

**MED 3006: INTRODUCTION TO GENERAL SURGERY**

<b>Course Date</b>	March 29-April 22, 2021	
<b>Exam Date</b>	Theoretical Exam: April 22, 2021	
<b>Course Coordinator:</b>	FATİH ÖZDENER	
<b>Academic Unit</b>	<b>Academic Staff</b>	<b>Theoretical hours</b>
<b>General Surgery</b>	Leyla Zer, Prof.	8
	Levent Kaptanoğlu, Prof.	7
	Metin Kement, Prof.	5
	Emre Sivrikoz, Assoc. Prof.	5
	Sabri Tekin, Assoc. Prof.	5
	Ahmet Erkek, Assist. Prof.	4
	Babek Tabandeh, Assist. Prof.	6
<b>TOTAL</b>		40

**COURSE AIM:**

The aim of this course is to make an introduction to general surgery subjects, provide basic information on the diagnosis and management of some of the most commonly encountered diseases in general surgery practice and give knowledge about the common problems encountered in the emergency service.

**LEARNING OUTCOMES:**

At the end of this lesson, the student will be able to:		
DEP	TOPIC	LEARNING OUTCOMES
<b>GENERAL SURGERY</b>	Introduction to committee, medical terminology, surgical terms (T-1)	<ol style="list-style-type: none"> <li>1. Define medical terminology</li> <li>2. Describe the importance of medical terminology</li> <li>3. Define the common general surgery terms</li> </ol>
	Patient History taking in general surgery (T-1)	<ol style="list-style-type: none"> <li>1. Elicit the patient's chief complaint, history of present illness, past medical history, social, family, occupational histories and complete a review of systems</li> <li>2. Recognize pertinent positive and negative history findings</li> <li>3. Establish a positive professional relationship</li> </ol>
	Physical examination in surgery (T-1)	<ol style="list-style-type: none"> <li>1. Perform general examination</li> <li>2. Perform local examination (abdomen, breast, inguinoscrotal region, etc.)</li> <li>3. Perform systemic examination</li> </ol>
	Asepsis, antisepsis and Disinfection (T-1)	<ol style="list-style-type: none"> <li>1. Explain the basic concepts, rules and principles of surgical asepsis, antisepsis, and disinfection</li> <li>2. Explain the importance of personal protective measures to prevent the spread of infection</li> </ol>
	Surgical infection and usage of antibiotics (T-1)	<ol style="list-style-type: none"> <li>1. Define surgical site infection</li> <li>2. Identify the risk factors associated with</li> <li>3. Explain the principles of infection control/safe practices</li> <li>4. Explain the role of microbiology laboratory in the diagnosis and management of infections</li> <li>5. Explain the safe and appropriate usage of antibiotics</li> </ol>
	Metabolic and endocrine response to injury (T-1)	<ol style="list-style-type: none"> <li>1. Define classical concepts of homeostasis</li> <li>2. Define mediators of the metabolic response to injury</li> <li>3. Describe physiochemical and biochemical changes that occur during injury and recovery</li> </ol>

Bleeding, hemostasis, blood transfusion (T-1)	<ol style="list-style-type: none"> <li>1. Define hemostasis</li> <li>2. Describe the mechanisms involved in hemostasis</li> <li>3. Explain the principles of transfusion and list the indications and contraindications</li> <li>4. Discuss the complications of blood transfusion</li> </ol>
Dyspepsia (T-1)	<ol style="list-style-type: none"> <li>1. Define dyspepsia</li> <li>2. List the causes of dyspepsia</li> <li>3. Describe the symptoms of dyspepsia</li> </ol>
Dysphagia (T-1)	<ol style="list-style-type: none"> <li>1. Define dysphagia</li> <li>2. List the causes of dysphagia</li> </ol>
Nausea and vomiting (T-1)	<ol style="list-style-type: none"> <li>1. Identify common causes of nausea and vomiting</li> <li>2. Describe the pathophysiologic mechanisms of nausea and vomiting</li> <li>3. Create goals for treating nausea and vomiting</li> </ol>
Upper gastrointestinal bleeding (UGIB) (T-1)	<ol style="list-style-type: none"> <li>1. Explain the pathophysiology of acute UGIB</li> <li>2. List risk factors for UGIB</li> <li>3. Describe symptoms</li> <li>4. Review how to assess patients presenting with UGIB</li> </ol>
Hematemesis (T-1)	<ol style="list-style-type: none"> <li>1. Define hematemesis</li> <li>2. List the causes and symptoms of hematemesis</li> <li>3. Review how to assess patients presenting with hematemesis</li> </ol>
Rectal bleeding/hematochezia, Anorectal pain (T-1)	<ol style="list-style-type: none"> <li>1. Define hematochezia</li> <li>2. List the causes and symptoms of hematochezia</li> <li>3. Review how to assess patients presenting with hematochezia</li> <li>4. List the anorectal pain causes</li> </ol>
Lower gastrointestinal bleeding (LGIB) (T-1)	<ol style="list-style-type: none"> <li>1. List the causes and symptoms of LGIB</li> <li>2. Review how to assess patients presenting with LGIB</li> </ol>
Melena, Algorithms for bleeding (T-1)	<ol style="list-style-type: none"> <li>1. Define melena</li> <li>2. List the cause and symptoms of melena</li> <li>3. Review how to assess patients presenting with melena</li> </ol>
Approach to breast lump, Nipple discharge (T-1)	<ol style="list-style-type: none"> <li>1. Revisit the structure of the breast, relating hormonal changes to its functions</li> <li>2. Outline the key features of examination and investigation of palpable breast lumps</li> <li>3. Describe the history and exam features of pathologic and non-pathologic nipple discharge</li> </ol>
Breast evaluation, Breast radiology (T-1)	<ol style="list-style-type: none"> <li>1. Discuss current breast imaging technologies</li> <li>2. Define the principles and objectives of population screening</li> </ol>
Breast diseases (T-1)	<ol style="list-style-type: none"> <li>1. Define the classification of breast diseases</li> <li>2. List the most common symptoms</li> </ol>
Surgical instruments and Materials (T-1)	<ol style="list-style-type: none"> <li>1. Describe the types of surgical instruments</li> <li>2. Discuss the materials used</li> </ol>
Preoperative management (T-1)	<ol style="list-style-type: none"> <li>1. Identify the components of a focused patient history and physical examination</li> <li>2. Explain the correct assessment and optimization</li> </ol>

		<p>needed for patients with common co-morbidities</p> <ol style="list-style-type: none"> <li>3. Discuss basic principles of risk assessment</li> <li>4. Have an understanding of appropriate use of pre-operative lab tests</li> </ol>
	Postop complications and patient care (T-1)	<ol style="list-style-type: none"> <li>1. Define the most common postoperative complications</li> <li>2. Explain how to manage with these problems</li> </ol>
	Patient safety in surgery (T-2)	<ol style="list-style-type: none"> <li>1. Define patient safety</li> <li>2. Explain the importance of patient safety</li> <li>3. Explain the causes of critical incidents and patient harm</li> <li>4. Define patient safety measures</li> </ol>
	Surgical metabolism and Nutrition (T-2)	<ol style="list-style-type: none"> <li>1. Explain the importance of nutrition in surgical patients</li> <li>2. Explain nutritional assessment</li> <li>3. Define nutritional requirements</li> </ol>
	Nutrition and the immune System (T-1)	<ol style="list-style-type: none"> <li>1. Explain the importance of nutrition on the immune system</li> </ol>
	Common surgical procedures (T-1)	<ol style="list-style-type: none"> <li>1. Get knowledge about common surgical procedures</li> </ol>
	Surgical techniques (T-1)	<ol style="list-style-type: none"> <li>1. Describe basic surgical techniques</li> </ol>
	Laparoscopic surgery (T-1)	<ol style="list-style-type: none"> <li>1. Define laparoscopy</li> <li>2. Explain the benefits of laparoscopic surgery</li> <li>3. Explain what is laparoscopic surgery used for</li> </ol>
	Perioperative management of diabetic patient (T-1)	<ol style="list-style-type: none"> <li>1. Explain the roles of history-taking, glycated hemoglobin A1c and antihyperglycemic drugs in the perioperative period</li> <li>2. Describe insulin management in surgical patients</li> <li>3. Identify and describe the significance of optimal glycemic targets in the perioperative period</li> </ol>
	Enteral and parenteral nutrition (T-1)	<ol style="list-style-type: none"> <li>1. Evaluate the nutritional status of the patient</li> <li>2. Determine the most appropriate form of nutrition support required</li> <li>3. Estimate protein and caloric requirements of a patient based on the diseases state</li> <li>4. Define enteral and parenteral nutrition</li> <li>5. Explain enteral and parenteral nutrition methods</li> <li>6. Discuss advantages and disadvantages of enteral and parenteral nutrition</li> </ol>
	Anatomy of the inguinal region (T-1)	<ol style="list-style-type: none"> <li>1. Describe the anatomy of inguinal region and inguinal canal</li> </ol>
	Approach to a patient with groin lump (T-1)	<ol style="list-style-type: none"> <li>1. Explain the causes, symptoms, and diagnosis of lumps in the groin</li> </ol>

<p>Inguinal hernias (T-1)</p>	<ol style="list-style-type: none"> <li>1. Define the etiology and pathophysiology of inguinal hernias</li> <li>2. Discuss locations and associated signs and symptoms</li> <li>3. Explain complications</li> <li>4. Explain diagnosis and examination methods</li> </ol>
<p>Abdominal pain , discomfort and distention, mass (T-1)</p>	<ol style="list-style-type: none"> <li>1. Describe pathophysiologic mechanisms of abdominal pain and distention</li> <li>2. Describe common causes of abdominal pain and distention</li> <li>3. Identify signs and symptoms of a surgical abdomen</li> <li>4. Explain principal diagnostic studies necessary to make differential diagnosis</li> <li>5. Define the different types of abdominal mass in terms of site, etiology, and clinical characteristic</li> </ol>
<p>Soft tissue tumors (T-1)</p>	<ol style="list-style-type: none"> <li>1. Explain the clinical presentation, histopathology, and diagnostic evaluation of the most common soft tissue tumors</li> </ol>
<p>Unintentional injuries ( freezing, hypothermia, hyperthermia, heatstroke, bites/sting and others) (T-1)</p>	<ol style="list-style-type: none"> <li>1. Define unintentional injury</li> <li>2. List the examples of unintentional injuries</li> <li>3. Define hypothermia</li> <li>4. Recognize the signs and symptoms of freezing injury</li> <li>5. Discuss the treatment practices for managing freezing injury in the emergency department</li> <li>6. Define hyperthermia</li> <li>7. Describe signs and symptoms of hyperthermia</li> <li>8. Discuss the treatment practices for managing heatstroke in the emergency department</li> <li>9. Discuss common offending organisms, pathophysiology, assessment findings and management of a patient with a bite or sting.</li> <li>10. Identify when a casualty is having an allergic reaction to a bite or sting</li> <li>11. Explain first aid treatment for a casualty who has been bitten or stung</li> </ol>
<p>Poisonings (food poisoning, corrosive poisoning and others) (T-1)</p>	<ol style="list-style-type: none"> <li>1. Get knowledge required to manage poisoned patients in the emergency department</li> <li>2. Explain the importance of airway management and cardiovascular support in a toxic ingestion</li> <li>3. Explain the principles, methods and controversies of decontamination techniques (gastric lavage, activated charcoal and whole bowel irrigation)</li> <li>4. Define causes, symptoms, diagnosis, treatment, and prevention of food poisoning</li> <li>5. Identify intentional versus unintentional caustic ingestions</li> <li>6. Describe the clinical features, investigations, and complications of corrosive ingestion</li> </ol>

Allergic reactions (T-1)	<ol style="list-style-type: none"><li>1. Describe mechanism, signs and symptoms, proper assessment, and treatment for patient experiencing an allergic reaction</li><li>2. Describe emergency medical care for patient in anaphylactic shock</li></ol>
Burns (T-1)	<ol style="list-style-type: none"><li>1. Explain the rule of nines to estimate total body surface area of the burn</li><li>2. Describe partial and full thickness burn wounds Describe ambulatory management of burn patients</li></ol>