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

RTH214 General Respiratory Care Practical - JNQF Level: 7

Second Semester 2023-2024

Course Catalog
1 Credit Hours. At the end of this course, students should know apply the hands-on division of RTH212 course; the indications, limitations, and contraindications of medical gases and humidity equipment includes the oxygen supply system starts from manufacturing until reach the patient. They should also be able to use, troubleshoot, and maintain this equipment.
Teaching Method: On Campus

Text Book	
Title	Laboratory Excercises for Competency in Respiratory care
Author(s)	Bulter T. J.
Edition	3rd Edition
Short Name	Textbook
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref # 1	Basic Clinical lab Competencies for Respiratory Care	White G. C.	5th Edition	2013, ISBN: 9781435453654
Recommended for reading	EGAN'S Fundamentals of Respiratory Care	Kacmarek R. M., Stoller J. K., Heuer A. J.	12th Edition	2021, https://www.elsevier.com/books/egans-fundamentals-of-respiratory-care/kacmarek/978-0-323-51112-4

Instructor	
Name	**Mr. Ibrahim Mahmoud**
Office Location	Pending
Office Hours	

Email	immahmoud@just.edu.jo

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

Tentative List of Topics Covered		
Weeks	**Topic**	**References**
Week 1	Week of Withdrawing and adding courses/Orientation	
Week 2	Oxygen Supply Systems: Medical gas cylinders- cylinder handling- safety system connections	**C9** From **Textbook**, **C12** From **Ref # 1**
Week 3	Oxygen Supply Systems: Reducing valves, regulators, and flowmeters	**C9** From **Textbook**, **C12** From **Ref # 1**
Week 4	Oxygen Supply Systems: Blenders- bulk storage systems- oxygen concentrators- zone valves and wall outlets	**C9** From **Textbook**, **C12** From **Ref # 1**
Weeks 5, 6	Oxygen Administration Devices	**C11** From **Textbook**, **C13** From **Ref # 1**
Week 7	Midterm Exam	
Weeks 8, 9	Humidity Devices: Bubble humidifier- heat and moisture exchanger- pass-over humidifier- wick humidifier . Aerosal Generators	**C12, C13** From **Textbook**, **C15** From **Ref # 1**

Week 10	Oxygen Analysis:Identification- calibration of oxygen analyzers- oxygen analysis	**C10** From **Textbook**
Week 11	Noninvasive Gas-exchange Monitoring	**C25** From **Textbook**
Week 12	Field Hospital - onsite visit	
Week 13	Revision	
Weeks 14, 15, 16	Final Exam	

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	**Course Outcome Weight (Out of 100%)**	**Assessment method**
Demonstrate the safe handling, transport, and storage of medical gas cylinders. [1PLO 1, 1PLO 2, 1PLO 5] [1L7K1, 1L7S1, 1L7S2, 1L7S3]	30%	Quizzes, Discussion & interaction, Onsite Visit Report, Midterm Exam, Final Exam
Assemble various types of Oxygen delivery devices. [1PLO 1, 1PLO 2, 1PLO 3, 1PLO 5] [1L7K1, 1L7S1, 1L7S2, 1L7S3]	20%	Quizzes, Discussion & interaction, Midterm Exam, Final Exam
Operate the various types of humidifiers. [1PLO 1, 1PLO 2, 1PLO 3, 1PLO 5] [1L7K1, 1L7S1, 1L7S2, 1L7S3]	20%	Quizzes, Discussion & interaction, Final Exam
Select the suitable Aerosol device in a specific clinical condition. [1PLO 1, 1PLO 3, 1PLO 4] [1L7K1]	10%	Quizzes, Discussion & interaction, Final Exam
Demonstrate effective manual ventilation technique. [1PLO 1, 1PLO 3, 1PLO 5] [1L7K1, 1L7S1, 1L7S2, 1L7S3]	10%	Quizzes, Discussion & interaction, Final Exam
Interpret data obtained from NI monitoring devices. [1PLO 1, 1PLO 3, 1PLO 5] [1L7K1, 1L7S1, 1L7S2, 1L7S3]	10%	Quizzes, Discussion & interaction, Final Exam

Relationship to Program Student Outcomes (Out of 100%)						
PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7
30	20	20	3.33	26.67		

Relationship to NQF Outcomes (Out of 100%)			
L7K1	L7S1	L7S2	L7S3
32.5	22.5	22.5	22.5

Evaluation	
Assessment Tool	**Weight**
Quizzes	10%
Discussion & interaction	10%

Onsite Visit Report	10%
Midterm Exam	30%
Final Exam	40%

Policy	
Teaching & Learning Methods	1. Objectives of the course will be achieved through class presentations, videos, hands on practice,and case studies, 2. You are responsible for all material covered in the class. 3. Please communicate any concerns or issues as soon as possible either in class, or by E-mail. Teaching duration: - Duration: 16 weeks Examination: - Paper based exams and quizzes, and paractical exams will conducted in lab.
Attendance policy	- Students are expected to attend all the labs. - Unexcused absences of more than 20% of the required attendance will deserve a fail in this course. - In a case of excused absence e.g. illness or emergency, students should contact the course coordinator immediately. And a formal written excuse from the physician should be submitted by the student in a case of illness, otherwise the absence will be considered unexcused. - In case of absence on the date of exam(s), students will not be allowed to set for a makeup exam unless they have got an approval from the deanship of AMS for this regard. - Student are intented to follow dress of code according to policy

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