

# COURSE SYLLABUS

<b>LAST REVIEW</b>	Spring 2021
<b>COURSE TITLE</b>	Clinic Practice I
<b>COURSE NUMBER</b>	RSCR 0229
<b>DIVISION</b>	Health Professions
<b>DEPARTMENT</b>	Respiratory Therapy
<b>CIP CODE</b>	51.0908
<b>CREDIT HOURS</b>	4
<b>CONTACT HOURS/WEEK</b>	Clinical: 12
<b>PREREQUISITES</b>	None
<b>COURSE PLACEMENT</b>	This course is part of a selective admission program. Students must be admitted to the Respiratory Therapy program to enroll in this course.

## COURSE DESCRIPTION

Students make clinical rounds with Respiratory Care Practitioners (RCP) and physicians. Activities are directed so that students gain familiarity with initiating respiratory therapy in a variety of adult-child acute care and rehabilitation settings. Emphasis is placed on professional clinical practice guidelines for basic therapies. Students will practice safe operation of equipment, and appropriate technology selection for desired therapeutic effects.

## PROGRAM ALIGNMENT

This course is part of a program aligned through the Kansas Board of Regents and Technical Education Authority. For more information, please visit:

[https://kansasregents.org/workforce\\_development/program-alignment](https://kansasregents.org/workforce_development/program-alignment)

## PROGRAM LEARNING OUTCOMES

1. Formulate the knowledge and critical reasoning skills necessary to pass the National Board for Respiratory Care Therapist Multiple Choice Exam.
2. Execute the variety of assessment and intervention skills necessary to provide respiratory care in the clinical setting at the entry Registered Respiratory Therapist level.
3. Integrate professional behaviors necessary at the entry Registered Respiratory Therapist level.

## TEXTBOOKS

<http://kckccbookstore.com/>

## **METHODS OF INSTRUCTION**

A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom.

Methodology will be selected to best meet student needs.

## **COURSE OUTLINE**

- I. Clinical information from the patient's chart.
  - A. Patient history e.g., DNR status, social history, smoking history, medical history, family history, home medication.
  - B. Physician order, progress notes
  - C. Lab results e.g., CBC, ABG, Microbiology, electrolytes
  - D. Chest radiograph
  - E. EKG
  - F. Vital signs
  
- II. Applications of oxygen therapy
  - A. Operation of oxygen supply systems
  - B. Assemble and troubleshoot oxygen administration devices
  - C. Measurement of pulse oximetry
  - D. Measurement of oxygen concentration
  - E. Titrating oxygen levels
  - F. Liquid oxygen systems
  - G. Operate oxygen concentrators
  - H. Calculate flow rates
  - I. Calculate air/oxygen dilutions
  
- III. Applications of humidity and aerosol
  - A. Control heat output
  - B. Control flow
  - C. Determine delivery system
  - D. Select adjuncts
  
- IV. Patient assessment
  - A. Obtaining vital signs
  - B. Obtaining Oxygen level
  - C. Performing physical assessments e.g., palpation, percussion, auscultation, inspection
  
- V. Infection control practices
  - A. Handwashing to prevent hospital acquired infections
  - B. Isolation procedures
  - C. Bacteriological surveillance

- D. Equipment processing
- E. Proper handling of biohazardous materials
- VI. Airway Clearance and Lung Expansion Techniques
  - A. Measuring incentive spirometry volume and flow
  - B. Assisted cough e.g., deep breathing and coughing, huff, quad
- VII. Cardiopulmonary resuscitation
  - A. Determine unresponsiveness
  - B. Call for support team
  - C. Position patient
  - D. Open airway
  - E. Determine apnea
  - F. Provide manual ventilation
  - G. Determine pulselessness
  - H. Perform compressions
- VIII. Effective clinical communications
  - A. Telephone skills
  - B. Voice mail operation
  - C. Message retrieval
  - D. Stat pages
  - E. Pager or mobile phone operation
  - F. Retrieving patient files
  - G. Maintaining patient confidentiality
- IX. Clinical calculations
  - A. Flow rates
  - B. Air to Oxygen ratio
  - C. Metrics conversions
  - D. Cylinder time remaining
  - E. Oxygen mixtures and medical gas
- X. Monitoring administration of respiratory medications
  - A. Aerosol nebulizers
  - B. ucokinetics, mucolytics, and bronchodilators

### **COURSE LEARNING OUTCOMES AND COMPETENCIES**

Upon successful completion of this course, the student will:

- A. Review and gather clinical information from the patient's chart.
  - 1. Review patient history.
  - 2. Review physician orders and progress notes
  - 3. Review and gather lab values
  - 4. Review and obtain chest radiograph, EKGs.
  - 5. Review patient's vital signs.

6. Demonstrate application of care standards.

- B. Apply oxygen therapy.
  - 7. Assemble and troubleshoot oxygen administration devices.
  - 8. Select appropriate medical gas and oxygen equipment for patients.
  - 9. Apply medical gas and oxygen equipment to patients.
  - 10. Adjust medical gas and oxygen equipment to patient responses.
  - 11. Measure pulse oximetry.
  - 12. Titrate oxygen level based on patient responses.
  - 13. Calculate flow rates and air/oxygen dilutions.
  
- C. Apply humidity and aerosol therapy.
  - 14. Apply humidity and aerosol therapy.
  - 15. Select appropriate humidity and aerosol equipment for patients.
  - 16. Apply humidity and aerosol equipment to patients.
  - 17. Adjust medical humidity and aerosol equipment to patient responses.
  
- D. Perform patient assessment.
  - 18. Perform patient assessment.
  - 19. Assess vital signs.
  - 20. Assess lung sounds.
  - 21. Assess heart sounds.
  - 22. Palpate the chest.
  - 23. Percuss the chest.
  - 24. Assess SpO<sub>2</sub>.
  - 25. Assess PEF<sub>R</sub>.
  
- E. Apply infection control practices.
  - 26. Apply infection control practices.
  - 27. Apply Universal precautions.
  - 28. Apply Body Substance Isolation.
  - 29. Apply Respiratory Isolation.
  - 30. Apply reverse isolation.
  
- F. Perform Airway Clearance and Lung Expansion Techniques.
  - 31. Measure incentive spirometry volume and flow.
  - 32. Assist cough e.g., deep breathing and coughing, huff, quad.
  
- G. Perform and gather devices for cardiopulmonary resuscitation.
  - 33. Perform cardiopulmonary resuscitation.
  - 34. Perform American Heart Association Basic Life Support for Healthcare Providers.
  - 35. Apply a resuscitation bag, mask, valve device to patients to provide positive pressure ventilation.
  - 36. Apply oropharyngeal airways to patients with assistance.
  - 37. Apply nasopharyngeal airways to patients with assistance.



- H. Effectively communicate clinically.
  - 38. Effectively communicate clinically.
  - 39. Operate clinic phone to send and receive messages.
  - 40. Route clinical message and patient data to appropriate providers.
  - 41. Operate clinic mobile phone and pagers.
  - 42. Apply HIPPA patient confidentiality.
  - 43. Use approved medical terminology to chart patient data.
  
- I. Perform clinical calculations.
  - 44. Perform clinical calculations.
  - 45. Calculate flow rates.
  - 46. Calculate metric conversions.
  - 47. Calculate time remaining in a medical gas cylinder.
  - 48. Calculate oxygen and medical gas mixtures.
  - 49. Use a nomogram to determine predicted values for patient lung functions.
  
- J. Monitor and administering respiratory medications with assistance.
  - 50. Administer respiratory medications with assistance.
  - 51. Select appropriate medication delivery device for patients.
  - 52. Apply medication delivery devices to patients with assistance.
  - 53. Dispense prescribed medications and dosages with assistance.
  - 54. Adjust medication delivery to patients based on patient responses with assistance.

## **ASSESSMENT OF COURSE LEARNING OUTCOMES AND COMPETENCIES**

Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

## **COLLEGE POLICIES AND PROCEDURES**

*Student Handbook*

<https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf>

*College Catalog*

<https://www.kckcc.edu/academics/catalog/index.html>

*College Policies and Statements*

<https://www.kckcc.edu/about/policies-statements/index.html>

*Accessibility and Accommodations*

<https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html>.

