Pancreatic Pathology (Path.) - L | 1 |
|  | Pancreatitis-Surgery – (Surg.) - L | 1 |
|  | Tests for hepatobiliary and GI pathology (Path.) - L | 1 |
|  | Practical session –Pancreas, Liver, and biliary system (Path) - LAB | 2 |
|  | Tumors, pre-malignant conditions of the intestine | 1 |
|  | Bedside teaching – Medicine-1 | 3 |
|  | Bedside teaching – Medicine-2 | 3 |
|  | Bedside teaching – Pediatrics-1 | 3 |
|  | Bedside teaching – Pediatrics-2 | 3 |
|  | Bedside teaching –Surgery-1 | 3 |
|  | Bedside teaching –Surgery-2 | 3 |
|  | Development and anomalies of the oral cavity, pharyngeal arches,‎ digestive tube, and accessory glands – Tutorial Anatomy (Anat.) | 2 |
|  | PBL 3 | 2 |
|  | Intestinal Obstruction – Surg. - L | 1 |
|  | Normal and abnormal Radiology and Imaging of the GIT Radio. LAB1 | 2 |
|  | Normal and abnormal Radiology and Imaging of the GIT Radio. LAB2 | 2 |
|  | Radiology and Imaging of the GIT Radio. LAB | 2 |
|  | TBL-2: Surgical causes of Jaundice (Dept. of Surgery) | 2 |
|  | Total | 139 |

# Assessment Tasks for Students

| **#** | **Assessment task\***  | **Week Due** | **Percentage of Total Assessment Score** |
| --- | --- | --- | --- |
| **1** | Mid-block exam  | Week 4 | 20 % |
| **2** | TBL assessment | Weeks 2-5 | 10% |
| **3** | PBL assessment | Weeks 1-6 | 10 % |
| **4** | End of course exams:- Written: MCQs (40%) - Practical: OSPE (20%) | Week 7 | 60% |

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**\*Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

# F. Learning Resources and Facilities

## 1.Learning Resources

|  |  |
| --- | --- |
| **Required Textbooks** | ANATOMY1. Gray’s Anatomy for Students. Richard L. Drake, Wayne Vogal and Adam W. Mitchell. 3rd Ed.
2. Clinical anatomy by systems 13th edition 2006. Richard S Snell. Lippincott Wilkins and Williams. ISBN – 978078179164-9.
3. Snell's Clinical Anatomy by Regions 10 edition 2019. Richard S Snell. LWW. ISBN-13: 978-1496345646

HISTOLOGY:1. WHEATER’S Functional Histology: A Text and Colour Atlas. Barbara Young, Phillip Woodford and Geraldine O’Dowd. 6th Ed.
2. JUNQUEIRA’S Basic Histology: text and atlas. Antony L. Mescher. 14th Ed.
3. Text and atlas 2016 Antony L Mescher McGraw-Hill Companies Inc. ISBN-978-0-7-184270-9

EMBRYOLOGY 1. The Developing Human: Clinically Oriented Embryology. Keith L. Moore, T. V. N Persaud and Mark G. Torchia. 9th Ed.
2. Langman medical embryology 13th edition 2015. TW Saddler Wolters Kluwar Health ISBN- 978-1-4698-9780-6

PHYSIOLOGY:1. Ganong’s Review of Medical Physiology.Kim Barret et al. 25th Ed. 2016
2. Guyton ad Hall text book of medical physiology. John E. Hall. 13th Ed. 2016
	1. BIOCHEMISTRY:
3. Medical biochmistry. John W Baynes and Mark H Dominiczak. 3rd Ed.
4. Harpers illustrated biochemistry.28th Ed.
	1. PHARMACOOGY:
5. Goodman and Gillman’s The Pharmacological Basis of THERAPEUTICS. Laurance L. Brunton, John S. Lazo and Keith L. Parker. 11th Ed
6. Basic & Clinical Pharmacology by B.G. Katzung.11th Ed.
	1. PATHOLOGY:
7. Robbins Basic Pathology. Kumar, Abbas and Aster. 9th Ed.
8. Muir’s Text Book of Pathology, David A Levison et al.14th Ed.
	1. MICROBIOLOGY:
9. Jawetz, Melnick, &Adelberg's Medical Microbiology. 27th Ed.
10. Markell and Voge’s Medical parasitology. 9th Ed.
	1. MEDICINE:
11. Current Medical Diagnosis &treatment.Maxine A. Papadakis and Stephen J. McPhee. 55th Ed. 2016
12. Harrison’s principles of internal medicine.Kasper et al.19th Ed.

10. SURGERY:1. Bailey & love’s : short practice of surgery. 27th Ed. 2020
 |
| **Essential References Materials** | * Rang and dales pharmacology
* Essentials of medical pharmacology by KD tripathi
* Guyton Textbook of medical physiology.
* Medical Microbiology and Immunology by warren Levinson.
* Medical Microbiology and Immunology by Warren Levinson &Ernest Jawetz, Examination Board Review.
 |
| **Electronic Materials** | 1. Saudi Digital Library <https://sdl.edu.sa>
2. <http://www.adameducation.com/interactive-physiology>
3. <http://www.webpath.med.utah.edu>
4. [WWW.WHO.org](http://WWW.WHO.org)
5. [WWW.CDC.org](http://WWW.CDC.org)
6. [WWW.ASM.org](http://WWW.ASM.org)
7. [WWW.BSAC.org](http://WWW.BSAC.org)
 |
| **Other Learning Materials** | 1. Ganong’s Review of Medical Physiology, Kim E. Barrett et al, 25th edition, 2016.
2. Grant’s Atlas of Anatomy, Anne M.R.Agur, Arthur F. Dalley, 13th edition 2013
3. Merkell and Voge’s Medical Parasitology, David T. John et al, 9th edition.2006.
4. Wheater’s basic histopathology
5. Di Fiore’s atlas of histology
6. Diagnostic molecular pathology, William B. Coleman & Gregory J. Tsongalis
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## 2. Facilities Required

| **Item** | **Resources** |
| --- | --- |
| **Accommodation**(Classrooms, laboratories, demonstration rooms/labs, etc.) | 1. Lecture room suitable for students.
2. Laboratories (dissection room-DR, physiology, biochemistry, microbiology, pathology, pharmacology and clinical skill lab) suitable for students.

Teaching hospital for bedside teaching |
| **Technology Resources** (AV, data show, Smart Board, software, etc.) | 1. Computers and multimedia projectors in lecture room, PBL room, TBL room and laboratories.
2. There is a need for computers with network and internet access for student learning.
 |
| **Other Resources** (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list) | Library supplied with reference, textbooks, and electronic resources |

# F. Specification Approval Data

|  |  |
| --- | --- |
| **Council / Committee** |  |
| **Reference No.** |  |
| **Date** |  |