



Jordan University of Science and Technology
Faculty of Applied Medical Sciences
Respiratory Therapy Department

RTH479 Advanced Heart And Lung Emergency Practical - JNQF Level: 7

First Semester 2024-2025

Course Catalog

1 Credit Hours. Apply the theoretical skills accompanying the subject in practical laboratories, for example, but not limited to: ECG reading and analysis, basic CPR skills.

Teaching Method: On Campus

Text Book

Title	EGAN'S Fundamentals of Respiratory Care
Author(s)	Kacmarek R. M., Stoller J. K., Heuer A. J.
Edition	12th Edition
Short Name	Ref#:1
Other Information	2021, https://www.elsevier.com/books/egans-fundamentals-of-respiratory-care/kacmarek/978-0-323-51112-4

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref#:2	Basic life support (student manual), 2020	American Heart Association	1st Edition	https://www.ahajournals.org/doi/10.1161/CIR.0000000000000916 , ISBN:978-1616697686
Ref#:3	Advanced cardiac life support (student manual), 2020	American Heart Association	1st Edition	https://www.ahajournals.org/doi/10.1161/CIR.0000000000000916 , ISBN:978-1616697686
Ref#:4	Pediatric advanced life support (student manual), 2020	American Heart Association	1st Edition	https://www.ahajournals.org/doi/10.1161/CIR.0000000000000901

Instructor

Name	Mr. Ibrahim Mahmoud
Office Location	Pending
Office Hours	Sun : 08:00 - 08:30 Mon : 10:00 - 12:30 Wed : 10:00 - 12:30 Thu : 10:00 - 12:00
Email	immahmoud@just.edu.jo

Class Schedule & Room	
Section 1:	Lecture Time: Sun : 08:30 - 10:30 Room: LAB
Section 2:	Lecture Time: Sun : 10:30 - 12:30 Room: LAB
Section 3:	Lecture Time: Wed : 12:30 - 14:30 Room: LAB
Section 4:	Lecture Time: Tue : 08:30 - 10:30 Room: LAB
Section 5:	Lecture Time: Tue : 10:30 - 12:30 Room: LAB
Section 6:	Lecture Time: Wed : 14:30 - 16:30 Room: LAB

Tentative List of Topics Covered		
Weeks	Topic	References
Week 1	Orientation to Course - syllabus overview	From Ref#: 1 , From Ref#: 2 , From Ref#: 3 , From Ref#: 4
Week 2	Basic life support - Adult/AED	From Ref#: 1 , From Ref#: 2
Week 3	Basic life support-Pediatric	From Ref#: 1 , From Ref#: 2 , From Ref#: 4
Weeks 4, 5	ECG technique, interpretation and analysis	From Ref#: 1 , From Ref#: 3

Week 6	Cardiac Arrest/high performance team	From Ref#: 1 , From Ref#:3
Week 7	Cardiac Arrest and post cardiac arrest care	From Ref#: 1 , From Ref#:3
Week 8	Preventing arrest/bradycardia	From Ref#: 1 , From Ref#:3
Week 9	Preventing arrest/tachycardia	From Ref#:3
Weeks 11, 12	PALS-Systematic approach	From Ref#:4
Week 13	PALS-Respiratory emergencies	From Ref#:4
Week 14	PALS- shock emergencies	From Ref#:4
Week 15	PALS- Arrhythmia emergencies	From Ref#:4
Week 16	Neonatal Resuscitation	From Ref#:4

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Apply the basic life support (BLS) assessment, primary assessment, and secondary assessment sequence for systematic evaluation. [1PLO 1, 1PLO 2, 1PLO 3, 1PLO 5] [1L7K1, 1L7S1, 1L7S2, 1L7S3, 1L7C1, 1L7C2, 1L7C3, 1L7C4]	15%	
Perform early management of bradycardia and tachycardia that may result in cardiac arrest or negative outcomes [1PLO 1, 1PLO 2, 1PLO 3, 1PLO 5] [1L7K1, 1L7S1, 1L7S2, 1L7S3, 1L7C2]	10%	
Perform prompt, high quality BLS, which includes prioritizing early compressions and integrating early AED use [1PLO 2, 1PLO 3, 1PLO 4, 1PLO 6] [1L7K1, 1L7S1, 1L7S2, 1L7S3, 1L7C2, 1L7C3]	10%	
Demonstrate adjunct techniques to support and assist with respiratory stability of a pediatric patient in respiratory distress or failure [1PLO 1, 1PLO 4, 1PLO 5] [1L7K1, 1L7S3]	10%	
Recognize and perform early interventions for the treatment of shock. [1PLO 1, 1PLO 3, 1PLO 5] [1L7K1, 1L7S1, 1L7C4]	10%	
Perform early management of cardiac arrest until termination of resuscitation or transfer of care, including immediate post-cardiac arrest care. [1PLO 1, 1PLO 3, 1PLO 5] [1L7K1, 1L7S1, 1L7C4]	10%	
Model effective communication as a member of a high performance team [1PLO 1, 1PLO 4, 1PLO 6] [1L7K1, 1L7S1, 1L7C2, 1L7C3]	5%	
Differentiate between unstable and stable patients with arrhythmias [1PLO 1, 1PLO 3] [1L7K1, 1L7S1]	5%	
Interpret cardiac rhythm strips and 12-lead ECG [1PLO 1] [1L7K1, 1L7S1]	15%	

Apply systematic approach management of ACS and stroke . (PLO1, PLO2, PLO3) (L7K1, L7S2, L7S3, L7C1, L7C4) [1PLO 1, 1PLO 2, 1PLO 3][1L7K1, 1L7S2, 1L7S3, 1L7C1, 1L7C4]	10%	
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Relationship to Program Student Outcomes (Out of 100%)						
PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7
38.75	12.08	21.25	7.5	16.25	4.17	

Relationship to NQF Outcomes (Out of 100%)							
L7K1	L7S1	L7S2	L7S3	L7C1	L7C2	L7C3	L7C4
30.46	23.46	7.54	12.54	3.88	6.79	4.79	10.54

Evaluation	
Assessment Tool	Weight
Teamwork Exam (Practical) - 23/11-05/12/2024	30%
Midterm Exam (Theoretical), 23/11-05/12/2024	20%
Participation	10%
Final Exam, 04-09/01/2025	40%

Policy	
Statement on Professionalism	Professional behavior is expected of students at all times. Attitude and professional behavior are a minimum criterion for passing this class. Examples of unprofessional behavior include but are not limited to: missing classes, tardiness, lack of attention for a speaker, talking to others during a lecture, leaving a lecture before its completion without prior authorization of the instructor, working on other class material during class, and sleeping during class.
Cheating	University regulations will be applied to cases of cheating and/or plagiarism
Cell phone	The use of cellular phones is prohibited in Labs and during exams. The cellular phone must be switched off in Labs and during exams.
Attendance	No points will be counted for points attendance in this class, however, attending the lab will greatly enhance your grade. The student is responsible for any information discussed and hands on training. It is imperative to attend all labs!
Make-up Exam	Make-up exams are entitled to students who miss the exam with an accepted legal or medical excuse endorsed by the instructor within 24 hours after the scheduled exam (Please review university regulations for more details)
Feedback	Concerns, complaints, questions, and/or feedback are appreciated and will be important to the instructor. You can contact your instructor using the e-mail or during office hours

others	<ol style="list-style-type: none">1. Arrive on time as students will not be allowed to attend the lab if they arrive late.2. Students should be committed to the dress code of the lab. Students who will not be committed to the dress code will not be allowed to attend the lab. The dress code includes the following.<ul style="list-style-type: none">- Clean clothes- Clean and tidy gray scrub for both gender- Jeans for males and females are not allowed.- High heels for female are not allowed.- Females should tie up the long hair.- Strong perfumes are not allowed.- Long nails are not allowed.- Excessive accessories and jewelries particularly in the hands are not allowed.3. No food or beverages are allowed in inside lab.4. After completion of lab, all equipment should be returned to its original location.
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