Course specification
Kafrelsheikh University
Faculty of Medicine
اعتماد توصيف مقررات الفرقة الخامسة

اعتمادات المجالس الحاكمة:

مجلس إدارة وحدة ضمان الجودة	جلسة رقم (٢) بتاريخ ٢٠٢٤/٩/٣٠
مجلس الكلية:	جلسة رقم (٦١) بتاريخ ٢٠٢٤/١٠/٧

الإعتمادات:

مدير وحدة ضمان الجودة

عميد الكلية

Course Specifications
Ear, Nose and Throat
S9M1/ENT
2025 /2026

1. Basic Information

Course Title	**Ear, Nose and Throat**			
Course Code	**S9M1/ENT**			
Department/s participating in delivery of the course	**Ear nose throat Department**			
	Theoretical	**Practical**	**Self-learning (Tasks/ Assignments/ incision academy**	**Total**
Number of credit hours of the course = 4	**2**	**1**	**1**	**4**
Number of contact hours of the course = 105	30	45	30	105
Course Type	Obligatory			
Course duration	4 weeks			
Academic level at which the course is taught	fifth year/9th semester			
Academic Program	برنامج بكالوريوس الطب والجراحة (MBBS) credit hours			
Faculty	Kafrelsheikh Faculty of Medicine			
University	Kafrelsheikh University			
Name of Course Coordinator	Dr. Hussein Abdallah El-Shirbeney			
Course Specification Approval Date	7/10/2024			
Course Specification Approval (Attach the decision/minutes of the department /committee/council ....)				

2. Course Overview (Brief summary of scientific content)

This course provides students with essential knowledge and clinical orientation to diseases affecting the ear, nose, throat, and head and neck. It emphasizes both common conditions and emergencies in otorhinolaryngology. Students will develop the skills to apply scientific and analytic methods in diagnosis and management, making effective use of available resources while considering environmental safety. The course also fosters integration of basic science knowledge with clinical skills to support competent practice in ear, nose, and throat disorders.

3. Course Learning Outcomes (CLOs)

Matrix of course learning outcomes CLOs with program outcomes POs (NARS/ARS)

Program Outcomes (NARS/ARS) (according to the matrix in the program specs)		Course Learning Outcomes Upon completion of the course, the student will be able to:	
Code	**Text**	**Code**	**Text**
Competency Area I: The graduate as a health care provider **The graduate should provide quality, safe, patient-centered care, drawing upon his/her integrated knowledge and clinical skills, and adhering to professional values. The graduate should collect and interpret information, make clinical decisions, and carry out diagnostic and therapeutic interventions - with an understanding of the limits of his/her expertise- considering the patient's circumstances and preferences as well as the availability of resources. The graduate should be able to:**			
1.1	**Take and record a structured, patient-centered history.**	1.1.1.	Document a complete otorhinolaryngological medical history in the outpatient clinics.
		1.4.1	Examine patient's physical signs in terms of anatomical, pathological, and functional diagnostic significances.
		1.6.1.	Point out the most appropriate and cost-effective diagnostic laboratory investigations for common otorhinolaryngological disorders to reach the proper final diagnosis within a short time.
		1.10.1.	Integrate anatomical, physiological, and pathological knowledge with clinical data to prioritize differential diagnoses and select cost-effective investigations for a coherent diagnostic formulation.
		1.13.1.	Formulate a management plan for common otorhinolaryngological diseases and acute emergencies.
Competency Area III: The graduated as a professional **codes, standards of practice, and laws** **The graduate should adhere to the professional and ethical governing practice. The graduate should be able to:**			
3.5	**Ensure confidentiality and privacy of patients' information.**	3.5.1	Maintain confidentiality and privacy of patients' information.

Program Outcomes (NARS/ARS) (according to the matrix in the program specs)		Course Learning Outcomes Upon completion of the course, the student will be able to:	
Code	**Text**	**Code**	**Text**
Competency Area VI: The graduate as a scholar and scientist			

The graduate should build his / her clinical practice on a base of knowledge of scientific principles and methods of basic medical and social sciences, applying this knowledge into clinical care, and using it as a foundation for clinical reasoning, care provision, further professional development and research. The graduate should be able to:			
4.1	**Describe the normal structure of the body and its major organ systems and explain their functions.**	4.1.1.	Describe the normal structure and function of the ear, nose, and throat.
		4.1.2.	Explain clinical data in relation to basic anatomical, pathological, and physiological scientific facts
4.5	**Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of the common illness/disease and explain the ways in which they operate on the body (pathogenesis).**	4.5.1.	Recognize the etiology, pathogenesis, and complications of common otorhinolaryngological illnesses and diseases, with special emphasis on environmental and traumatic causes.
Competency Area V: The graduate as a member of the health team and a part of the health care system			
The graduate should work and collaborate effectively with physicians and other colleagues in the health care professions, demonstrating an awareness of and a respect for their roles in delivering safe & effective patient- and population-centered care. He/she should be committed to his/her role as a part of health care system, respecting its hierarchy and rules and using his/her administrative and leadership skills to add value to the system. The graduate should be able to:			
5.3	**Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports collaborative work.**	5.3.1	Implement collaborative teamwork during small group teaching .

4. Teaching and Learning Methods

1. Interactive Lectures
2. Tutorial classes
3. Clinical classes
4. Self-directed learning.
5. Case Discussion

Course Schedule

NO.		Total

of the Week	Scientific content of the course (Course Topics)	Weekly Hours	Theoretical teaching (lectures/discussion groups/ .....)	Training (Clinical Rounds)	Others
1.	1. Examination of the Ear, Nose and Throat	26.5	1.5	2	
	2. Pain in the Ear		1.5	2	2
	3. Discharge from the Ear 1		1.5	2	
	4. Discharge from the Ear 2		1.5	2	2
	5. Otologic dysfunction		1.5	2	
	6. ENT Case discussion			1.5	3.5
2.	7. Facial Palsy	26.5	1.5	2	
	8. Paranasal sinus diseases 1		1.5	2	2
	9. Paranasal sinus diseases 2		1.5	2	
	10. Nasal discharge		1.5	2	2
	11. Epistaxis		1.5	2	
	12. ENT Case Discussion			1.5	3.5
3.	13. Nasal Obstruction and Smell Disorder	27	1.5	2	
	14. Facial Plastics		1.5	2	2
	15. Throat Pain 1		1.5	2	
	16. Throat Pain 2		1.5	2	2
	17. Airway Obstruction disorder & Stridor		1.5	2	
	18. ENT Case Discussion			2	3.5
4.	19. Hoarseness and Voice disorders	25	1.5	2	
	20. Snoring and Obstructive Sleep Apnea		1.5	2	2
	21. Swallowing problems		1.5	2	
	23. Head and Neck Trauma		1.5	2	2
	24. Foreign body in Ear, Nose, Larynx Neck Swelling 1		1.5	2	3.5
		105	**30**	**45**	**30**

5. Methods of Students' Assessment

No.	Assessment Methods*	Assessment Timing (Week Number)	Marks	Percentage of Total Course Marks
1.	Quiz	Third week	0	0
2.	End Module exam	Fifth Week	20	**20%**
3.	Final Written Exam	16-20 Week	40	**40%**
4.	Final Practical/Clinical/… Exam	Fifth Week	30	**30%**
5	Assignments/Portfolio	Throughout the Module	10	**10%**

	Total		100	**100%**

6. Learning Resources and Supportive Facilities *

Learning resources (books, scientific references, etc.) *	**The Main (Essential) Reference for the Course** (must be written in full according to the scientific documentation method)	● Operative Otolaryngology: Head and Neck Surgery. (2017), by: Carl H. Snyderman MD Elsevier. ● Cummings otolaryngology head and neck surgery. (2020), by: Paul Flint, Bruce Haughey, Valerie Lund, K. Robbins, J. Regan Thomas, Marci Lesperance, Howard W. Francis. Elsevier.
	Other References	● Scott-Brown's Essential Otorhinolaryngology, Head & Neck Surgery By England -Publisher: Taylor - Copyright : 2022 - Ed - ISBN13 : 9781138608481
	Electronic Sources (Links must be added)	● https://www.entuk.org
	Learning Platforms (Links must be added)	● https://academy.incision.care/courses https://www.ekb.eg/ar/web/researchers/home
	Other (to be mentioned)	European Examination Board in Otorhinolaryngology ● https://www.ceorlhns.org/education
Supportive facilities & equipment for teaching and learning *	**Devices/Instruments**	• Tuning forks , Tongue depressors • Nasal speculums • Head mirrors / head lights • Otoscopes
	Supplies	Library facilities & Online Access With updated ENT textbooks.
	Electronic Programs	Interactive e-learning platforms (ThinCi) and Microsoft teams.
	Skill Labs/ Simulators	
	Virtual Labs	
	Other (to be mentioned)	

منسق المقرر
حسين الشربيني

مدير البرنامج
هاني برج

Course Specifications
Radiology and laboratory medicine
S9M2/RL
2025 /2026

1. Basic Information

Course Title	**Radiology and laboratory Medicine**			
Course Code	S9M2/RL			
Department/s participating in delivery of the course	• **Radiodiagnosis and medical imaging department** • **Clinical pathology department**			
Number of credit hours of the course = 6	**Theoretical**	**Clinical**	**Self-learning (Tasks/ Assignments/ incision academy**	**Total**
	3	2	1	6
Number of contact hours of the course	**45**	**90**	**30**	165
Course Type	Obligatory			
Course duration	5weeks			
Academic level at which the course is taught	fifth year/9th semester			
Academic Program	M.B. Ch.B. 5+2 Program (credit hour)			
Faculty	Kafrelsheikh Faculty of Medicine			
University	Kafrelsheikh University			
Name of Course Coordinator				
Course Specification Approval Date	7/10/2024			
Course Specification Approval **(Attach the decision/minutes of the department /committee/council ....)**				

2. Course Overview (Brief summary of scientific content)

The course aims to equip students with the knowledge, skills, and attitudes required to apply radiological and laboratory investigations in clinical practice. Students will understand the principles, indications, and interpretation of X-ray, ultrasound, CT, and MRI studies, and recognize normal and abnormal findings. They will also learn fundamental concepts of hematology, biochemistry, immunology, and microbiology essential for disease diagnosis and monitoring. Emphasis is placed on developing accuracy, safety, and professionalism in performing and interpreting investigations, as well as fostering responsibility, teamwork, ethical conduct, and a patient-centered approach in both diagnostic imaging and laboratory practice.

3. Course Learning Outcomes (CLOs)

Matrix of course learning outcomes CLOs with program outcomes POs (NARS/ARS)

	Program Outcomes (NARS/ARS) (according to the matrix in the program specs)		**Course Learning Outcomes Upon completion of the course, the student will be able to:**
Code	**Text**	**Code**	
1.1	Take and record a structured, patient centered history	1.1.1	record relevant clinical information and history to select appropriate imaging procedures.
1.2	Adopt an empathic and holistic approach to the patients and their problems	1.2.1	
1.4	Perform appropriately-timed full physical examination of patients, appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive	1.4.1	Correlate clinical findings with imaging needs, ensuring appropriate patient preparation and safety.
1.5	Prioritize issues to be addressed in a patient encounter	1.5.1	
1.6	Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors	1.6.1	Choose suitable radiological modalities (X-ray, US, CT, MRI) and interpret basic findings accurately.
		1.6.2	Interpret basic hematology test results relevant to red cell disorders (e.g., CBC, reticulocyte count).
		1.6.3	Interpret laboratory findings (CBC, bone marrow, immunophenotyping) in leukemia diagnosis.
		1.6.4	Interpret renal function tests (serum urea, creatinine, electrolytes, urinalysis).
		1.6.5	Interpret laboratory investigations (glucose tolerance, HbA1c, insulin assays).
		1.6.6	Select and interpret renal function tests and urinalysis findings in health and disease.
		1.6.7	Select appropriate enzymatic and microbiological tests to confirm diagnosis.
		1.6.8	Select and interpret appropriate investigations for different types of anemia.

1.7	Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice	1.7.1	
1.8	Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand	1.8.1	Apply anatomy, physics, and pathology principles in understanding radiological images.
		1.8.2	Apply knowledge of hematology and biochemistry to explain the mechanisms and clinical findings of anemia.
		1.8.3	Apply knowledge of molecular and clinical pathology to classify leukemias.
1.9	Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM)	1.9.1	
1.10	Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation	1.10.1	Combine imaging results with clinical data to reach a diagnostic conclusion.
1.11	Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances	1.11.1	Demonstrate safe and proper handling of radiological equipment and patient positioning.
1.12	Adopt strategies and apply measures that promote patient safety	1.12.1	Apply radiation protection and safety measures for patients and staff
1.13	Establish patient-centered management plans in partnership with the patient, his/her family and other health professionals as appropriate, using Evidence Based Medicine in management decision	1.13.1	Recommend appropriate imaging follow-up and communicate results effectively with clinicians.
1.14	Respect patients' rights and involve them and/or their families/carers in management decisions	1.14.1	
1.15	Provide the appropriate care in cases of emergency, including cardio-pulmonary resuscitation, immediate life support measures and basic first aid procedures	1.15.1	
1.16	Apply the appropriate pharmacological and nonpharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life	1.16.1	
1.17	Contribute to the care of patients and their families at the end of life, including management of symptoms, practical issues of law and certification	1.17.1	

2.1	Identify the basic determinants of health and principles of health improvement	2.1.1	Recognize imaging findings related to major community diseases (e.g., tuberculosis, trauma, cancer).
2.2	Recognize the economic, psychological, social, and cultural factors that interfere with wellbeing	2.2.1	
2.3	Discuss the role of nutrition and physical activity in health	2.3.1	
2.4	Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases	2.4.1	
2.5	Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity	2.5.1	
2.6	Recognize the epidemiology of common diseases within his/her community and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases	2.6.1	
2.7	Provide care for specific groups including pregnant women, newborns and infants, adolescents and the elderly	2.7.1	
2.8	Identify vulnerable individuals that may be suffering from abuse or neglect and take the proper actions to safeguard their welfare	2.8.1	
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect	3.1.1	Demonstrate professionalism, respect, and empathy when dealing with patients during imaging procedures.
3.2	Adhere to the professional standards and laws governing the practice, and abide by the national code of ethics issued by the Egyptian Medical Syndicate	3.2.1	Maintain ethical conduct, patient confidentiality, and respect during image acquisition and reporting.
		3.2.2	apply professional standards and ethical principles, including autonomy, beneficence, justice, and respect for patients' rights
3.3	Respect the different cultural beliefs and values in the community they serve	3.3.1	respect cultural values and beliefs while explaining the impact of psychiatric interventions in a patient-centered manner
3.4	Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic backgrounds, or their disabilities	3.4.1	
3.5	Ensure confidentiality and privacy of patients' information	3.5.1	
3.6	Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors	3.6.1	

3.7	Recognize and manage conflicts of interest	3.7.1	
3.8	Refer patients to the appropriate health facility at the appropriate stage	3.8.1	
3.9	Identify and report any unprofessional and unethical behaviors or physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients' safety	3.9.1	
4.1	Describe the normal structure of the body and its major organ systems and explain their functions	4.1.1	Identify normal anatomy in radiological images of various systems.
		4.1.2	Describe the normal structure and function of major organ systems including blood, liver, and kidney, and explain their physiological roles.
4.2	Explain the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis	4.2.1	Explain the molecular, biochemical, and cellular mechanisms involved in maintaining homeostasis, hematopoiesis, and metabolic balance.
4.3	Recognize and describe main developmental changes in humans and the effect of growth, development and aging on the individual and his family	4.3.1	
4.4	Explain normal human behavior and apply theoretical frameworks of psychology to interpret the varied responses of individuals, groups and societies to disease	4.4.1	
4.5	Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis)	4.5.1	Identify genetic, developmental, and metabolic causes of disordered hematopoiesis and explain their pathogenesis.
		4.5.2	Identify the pathogenesis of red cell disorders such as hemolytic and membrane defects
		4.5.3	Identify genetic and neoplastic causes of leukemia and explain their pathogenesis.
		4.5.4	Identify metabolic and endocrine causes of carbohydrate metabolism disorders such as diabetes mellitus.
		4.5.5	Explain mechanisms of enzyme alterations and infectious disease pathogenesis.
		4.5.6	Identify immunologic mechanisms underlying hypersensitivity reactions.
4.6	Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions	4.6.1	Recognize and describe pathological changes in imaging related to common diseases.
		4.6.2	Describe the altered morphology and function of erythrocytes in anemic conditions.
		4.6.3	Describe the altered structure and function of the liver in hepatocellular and cholestatic diseases.

		4.6.4	Describe altered renal structure and function in acute and chronic renal diseases.
		4.6.5	Describe structural and functional abnormalities of leukocytes in infection, inflammation, and malignancy.
4.7	Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population	4.7.1	Describe enzyme kinetics, therapeutic drug actions, and the pharmacological factors that affect biochemical and laboratory parameters.
4.8	Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities	4.8.1	Demonstrate the ability to explain imaging principles, contrast use, and modalities applied in clinical diagnosis
5.1	Recognize the important role played by other health care professionals in patients' management	5.1.1	Collaborate with clinicians and technologists to optimize diagnostic imaging and patient care.
5.2	Respect colleagues and other health care professionals and work cooperatively with them	5.2.1	
5.3	Implement strategies to promote understanding, manage differences, and resolve conflicts	5.3.1	
5.4	Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system	5.4.1	
5.5	Communicate effectively using written health records, electronic medical records, or other digital technology	5.5.1	Prepare clear and concise imaging reports and documentation using medical terminology.
5.6	Evaluate his / her work and that of others using constructive feedback	5.6.1	
5.7	Recognize own personal and professional limits, and seek help from colleagues and supervisors when necessary	5.7.1	
5.8	Apply fundamental knowledge of health economics to ensure the efficiency and effectiveness of the health care system	5.8.1	
5.9	Use health informatics to improve the quality of patient care	5.9.1	
5.10	Document clinical encounters in an accurate, complete, timely, and accessible manner	5.10.1	
5.11	Improve the health service provision by applying a process of continuous quality improvement	5.11.1	
5.12	Demonstrate accountability to patients, society, and the profession	5.12.1	
6.1	Regularly reflect on and assess his / her performance using various	6.1.1	

	performance indicators and information sources		
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice	6.2.1	
6.3	Identify opportunities and use various resources for learning	6.3.1	Utilize digital imaging platforms and online radiology databases for continuous learning.
6.4	Engage in inter-professional activities and collaborative learning	6.4.1	
6.5	Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that address them.	6.5.1	
6.6	Effectively manage learning time and resources and set priorities	6.6.1	
6.7	Demonstrate an understanding of the scientific principles of research including its ethical aspects and scholarly inquiry and contribute to the work of a research study	6.7.1	
6.8	Critically appraise research studies and scientific papers in terms of integrity, reliability, and applicability	6.8.1	Interpret and evaluate recent radiological research and evidence-based imaging practices.
6.9	Analyze and use numerical data including the use of basic statistical methods	6.9.1	
6.10	Summarize and present to professional and lay audiences the findings of relevant research and scholarly inquiry	6.10.1	

4. Teaching and Learning Methods

6. Interactive Lectures
7. Tutorial classes
8. **Clinical** classes
9. Directed self learning.

Course Schedule

NO. of the Week	Scientific content of the course (Course Topics)	Total Weekly Hours			
1.	1. **(Radiology)** Introduction to X-ray and Ultrasound Imaging	33	**Theoretical teaching (lectures/discussion groups/ .....)**	**Training (Clinical Rounds)**	**Others**
	2. **(Laboratory Medicine)** Hematopoiesis		1.5	**3**	**2**
	3. **(Radiology)** Introduction to CT and MRI Imaging		1.5	**3**	

	4. **(Laboratory Medicine)** Red Cell Disorders		1.5	3	2
	5. **(Radiology)** Neuro-imaging I		1.5	3	
	6. **(Laboratory Medicine)** Anemia		1.5	3	2
2.	7. **(Radiology)** Cardiac Imaging	33	1.5	3	
	8. **(Laboratory Medicine)** White Blood Cell Disorders		1.5	3	2
	9. **(Radiology)** Vascular Imaging		1.5	3	
	10. **(Laboratory Medicine)** Leukemias		1.5	3	2
	11. **(Radiology)** Radiological Emergencies		1.5	3	
	12. **(Laboratory Medicine)** Liver Diseases		1.5	3	2
3.	13. **(Radiology)** Gastrointestinal (GIT) Imaging	33	1.5	3	
	14. **(Laboratory Medicine)** Kidney Function		1.5	3	2
	15. **(Radiology)** Musculoskeletal Imaging I		1.5	3	
	16. **(Laboratory Medicine)** Disorders of Carbohydrate Metabolism		1.5	3	2
	17. **(Radiology)** Musculoskeletal Imaging II		1.5	3	
	18. **(Laboratory Medicine)** Clinical Enzymology		1.5	3	2
4.	19. **(Radiology)** Genito-urinary Imaging	33	1.5	3	
	20. **(Laboratory Medicine)** Basic Clinical Microbiology		1.5	3	2
	21. **(Radiology)** Pediatric Imaging		1.5	3	
	22. **(Laboratory Medicine)** Blood Banking		1.5	3	2
	23. **(Radiology)** Breast Imaging		1.5	3	
	24. **(Laboratory Medicine)** Hypersensitivity Reactions		1.5	3	2
5.	25. **(Radiology)** Interventional Radiology	33	1.5	3	
	26. **(Radiology)** Introduction to X-ray and Ultrasound Imaging		1.5	3	2
	27. Revision		1.5	3	
	28. Revision		1.5	3	2

	29. Revision		1.5	3	
	30. Revision		1.5	3	2
		165	45	90	30

5. Methods of Students' Assessment

No.	Assessment Methods*	Assessment Timing (Week Number)	Marks	Percentage of Total Course Marks
1.	Quiz	Third week	-	0
2.	End Module exam	5 Week	**30**	**20%**
3.	Final Written Exam	16-20 Week	60	**40%**
4.	Final Clinical Exam	5 Week	45	**30%**
5.	Assignments/Portfolio	Throughout the Module	15	**10%**
	total		**150**	**100%**

6. Learning Resources and Supportive Facilities *

Learning resources (books, scientific references, etc.) *	**The Main (Essential) Reference for the Course** (must be written in full according to the scientific documentation method)	• Grainger, R. G., Allison, D. J., Adam, A., Dixon, A. K., & Mitchell, A. M. (2021). Grainger & Allison's Diagnostic Radiology: A Textbook of Medical Imaging (7th ed.). Elsevier. • Brant, W. E., & Helms, C. A. (2019). Fundamentals of Diagnostic Radiology (5th ed.). Wolters Kluwer Health. • Rumack, C. M., Wilson, S. R., Charboneau, J. W., & Levine, D. (2023). Diagnostic Ultrasound (6th ed.). Elsevier. • Abbasi F, Ayremlu P, Niazkhani Z. "From classroom to clinic: evaluating a clinical pathology course to strengthen pathology report literacy of medical interns." *BMC Medical Education*. 2025 Apr 7;25(1):490. doi:10.1186/s12909-025-07001-4. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC11974 • Baba O, et al. "Breaking Barriers in Pathology Education: Embracing the Digital Future." *American Journal of Clinical Pathology*, 2023. (Supplement issue) — https://academic.oup.com/ajcp/article/160/Supplement_1/S101/7455592 •
	Other References	Haaga, J. R., Dogra, V. S., Forsting, M., Gilkeson, R. C., Ha, H. K., & Sundaram, M. (2017). CT and MRI of the Whole Body (6th ed.). Elsevier.
	Electronic Sources (Links must be added)	**Radiopaedia** – Comprehensive open-access radiology resource with cases, articles, and quizzes. https://radiopaedia.org

		e-Anatomy (Imaios) – Interactive anatomy and medical imaging atlas (CT, MRI, X-ray, Ultrasound). https://www.imaios.com/en/e-Anatomy **American College of Radiology (ACR)** – Guidelines and imaging criteria for clinical decision-making. https://www.acr.org **Radiology Masterclass** – Educational site offering tutorials on X-ray, CT, and MRI interpretation. https://www.radiologymasterclass.co.uk **Radiology Assistant (by the Dutch Radiological Society)** – Expert tutorials and teaching files on all imaging modalities. https://radiologyassistant.nl **National Center for Biotechnology Information (NCBI) – PubMed** – Access to current radiology and imaging research. https://pubmed.ncbi.nlm.nih.gov **European Society of Radiology (ESR eLearning Platform – Education on Demand)** https://www.myesr.org/education/educationondemand • **American Society for Clinical Pathology (ASCP).** *Official website providing educational resources, case studies, and guidelines in laboratory medicine.* Available from: https://www.ascp.org • **Centers for Disease Control and Prevention (CDC) – Laboratory Quality and Safety.** *Comprehensive reference for laboratory procedures, biosafety, and diagnostic guidelines.* Available from: https://www.cdc.gov/labquality • **World Health Organization (WHO) – Laboratory Biosafety Manual, 4th Edition, 2020.** *Global standard reference for clinical laboratory practices and safety.* Available from: https://www.who.int/publications/i/item/9789240011311 • **PubMed Central (PMC).** *Database of peer-reviewed journal articles in clinical and laboratory medicine.* Available from: https://www.ncbi.nlm.nih.gov/pmc/ **The Journal of Clinical Pathology (BMJ Publishing Group).** *Peer-reviewed international journal for pathology and laboratory medicine research.* Available from: https://jcp.bmj.com
	Learning Platforms (Links must be added)	Learning Platforms (Links must be added) FreeCME – Radiology Continuing Education Courses Offers free, accredited online CME activities in diagnostic

		and interventional radiology https://www.freecme.com/specialties/radiology Coursera – Medical Imaging and Radiology Courses Online learning platform offering structured radiology and medical imaging programs from top universities https://www.coursera.org/courses?query=radiology RSNA (Radiological Society of North America) Education Center Provides online case reviews, CME courses, and radiology learning modules https://www.rsna.org/education Radiopaedia Courses Interactive, case-based online radiology training modules suitable for students and professionals https://radiopaedia.org/courses
	Other (to be mentioned)	
Supportive facilities & equipment for teaching and learning *	**Devices/Instruments**	• desktop or laptop computers with stable internet access • projector and screen (for group teaching, case discussions, and presentations) • printers / scanners (for psychological tests, survey forms, and reports) • X-ray machine (digital and conventional) • Ultrasound machine with Doppler capability • Computed Tomography (CT) scanner • Magnetic Resonance Imaging (MRI) unit Mammography machine
	Supplies	• library facilities & online access with updated textbooks and journals • X-ray films and film markers Ultrasound gel Contrast media (iodinated and gadolinium-based) IV cannulas and syringes Disinfectants and gloves Patient gowns and drapes Protective barriers and covers for probes Stationery for reporting and documentation
	Electronic Programs	Interactive e-learning platforms (ThinCi) and Microsoft teams.
	Skill Labs/ Simulators	
	Virtual Labs	
	Other (to be mentioned)	

Name and Signature **Course Coordinator**	**Name and Signature** **Program Coordinator**

Course Specifications

Dermatology

S9M3/D

2025 /2026

1. Basic Information

Course Title	**Dermatology**			
Course Code	S9M3/D			
Department/s participating in delivery of the course	• **Dermatology**			
Number of credit hour of the course = 2	**Theoretical**	**Clinical**	**Self-learning (Tasks/ Assignments/ incision academy**	**Total**
	1	0.5	0.5	2
Number of Contact hour	15	22.5	15	52.5
Course duration	3 weeks			
Course Type	Obligatory			
Academic level at which the course is taught	fifth year/9th semester			
Academic Program	M.B. Ch.B. 5+2 Program (credit points)			
Faculty	Kafrelsheikh Faculty of Medicine			
University	Kafrelsheikh University			
Name of Course Coordinator				
Course Specification Approval Date	7/10/2024			
Course Specification Approval (Attach the decision/minutes of the department /committee/council ....)				

2. Course Overview (Brief summary of scientific content)

The dermatology module equips students with knowledge and skills to assess, diagnose, and manage common skin disorders, including infections, inflammatory, allergic, and pigmentary conditions, as well as hair and andrology issues. The module emphasizes clinical examination, effective communication, and professional, ethical patient care.

3. Course Learning Outcomes (CLOs)

Matrix of course learning outcomes CLOs with program outcomes POs (NARS/ARS)

	Program Outcomes (NARS/ARS) (according to the matrix in the program specs)		**Course Learning Outcomes Upon completion of the course, the student will be able to:**
Code	**Text**	**Code**	
1.1	Take and record a structured, patient centered history	1.1.1	take and record a structured, patient-centered history from pediatric patients and/or their caregivers, focusing on skin conditions, infections, inflammatory, allergic, pigmentary, and hair disorders.
1.2	Adopt an empathic and holistic approach to the patients and their problems	1.2.1	demonstrate an empathic and holistic approach to patients and their families while managing dermatological problems, showing compassion, respect, and professionalism
1.3	Assess the mental state of the patient	1.3.1	
1.4	Perform appropriately-timed full physical examination of patients, appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive	1.4.1	perform a systematic skin and related system examination appropriate to the patient's age, gender, and clinical presentation, identifying signs of infections, inflammatory, allergic, pigmentary, and hair disorders.
1.5	Prioritize issues to be addressed in a patient encounter	1.5.1	
1.6	Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors	1.6.1	Select appropriate laboratory and diagnostic investigations, including skin swabs, cultures, biopsies, serology, and blood tests, to guide the diagnosis and management of dermatological conditions.
1.7	Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice	1.7.1	
1.8	Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand	1.8.1	

1.9	Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM)	1.9.1	Retrieve and critically evaluate current dermatology literature and digital resources to support evidence-based diagnosis and management of skin, hair, and nail disorders
1.10	Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation	1.10.1	integrate history, clinical examination, and investigation findings for a wide range of dermatological conditions.
1.11	Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances	1.11.1	
1.12	Adopt strategies and apply measures that promote patient safety	1.12.1	
1.13	Establish patient-centered management plans in partnership with the patient, his/her family and other health professionals as appropriate, using Evidence Based Medicine in management decision	1.13.1	
1.14	Respect patients' rights and involve them and/or their families/carers in management decisions	1.14.1	
1.15	Provide the appropriate care in cases of emergency, including cardio-pulmonary resuscitation, immediate life support measures and basic first aid procedures	1.15.1	deliver emergency care in dermatological complications, including acute hypersensitivity reactions and anaphylaxis
1.16	Apply the appropriate pharmacological and nonpharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life	1.16.1	
1.17	Contribute to the care of patients and their families at the end of life, including management of symptoms, practical issues of law and certification	1.17.1	
2.1	Identify the basic determinants of health and principles of health improvement	2.1.1	
2.2	Recognize the economic, psychological, social, and cultural factors that interfere with wellbeing	2.2.1	
2.3	Discuss the role of nutrition and physical activity in health	2.3.1	
2.4	Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases	2.4.1	Identify disease prevention principles, including skin hygiene, vaccination guidance, and strategies to reduce the risk of skin infections

2.5	Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity	2.5.1	
2.6	Recognize the epidemiology of common diseases within his/her community and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases	2.6.1	
2.7	Provide care for specific groups including pregnant women, newborns and infants, adolescents and the elderly	2.7.1	
2.8	Identify vulnerable individuals that may be suffering from abuse or neglect and take the proper actions to safeguard their welfare	2.8.1	
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect	3.1.1	Exhibit professional behavior in all clinical encounters, including honesty, integrity, compassion, and respect for patients' dignity and rights.
3.2	Adhere to the professional standards and laws governing the practice, and abide by the national code of ethics issued by the Egyptian Medical Syndicate	3.2.1	
3.3	Respect the different cultural beliefs and values in the community they serve	3.3.1	
3.4	Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic backgrounds, or their disabilities	3.4.1	
3.5	Ensure confidentiality and privacy of patients' information	3.5.1	
3.6	Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors	3.6.1	
3.7	Recognize and manage conflicts of interest	3.7.1	
3.8	Refer patients to the appropriate health facility at the appropriate stage	3.8.1	
3.9	Identify and report any unprofessional and unethical behaviors or physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients' safety	3.9.1	
4.1	Describe the normal structure of the body and its major organ systems and explain their functions	4.1.1	Describe the normal structure and function of the skin, appendages (hair, nails), and related integumentary system components.
4.2	Explain the molecular, biochemical, and cellular mechanisms that are	4.2.1	Explain the molecular, biochemical, and cellular mechanisms that maintain skin homeostasis, including barrier function, immune response, and pigmentation

	important in maintaining the body's homeostasis		
4.3	Recognize and describe main developmental changes in humans and the effect of growth, development and aging on the individual and his family	4.3.1	Recognize and describe the major developmental and age-related changes in the skin, hair, and nails, and their impact on health, appearance, and disease susceptibility.
4.4	Explain normal human behavior and apply theoretical frameworks of psychology to interpret the varied responses of individuals, groups and societies to disease	4.4.1	
4.5	Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis)	4.5.1	Identify the genetic, developmental, metabolic, toxic, infectious, autoimmune, neoplastic, degenerative, and traumatic causes of skin, hair, and nail disorders, and explain their pathogenesis
4.6	Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions	4.6.1	
4.7	Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population	4.7.1	Explain the therapeutic actions, pharmacokinetics, side effects, and interactions of dermatological treatments, including topical and systemic agents, combination therapies, and commonly used non-prescribed medications
4.8	Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities	4.8.1	Perform essential dermatology practical skills and procedures, including skin examination, dermatoscopy, biopsy techniques, and interpretation of common diagnostic tests, while understanding their scientific rationale
5.1	Recognize the important role played by other health care professionals in patients' management	5.1.1	
5.2	Respect colleagues and other health care professionals and work cooperatively with them	5.2.1	work collaboratively with peers, supervisors, and other healthcare professionals to ensure comprehensive care for complex dermatological cases
5.3	Implement strategies to promote understanding, manage differences, and resolve conflicts	5.3.1	
5.4	Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system	5.4.1	
5.5	Communicate effectively using written health records, electronic medical records, or other digital technology	5.5.1	
5.6	Evaluate his / her work and that of others using constructive feedback	5.6.1	Assess personal performance and provide constructive feedback on the work of peers and colleagues during dermatology clinical and learning activities
5.7	Recognize own personal and professional limits, and seek help	5.7.1	

	from colleagues and supervisors when necessary		
5.8	Apply fundamental knowledge of health economics to ensure the efficiency and effectiveness of the health care system	5.8.1	
5.9	Use health informatics to improve the quality of patient care	5.9.1	utilize diverse learning resources, including digital platforms, peer and faculty interactions, and evidence-based materials, to enhance knowledge and support lifelong learning in dermatology.
5.10	Document clinical encounters in an accurate, complete, timely, and accessible manner	5.10.1	
5.11	Improve the health service provision by applying a process of continuous quality improvement	5.11.1	
5.12	Demonstrate accountability to patients, society, and the profession	5.12.1	
6.1	Regularly reflect on and assess his / her performance using various performance indicators and information sources	6.1.1	
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice	6.2.1	
6.3	Identify opportunities and use various resources for learning	6.3.1	use diverse learning resources, including digital platforms and peer/professor interactions, to enhance knowledge acquisition
6.4	Engage in inter-professional activities and collaborative learning	6.4.1	
6.5	Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that address them.	6.5.1	
6.6	Effectively manage learning time and resources and set priorities	6.6.1	
6.7	Demonstrate an understanding of the scientific principles of research including its ethical aspects and scholarly inquiry and contribute to the work of a research study	6.7.1	
6.8	Critically appraise research studies and scientific papers in terms of integrity, reliability, and applicability	6.8.1	
6.9	Analyze and use numerical data including the use of basic statistical methods	6.9.1	
6.10	Summarize and present to professional and lay audiences the findings of relevant research and scholarly inquiry	6.10.1	

4. Teaching and Learning Methods

10. Interactive Lectures
11. Tutorial classes
12. **Clinical** rounds

13. Directed self-learning.

Course Schedule

NO. of the Week	Scientific content of the course (Course Topics)	Total Weekly Hours	Theoretical teaching (lectures/discussi on groups/ .....)	Training clinical	Others
1.	1. • Skin introduction	17.5	2	1.5	
	2. • Bacterial infections		2	1.5	
	3. • Viral infections		1	1.5	
	4. • Leprosy			1.5	2.5
	5. • Fungal infections			1.5	
	6. • Parasitic infections				2.5
2.	7. • Erythematosquamous disorders	17.5	2	1.5	
	8. • Acne vulgaris		2	1.5	
	9. • Syphilis and HIV		1	1.5	
	10. • Allergic skin diseases			1.5	2.5
	11. • Andrology			1.5	
	12. • Hair disorders and vitiligo				2.5
3	13. Hair disorders and vitiligo	17.5	2	1.5	
	14. Hair disorders and vitiligo		2	1.5	
	15. Revision		1	1.5	
	16. Revision			1.5	2.5
	17. Revision			1.5	
	18. Revision				2.5
	Total	**52.5**	**15**	**22.5**	**15**

5. Methods of Students' Assessment

No.	Assessment Methods*	Assessment Timing (Week Number)	Marks	Percentage of Total Course Marks
1.	Quiz	First week	0	0
2.	End Module exam	Third Week	**10**	**20%**

3.	Final Written Exam	16-20 Week	**20**	**40%**
4.	Final Clinical Exam	Third Week	**15**	**30%**
5.	Assignments/Portfolio	Throughout the Module	**5**	**10%**
			50	

6. Learning Resources and Supportive Facilities *

Learning resources (books, scientific references, etc.) *	**The Main (Essential) Reference for the Course** (must be written in full according to the scientific documentation method)	• Habif TP, Chapman MS, Curry JL. Clinical Dermatology: Expert Consult. 8th ed. Elsevier; 2021. ISBN: 9780323757107 • Bolognia JL, Schaffer JV, Cerroni L. Dermatology. 5th ed. Elsevier; 2018. ISBN: 9780323357635
	Other References	● Wolff K, Johnson RA, Saavedra AP. Fitzpatrick's Color Atlas and Synopsis of Clinical Dermatology. 8th ed. McGraw-Hill; 2019.
	Electronic Sources (Links must be added)	• **PubMed (Dermatology search portal):** https://pubmed.ncbi.nlm.nih.gov/?term=dermatology **DermNet NZ (Dermatology reference and patient education):** https://dermnetnz.org/ **American Academy of Dermatology (AAD):** https://www.aad.org/ World Health Organization — Skin Health: https://www.who.int/health-topics/skin-diseases Egyptian Knowledge Bank (EKB): https://www.ekb.eg/ar/web/researchers/home
	Learning Platforms (Links must be added)	• **Interactive e-learning platforms (ThinCi)** – virtual dermatology cases and modules • **Khan Academy – Health & Medicine / Skin & Dermatology:** https://www.khanacademy.org/science/health-and-medicine • **OpenLearn (The Open University) – Health & Medicine courses:** https://www.open.edu/openlearn/science-maths-technology/health-medicine • **Coursera (Audit for free) – Dermatology & Skin Health courses:** https://www.coursera.org/courses?query=dermatology • **edX (Audit for free) – Health & Medicine / Skin Science programs:** https://www.edx.org/learn/health • **Egyptian Knowledge Bank (EKB) – full free access in Egypt:** https://www.ekb.eg/ar/web/researchers/home • **MIT OpenCourseWare – Biological & Health Sciences:** https://ocw.mit.edu/courses/biology/ • **American Academy of Dermatology (AAD) – educational resources:** https://www.aad.org/education
	Other (to be mentioned)	
Supportive facilities & equipment for teaching and learning *	**Devices/Instruments**	• Desktop or laptop computers with stable internet access • Projector and screen for group teaching, case discussions, and presentations • Dermatoscopes, magnifying lenses, and slit-lamps for clinical examination • Printers / scanners for patient forms, consent documents, and reports
	Supplies	• Library facilities & online access with updated dermatology textbooks and journals • Clinical record forms, patient history sheets, and diagnostic worksheets (printed or digital) Sterile gloves, swabs, biopsy kits, and other disposable diagnostic materials

	Electronic Programs	Interactive e-learning platforms (ThinCi) and Microsoft teams.
	Skill Labs/ Simulators	
	Virtual Labs	
	Other (to be mentioned)	Access to hospital clinics and outpatient units for hands-on clinical exposure

Course Specifications

Family medicine and integrated management of common illness

S9M4/FM

2025 /2026

1. Basic Information

Course Title	Family medicine and integrated management of common illness				
Course Code	S9M4/FM				
Department/s participating in delivery of the course	**Community medicine and public health department** **Pediatric department** **Internal Medicine Department** **Obstetrics and Gynecology department**				
Number of credit hour of the course = 6	**Theoretical**	**clinical**	Field	**Self-learning (Tasks/ Assignments/ incision academy**	**Total**
	3	1	1	1	6
Number of contact hour of the course = 180	**45**	**45**	60	**30**	180
Course Type	Obligatory				
Course duration	4 weeks				
Academic level at which the course is taught	Fifth year/9^{h} semester				
Academic Program	M.B. Ch.B. 5+2 Program (credit hour)				
Faculty	Kafrelsheikh Faculty of Medicine				
University	Kafrelsheikh University				
Name of Course Coordinator					
Course Specification Approval Date	7/10/2024				

Course Specification Approval (Attach the decision/minutes of the department /committee/council ....)	

2. Course Overview (Brief summary of scientific content)

To enable students, through collaboration between the Community Medicine and Public Health, Pediatric, Internal Medicine, and Obstetrics and Gynecology Departments, to acquire the knowledge, skills, and attitudes necessary to understand, apply, and integrate the principles of community, family, maternal, child, adult, and geriatric health care within the framework of the Egyptian health system, emphasizing prevention, early detection, management, and health promotion across all life stages.

3. Course Learning Outcomes (CLOs)

Matrix of course learning outcomes CLOs with program outcomes POs (NARS/ARS)

	Program Outcomes (NARS/ARS) (according to the matrix in the program specs)		**Course Learning Outcomes Upon completion of the course, the student will be able to:**
Code	**Text**	**Code**	**Text**
1.1	Take and record a structured, patient centered history	1.1.1	Obtain a complete history appropriate to the patient's age and context, including maternal, child, adolescent, adult, and geriatric history, with emphasis on lifestyle, nutrition, psychosocial, and reproductive factors.
1.2	Adopt an empathic and holistic approach to the patients and their problems	1.2.1	Demonstrate empathy and a holistic approach to patients and families in community, maternal, child, and geriatric settings, considering physical, emotional, and social dimensions.
1.3	Assess the mental state of the patient	1.3.1	
1.4	Perform appropriately-timed full physical examination of patients, appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive	1.4.1	Perform systematic examinations for neonates, children, pregnant women, adults, and elderly patients with cultural sensitivity..
1.5	Prioritize issues to be addressed in a patient encounter	1.5.1	Prioritize health problems during encounters, identifying urgent maternal, pediatric, or geriatric conditions requiring prompt management.
1.6	Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors	1.6.1	Choose and interpret relevant investigations in primary care, maternal, child, and elderly patients, considering cost-effectiveness and evidence-based practice.
1.7	Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice	1.7.1	

1.8	Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand	1.8.1	Apply biomedical and clinical knowledge to interpret disease patterns across life stages and design appropriate preventive and curative interventions.
1.9	Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM)	1.9.1	
		1.9.2	
1.10	Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation	1.10.1	Integrate history, examination, and investigations to diagnose common conditions in children, women, adolescents, and elderly patients.
1.11	Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances	1.11.1	Perform basic procedures relevant to primary, maternal, and child care such as growth assessment, immunization, antenatal checks, and basic life support safely.
1.12	Adopt strategies and apply measures that promote patient safety	1.12.1	apply safety measures during obstetric care to prevent complications, ensure maternal and fetal safety, and maintain high standards of clinical practice.
1.13	Establish patient-centered management plans in partnership with the patient, his/her family and other health professionals as appropriate, using Evidence Based Medicine in management decision	1.13.1	Develop and implement individualized, evidence-based care plans for patients across all age groups in collaboration with the healthcare team.
1.14	Respect patients' rights and involve them and/or their families/carers in management decisions	1.14.1	Respect patients' rights and autonomy in reproductive, adolescent, and geriatric care, ensuring confidentiality and informed consent.
1.15	Provide the appropriate care in cases of emergency, including cardio-pulmonary resuscitation, immediate life support measures and basic first aid procedures	1.15.1	
1.16	Apply the appropriate pharmacological and nonpharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life	1.16.1	
1.17	Contribute to the care of patients and their families at the end of life, including management of symptoms, practical issues of law and certification	1.17.1	
		1.17.2	
2.1	Identify the basic determinants of health and principles of health improvement	2.1.1	Identify determinants of health and describe how nutrition, hygiene, environment, and socioeconomic factors affect maternal, child, and community health.
2.2	Recognize the economic, psychological, social, and cultural factors that interfere with wellbeing	2.2.1	Recognize economic, psychological, and cultural influences on family health, fertility, adolescence, and aging.

2.3	Discuss the role of nutrition and physical activity in health	2.3.1	
2.4	Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases	2.4.1	Identify common community health risks such as malnutrition, chronic diseases, pollution, and adolescent issues in Egypt.
2.5	Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity	2.5.1	Apply principles of health promotion in maternal, child, school, and geriatric programs, emphasizing vaccination, nutrition, and screening.
2.6	Recognize the epidemiology of common diseases within his/her community and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases	2.6.1	
2.7	Provide care for specific groups including pregnant women, newborns and infants, adolescents and the elderly	2.7.1	Provide comprehensive care for pregnant women, newborns, children, adolescents, and elderly individuals through multidisciplinary teamwork
2.8	Identify vulnerable individuals that may be suffering from abuse or neglect and take the proper actions to safeguard their welfare	2.8.1	Identify and protect cases of child abuse, gender-based violence, and elderly neglect, following proper referral pathways.
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect	3.1.1	Demonstrate professionalism, empathy, and respect for pregnant women, their families, and cultural beliefs during Demonstrate professionalism, compassion, and integrity in patient care across all clinical and community settings..
3.2	Adhere to the professional standards and laws governing the practice, and abide by the national code of ethics issued by the Egyptian Medical Syndicate	3.2.1	Comply with national health policies, legal frameworks, and ethical codes governing community, maternal, and clinical practice.
3.3	Respect the different cultural beliefs and values in the community they serve	3.3.1	Show respect for cultural, religious, and societal norms influencing family, reproductive, and end-of-life care.
		3.3.2	
3.4	Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic backgrounds, or their disabilities	3.4.1	
3.5	Ensure confidentiality and privacy of patients' information	3.5.1	Maintain confidentiality during all patient interactions, including reproductive, adolescent, and geriatric consultations.
3.6	Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors	3.6.1	
3.7	Recognize and manage conflicts of interest	3.7.1	
3.8	Refer patients to the appropriate health facility at the appropriate stage	3.8.1	Identify and refer high-risk patients (e.g., complicated pregnancy, severe child illness, or dementia) to appropriate levels of care.

3.9	Identify and report any unprofessional and unethical behaviors or physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients' safety	3.9.1	
4.1	Describe the normal structure of the body and its major organ systems and explain their functions	4.1.1	Describe normal anatomy and physiology of the human body across all life stages, emphasizing growth, reproduction, and aging.
4.2	Explain the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis	4.2.1	
4.3	Recognize and describe main developmental changes in humans and the effect of growth, development and aging on the individual and his family	4.3.1	
4.4	Explain normal human behavior and apply theoretical frameworks of psychology to interpret the varied responses of individuals, groups and societies to disease	4.4.1	
4.5	Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis)	4.5.1	
4.6	Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions	4.6.1	
4.7	Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population	4.7.1	
4.8	Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities	4.8.1	
5.1	Recognize the important role played by other health care professionals in patients' management	5.1.1	
5.2	Respect colleagues and other health care professionals and work cooperatively with them	5.2.1	Work effectively within multidisciplinary teams across Community, Pediatrics, Internal Medicine, and Obstetrics & Gynecology.
5.3	Implement strategies to promote understanding, manage differences, and resolve conflicts	5.3.1	
5.4	Apply leadership skills to enhance team functioning, the learning	5.4.1	

	environment, and/or the health care delivery system		
5.5	Communicate effectively using written health records, electronic medical records, or other digital technology	5.5.1	
5.6	Evaluate his / her work and that of others using constructive feedback	5.6.1	
5.7	Recognize own personal and professional limits, and seek help from colleagues and supervisors when necessary	5.7.1	
5.8	Apply fundamental knowledge of health economics to ensure the efficiency and effectiveness of the health care system	5.8.1	
5.9	Use health informatics to improve the quality of patient care	5.9.1	
		5.9.2	
5.10	Document clinical encounters in an accurate, complete, timely, and accessible manner	5.10.1	
5.11	Improve the health service provision by applying a process of continuous quality improvement	5.11.1	Participate in maternal, child, and community health quality improvement programs using health indicators and audit results.
5.12	Demonstrate accountability to patients, society, and the profession	5.12.1	
6.1	Regularly reflect on and assess his / her performance using various performance indicators and information sources	6.1.1	Reflect on clinical and community performance, using feedback to enhance competence and professionalism.
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice	6.2.1	
6.3	Identify opportunities and use various resources for learning	6.3.1	
6.4	Engage in inter-professional activities and collaborative learning	6.4.1	
6.5	Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters	6.5.1	
6.6	Effectively manage learning time and resources and set priorities	6.6.1	
6.7	Demonstrate an understanding of the scientific principles of research including its ethical aspects and scholarly inquiry and contribute to the work of a research study	6.7.1	Apply basic research and epidemiological methods in community, maternal, and pediatric health studies.
6.8	Critically appraise research studies and scientific papers in terms of integrity, reliability, and applicability	6.8.1	
6.9	Analyze and use numerical data including the use of basic statistical methods	6.9.1	
6.10	Summarize and present to professional and lay audiences the	6.10.1	

	findings of relevant research and scholarly inquiry		

4. Teaching and Learning Methods

14. Interactive Lectures
15. Tutorial classes
16. Clinical classes
17. Field visit
18. Directed self learning.
19. Case Discussion

Course Schedule

NO. of the Week	Scientific content of the course (Course Topics)	Total Weekly Hours	Theoretical teaching (lectures/discussi on groups/ .....)	Training (Clinical Rounds)	field	Directed self-learning.
1.	31. Health system in Egypt1	45.5	2	2		
	32. Primary health care1		2	2	7	3.5
	33. Primary health care2		2	2		
	34. Maternal health1		2	2	4	3
	35. Maternal health2		2	1	4	
	36. Child health1		2	2		
2.	37. Child health2	45.5	2	2		
	38. School health1		2	2	7	3.5
	39. School health2		2	2		
	40. Reproductive health1		2	2	4	3
	41. Health care management		2	1	4	
	42. Genetic counseling		2	2		
3.	43. Care of newborn	45.5	2	2		
	44. IMCI		2	2	7	3.5
	45. Child abuse and depression		2	2		
	46. Adolescent medicine (common disorders and special consideration in society)		2	2	4	3
	47. Adolescent medicine (common disorders and special consideration in society)		2	1	4	
	48. Atypical presentation of diseases in elderly patients		2	2		

4.	49. Fatigue, Dementia and delirium	43.5	2	2		
	50. Management of common health problems guidelines		2	2	7	3.5
	51. Constipation and faecal impaction in elderly		2	2		
	52. Genital mutilation		2	2	4	3
	53. Family planning and contraception1		1	2	4	
	54. Family planning and contraception2			2		
		180	45	45	60	30

5. Methods of Students' Assessment

No.	Assessment Methods*	Assessment Timing (Week Number)	Marks	Percentage of Total Course Marks
1.	Quiz	Second week	0	0
2.	End Module exam	Fourth Week	**30**	**20%**
3.	Final Written Exam	16-20 Week	**60**	**40%**
4.	Final Clinical Exam	Fourth Week	**45**	**30%**
5.	Field work	Throughout the Module	**5**	**3%**
6.	Assignments/Portfolio	Throughout the Module	**10**	**7 %**
	Total		**150**	**100&**

6. Learning Resources and Supportive Facilities *

Learning resources (books, scientific references, etc.) *	**The Main (Essential) Reference for the Course** (must be written in full according to the scientific documentation method)	• Park, K. (2023). Park's Textbook of Preventive and Social Medicine (27th ed.). Jabalpur, India: Banarsidas Bhanot Publishers. • Nelson, W. E., Kliegman, R. M., St. Geme, J. W. (2024). Nelson Textbook of Pediatrics (22nd ed.). Philadelphia: Elsevier. • Kumar, P., & Clark, M. (2024). Kumar and Clark's Clinical Medicine (11th ed.). Elsevier.
	Other References	. **2Wynn, Ralph M.; Lauritzen, Christian; Knörr, Karl; Beller, Fritz K. (2012).** *Gynecology: A Textbook for Students*. New York: Springer. Available at: https://link.springer.com/book/10.1007/978-1-4615-7128-5

	Electronic Sources (Links must be added)	• **World Health Organization (WHO):** https://www.who.int • **Ministry of Health and Population, Egypt:** https://www.mohp.gov.eg • **Centers for Disease Control and Prevention (CDC):** https://www.cdc.gov • **UNFPA – Egypt:** https://egypt.unfpa.org • **UNICEF – Child Health:** https://www.unicef.org/health • **WHO – Primary Health Care:** https://www.who.int/health-topics/primary-health-care • **WHO – Reproductive & Maternal Health:** https://www.who.int/health-topics/reproductive-health • **IMCI – WHO:** https://www.who.int/teams/maternal-newborn-child-adolescent-health-and-ageing/imci • **National Institute on Aging:** https://www.nia.nih.gov • **UpToDate:** https://www.uptodate.com
	Learning Platforms (Links must be added)	• **FreeCME – Public Health, Family Medicine & Pediatrics:** https://www.freecme.com/specialties/public-health • **Clinical Options – Pediatrics & Women's Health:** https://clinicaloptions.com • **Medscape Education:** https://www.medscape.org • **Coursera – Global Health & Primary Care Courses:** https://www.coursera.org • **FutureLearn – Public Health & Health Management:** https://www.futurelearn.com • **WHO Academy Learning Platform:** https://academy.who.int • **Endocrinology Advisor CME (for adolescent and elderly topics):** https://www.endocrinologyadvisor.com/endocrinology-cme-courses • **OpenWHO – Free WHO Online Courses:** https://openwho.org
	Other (to be mentioned)	
Supportive facilities & equipment for teaching and learning *	**Devices/Instruments**	• Community Medicine & Public Health: BP monitor, weighing scales, thermometer, glucometer, environmental inspection kits. • Pediatrics: Infantometer, pediatric scales, growth charts, pulse oximeter, neonatal resuscitation set, immunization tools.

		• Internal Medicine: Stethoscope, sphygmomanometer, ECG machine, glucometer, nebulizer, oxygen devices. • Obstetrics & Gynecology: Fetoscope, Doppler, ultrasound machine, pelvic exam set, fundal height tape, delivery set.
	Supplies	• Disposable gloves and masks • Sterile gauze, cotton, and bandages • Antiseptics and disinfectants • Syringes and needles • IV fluids and infusion sets • Tongue depressors and swabs • Thermometer covers and BP cuffs • Stationery and patient record forms
	Electronic Programs	Interactive e-learning platforms (ThinCi) and Microsoft teams.
	Skill Labs/ Simulators	
	Virtual Labs	
	Other (to be mentioned)	access to hospital clinics for hands-on clinical exposure

منسق المقرر
هبة عبد المقصود

مدير البرنامج
هاني برج

Course Specifications
S10M1/CCS

Chest cardiovascular disease, cardiovascular surgery, anesthesia, pediatric, vascular, plastic surgeries
2025 /2026

1. Basic Information

Course Title	**Chest cardiovascular disease, cardiovascular surgery, anesthesia, pediatric, vascular, plastic surgeries**			
Course Code	S10M1/CCS			
Department/s participating in delivery of the course	**Chest Department** **Cardiology department** **Pediatric surgery department** **Vascular surgery department** **Cardiothoracic department** **Plastic surgery department** **Anesthesia ICU department**			
	Theoretical	**Clinical**	**Directed Self-learning**	**Total**
Number of credit hour of the course = 10	6	**2**	2	10
Number of contact hour of the course = 240	90	**90**	60	240
Course duration	9 weeks			
Course Type	Obligatory			
Academic level at which the course is taught	Fifth year/10th semester			
Academic Program	M.B. Ch.B. 5+2 Program (credit hour)			
Faculty	Kafrelsheikh Faculty of Medicine			
University	Kafrelsheikh University			
Name of Course Coordinator				
Course Specification Approval Date	7/10/2024			
Course Specification Approval **(Attach the decision/minutes of the department /committee/council ....)**				

2. Course Overview (Brief summary of scientific content)

This integrated clinical course provides students with the essential competencies required for the diagnosis and management of major surgical and medical conditions affecting different organ systems. It encompasses cardiothoracic, vascular, pediatric, plastic, and general surgical topics alongside related medical disciplines such as cardiology, respiratory medicine, and anesthesia. The course emphasizes clinical reasoning, patient assessment, and evidence-based decision-making. Students learn to perform comprehensive history taking and physical examination, interpret investigations, and apply appropriate therapeutic and procedural skills. Anesthesia sessions focus on perioperative care, airway management, and resuscitation principles. Through lectures, demonstrations, and clinical rotations, students develop teamwork, professionalism, and communication skills required for multidisciplinary patient care. The course aims to link foundational scientific knowledge with clinical practice, enabling students to deliver safe, ethical, and effective care across surgical and medical specialties.

3. Course Learning Outcomes (CLOs)

Matrix of course learning outcomes CLOs with program outcomes POs (NARS/ARS)

	Program Outcomes (NARS/ARS) (according to the matrix in the program specs)		**Course Learning Outcomes** **Upon completion of the course, the student will be able to:**
Code	**Text**	**Code**	**Text**
1.1	Take and record a structured, patient centered history	1.1.1	Record a focused surgical history including pain, trauma, and operative history.
		1.1.2	Record a detailed medical history focusing on cardiovascular and respiratory symptoms.
1.2	Adopt an empathic and holistic approach to the patients and their problems	1.2.1	Adopt an empathic and holistic approach in preoperative and postoperative surgical care.
		1.2.2	Adopt an empathic and holistic approach when managing chronic heart or chest conditions.
1.3	Assess the mental state of the patient	1.3.1	
1.4	Perform appropriately-timed full physical examination of patients, appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive	1.4.1	Perform a complete surgical physical examination including abdomen, hernia, and peripheral pulses.
		1.4.2	Perform cardiovascular and respiratory system examinations for diagnosis.

1.5	Prioritize issues to be addressed in a patient encounter	1.5.1	Prioritize surgical problems such as bleeding, infection, or obstruction.
		1.5.2	Prioritize medical problems like dyspnea, chest pain, or arrhythmia.
1.6	Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors	1.6.1	Select and interpret laboratory and imaging studies relevant to surgical conditions.
		1.6.2	interpret ECG, echocardiogram, and pulmonary function tests.
1.7	Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice	1.7.1	
1.8	Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand	1.8.1	Apply anatomical and physiological principles to explain surgical pathologies.
		1.8.2	Apply pathophysiological knowledge in interpreting cardiac and pulmonary disorders.
1.9	Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM)	1.9.1	Retrieve and analyze surgical evidence to guide operative decision-making.
		1.9.2	Retrieve and evaluate evidence for pharmacological and non-pharmacological management.
1.10	Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation	1.10.1	Integrate surgical findings to formulate differential diagnoses and operative plans.
		1.10.2	Integrate medical findings to formulate accurate cardiac or respiratory diagnoses.
1.11	Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances	1.11.1	Show the ability to perform diagnostic procedures safely (ECG, thoracentesis, nebulization).
		1.11.2	Show the ability to perform minor surgical and diagnostic procedures safely (suturing, drainage, wound care) on themselves or manikins.
1.12	Adopt strategies and apply measures that promote patient safety	1.12.1	
1.13	Establish patient-centered management plans in partnership with the patient, his/her family and other health professionals as appropriate, using	1.13.1	

	Evidence Based Medicine in management decision		
1.14	Respect patients' rights and involve them and/or their families/carers in management decisions	1.14.1	Respect patients' rights in consenting and operative decision-making.
		1.14.1	Respect patients' rights in long-term treatment and rehabilitation planning.
1.15	Provide the appropriate care in cases of emergency, including cardio-pulmonary resuscitation, immediate life support measures and basic first aid procedures	1.15.1	Show the ability to Provide emergency surgical care for trauma, bleeding, and shock.
		1.15.2	Show the ability to Provide emergency care for acute heart failure, arrhythmia, or respiratory distress
1.16	Apply the appropriate pharmacological and nonpharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life	1.16.1	Show the ability to Apply pain control protocols for preoperative, postoperative, and palliative surgical cases.
		1.16.2	Show the ability to Apply pharmacological and supportive measures for pain and dyspnea relief.
1.17	Contribute to the care of patients and their families at the end of life, including management of symptoms, practical issues of law and certification	1.17.1	
2.1	Identify the basic determinants of health and principles of health improvement	2.1.1	Identify surgical risk factors such as smoking, obesity, and poor nutrition that influence wound healing and recovery.
		2.1.2	Identify determinants like hypertension, obesity, and sedentary lifestyle affecting heart and lung health.
		2.1.3	Identify perioperative factors affecting patient safety and outcomes including comorbidities and stress response.
2.2	Recognize the economic, psychological, social, and cultural factors that interfere with wellbeing	2.2.1	
2.3	Discuss the role of nutrition and physical activity in health	2.3.1	Discuss the importance of nutrition in postoperative recovery and prevention of surgical complications.
		2.3.2	Discuss the role of diet and exercise in prevention and control of cardiac and pulmonary diseases.
		2.3.3	Discuss perioperative fasting, fluid balance, and nutritional support during anesthesia.

2.4	Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases	2.4.1	identify surgical diseases related to occupational or environmental exposure such as trauma or burns.
		2.4.2	Identify risk factors for respiratory diseases and cardiovascular morbidity in the community.
2.5	Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity	2.5.1	Describe principles of prevention of vascular and diabetic foot complications through patient education.
		2.5.2	Describe preventive strategies for cardiac ischemia, hypertension, and COPD.
		2.5.3	Describe preventive measures to avoid anesthesia-related complications through preoperative assessment.
2.6	Recognize the epidemiology of common diseases within his/her community and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases	2.6.1	Recognize the prevalence and prevention strategies for congenital anomalies and trauma in children.
		2.6.2	Recognize epidemiology of ischemic heart disease and respiratory infections in the local population.
2.7	Provide care for specific groups including pregnant women, newborns and infants, adolescents and the elderly	2.7.1	Show the ability to Provide surgical care suitable for neonates and children with congenital malformations.
2.8	Identify vulnerable individuals that may be suffering from abuse or neglect and take the proper actions to safeguard their welfare	2.8.1	
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect	3.1.1	Exhibit professionalism, integrity, and compassion in surgical wards, operating rooms, cardiac and respiratory patient care.
3.2	Adhere to the professional standards and laws governing the practice, and abide by the national code of ethics issued by the Egyptian Medical Syndicate	3.2.1	
3.3	Respect the different cultural beliefs and values in the community they serve	3.3.1	
3.4	Treat all patients equally, and avoid stigmatizing any category regardless of	3.4.1	

	their social, cultural or ethnic backgrounds, or their disabilities		
3.5	Ensure confidentiality and privacy of patients' information	3.5.1	Ensure confidentiality of patients' data in ward rounds and electronic records.
3.6	Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors	3.6.1	
3.7	Recognize and manage conflicts of interest	3.7.1	
3.8	Refer patients to the appropriate health facility at the appropriate stage	3.8.1	Show the ability to Refer patients requiring advanced cardiac or respiratory intervention appropriately.
3.9	Identify and report any unprofessional and unethical behaviors or physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients' safety	3.9.1	
4.1	Describe the normal structure of the body and its major organ systems and explain their functions	4.1.1	Describe surgical anatomy relevant to thoracic, vascular, and reconstructive procedure
		4.1.2	Describe the anatomy and physiology of the cardiovascular and respiratory systems.
4.2	Explain the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis	4.2.1	Explain biochemical mechanisms of shock, wound healing, and tissue repair.
		4.2.2	Explain cellular mechanisms regulating myocardial contraction and gas exchange.
		4.2.3	Explain physiological mechanisms underlying anesthesia and acid-base balance.
4.3	Recognize and describe main developmental changes in humans and the effect of growth, development and aging on the individual and his family	4.3.1	
4.4	Explain normal human behavior and apply theoretical frameworks of psychology to interpret the varied responses of individuals, groups and societies to disease	4.4.1	
4.5	Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis)	4.5.1	Identify traumatic, neoplastic, and infectious causes of surgical diseases.

		4.5.2	Identify genetic, metabolic, and infectious causes of cardiac and respiratory disorders.
		4.5.3	Identify toxic and pharmacologic effects influencing organ function during anesthesia.
4.6	Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions	4.6.1	Describe pathophysiological changes in ischemia, embolism, burns, and congenital defects.
		4.6.2	Describe the pathophysiology of heart failure, arrhythmias, and pulmonary embolism.
		4.6.3	Describe physiological alterations due to anesthesia, hypoxia, and shock.
4.7	Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population	4.7.1	Describe pharmacologic properties of antihypertensive, antiarrhythmic, and bronchodilator drugs.
		4.7.2	Describe pharmacologic actions and side effects of antibiotics, anticoagulants, and analgesics.
		4.7.3	Describe mechanisms and effects of anesthetic agents and muscle relaxants
4.8	Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and interpret common diagnostic modalities	4.8.1	**Show the ability to** interpret surgical investigations such as X-ray, CT, and Doppler
		4.8.2	**Show the ability to** interpret ECG, echocardiography, and pulmonary function tests.
		4.8.3	**how the ability to** use and interpret physiological monitors during anesthesia.
5.1	Recognize the important role played by other health care professionals in patients' management	5.1.1	Recognize the collaborative role of surgical, nursing, and rehabilitation teams in perioperative care.
		5.1.2	Recognize the importance of coordination between anesthetists, surgeons, and ICU staff.
5.2	Respect colleagues and other health care professionals and work cooperatively with them	5.2.1	
5.3	Implement strategies to promote understanding, manage differences, and resolve conflicts	5.3.1	
5.4	Apply leadership skills to enhance team functioning, the learning	5.4.1	Apply leadership principles during emergency or operative situation

	environment, and/or the health care delivery system		
5.5	Communicate effectively using written health records, electronic medical records, or other digital technology	5.5.1	**Show the ability to** record medical histories, ECG findings, and progress notes.
5.6	Evaluate his / her work and that of others using constructive feedback	5.6.1	
5.7	Recognize own personal and professional limits, and seek help from colleagues and supervisors when necessary	5.7.1	Recognize limits in surgical skill and consult senior surgeons appropriately.
5.8	Apply fundamental knowledge of health economics to ensure the efficiency and effectiveness of the health care system	5.8.1	
5.9	Use health informatics to improve the quality of patient care	5.9.1	
5.10	Document clinical encounters in an accurate, complete, timely, and accessible manner	5.10.1	**Show the ability to** prepare complete surgical case summaries and discharge notes.
5.11	Improve the health service provision by applying a process of continuous quality improvement	5.11.1	
5.12	Demonstrate accountability to patients, society, and the profession	5.12.1	Demonstrate responsibility in managing chronic diseases and patient safety
6.1	Regularly reflect on and assess his / her performance using various performance indicators and information sources	6.1.1	Reflect on surgical outcomes and feedback to improve performance
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice	6.2.1	Develop a learning plan to update cardiac and respiratory management knowledge
6.3	Identify opportunities and use various resources for learning	6.3.1	
6.4	Engage in inter-professional activities and collaborative learning	6.4.1	
6.5	Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters	6.5.1	
6.6	Effectively manage learning time and resources and set priorities	6.6.1	
6.7	Demonstrate an understanding of the scientific principles of research including its ethical aspects and	6.7.1	

	scholarly inquiry and contribute to the work of a research study		
6.8	Critically appraise research studies and scientific papers in terms of integrity, reliability, and applicability	6.8.1	
6.9	Analyze and use numerical data including the use of basic statistical methods	6.9.1	
6.10	Summarize and present to professional and lay audiences the findings of relevant research and scholarly inquiry	6.10.1	Show the ability to present anesthesia audits and research reports**.**

4. Teaching and Learning Methods

20. Interactive Lectures
21. Tutorial classes
22. Clinical classes
23. Directed self learning.
24. Skill lab
25. Simulated patient
26. Case Discussion

Course Schedule

NO. of the Week	Scientific content of the course (Course Topics)	Total Weekly Hours	Theoretical teaching (lectures/discussi on groups/ .....)	Training (Clinical Rounds)/ Skill lab /Simulated patient	Others Directed self learning
1.	**1.** Cardiothoracic – Chest Trauma & Pleural Disease	**26.5**	**2**	**2**	
	2. Plastic – Maxillofacial Trauma & Jaw Swelling		**2**	**2**	
	3. Cardiothoracic – Trauma 2 & Suppurative Diseases		**2**	**2**	**3**
	4. Chest – Suppurative Lung Disease		**2**	**2**	
	5. Cardiothoracic – Empyema & Lung Cancer		**1**	**1**	**3.5**
	6. Chest – Lung Cancer		**1**	**1**	
2.	**7.** Chest – Pleural Effusion	**26.5**	**2**	**2**	
	8. Chest – Interstitial Lung Disease (ILD)		**2**	**2**	

	9. Chest – Chronic Obstructive Pulmonary Disease (COPD)		**2**	**2**	3
	10. Chest – Bronchial Asthma (BA)		**2**	**2**	
	11. Chest – Pulmonary Tuberculosis (TB)		**1**	**1**	3.5
	12. Chest – Lower Respiratory Tract Infection (LRTI)		**1**	**1**	
3.	**13.** Chest – Obstructive Sleep Apnea (OSA)	**26.5**	**2**	**2**	
	14. Chest – Pulmonary Vascular Disease		**2**	**2**	
	15. Chest – Respiratory Failure & Oxygen Therapy		**2**	**2**	3
	16. Cardiothoracic – Chest X-ray		**2**	**2**	
	17. Anesthesia – Introduction		**1**	**1**	3.5
	18. Anesthesia – CPR		**1**	**1**	
4.	**19.** Anesthesia – General Anesthesia	**26.5**	**2**	**2**	
	20. Anesthesia – Neuroaxial Anesthesia		**2**	**2**	
	21. Anesthesia – Local Anesthesia		**2**	**2**	3
	22. Anesthesia – Peripheral Nerve Block		**2**	**2**	
	23. Anesthesia – Shock		**1**	**1**	3.5
	24. Anesthesia – Blood Transfusion		**1**	**1**	
5.	**25.** Cardiology – Ischemic Heart Disease (IHD)	**26.5**	**2**	**2**	
	26. Cardiothoracic – Coronary Diseases		**2**	**2**	
	27. Cardiology – Heart Failure (HF)		**2**	**2**	3
	28. Cardiology – Aortic Diseases		**2**	**2**	
	29. Cardiology – Valvular Heart Disease		**1**	**1**	3.5
	30. Cardiothoracic – Valvular Diseases		**1**	**1**	
6.	**31.** Cardiology – Arrhythmias & Atrial Fibrillation (AF)	**26.5**	**2**	**2**	

	32. Cardiology – Hypertension & Rheumatic Fever		**2**	**2**	
	33. Cardiology – Pulmonary Embolism & Pulmonary Hypertension		**2**	**2**	3
	34. Cardiology – Congenital Heart Diseases (CHD)		**2**	**2**	
	35. Cardiology – Pericardial Diseases & Infective Endocarditis		**1**	**1**	3.5
	36. Vascular – Varicose Veins & Lymphedema		**1**	**1**	
7.	**37.** Vascular – Deep Vein Thrombosis (DVT)	**26.5**	**2**	**2**	
	38. Vascular – Acute & Chronic Ischemia		**2**	**2**	
	39. Vascular – Dialysis Access		**2**	**2**	3
	40. Vascular – Lymphedema & Lower Limb Swelling		**2**	**2**	
	41. Vascular – Diabetic Foot		**1**	**1**	3.5
	42. Vascular – DVT & Post-Phlebitic Syndrome (PPS)		**1**	**1**	
8.	**43.** Vascular – OSCE Review	**26.5**	**2**	**2**	
	44. Pediatrics – Esophageal Atresia		**2**	**2**	
	45. Pediatrics – Congenital Diaphragmatic Hernia (CDH)		**2**	**2**	3
	46. Pediatrics – Anterior Abdominal Wall Defects & Hernia		**2**	**2**	
	47. Pediatrics – Anorectal Malformations		**1**	**1**	3.5
	48. Pediatrics – Neck Swelling		**1**	**1**	
9.	**49.** Pediatrics – Congenital Hypertrophic Pyloric Stenosis (CHPS) & Intussusception	**28**	**2**	**2**	
	50. Plastic – Burns		**2**	**2**	3.5
	51. Plastic – Skin Graft & Flap		**2**	**2**	**1.5**
	52. Plastic – Cleft & Vascular Malformation		**2**	**2**	

	53. Plastic – Hand Surgery		**1**	**1**	3.5
	54. Cardiothoracic – Chest Trauma & Pleural Disease		**1**	**1**	
	Total	**240**	**90**	**90**	**60**

5. Methods of Students' Assessment

No.	Assessment Methods*	Assessment Timing (Week Number)	Marks	Percentage of Total Course Marks
1.	Quiz	Fourth Week	0	0
2.	End Module exam	Ninth Week	**50**	**23%**
3.	Final Written Exam	16-20 Week	**100**	**40%**
4.	Final Clinical Exam	Ninth Week	**75**	**30%**
5	Assignments/Portfolio	Throughout the Module	**25**	**7%**
	Total		**250**	**100%**

6. Learning Resources and Supportive Facilities *

Learning resources (books, scientific references, etc.) *	**The Main (Essential) Reference for the Course** (must be written in full according to the scientific documentation method)	• Fauci, Anthony S.; Kasper, Dennis L.; Hauser, Stephen L.; et al, (2018). Harrison's Principles of Internal Medicine, Twentieth Edition (20th ed.) • Papadakis, Maxine A.; Rabow, Michael W.; McPhee, Stephen J.; et al. (2024). CURRENT Medical Diagnosis & Treatment, 2024 (62nd ed.). New York: McGraw-Hill.. Elsevier.https://www.elsevier.com/books/sabiston-textbook-of-surgery/9780323640633Norman, S., O'Connell, P. R., & Williams, N. S. (2022). Bailey & Love's Short Practice of Surgery (28th ed.). Boca Raton, FL: CRC Press.
	Other References	Ralston, S. H., Penman, I. D., Strachan, M. W. J., et al. (2018). Davidson's principles and practice of medicine (23rd ed.). Elsevier Health Sciences
	Electronic Sources (Links must be added)	**American Association for the Study of Liver Diseases (AASLD) — Practice Guidelines** https://www.aasld.org/practice-guidelines https://www.who.int/health-topics/infectious-diseases https://easl.eu/publications/clinical-practice-guidelines/ **National Institute for Health and Care Excellence (NICE) — Surgical Guidelines** https://www.nice.org.uk/guidance https://www.futurelearn.com/subjects/healthcare-medicine-courses/surgery

		https://my.incision.care/login?refApp=academy&refUrl=https:%2F%2Facademy.incision.care%2Fcourses
	Learning Platforms (Links must be added)	https://www.freecme.com/specialties/gastroenterology-cme-courses https://clinicaloptions.com/activities/gastroenterology https://www.medscape.org/gastroenterology? https://www.cdc.gov/project-firstline/index.html https://www.coursera.org/courses?query=surgery https://openwho.org/ **TeachMeSurgery – Comprehensive Free Surgical Reference** https://teachmesurgery.com/ **ClinicalKey Student (Free Trial Access for Texts and Videos)** https://www.clinicalkey.com/student/
	Other (to be mentioned)	
Supportive facilities & equipment for teaching and learning *	**Devices/Instruments**	• Skill lab / simulation based learning • Scalpel (No. 10, 11, 15 blades with handles) • Surgical scissors (Mayo, Metzenbaum) • Tissue forceps (Adson, DeBakey) • Hemostats (Mosquito, Kelly, Crile) • Needle holders (Mayo-Hegar, Olsen-Hegar) • Retractors (Langenbeck, Deaver, Richardson, Army-Navy) • Suction apparatus (Yankauer, Poole, Frazier suction tips) • Sponge-holding forceps and towel clips • Electrocautery unit (Monopolar and Bipolar diathermy) • • Hernia dissecting scissors and forceps • • Hernia retractors (Farabeuf, Doyen) • • Hernia mesh and mesh fixation instruments (Tacker, stapler) • • Hernia needle (Desjardins, Ferguson) • • Ligature carriers and suture materials (Prolene, Vicryl) • Sphygmomanometer (manual/digital) • Thermometer (digital/infrared/mercury)growth assessment tools (infantometers, stadiometers, weighing scales)
	Supplies	• library facilities & online access with updated pediatric textbooks and journals • sterile gloves, syringes, , disposable diagnostic materials • Skill lab / simulation based • library facilities & online access with updated pediatric textbooks and journals • sterile gloves, syringes, , disposable diagnostic materials • Sterile gloves (various sizes) • Syringes and needles (1 ml to 20 ml) •
	Electronic Programs	Interactive e-learning platforms (ThinCi) and Microsoft teams.
	Skill Labs/ Simulators	
	Virtual Labs	
	Other (to be mentioned)	access to hospital clinics for hands-on clinical exposure

منسق المقرر
احمد عوف

مدير البرنامج
هاني برج

Course Specifications

Immunology intensive care, medical, surgical emergency, critical care and patient safety

S10M2/IIE

2025 /2026

1. Basic Information

Course Title	**Immunology intensive care, medical, surgical emergency, critical care and patient safety**			
Course Code	S10M2/IIE			
Department/s participating in delivery of the course	**General surgery department** **Chest Department** **Anesthesia ICU department**			
	Theoretical	**Clinical**	**Directed Self-learning**	**Total**
Number of credit hours of the course = 10	6	**2**	2	10
Number of contact hours of the course = 240	90	**90**	60	240
Course duration	9 weeks			
Course Type	Obligatory			

Academic level at which the course is taught	Fifth year/10th semester
Academic Program	M.B. Ch.B. 5+2 Program (credit hours)
Faculty	Kafrelsheikh Faculty of Medicine
University	Kafrelsheikh University
Name of Course Coordinator	
Course Specification Approval Date	7/10/2024
Course Specification Approval **(Attach the decision/minutes of the department /committee/council ....)**	

2. Course Overview (Brief summary of scientific content)

This integrated clinical module equips students with essential competencies in both internal medicine and surgery, focusing on the diagnosis, management, and emergency care of major conditions across organ systems. It covers medical topics such as inflammatory bowel disease, celiac disease, autoimmune disorders, renal and acid–base disturbances, and shock, emphasizing clinical reasoning and evidence-based decision-making. Surgical topics include trauma, acute abdomen, biliary and urological emergencies, cardiothoracic injuries, anesthesia crises, and resuscitation. Through lectures, demonstrations, and clinical rotations, students gain skills in history taking, examination, investigations, procedures, teamwork, and professional communication, linking scientific knowledge to safe and effective patient care.

3. Course Learning Outcomes (CLOs)

Matrix of course learning outcomes CLOs with program outcomes POs (NARS/ARS)

	Program Outcomes (NARS/ARS) (according to the matrix in the program specs)		**Course Learning Outcomes** **Upon completion of the course, the student will be able to:**
Code	**Text**	**Code**	**Text**
1.1	Take and record a structured, patient centered history	1.1.1	obtain a structured gastrointestinal history, including symptom onset, frequency, severity, and associated systemic or extra-intestinal features.
		1.1.2	take a focused history in patients with acute abdominal pain, identifying onset, character, radiation, aggravating/relieving factors, and red-flag symptoms.
1.2	Adopt an empathic and holistic approach to the patients and their problems	1.2.1	
1.3	Assess the mental state of the patient	1.3.1	

1.4	Perform appropriately-timed full physical examination of patients, appropriate to the age, gender, and clinical presentation of the patient while being culturally sensitive	1.4.1	perform a focused abdominal and systemic physical examination appropriate to the patient's age, gender, and presenting symptoms, identifying signs of surgical emergencies
		1.4.2	perform a full, age- and gender-appropriate physical examination, assessing joint, skin, and systemic signs to identify organ involvement and complications in autoimmune rheumatologic diseases.
1.5	Prioritize issues to be addressed in a patient encounter	1.5.1	
		1.5.2	
1.6	Select the appropriate investigations and interpret their results taking into consideration cost/ effectiveness factors	1.6.1	interpret laboratory and imaging investigations relevant to common medical emergencies, integrating clinical relevance and cost-effectiveness into decision-making
		1.6.2	interpret appropriate diagnostic tests for surgical patients, including imaging and laboratory studies, while considering cost-effectiveness and urgency.
1.7	Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice	1.7.1	
1.8	Apply knowledge of the clinical and biomedical sciences relevant to the clinical problem at hand	1.8.1	
		1.8.2	
1.9	Retrieve, analyze, and evaluate relevant and current data from literature, using information technologies and library resources, in order to help solve a clinical problem based on evidence (EBM)	1.9.1	
		1.9.2	
1.10	Integrate the results of history, physical examination and laboratory test findings into a meaningful diagnostic formulation	1.10.1	integrate history, physical examination, and relevant laboratory or imaging findings to formulate a coherent diagnostic impression in patients with gastrointestinal or autoimmune disorders.
		1.10.2	integrate patient history, focused physical examination, and diagnostic investigations to generate a prioritized surgical or emergency diagnostic formulation in patients presenting with acute conditions.

1.11	Perform diagnostic and intervention procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances	1.11.1	Demonstrate the ability to perform diagnostic and therapeutic surgical procedures safely and competently, adjusting to unforeseen intraoperative or clinical findings.
1.12	Adopt strategies and apply measures that promote patient safety	1.12.1	implement patient safety measures and adapt emergency interventions to protect patients in critical care or high-risk scenarios.
1.13	Establish patient-centered management plans in partnership with the patient, his/her family and other health professionals as appropriate, using Evidence Based Medicine in management decision	1.13.1	
1.14	Respect patients' rights and involve them and/or their families/carers in management decisions	1.14.1	respect patients' rights and actively involve patients and their families in clinical discussions and management decisions.
		1.14.2	communicate effectively with patients and their families, ensuring informed consent and collaborative participation in surgical decision-making.
1.15	Provide the appropriate care in cases of emergency, including cardio-pulmonary resuscitation, immediate life support measures and basic first aid procedures	1.15.1	Demonstrate the ability to provide immediate and appropriate emergency care, including basic life support, stabilization measures, and initial management in medical emergencies.
		1.15.2	Demonstrate the ability to deliver timely and effective emergency interventions, including basic and advanced life support, initial resuscitation, and urgent surgical stabilization
1.16	Apply the appropriate pharmacological and nonpharmacological approaches to alleviate pain and provide palliative care for seriously ill people, aiming to relieve their suffering and improve their quality of life	1.16.1	Demonstrate the ability to assess pain and implement disease-specific pharmacological (e.g., NSAIDs, immunomodulators) and non-pharmacological (e.g., physical therapy, counseling) interventions to relieve suffering and improve quality of life in patients with chronic medical conditions.
		1.16.2	Demonstrate the ability to deliver palliative care and symptom management in critically ill or end-of-life patients, integrating pharmacological and non-pharmacological measures to ensure comfort, dignity, and optimal quality of life.
1.17	Contribute to the care of patients and their families at the end of life, including management of symptoms, practical issues of law and certification	1.17.1	

2.1	Identify the basic determinants of health and principles of health improvement	2.1.1	
2.2	Recognize the economic, psychological, social, and cultural factors that interfere with wellbeing	2.2.1	
2.3	Discuss the role of nutrition and physical activity in health	2.3.1	Discuss perioperative nutritional needs and physical activity considerations, and advise patients to optimize recovery, reduce complications, and enhance functional outcomes.
		2.3.2	Discuss nutritional and activity-based interventions into the care and rehabilitation of critically ill or recovering patients to improve outcomes and functional capacity.
2.4	Identify the major health risks in his/her community, including demographic, occupational and environmental risks; endemic diseases, and prevalent chronic diseases	2.4.1	identify major health risks in the local community, including demographic, occupational, and environmental factors, endemic diseases, and prevalent chronic conditions, and integrate this knowledge into patient care and preventive strategies.
2.5	Describe the principles of disease prevention, and empower communities, specific groups or individuals by raising their awareness and building their capacity	2.5.1	
2.6	Recognize the epidemiology of common diseases within his/her community and apply the systematic approaches useful in reducing the incidence and prevalence of those diseases	2.6.1	recognize the epidemiological patterns of common chronic and autoimmune diseases in the community and apply systematic strategies to reduce their incidence and complications.
2.7	Provide care for specific groups including pregnant women, newborns and infants, adolescents and the elderly	2.7.1	
2.8	Identify vulnerable individuals that may be suffering from abuse or neglect and take the proper actions to safeguard their welfare	2.8.1	
3.1	Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, commitment, compassion, and respect	3.1.1	Exhibit professional conduct during surgical and emergency care, maintaining ethical standards, respect for patients and families, and accountability in all aspects of practice.
		3.1.2	Demonstrate professional behaviors in multidisciplinary and high-acuity settings, fostering effective teamwork, communication, and ethical

			decision-making while providing patient-centered care.
3.2	Adhere to the professional standards and laws governing the practice, and abide by the national code of ethics issued by the Egyptian Medical Syndicate	3.2.1	
3.3	Respect the different cultural beliefs and values in the community they serve	3.3.1	
3.4	Treat all patients equally, and avoid stigmatizing any category regardless of their social, cultural or ethnic backgrounds, or their disabilities	3.4.1	
3.5	Ensure confidentiality and privacy of patients' information	3.5.1	
3.6	Recognize basics of medico-legal aspects of practice, malpractice and avoid common medical errors	3.6.1	
3.7	Recognize and manage conflicts of interest	3.7.1	
3.8	Refer patients to the appropriate health facility at the appropriate stage	3.8.1	
3.9	Identify and report any unprofessional and unethical behaviors or physical or mental conditions related to himself, colleagues or any other person that might jeopardize patients' safety	3.9.1	
4.1	Describe the normal structure of the body and its major organ systems and explain their functions	4.1.1	Describe the structure and function of the gastrointestinal tract, liver, and immune components relevant to digestive and autoimmune disorders.
		4.1.2	Describe the structure and function of the cardiovascular, renal, and endocrine systems and their relevance to acute and critical care conditions.
4.2	Explain the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis	4.2.1	Explain the molecular, biochemical, and cellular mechanisms that maintain gastrointestinal and immune system homeostasis and their relevance to digestive and autoimmune disorders.
		4.2.2	Explain the biochemical and cellular processes that maintain cardiovascular, renal, and endocrine homeostasis and their significance in acute and critical care scenarios.
		4.2.3	Explain the cellular and molecular mechanisms that preserve homeostasis in abdominal, thoracic,

			urinary, and nervous systems to guide surgical and emergency care.
4.3	Recognize and describe main developmental changes in humans and the effect of growth, development and aging on the individual and his family	4.3.1	
4.4	Explain normal human behavior and apply theoretical frameworks of psychology to interpret the varied responses of individuals, groups and societies to disease	4.4.1	
4.5	Identify various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of illness/disease and explain the ways in which they operate on the body (pathogenesis)	4.5.1	Identify the genetic, autoimmune, infectious, metabolic, and environmental causes of gastrointestinal and autoimmune diseases and explain their pathogenesis.
		4.5.2	Identify the metabolic, toxic, vascular, infectious, and traumatic causes of acute, endocrine, and cardiovascular conditions and explain the pathophysiological mechanisms underlying organ dysfunction.
		4.5.3	Identify the traumatic, neoplastic, infectious, and degenerative causes of surgical and emergency conditions and explain their mechanisms of injury and disease progression.
4.6	Describe altered structure and function of the body and its major organ systems that are seen in various diseases and conditions	4.6.1	
4.7	Describe drug actions: therapeutics and pharmacokinetics; side effects and interactions, including multiple treatments, long term conditions and non-prescribed medication; and effects on the population	4.7.1	Describe the mechanisms of action, therapeutic uses, pharmacokinetics, side effects, and drug interactions of medications used in chronic and autoimmune diseases, including considerations for long-term therapy and polypharmacy.
		4.7.2	Describe the actions, therapeutic uses, pharmacokinetics, side effects, and interactions of drugs used in surgical and emergency care, including anesthesia, resuscitation, and multi-drug management.
4.8	Demonstrate basic sciences specific practical skills and procedures relevant to future practice, recognizing their scientific basis, and	4.8.1	Interpret imaging, laboratory results, and bedside investigations to guide diagnosis and management in surgical and emergency care.

	interpret common diagnostic modalities		
		4.8.2	Interpret laboratory results, imaging studies, and bedside investigations to guide diagnosis and management in internal medicine patients.
5.1	Recognize the important role played by other health care professionals in patients' management	5.1.1	Recognize the roles of surgical, nursing, and rehabilitation teams in perioperative care.
		5.1.2	Demonstrate collaboration during anesthesia and recovery phases.
5.2	Respect colleagues and other health care professionals and work cooperatively with them	5.2.1	
5.3	Implement strategies to promote understanding, manage differences, and resolve conflicts	5.3.1	
5.4	Apply leadership skills to enhance team functioning, the learning environment, and/or the health care delivery system	5.4.1	
5.5	Communicate effectively using written health records, electronic medical records, or other digital technology	5.5.1	Show the ability to document surgical notes, operative reports, and discharge summaries accurately
		5.5.2	Show the ability to document anesthesia records, intraoperative events, and monitoring data precisely
		5.5.3	Show the ability to record medical histories, investigation results, and progress notes clearly.
5.6	Evaluate his / her work and that of others using constructive feedback	5.6.1	
5.7	Recognize own personal and professional limits, and seek help from colleagues and supervisors when necessary	5.7.1	
5.8	Apply fundamental knowledge of health economics to ensure the efficiency and effectiveness of the health care system	5.8.1	
5.9	Use health informatics to improve the quality of patient care	5.9.1	
5.10	Document clinical encounters in an accurate, complete, timely, and accessible manner	5.10.1	

5.11	Improve the health service provision by applying a process of continuous quality improvement	5.11.1	
5.12	Demonstrate accountability to patients, society, and the profession	5.12.1	
6.1	Regularly reflect on and assess his / her performance using various performance indicators and information sources	6.1.1	Reflect on anesthesia management and intraoperative performance to optimize patient safety
6.2	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice	6.2.1	
6.3	Identify opportunities and use various resources for learning	6.3.1	
6.4	Engage in inter-professional activities and collaborative learning	6.4.1	
6.5	Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters	6.5.1	
6.6	Effectively manage learning time and resources and set priorities	6.6.1	
6.7	Demonstrate an understanding of the scientific principles of research including its ethical aspects and scholarly inquiry and contribute to the work of a research study	6.7.1	
6.8	Critically appraise research studies and scientific papers in terms of integrity, reliability, and applicability	6.8.1	
6.9	Analyze and use numerical data including the use of basic statistical methods	6.9.1	
6.10	Summarize and present to professional and lay audiences the findings of relevant research and scholarly inquiry	6.10.1	

4. Teaching and Learning Methods

27. Interactive Lectures
28. Tutorial classes
29. Clinical classes
30. Directed self learning.
31. Skill lab
32. Simulated patient
33. Case Discussion

Course Schedule

NO. of the Week	Scientific content of the course (Course Topics)	Total Weekly Hours	Theoretical teaching (lectures/discussi on groups/ .....)	Training (Clinical Rounds)/ Skill lab /Simulated patient	Others Directed self-learning
1.	55. Internal Medicine: Inflammatory Bowel Disease – Ulcerative Colitis	26.5	2	2	
	56. Internal Medicine: Inflammatory Bowel Disease – Crohn's Disease		2	2	
	57. Internal Medicine: Celiac Disease – Pathophysiology and Diagnosis		2	2	3
	58. Internal Medicine: Celiac Disease – Clinical Manifestations and Management		2	2	
	59. Internal Medicine: Whipple Disease – Clinical Picture		1	1	3.5
	60. Internal Medicine: Whipple Disease – Diagnosis and Treatment		1	1	
2.	61. Internal Medicine: Rheumatoid Arthritis – Clinical Features and Investigations	26.5	2	2	
	62. Internal Medicine: Rheumatoid Arthritis – Complications and Extra-articular Manifestations		2	2	
	63. Internal Medicine: Systemic Lupus Erythematosus – Diagnostic Criteria		2	2	3
	64. Internal Medicine: Systemic Lupus Erythematosus – Organ		2	2	

	Involvement and Complications				
	65. Internal Medicine: Vasculitis – Large and Medium Vessel Vasculitis		**1**	**1**	3.5
	66. Internal Medicine: Vasculitis – Small Vessel Vasculitis		**1**	**1**	
3.	**67.** Internal Medicine: Scleroderma (Systemic Sclerosis) – Cutaneous Manifestations	**26.5**	**2**	**2**	
	68. Internal Medicine: Scleroderma (Systemic Sclerosis) – Systemic Involvement		**2**	**2**	
	69. Internal Medicine: Autoimmune Liver Disease – Primary Biliary Cholangitis		**2**	**2**	3
	70. Internal Medicine: Autoimmune Liver Disease – Autoimmune Hepatitis		**2**	**2**	
	71. Internal Medicine: Acid–Base Balance – Disorders and Compensation		**1**	**1**	3.5
	72. Internal Medicine: Acute Kidney Injury (AKI) – Causes and Pathophysiology		**1**	**1**	
4.	**73.** Internal Medicine: Acute Kidney Injury (AKI) – Diagnosis and Management	**26.5**	**2**	**2**	
	74. Internal Medicine: Gastrointestinal Bleeding – Upper GI Causes		**2**	**2**	
	75. Internal Medicine: Gastrointestinal Bleeding – Lower GI Causes		**2**	**2**	3
	76. Internal Medicine: Shock – Classification and Pathophysiology		**2**	**2**	
	77. Internal Medicine: Shock – Management Principles		**1**	**1**	3.5

	78. Internal Medicine: Thyroid Emergency – Thyroid Storm and Myxedema Coma		**1**	**1**	
5.	**79.** Surgery: Surgical Emergency Overview – Principles of Management	**26.5**	**2**	**2**	
	80. Surgery: Multiple Trauma Injuries – Initial Assessment (ATLS)		**2**	**2**	
	81. Surgery: Multiple Trauma Injuries – Complications and Resuscitation		**2**	**2**	3
	82. Surgery: Spleen and Liver Trauma – Mechanisms and Diagnosis		**2**	**2**	
	83. Surgery: Spleen and Liver Trauma – Surgical Management		**1**	**1**	3.5
	84. Surgery: Gastrointestinal (GI) Bleeding – Diagnostic and Surgical Approach		**1**	**1**	
6.	**85.** Surgery: Acute Abdomen – Diagnostic Evaluation	**26.5**	**2**	**2**	
	86. Surgery: Acute Abdomen – Surgical Conditions (Appendicitis, Perforation)		**2**	**2**	
	87. Surgery: Biliary Emergencies – Cholecystitis and Cholangitis		**2**	**2**	3
	88. Surgery: Biliary Emergencies – Bile Duct Injury and Management		**2**	**2**	
	89. Surgery: Mesenteric Vascular Occlusion (MVO) – Acute Ischemia		**1**	**1**	3.5
	90. Surgery: Mesenteric Vascular Occlusion (MVO) – Chronic Ischemia		**1**	**1**	
7.	**91.** Surgery: Deep Vein Thrombosis (DVT) – Risk Factors and Diagnosis	**26.5**	**2**	**2**	

	92. Surgery: Deep Vein Thrombosis (DVT) – Prevention and Management		**2**	**2**	
	93. Surgery: Cardiothoracic Emergency – Cardiac Tamponade and Tension Pneumothorax		**2**	**2**	3
	94. Surgery: Cardiothoracic Emergency – Thoracic Trauma		**2**	**2**	
	95. Surgery: Urological Emergency – Urinary Retention and Renal Colic		**1**	**1**	3.5
	96. Surgery: Urological Emergency – Testicular Torsion and Trauma		**1**	**1**	
8.	**97.** Surgery: Head Injury – Classification and Initial Management	**26.5**	**2**	**2**	
	98. Surgery: Head Injury – Complications (ICP, Hematomas)		**2**	**2**	
	99. Surgery: Anesthesia Emergency – Airway Complications		**2**	**2**	3
	100. Surgery: Anesthesia Emergency – Malignant Hyperthermia and Anaphylaxis		**2**	**2**	
	101. Surgery: Cardiopulmonary Resuscitation (CPR) – Basic Life Support		**1**	**1**	3.5
	102. Surgery: Cardiopulmonary Resuscitation (CPR) – Advanced Life Support		**1**	**1**	
9.	**103. Revision**	**28**	**2**	**2**	
	104. Revision		**2**	**2**	3.5
	105. Revision		**2**	**2**	**1.5**
	106. Revision		**2**	**2**	
	107. Revision		**1**	**1**	3.5
	108. Revision		**1**	**1**	
	Total	**240**	**90**	**90**	**60**

5. Methods of Students' Assessment

No.	Assessment Methods*	Assessment Timing (Week Number)	Marks	Percentage of Total Course Marks
1.	Quiz	Fourth Week	0	0
2.	End Module exam	Ninth Week	**50**	**23%**
3.	Final Written Exam	16-20 Week	**100**	**40%**
4.	Final Clinical Exam	Ninth Week	**75**	**30%**
5	Assignments/Portfolio	Throughout the Module	**25**	**7%**
	Total		**250**	**100%**

6. Learning Resources and Supportive Facilities *

Learning resources (books, scientific references, etc.) *	**The Main (Essential) Reference for the Course** (must be written in full according to the scientific documentation method)	• Fauci, Anthony S.; Kasper, Dennis L.; Hauser, Stephen L.; et al, (2018). Harrison's Principles of Internal Medicine, Twentieth Edition (20th ed.) • Papadakis, Maxine A.; Rabow, Michael W.; McPhee, Stephen J.; et al. (2024). CURRENT Medical Diagnosis & Treatment, 2024 (62nd ed.). New York: McGraw-Hill.. Elsevier.https://www.elsevier.com/books/sabiston-textbook-of-surgery/9780323640633Norman, S., O'Connell, P. R., & Williams, N. S. (2022). Bailey & Love's Short Practice of Surgery (28th ed.). Boca Raton, FL: CRC Press.
	Other References	Ralston, S. H., Penman, I. D., Strachan, M. W. J., et al. (2018). Davidson's principles and practice of medicine (23rd ed.). Elsevier Health Sciences
	Electronic Sources (Links must be added)	**American Association for the Study of Liver Diseases (AASLD) — Practice Guidelines** https://www.aasld.org/practice-guidelines https://www.who.int/health-topics/infectious-diseases https://easl.eu/publications/clinical-practice-guidelines/ **National Institute for Health and Care Excellence (NICE) — Surgical Guidelines** https://www.nice.org.uk/guidance https://www.futurelearn.com/subjects/healthcare-medicine-courses/surgery https://my.incision.care/login?refApp=academy&refUrl=https:%2F%2Facademy.incision.care%2Fcourses

	Learning Platforms (Links must be added)	https://www.freecme.com/specialties/gastroenterology-cme-courses https://clinicaloptions.com/activities/gastroenterology https://www.medscape.org/gastroenterology? https://www.cdc.gov/project-firstline/index.html https://www.coursera.org/courses?query=surgery https://openwho.org/ **TeachMeSurgery – Comprehensive Free Surgical Reference** https://teachmesurgery.com/ **ClinicalKey Student (Free Trial Access for Texts and Videos)** https://www.clinicalkey.com/student/
	Other (to be mentioned)	
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مدير البرنامج	منسق المقرر
هاني برج	احمد صبح