JEFFERSON COLLEGE
COURSE SYLLABUS

RCP130
Cardiopulmonary Pharmacology
3 Credit Hours

Prepared by:
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Respiratory Therapy Program Director

Created on Date: 4/15/11

Elizabeth Check, Dean, Career and Technical Education
Mary Beth Ottinger, Division Chair
I. CATALOGUE DESCRIPTION
   A. Prerequisite - Admission to the program
   B. Credit hour award - 3
   C. Description - Topics to be covered in this course include: Basic pharmacologic principles, classification of drugs, the effects, side-effects, and hazards of the medications used in cardiopulmonary medicine. (S)

II. EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES

<table>
<thead>
<tr>
<th>Expected Learning Outcomes</th>
<th>Assessment Measures</th>
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<tbody>
<tr>
<td>Assess the mode of administration for appropriate drugs in a given situation</td>
<td>Class activity</td>
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<td>Homework</td>
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<td>Summative Exam</td>
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<tr>
<td>Demonstrate proper technique for each modality of administration of all drugs</td>
<td>Class activity</td>
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<td>Homework</td>
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<td>Summative Exam/ skill demonstration</td>
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<tr>
<td>Analyze effects of all drugs used in the scope of respiratory care</td>
<td>Class activity</td>
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<td>Homework</td>
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<td>Summative Exam</td>
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<tr>
<td>Describe side effects of all drugs used within the scope of respiratory care and the remedies to those side effects</td>
<td>Class activity</td>
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<td>Homework</td>
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<td>Summative Exam</td>
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<tr>
<td>Apply knowledge of drug administration to appropriate patients with appropriate time administrations</td>
<td>Class activity</td>
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<td>Calculate variable drug dosage administration within the scope of respiratory care</td>
<td>Class activity</td>
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<td>Summative Exam</td>
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<td>Compare the interactions of the drugs used within the scope of respiratory care</td>
<td>Class activity</td>
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<td>Homework</td>
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<td>Summative Exam</td>
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III. OUTLINE OF TOPICS
   A. Basic Concepts to Respiratory Care
      1. Introduction to respiratory care pharmacology
      2. Principles of drug actions
      3. Administration of aerosolized agents
      4. Calculating drug doses
      5. Central and peripheral nervous systems interactions
   B. Drugs Used to Treat the Respiratory System
      1. Adrenergic bronchodilators
      2. Anticholinergic bronchodilators
      3. Xanthenes
      4. Mucus controlling drug therapy
5. Surfactant agents
6. Corticosteroids
7. Nonsteroidal antiashmatics
8. Aerosolized anti-infective agents
9. Antimicrobial agents
10. Cold and cough agents
11. Selected agents of pulmonary value
12. Neonatal and pediatric aerosolized drug therapy

C. Critical Care and Cardiovascular Drug Classes
1. Skeletal muscle relaxers
2. Vassopressors, inotropes, and antiarrhythmic agents
3. Drugs affecting circulation
4. Diuretic agents
5. Drugs affecting central nervous system

IV. METHOD(S) OF INSTRUCTION
A. Lecture
B. Readings from textbook
C. Supplemental handouts
D. Classroom activities
E. Participation in active learning by computer programs, games, and internet based activities.
F. Peer interactive activities and discussions in classroom and online

V. REQUIRED TEXTBOOK


VI. REQUIRED MATERIALS (student)
A. Course homepage available through jeffco.edu
B. A computer with internet access (available through the Jefferson College Labs).
C. Paper, notebooks, pens, pencils with erasers.

VII. SUPPLEMENTAL REFERENCES
A. Class handouts
B. Videos

VIII. METHOD OF EVALUATION (basis for determining course grade)
A. Classroom activities 10%
B. Homework 20%
C. Summation examinations-comprehensive 60% - Final is worth at least 30% of total grade
D. Attendance 10%
E. Grading scale:
A=92-100%
B=86-91.9%
C=80-85.9%
D=70-79.9%
F=0-69.9%

IX. ADA STATEMENT
Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services (Library; phone 636-797-3000, ext. 169).

X. ACADEMIC HONESTY STATEMENT
All students are responsible for complying with campus policies as stated in the Student Handbook. Any student who cheats or plagiarizes will be subject to dismissal from the respiratory program and will be referred to the college for disciplinary action. (see College website, http://www.jeffco.edu/jeffco/index.php?option=com_weblinks&catid=26&Itemid=84)