

Republic of Yemen

Ministry of Higher Education & Scientific Research

21 SEPTEMBER UNIVERSITY of MEDICALS & APPLIED

SCIENCES



Program Anesthesia Technician

Course Specification of internal Medicine

Course No. (01.02.842)

2024

Prepared by:

Dr. Abdulhameed Al-Thaifani

Reviewed by:

Dr fares Mahdi

Head of the Depa

Dr .fares Mahdi

Quality Unit

Dr. Fadl Shujaa Al-deen

:

Dean

Dr Abdulsalam Dallak.

I. Course Identification and General Information:						
1	Course Title:	Internal medicine				
2	Course Code & Number:	(01.02.842)				
3	Credit hours:	Credit Hours				Total
		Th	Seminar	Prac	Train	
		2	-			2
4	Study level/ semester at which this course is offered:	Level3/first semester				
5	Pre –requisite (if any):	-				
6	Co –requisite (if any):	-				
7	Program(s) in which the course is offered	Anesthesia Technician				
8	Language of teaching the course:	English				
9	Location of teaching the course:	Faculty of Medical Applied Science				
10	System of Study:	Semester				
11	Mode of delivery:					
12	Prepared By:	Dr. Abdulhameed Ali Lotf Al-Thifani				
13	Date of Approval	2024				

II. Course Description
This course is designed to provide student with knowledge and skills on nature of diseases which affect different part of human body with special focus on etiology; signs and symptoms; principles of treatment; complications and plan of control, to be used for the diagnosis and treatment of the cases that fall within scope of their practice and refer the others.

III. Course Intended Learning Outcomes (CILOs) : (مخرجات تعلم المقرر)	Referenced PILOs (مخرجات تعلم البرنامج)
A. Knowledge and Understanding: Upon successful completion of the course, students will be able to:	
a1	Identify essential medical concepts related to various diseases, criteria for referral system, dealing with the emergency cases, wound management.
a2	Describe peptic ulcer diseases, chronic
A1.	Demonstrate the concepts and principles of anesthesia and different basic and humanities courses and its applications in anesthesia practice
A2.	Describe normal and abnormal human behaviors, structure and function of human

	obstructive pulmonary diseases		body and identify the basics of intensive care, medical emergencies that the anesthetist and high dependency care units and how to manage patients at risk.
a3	Recognize gall bladder diseases, the clinical manifestation and diagnosis & treatment of pneumonia, the diagnostic and management for rheumatic fever	A3.	Recognize the full details about the basic physics and its applications in anesthesia, the equipment's and apparatus in anesthesia and critical care unit.
B. Intellectual Skills: Upon successful completion of the course, students will be able to:			
b1	Compare between the uses of the four assessment techniques	B1	Synthesize knowledge derived from, medical, anesthesia, basic sciences and humanities courses into the practice of anesthesia
b2	Compare between upper & lower GIT bleeding regarding types, clinical manifestations and management, between type I & Type II diabetes.	B2	Interpret the basic normal anatomical structures on radiographs, C.T. scans and magnetic resonance images and readings of the standard monitors attached to the patient as well as additional monitors as central venous pressure monitoring.
b3	Distinguish between types of hepatitis and differentiate between angina and myocardial infarction and between types of anemia, clinical manifestations and management.	B3	Demonstrate competence in the use of language, libraries, and databases and in basic concepts of research methodology and epidemiology and be able to critically analyze relevant published research

			literature.
C. Professional and Practical Skills: Upon successful completion of the course, students will be able to:			
c1	Perform health assessment, preventive, diagnostic, and treatment measures for simple cases	C1	Administer a range of assessment techniques, procedures and management appropriate to patient condition and maintain fluid therapy and blood transfusion.
c2	Perform basic life support and Control bleeding	C2	Perform an approach to the assessment of risk and need for consultation for an anesthetics,
D. Transferable Skills: Upon successful completion of the course, students will be able to:			
d1	Engage in educational activities related to professional issues.	D1. Communicate effectively with individuals and groups and members of the health team in order to promote effective interpersonal relationships and teamwork	
d2	Employ effective communication and accurate documentation while providing and/or managing for client needs.	D2. Demonstrate professional, ethical, moral, legal, and spiritual concepts into one's practice within a global environment	

A) Alignment Course Intended Learning Outcomes of Knowledge and Understanding to Teaching Strategies and Assessment Strategies		
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
a1. Identify essential medical concepts related to various diseases, criteria for referral system, dealing with the	Lecture discussion Case discussion Brainstorming	Essay type Short answers Objective type

emergency cases, wound management.		
a2. Describe peptic ulcer diseases, chronic obstructive pulmonary diseases	Lecture discussion Case discussion Brainstorming	Essay type Short answers Objective type
a3. Recognize gall bladder diseases, the clinical manifestation and diagnosis & treatment of pneumonia, the diagnostic and management for rheumatic fever	Lecture discussion Case discussion Brainstorming	Essay type Short answers Objective type

(B) Alignment Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies:

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
b1. Compare between the uses of the four assessment techniques	Lecture discussion Case discussion Brainstorming	Essay type Short answers Objective type
b2. Compare between upper & lower GIT bleeding regarding types, clinical manifestations and management, between type I & Type II diabetes.	Lecture discussion Case discussion Brainstorming	Essay type Short answers Objective type
b3. Distinguish between types of hepatitis and differentiate between angina and myocardial infarction and between types of anemia, clinical manifestations and management.	Lecture discussion Case discussion Brainstorming	Essay type Short answers Objective type

(C) Alignment Course Intended Learning Outcomes of Professional and Practical Skills to Teaching Strategies and Assessment Strategies:

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
c1. Perform health assessment, preventive, diagnostic, and treatment measures for simple cases	Lab Practice Supervised Clinical practice	Evaluate with checklist Assess performance with rating scale Clinical exam
c2. Perform basic life support and Control bleeding	Lab Practice Supervised Clinical	Evaluate with checklist Assess performance with

	practice	rating scale Clinical exam
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(D) Alignment Course Intended Learning Outcomes of Transferable Skills to Teaching Strategies and Assessment Strategies:

Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
d1. Engage in educational activities related to professional issues.	Practice session Supervised clinical practice	Assess role plays with check-list on teaching techniques Assess health teaching with checklist Assess performance with rating scale
d2. Employ effective communication and accurate documentation while providing and/or managing for client needs.	Practice session Supervised clinical practice	Assess role plays with the check-list on communication Assess communication techniques by rating scale Assess performance with rating scale

IV. Course Content:

A – Theoretical Aspect:

Order	Units/Topics List	Sub Topics List	Number of Weeks	Contact hours	Learning Outcomes
1	Introduction	- Common signs & symptoms for medical diseases - Classifications of medical diseases - Health assessment - History - Physical examination	1	2	a1, b1, c1,
2	Diseases of digestive system	- Anatomy & physiology - Assessment & diagnostic tests - Peptic ulcer and &	1	2	a2, b2, c1, c2, d1, d2

		esophageal diseases - Upper & lower GIT bleeding - Mal-absorption syndrome - Ulcerative colitis			
3	Liver diseases	- Hepatitis - Liver failure - Liver cirrhosis - Liver tumors	1	2	a1, c1, c2, d1, d2
4	Gallbladder diseases	- Cholecystitis - Stone of gallbladder - Pancreatitis - Cancer of pancreas	1	2	a3, c1, c2, d1, d2
5	Diseases of Respiratory system	- Anatomy & physiology - Assessment & diagnostic tests - Common respiratory diseases ✓ Asthma ✓ Pneumonia ✓ COPD (Chronic bronchitis Bronchiectasis, and acute emphysema) ✓ Atelectasis ✓ Lung cancer ✓ Pleural effusion, pleurisy ✓ Pneumothorax	2	4	a1, a2, c1, c2, d1, d2
6	Midterm exam	Midterm exam	1	2	a1, a2, a3, b2, b3, c1, c2, c1, d2
7	Cardiovascular system	- Anatomy & physiology - Assessment & diagnostic tests - Rheumatic heart disease - Angina and myocardial infarction - Congestive heart failure - Hypertension - Varicosis	2	4	a2, a3, b3, c1, c2, d1, d2

Prepared by:

Reviewed by:

Head of the Depa

Quality Unit

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		• Cardiac arrest • Pacemakers • Cardiovascular Medications			
8	Blood diseases	▪ Anemia ▪ Hemorrhagic diseases ▪ Thrombosis ▪ Blood transfusion ▪ Hodgkin's disease	1	2	a3, b3, d1, d2
9	Neurological system	▪ Anatomy & physiology ▪ Assessment & diagnostic tests • Increased intracranial pressure • Head injuries • Cerebrovascular accident (Stroke) • Spinal cord injury • Epilepsy	2	4	a1, a2, c1, c2, d1, d2
10	Endocrine disease	▪ Diabetes ▪ Pituitary gland disease ▪ Thyroid gland diseases ▪ Parathyroid gland diseases ▪ Adrenal gland diseases.	1	2	a1, a3, b2, c1, c2
11	Urological system	▪ Anatomy & physiology ▪ Assessment & diagnostic tests ▪ Urinary tract infection ▪ Urolithiasis (stones) ▪ BPH ▪ Acute renal failure ▪ Dialysis for acute Renal failure	2	4	a1, c1, c2, d1, d2
12	Final exam	Final exam	1	2	a1, a2, b1, b2, b3, c1, c2, d1, d2
Number of Weeks /and Units Per Semester			14	32	

B – Practical Aspect:

Order	Task/ Experiments	Number of Weeks	Contact hours	Learning Outcomes
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	Not applicable			
	Number of Weeks /and Units Per Semester			

V. Teaching strategies of the course

1. Lecture – Discussion
2. Demonstration
3. Student assignment
4. Role Plays
5. Brainstorming
6. Case study
7. Field work

V. Assessments strategies of the course

Assess role plays with the check-list on communication
Assess communication techniques by rating scale
Assess performance with rating scale

VI. Assignments

No	Assignments	Aligned CILOs (symbols)	Week Due	Mark
1	Performing health assessment and requesting diagnostic measures for three assigned patients	c1, c2, d1, d2	2	2.5
2	Write plan of management for three assigned patients	c1, c2, d1, d2	2	2.5

VII. Schedule of Assessment Tasks for Students During the Semester

Theoretical Part

No	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
1	Attendance and activities	15th week	5	5%	a1, a2, b1, b2
2	Student assignments	5th and 12th week	5	5%	a1, a2, b3, b1, b2, b3
3	Mid-term exam	7th or 8th	20	20%	a1, a2, b1, b2,

		week			c2,d2
4	Final-exam	16th-17th week	70	70 %	a1, a2, a3, b1, b2, c2, d2

Clinical Part					
No	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
	Not applicable				
Number of Weeks /and Units Per Semester					

VIII. Learning Resources:	
Written in the following order: (Author; Year of publication; Title; Edition – Place of publication – Publisher).	
1- Required Textbook(s) (maximum two).	المراجع الرئيسية:
1. Davidson's Principles and Practice of Medicine (2002).19 th ed, Page108,127	
2- Essential References.	المراجع المساندة
1. Kumar's & Clark Pocket (2001). Clinical Medicine, 5 th ed, Page 852-853. publisher.	
3- Electronic Materials and Web Sites etc.	المصادر الإلكترونية ومواقع الإنترنت...الخ
1.http://www.google.com	

IX. Course Policies:	
1	Class Attendance: At least 75 % of the course hours should be attended by the student. Otherwise, he/she will not be allowed to attend the final exam
2	Tardy: any student who is late for more than 15 minutes from starting the lecture will not be allowed to attend the lecture and will be considered absent.
3	Exam Attendance/Punctuality: Any student who is late for more than 30 minutes from starting the exam will not be allowed to attend the exam and will be considered absent.
4	Assignments & Projects: Assignments and projects will be assessed individually unless the teacher request for group work
5	Cheating: Cheating by any means will cause the student failure and he/she must re-study the course

6	Plagiarism: Plagiarism by any means will cause the student failure in the course. Other disciplinary procedures will be according to the college rules.
7	Other policies (سياسات أخرى): -

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SCIENCES



Faculty of Medical Applied Science

Bachelor Anesthesia Technician

Course Specification of internal Medicine

Course No. (01.02.842)

2024

Prepared by:

Reviewed by:

Head of the Depa

Quality Unit

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Dean

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Dr fares Mahdi

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Dr. Fadl Shujaa Al-deen

Dr Abdulsalam Dallak.

Plan (Syllabus)

I. Course Identification and General Information:				
1	Course Title:	Internal medicine		
2	Course Code & Number:	(01.02.842)		
3	Credit hours:	Credit Hours		
		Th	Seminar	Prac
		2	-	
4	Study level/ semester at which this course is offered:	Third year/first semester		
5	Pre –requisite (if any):	-		
6	Co –requisite (if any):	-		
7	Program(s) in which the course is offered	Bachelor Anesthesia Technician		
8	Language of teaching the course:	English		
9	Location of teaching the course:	Faculty of Medical Applied Science		
10	System of Study:	Semester		
11	Mode of delivery:			
12	Prepared By:	Dr. Abdulhameed Ali Lotf Al-Thifani		
13	Date of Approval	2024		

II. Course Description

This course is designed to provide student with knowledge and skills on nature of diseases which affect different part of human body with special focus on etiology; signs and symptoms; principles of treatment; complications and plan of control, to be used for the diagnosis and treatment of the cases that fall within scope of their practice and refer the others.

. Course Intended Learning Outcomes (مخرجات تعلم المقرر)(CILOs) :	Program Intended Learning Outcomes
a1. Identify essential medical concepts related to	A1. Demonstrate the concepts

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various diseases, criteria for referral system, dealing with the emergency cases, wound management.	and principles of anesthesia and different basic and humanities courses and its applications in anesthesia practice
Describe peptic ulcer diseases, chronic obstructive a 2. pulmonary diseases	A1. Describe normal and abnormal human behaviors, structure and function of human body and identify the basics of intensive care, medical emergencies that the anesthetist and high dependency care units and how to manage patients at risk.
A3.Describe peptic ulcer diseases, chronic obstructive pulmonary diseases	A4 .Demonstrate knowledge of the basic general pharmacodynamics and pharmacokinetics of drugs at all age groups and the pharmacology of all anesthetic.
Recognize gall bladder diseases, the clinical manifestation and diagnosis & treatment of pneumonia, the diagnostic and management for rheumatic fever	A3 Recognize the full details about the basic physics and its applications in anesthesia, the equipment's and apparatus in anesthesia and critical care unit
Compare between the uses of the four b1 0 assessment techniquesb	B.1 integrate assessment data to formulate anesthesia diagnosis.
b2. Compare between upper & lower GIT bleeding regarding types, clinical manifestations and management, between type I & Type II diabetes.	B2.Synthesize knowledge derived from, medical, anesthesia, basic sciences and humanities courses into the practice of anesthesia
C1.Perform surgical physical examination, technique of wound suturing	C1.Interpret the basic normal anatomical structures on radiographs, C.T. scans and magnetic resonance images and readings of the standard monitors attached to the patient as well as additional monitors as central venous pressure monitoring.
C2.Discuss methods of bleeding control, cast applications	C2.Demonstrate competence in the use of language, libraries, and

	databases and in basic concepts of research methodology and epidemiology and be able to critically analyze relevant published research literature.
D1.Engage in educational activities related to professional issues.	D1.Show leadership skills that enable them to organize work and lead the juniors and paramedical staff and work effectively with a team.
D2 .Employ effective communication and accurate documentation while providing and/or managing for client needs.	D2.Communicate with patients, family, and/or significant others to take history, clinical

IV. Course Content:

A – Theoretical Aspect:

Order	Units/Topics List	Sub Topics List	Number of Weeks	Contact hours	Learning Outcomes
1	Introduction	- Common signs & symptoms for medical diseases - Classifications of medical diseases - Health assessment - History - Physical examination	1	2	a1, b1, c1,
2	Diseases of digestive system	- Anatomy & physiology - Assessment & diagnostic tests - Peptic ulcer and esophageal diseases - Upper & lower GIT bleeding - Mal-absorption syndrome - Ulcerative colitis	1	2	a2, b2, c1, c2, d1, d2
3	Liver diseases	- Hepatitis - Liver failure	1	2	a1, c1, c2, d1, d2

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		▪ Liver cirrhosis ▪ Liver tumors			
4	Gallbladder diseases	▪ Cholecystitis ▪ Stone of gallbladder ▪ Pancreatitis ▪ Cancer of pancreas	1	2	a3, c1, c2, d1, d2
5	Diseases of Respiratory system	▪ Anatomy & physiology ▪ Assessment & diagnostic tests ▪ Common respiratory diseases ✓ Asthma ✓ Pneumonia ✓ COPD (Chronic bronchitis Bronchiectasis, and acute emphysema) ✓ Atelectasis ✓ Lung cancer ✓ Pleural effusion, pleurisy ✓ Pneumothorax	2	4	a1, a2, c1, c2, d1, d2
6	Midterm exam	Midterm exam	1	2	a1, a2, a3, b2, b3, c1, c2, c1, d2
7	Cardiovascular system	▪ Anatomy & physiology ▪ Assessment & diagnostic tests • Rheumatic heart disease • Angina and myocardial infarction • Congestive heart failure • Hypertension • Varicosis • Cardiac arrest	2	4	a2, a3, b3, c1, c2, d1, d2

		• Pacemakers • Cardiovascular Medications			
8	Blood diseases	▪ Anemia ▪ Hemorrhagic diseases ▪ Thrombosis ▪ Blood transfusion ▪ Hodgkin's disease	1	2	a3, b3, d1, d2
9	Neurological system	▪ Anatomy & physiology ▪ Assessment & diagnostic tests • Increased intracranial pressure • Head injuries • Cerebrovascular accident (Stroke) • Spinal cord injury • Epilepsy	2	4	a1, a2, c1, c2, d1, d2
10	Endocrine disease	▪ Diabetes ▪ Pituitary gland disease ▪ Thyroid gland diseases ▪ Parathyroid gland diseases ▪ Adrenal gland diseases.	1	2	a1, a3, b2, c1, c2
11	Urological system	▪ Anatomy & physiology ▪ Assessment & diagnostic tests ▪ Urinary tract infection ▪ Urolithiasis (stones) ▪ BPH ▪ Acute renal failure ▪ Dialysis for acute Renal failure	2	4	a1, c1, c2, d1, d2
12	Final exam	Final exam	1	2	a1, a2, b1, b2, b3, c1, c2, d1, d2

	Number of Weeks /and Units Per Semester	16	32	
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B – Practical Aspect:

Order	Task/ Experiments	Number of Weeks	Contact hours	Learning Outcomes
	Not applicable			
	Number of Weeks /and Units Per Semester			

V. Teaching strategies of the course

- 1-Lecture – Discussion
- 2- Demonstration
- 3- Student assignment
- 4- Role Plays
- 5- Brainstorming
- 6- Case study
- 7- Field work

V. Assessments strategies of the course

Assess role plays with the check-list on communication
Assess communication techniques by rating scale
Assess performance with rating scale

VI. Assignments

No	Assignments	Aligned CILOs (symbols)	Week Due	Mark
1	Performing health assessment and requesting diagnostic measures for three assigned patients	c1, c2, d1, d2	2	2.5
2	Write plan of management for three assigned patients	c1, c2, d1, d2	2	2.5

VII. Schedule of Assessment Tasks for Students During the Semester

Theoretical Part

No	Assessment	Week	Mark	Proportion of	Aligned Course
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	Method	Due		Final Assessment	Learning Outcomes
1	Attendance and activities	15th week	5	5%	a1, a2, b1, b2
2	Student assignments	5th and 12th week	5	5%	a1, a2, b3, b1, b2, b3
3	Mid-term exam	7th or 8th week	20	20%	a1, a2, b1, b2, c2, d2
4	Final-exam	16th-17th week	70	70 %	a1, a2, a3, b1, b2, c2, d2
Clinical Part					
No	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes
	Not applicable				
Number of Weeks /and Units Per Semester					

VIII. Learning Resources:

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1- Required Textbook(s) (maximum two). المراجع الرئيسية:	
	2. Davidson's Principles and Practice of Medicine (2002). 19 th ed, Page 108, 127
2- Essential References. المراجع المساندة	
	2. Kumar's & Clark Pocket (2001). Clinical Medicine, 5 th ed, Page 852-853. publisher.
3- Electronic Materials and Web Sites etc. المصادر الإلكترونية ومواقع الإنترنت... الخ	
	1. http://www.google.com

IX. Course Policies: الضوابط والسياسات المتبعة في المساق

1	Class Attendance: At least 75 % of the course hours should be attended by the student. Otherwise, he/she will not be allowed to attend the final exam
2	Tardy: any student who is late for more than 15 minutes from starting the lecture will not be allowed to attend the lecture and will be considered absent.
3	Exam Attendance/Punctuality: Any student who is late for more than 30 minutes from starting the exam will not be allowed to attend the exam and

	will be considered absent.
4	Assignments & Projects: Assignments and projects will be assessed individually unless the teacher request for group work
5	Cheating: Cheating by any means will cause the student failure and he/she must re-study the course
6	Plagiarism: Plagiarism by any means will cause the student failure in the course. Other disciplinary procedures will be according to the college rules.
7	Other policies (سياسات أخرى): -