

Course title	Clinical Specialties: Cardiology and Respiratory			
Course code	GEMD-401			
Course type	Required			
Level	Undergraduate			
Year / Semester	Year 4 / Semester 7/8 (rotation) / (Penultimate Year)			
Course Lead	Professor Joseph Joseph Associate Dean for Clinical Education			
ECTS	60	Teaching Periods per Week		
		Large Group Learning	Small Group Learning	Clinical Practice
		3	1	36
Prerequisites	None		Required	None
Course purpose and objectives	The main objectives of the last two years of the Medicine programme are to provide students with extensive experience in the clinical environment, mainly in hospitals but also in the community, so that they can utilise their learning over the previous years to practise their clinical, communication, diagnostic and reasoning skills on real patients, and to learn about the management of patients, from a medical, therapeutic, surgical, psychosocial and caring perspective. In this course, students will work primarily with patients with heart conditions and respiratory diseases. They will develop an understanding of the presentation, signs and symptoms, physical examination findings, investigations, diagnosis, treatment (medical and/or surgical as appropriate) and management plan for common cardiovascular and respiratory diseases. The students will learn how to take detailed histories from, carry out systematic clinical examination of, and interpret laboratory and imaging data on patients with disorders of the cardiovascular and respiratory systems. They will also spend time in theatre observing cardiothoracic surgery.			
Learning outcomes	By the end of the course, the students should be able to: 1. take a focused history from a patient, or relative of a patient, presenting with a cardiovascular or a respiratory condition, in a sensitive and caring manner. 2. carry out a sensitive physical examination as part of investigation of the presenting complaint. 3. discuss a differential diagnosis for the presenting complaint. 4. apply their knowledge of basic and clinical science to identify and explain appropriate investigations, including sputum, blood and urine tests, peak flow, imaging, fine needle aspiration, and biopsy, to assist in the diagnosis of the presenting complaint and to interpret the results from such tests. 5. prepare and explain a treatment management plan for the patient to present to the responsible clinician to include medical, pharmacological, surgical options as appropriate. 6. observe, and where appropriate carry out or assist with, medical and surgical			

	procedures relating to patients with cardiovascular and respiratory conditions, planned and opportunistic. 7. Prescribe medications to treat patients with cardiovascular and respiratory diseases and make appropriate therapeutic/management decisions.																																																
Course content	Common presentations affecting the cardiovascular and respiratory systems including: ○ Hypertension ○ Arrhythmias ○ Valvular heart disease ○ Myocardial ischemia and infarction ○ ECG ○ Shock ○ Chest infections ○ Asthma and other lung disorders ○ Respiratory failure ○ Lung cancer																																																
Teaching Methodology	The course is delivered by clinical placements, lectures, tutorials, case studies and group discussions.																																																
Bibliography	Required textbooks/reading <table><tr><th>Authors</th><th>Title</th><th>Edition</th><th>Publisher</th><th>Year</th><th>ISBN</th></tr><tr><td>Griffin, Brian P; Menon, Venu</td><td>Manual of Cardiovascular Medicine</td><td>6th</td><td>Wolters Kluwer</td><td>2025</td><td>9781975211578</td></tr><tr><td>Ramrakha, Punit; Hill, Jonathan; Basu, Joyee; Camm, C. Fielder</td><td>Oxford Handbook of Cardiology</td><td>3rd</td><td>Oxford University Press</td><td>2025</td><td>9780198789536</td></tr><tr><td>Hampton, John R; Hampton, Joanna; Adlam, David</td><td>The ECG Made Easy</td><td>10th</td><td>Elsevier</td><td>2024</td><td>9780323937665</td></tr><tr><td>Dubin, Dale</td><td>Rapid Interpretation of EKG's</td><td>6th</td><td>Cover Publishing Company</td><td>2000</td><td>9780912912066</td></tr><tr><td>Grech, Ever D.</td><td>ABC of interventional cardiology</td><td>2nd</td><td>Wiley-Blackwell</td><td>2011</td><td>9781405170673 e-book</td></tr><tr><td>Caroline R Thomas, Gunchu Randhawa, Stephen H. Hughes,</td><td>The Respiratory System: Systems of the Body Series</td><td>3rd</td><td>Elsevier</td><td>2022</td><td>9780702082849</td></tr><tr><td>Robert M. Zollinger, E. Christopher Ellison, Timothy M. Pawlik, Patrick Vaccaro</td><td>Zollinger’s atlas of surgical operations</td><td>11th</td><td>McGraw-Hill</td><td>2022</td><td>9781260440850</td></tr></table>	Authors	Title	Edition	Publisher	Year	ISBN	Griffin, Brian P; Menon, Venu	Manual of Cardiovascular Medicine	6 th	Wolters Kluwer	2025	9781975211578	Ramrakha, Punit; Hill, Jonathan; Basu, Joyee; Camm, C. Fielder	Oxford Handbook of Cardiology	3 rd	Oxford University Press	2025	9780198789536	Hampton, John R; Hampton, Joanna; Adlam, David	The ECG Made Easy	10 th	Elsevier	2024	9780323937665	Dubin, Dale	Rapid Interpretation of EKG's	6 th	Cover Publishing Company	2000	9780912912066	Grech, Ever D.	ABC of interventional cardiology	2 nd	Wiley-Blackwell	2011	9781405170673 e-book	Caroline R Thomas, Gunchu Randhawa, Stephen H. Hughes,	The Respiratory System: Systems of the Body Series	3 rd	Elsevier	2022	9780702082849	Robert M. Zollinger, E. Christopher Ellison, Timothy M. Pawlik, Patrick Vaccaro	Zollinger’s atlas of surgical operations	11 th	McGraw-Hill	2022	9781260440850
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Recommended textbooks/reading

Authors	Title	Edition	Publisher	Year	ISBN
Herring N Paterson DJ.	Levick's introduction to cardiovascular physiology	6 th	CPC Press	2018	9781498739849
Stephen J. Bourke, Graham P. Burns, James G. Macfarlane	Respiratory medicine (lecture notes)	10 th	Wiley- Blackwell	2022	9781119774204
Joint Formulary Committee	https://bestpractice.bmj.com/drugs	Last one	BMJ Group and Pharmaceu tical Press	Current year	
National Institute for Health and Clinical Excellence	https://www.nice.org.uk/guidance	Last one		Current year	

For more information on accessing the British National Formulary (BNF) please see the library guide [Health Research Basics](#)

Additional information can also be found in the library guides: [Clinical Placement Support Resources](#) & [Health Library Student Well-being Resources](#)

Assessment

End of year exam and end of year OSCE. The written assessment will be Single Best Answer MCQs and Short Answer Questions. Workplace based assessments will take place during the attachment.

Language

English