

JACKSON COLLEGE
RESPIRATORY CARE PROGRAM



RES 124
Respiratory Pharmacology
LECTURE SYLLABUS
Fall 2016



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Outline of Instruction

Division:	Health Sciences	Area:	Respiratory Care
Course Number:	RES 124	Course Name:	Respiratory Pharmacology
Prerequisite:	RES 110 Respiratory Care Techniques II RES 114 Cardiopulmonary Pathophysiology I. RES 115 Clinical Practice I		
Credits:	2		

Course Description/Purpose

This course provides an overview of general pharmacology with an emphasis on drugs used in the critical care management of cardiopulmonary conditions.

Educational/Course Outcomes

The course goals and objectives incorporate specific Associate Degree Outcomes (ADOs) established by the JC Board of Trustees, administration, and faculty. These goals are in concert with four-year colleges, universities, and reflect input from the professional communities we serve. ADOs guarantee students achieve goals necessary for graduation credit, transferability, and professional skills needed in many certification programs. The ADOs and course objectives addressed in this class include the following:

Cognitive (ADO 7) Each student will be expected to:

- Compare and contrast the indications, contraindications, side effects, and standard and maximum adult dosages for common bronchopulmonary drugs.

Academic Honesty Policy: If I suspect you of academic dishonesty, I will follow JC's Academic Honesty Policy and take appropriate action up to and including assigning a **failing grade** for the paper, project, report, exam, or the course itself (whichever I deem necessary). To see the policy, visit: <https://www.jccmi.edu/wp-content/uploads/2015/11/1004.pdf> and <https://www.jccmi.edu/wp-content/uploads/2015/12/StudentCodeOfConduct.pdf>.

Incompletes Policy: (Excerpt from JC Policy) "A student may request an incomplete from the instructor. The incomplete will be granted only if the student can provide documentation that his or her work up to that point is sufficient in quality, but lacking in quantity, due to circumstances beyond the student's control. Furthermore, a written plan for making up the missing work within one semester must be completed by the student. Final determination of whether an incomplete will be given is the instructor's decision."

Class Conduct: Please recognize that all students have an equal right to a quality classroom experience. Behavior that would adversely affect the rights of another student (i.e. side conversations, disruptive actions, etc.) will result in those responsible being asked to leave for the remainder of the period and losing credit for any work that is missed.

Classroom expectations: There are three expectations that will be enforced in the classroom:

1. First, attendance is very important to successfully learn and retain lecture information. Therefore attendance in class all day, every day is expected and encouraged. According to the **JC Respiratory Care Program Student Handbook**, student responsibilities include "taking an active role in the learning process", and one cannot do this if you are not there and participating in discussion and class activities. The student will be responsible for contacting the instructor to obtain any make up material needed as a result of the absence. In order to facilitate preparation of such materials, the student will probably best contact the instructor as much in advance as possible via email or phone prior to class time if there is any expected absence or any makeup material needed. Then the student will need to contact the instructor after the absence to obtain any missing materials. As for notes or other content covered during class, it is the student's responsibility to gather such material, so going to the instructor and asking for any handouts or materials is the student's responsibility. Also, having a fellow student from whom the student can get such notes is vital in the event of an absence.
2. In addition, the **JC Respiratory Care Program Student Handbook** will be followed closely pertaining to classroom behavior. As stated in the Handbook, "Responsibilities borne by the student in maintaining an optimal learning environment include treating other students, instructors, respiratory therapists, and co-workers (e.g. nurses) with the respect afforded to fellow health care professionals." Mutual respect between the instructor and all students is expected at all times. Disrespect and other disruptive behaviors which inhibit the teaching and learning to which the entire class is entitled will not be tolerated. Any incidents will be handled in keeping with the disciplinary policy spelled out beginning on p. 16 of the **JC Respiratory Care Program Student Handbook**, and appropriate action taken up to and including **class expulsion**.

3. Thirdly, assignments or take home quizzes are expected to be handed in on the appropriate due date (which shall be **one week** from when they are given out in class). They may be handed in any time on the due date up to 4 pm with no penalty. In general, assignments that are late will be subject to a late penalty (5 pts/day deducted from the final grade for that assignment, for up to 8 days late to give a maximum of -40 pts for turn-ins late by one week; assignments turned in later than 8 days will lose an additional 10 pts/week).
4. **Redo problems** from tests and homework assignments, particularly ones that you got wrong or have trouble understanding. Remember that you must crawl before you can walk. Similarly, you must have a good handle on the basics of respiratory care before you can master the advanced concepts.

Getting Extra Help: (Besides visiting me during office hours)

It can be very frustrating when you do not understand concepts and are unable to complete homework assignments. However, there are many resources available to help you with your study of respiratory care.

- **CENTER FOR STUDENT SUCCESS:** Tutors (plus additional services for academic success) can be accessed by calling **796-8415** or by stopping by the **Center for Student Success, George Potter (Federer Room C)**. Arrange to get regular assistance from a tutor. Students requiring special assistance (including those affected by the Americans with Disabilities Act) should contact the Center for Student Success. This is the first step in acquiring the appropriate accommodations to facilitate your learning.
- **STUDY GROUP:** Find a study partner or a study group. Sometimes it helps to work through problems with another person.
- **JETNET:** There will be material posted there to help students and allow them to ask questions of the instructor and/or the group.
- **EMAIL:** The best and quickest way to get a hold of me, besides attending class, of course.

All lectures cancelled, **regardless** of reason, will be made up at a later time to be determined by course instructor.

WEEKLY SCHEDULE

Lecture	Office hours
Mon. 10:30AM- 12:30PM	Mon 9-10AM Tues 10-4 PM (during non-clinical weeks) Extra four hours by appointment and varied

REQUIRED TEXT

- Rau's Respiratory Care Pharmacology, 8th ed., Gardenhire, C.V. Mosby Co., 2012, (ISBN-978-0-323-07528-2). (**Rau**)

NOTE: (**Bold Name**) represents how this text will be referred to when cited in unit outlines

EVALUATION

If an accommodation is needed due to a documented disability—physical, learning, or otherwise—contact the Center for Student Success in **Potter Center, Federer Room C** (796-8415). Accommodations may be provided depending on the disability.

Course points are derived from unit exams, quizzes and assignments, and a comprehensive final exam. Most testable material for unit and final exams is listed in unit objectives, but can also be based on relevant review questions from the previous term as well as other classes in this term, and may include additional material as covered in class outlines and lecture. Additional quizzes, assignments, case studies or exams may be assigned in addition to those scheduled.

The system for evaluation will consist of:

Exams:	70%
Quizzes/Assignments:	10%
Final:	20%

A no show/no call for any scheduled or announced exam/quiz may result in a test grade of zero. Notification of a desire to schedule a make-up test is to be received prior to the time of the original exam in order to be routinely eligible for a makeup exam. **If taken the same day as decided by the instructor, there is no penalty, as long as there has been prior notice given.** This must be arranged with the instructor in advance. I may be notified directly by phone or via voice-mail message at (517) 796-8640. **By course policy, all first make-up exams lose 8 points from the final grade, a subsequent make-up exam loses 16 points, and a third requested make-up loses 24 points.**

Cell phones are to be set so as not to disrupt normal classroom communications; i.e., no cell phone ringing should be detectable faculty or students. For each incidence of detectable cell phone activation, 5 points will be deducted from the student's final total points earned. You may excuse yourself if an urgent call is expected or you feel that it needs to be taken immediately, but your phone should be set on vibrate or with the ringer lowered in such an extreme case.

GRADING

There will be weekly online quizzes covering each class' content. The. Quizzes will be available for one week only starting on the Monday the content was covered to the following Sunday and can be taken several times. The highest score will be applied to your grade.

There will be 3 exams plus one final exam. The final exam is comprehensive.

To pass RES 124 the final course average score must be $\geq 76\%$.

Final Course Average Score = (total pts earned/total pts possible) x 100

Grading Scale for All Respiratory Care Courses:

4.0 = 93 - 100	2.5 = 80 - 83	1.0 = 68 - 72
3.5 = 89 - 92	2.0 = 76 - 79	0.5 = 64 - 67
3.0 = 84 - 88	1.5 = 73 - 75	0.0 = Below 64

Exam Content

Exam one:	Chapters 1-5
Exam two	Chapters 6, 7, 9, 10
Exam three	Chapters 8, 11, 12, 13, 14, 16
Final Exam	Comprehensive

Students will be expected to complete an evaluation of the course on-line in JetNet at the conclusion of the semester.

In addition to lecture, class participation will be encouraged through discussion, learning games and review of clinical scenarios in order to reinforce class content.

RES 124 Respiratory Care Pharmacology TENTATIVE Calendar

Week	Date	Topic
1	9/5	No class, Labor Day
2	9/12	MSRC, No class, Delayed start
3	9/19	Review of Syllabus, Chapter 1 Introduction to respiratory care pharmacology, Chapter 2 Principles of Drug Action, Online Drug quiz
4	9/26	Chapter 3 Administration of Aerosolized Agents Chapter 5 The CNS & PNS Online Quiz
5	10/3	Chapter 4 Calculating Drug Doses Online Quiz
6	10/10	Exam 1 Chapters 1-5 During RES120 lecture on Wednesday October 7 On own – videos on JetNet, Chapter 6 Adrenergic bronchodilators Chapter 7 Anticholinergic bronchodilators Online Quiz
7	10/17	AARC, Chapter 9 Mucus – Controlling Drug Therapy Chapter 10 Surfactant Agents Chapter 11 Corticosteroids in Respiratory Care Online Quiz
8	10/24	Chapter 12 Non-steroidal Antiasthma Agents Online Quiz
9	10/31	Exam 2 over Chapters 6,7,9,10 Chapter 13 Aerosolized anti-infective Agents
10	11/7	Chapter 14 Antimicrobial Agents Chapter 16 Selected Agents of Pulmonary Value (pulmonary HTN, COPD drugs) Online Quiz
11	11/14	Chapter 8 Xanthines Chapter 18 Skeletal Muscle Relaxants Online Quiz
12	11/21	Exam 3 over Chapters 8,11,12,13,14,16 Chapter 20 Drugs affecting the CNS Class Activity-
13	11/28	Chapter 21 Vasopressors, Inotropes and Antiarrhythmic Agent Chapter 22 Drugs affecting Circulation: Antihypertensives, Antianginals, Antithrombotics Online Quiz
14	12/5	Chapter 19 Diuretic Agents Final Review
15	12/12	Final Exam