DATE OF LAST REVIEW: 02/2013

CIP CODE: 51.0908

SEMESTER: Department Syllabus

COURSE NAME: Clinic Practice II

COURSE NUMBER: RSCR0249

CREDIT HOURS: 4

INSTRUCTOR: Department Syllabus

OFFICE LOCATION: Department Syllabus

OFFICE HOURS: Department Syllabus

TELEPHONE: Department Syllabus

EMAIL: KCKCC-issued emails accounts are the official means for electronically communicating with our students.

PREREQUISITE(S): Admission to the Respiratory Therapy program, or permission of the instructor.

REQUIRED TEXT AND MATERIALS:
Please check with the KCKCC bookstore, http://www.kckccbookstore.com/, for the required texts for your particular class.

COURSE DESCRIPTION:
In this clinically focused class, students apply techniques for performing positive pressure breathing, pulmonary hygiene, airway maintenance, and collection of clinical data. Students initiate respiratory care in emergent situations, participate in critical care monitoring, cardiopulmonary assessment, airway management, and positive airway pressure therapy. Students implement respiratory care plans and make recommendations for care.

METHOD 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, and panels, conferencing, learning experiences, and performances outside the classroom. Methodology will be selected to best meet student needs.

COURSE REQUIREMENTS:
Each student is required to successfully pass examinations. Skill check offs for the units covered must be made prior to the examination. The written examination may contain multiple choice, true-false, matching, fill in the blank and/or short answer questions. They will be based mainly on lecture and text
content. Practical exams will be based on lecture materials. Related policies are located in the Respiratory Therapist program handbook.

COURSE OUTLINE:

I. Clinical Practice Guidelines
   A. arterial blood sampling
   B. arterial blood gas analysis
   C. hemoximetry analysis
   D. electrolyte analysis
   E. endotracheal and nasotracheal suctioning of adults and children
   F. postural drainage and chest physiotherapy
   G. continuous pulse oximetry
   H. oxygen therapy in the home or extended care facility
   I. positive pressure ventilation
   J. positive airway pressure breathing
   K. emergent airway care
   L. assess response to bronchodilator therapy at point of care

II. Monitoring Patients
   A. identify cardiac arrhythmias
   B. monitor cardiopulmonary status
   C. conscious sedation monitoring

III. Cardiopulmonary Diagnostics
   A. quality control and maintenance of instruments
   B. blood gas analysis
   C. hemoximetry analysis
   D. electrolyte analysis
   A. manometers
   B respirometers
   C. analyzers
   D. screening spirometers
      1. expiratory volumes
      2. expiratory flow rates
   E. cardiopulmonary laboratory techniques
      1. arterial puncture sampling
      2. arterial line sampling
      3. ambulation with pulse oximetry
      4. oxygen titration with pulse oximetry
      5. nocturnal desaturation studies
      6. capnography

IV. Cardiopulmonary Rehabilitation
   A. exercise prescription
   B. oxygen titration
   C. 6-minute/12-minute walks
   D. dyspnea index scale
   E. perceived level of exertion
   F. target heart rate
   G. recovery vital signs post exertion
IV. Patient Instruction
   A. safe operation of oxygen equipment
   B. safe operation of aerosol equipment
   C. smoking cessation breathing techniques

V. Airway Maintenance
   A. stylette
   B. Magill Forceps
   C. oral pharyngeal airway
   D. nasal pharyngeal airway
   E. endotracheal tubes
   F. cricoid pressure
   G. laryngoscope handles and blades
   H. suctioning
   I. securing artificial airways
   J. trach asepsis
   K. intubation assist
   L. check effectiveness of ventilation
      1. end tidal carbon dioxide detectors
      2. tracheal breath sounds
      3. lung breath sounds
      4. epigastric sounds
   M. Reposition tube and cuff pressure
   N. Tracheostomy care

VI. Apply Positive Pressure Equipment
   A. continuous positive pressure breathing
   B. bag valve mask
   C. positive pressure breathing
   D. positive expiratory pressure breathing

VII. Record and Report Clinical Data
   A. organize clinical technical data in medical record
   B. record patient response to procedures in medical record
   C. communicate time management needs
   D. respiratory care plans
   E. record patient instruction
   F. give oral reports on patients to other healthcare team members

VIII. Perform Clinical Calculations
    A. minute ventilation
    B. airway resistance
    C. dead space
    D. I:E ratio
    E. respiratory cycle time
    F. delivery of oxygen
    E. P/F ratio
    F. P (A-a)O₂
    G. a/A ratio

IX. Drug Administration for Pulmonary Hygiene and Crisis Breathing
    A. select appropriate delivery device
       1. high efficiency nebulizer
       2. small volume medication nebulizer
3. 
   A. large volume nebulizer
   B. check response to medications and identify adverse reactions

EXPECTED LEARNER OUTCOMES:
A. Student will apply respiratory therapy consistent with clinical practice guidelines.
B. Student will monitor patients.
C. Student will collect cardiopulmonary data.
D. Student will instruct patients.
E. Student will maintain airway.
F. Student will operate positive pressure equipment.
G. Student will record, report review clinical data.
H. Student will perform clinical calculations.
I. Student will determine cardiopulmonary drug administration for acute care patients.

COURSE COMPETENCIES:

**Student will apply respiratory therapy consistent with clinical practice guidelines.**
1. Student will reference clinical practice guidelines for respiratory care.
2. Student will apply clinical practice guidelines for arterial blood sampling.
3. Student will apply clinical practice guidelines for arterial blood analysis.
4. Student will apply clinical practice guidelines for arterialized blood capillary sampling.
5. Student will apply clinical practice guidelines for hemoximetry analysis.
6. Student will apply clinical practice guidelines for electrolyte analysis.
7. Student will apply clinical practice guidelines for endotracheal, oropharyngeal and nasotracheal suctioning.
8. Student will apply clinical practice guidelines for postural drainage and chest physiotherapy.
9. Student will apply clinical practice guidelines for continuous pulse oximetry.
10. Student will apply clinical practice guidelines for oxygen therapy in the home and extended care.
11. Student will apply clinical practice guidelines for positive pressure ventilation.
12. Student will apply clinical practice guidelines for positive airway pressure breathing.
13. Student will apply clinical practice guidelines for emergent airway care.
14. Student will apply clinical practice guidelines for assessing response to bronchodilation therapy.
15. Student will apply clinical practice guidelines for pulmonary rehabilitation.
16. Student will apply clinical practice guidelines for 12 lead ECG.
17. Student will apply clinical practice guidelines for managing artificial airways.
18. Student will apply clinical practice guidelines for bronchopulmonary hygiene procedure.

**Student will monitor patients.**
19. Student will identify cardiac arrhythmias.
20. Student will monitor cardiopulmonary status.

**Student will collect cardiopulmonary data.**
21. Student will collect airway pressure data with manometer.
22. Student will collect gas concentrations with analyzers.
23. Student will collect expiratory volumes with a screening spirometer.
24. Student will collect expiratory flow rates with a screening spirometer.
25. Student will collect cardiopulmonary laboratory data by arterial puncture sampling.
26. Student will collect cardiopulmonary laboratory data by arterial line sampling.
27. Student will collect ambulation data with pulse oximetry.
28. Student will collect oxygen titration data with pulse oximetry.
29. Student will collect peak flow measurement.

**Student will instruct patients.**
30. Student will instruct patients on safe operation of oxygen equipment.
31. Student will instruct patients on safe operation of aerosol equipment.
32. Student will instruct patients on safe operation of perceived level of exertion.
33. Student will instruct patients on safe operation of dyspnea index scale.
34. Student will instruct patients on safe operation of target heart rate.
35. Student will instruct patients on safe operation of recovery vital signs post exertion.
36. Student will instruct patients on safe operation of dyspnea index scale.
37. Student will instruct patients on safe operation of smoking cessation.
38. Student will instruct patients on safe operation of breathing techniques.

**Student will maintain airway.**
39. Student will provide airway maintenance using a stylette.
40. Student will provide airway maintenance using Magill Forceps.
41. Student will provide airway maintenance using oropharyngeal airway.
42. Student will provide airway maintenance using nasopharyngeal airway.
43. Student will provide airway maintenance using endotracheal tubes.
44. Student will provide airway maintenance using cricoid pressure.
45. Student will provide airway maintenance using laryngoscopy handles and blades.
46. Student will provide airway maintenance securing artificial airways.
47. Student will provide airway maintenance using tracheal asepsis.
48. Student will provide airway maintenance using intubation assistance.
49. Student will provide airway maintenance by checking effectiveness of ventilation.
50. Student will provide airway maintenance by doing routine tracheostomy care.
51. Student will provide airway maintenance by properly reposition or change and keeping appropriate cuff pressure in ETT and trach tube.

**Student will operate positive pressure equipment.**
52. Student will operate continuous positive pressure breathing equipment.
53. Student will operate BiPAP equipment.
54. Student will operate positive pressure ventilation equipment.
55. Student will operate positive expiratory pressure breathing equipment.

**Student will record, report and review clinical data.**
56. Student will organize clinical data in the medical record.
57. Student will record patient response to procedure in the medical record.
58. Student will record patient respiratory care plans in the medical record.
59. Student will give oral report on patients to other healthcare team members.
60. Student will review radiograph studies in the patient record.

**Student will perform clinical calculations.**
61. Student will calculate minute ventilation.
62. Student will calculate airway resistance.
63. Student will calculate dead space.
64. Student will calculate I:E ratio.
65. Student will calculate respiratory cycle time.
66. Student will calculate delivery of oxygen.
67. Student will calculate P/F ratio.
68. Student will calculate P(A-a)O₂.
69. Student will calculate a/A ratio.
70. Student will calculate target heart rate.

Student will perform cardiopulmonary drug administration for acute care patients.
71. Student will select appropriate drug delivery device to administer drugs.
72. Student will check patient response to medications given for crisis breathing and pulmonary hygiene.

**ASSESSMENT OF LEARNER OUTCOMES:**
Student progress is evaluated by means of exams, written assignments, and class participation.

**SPECIAL NOTES:**
This syllabus is subject to change at the discretion of the instructor. Material included is intended to provide an outline of the course and rules that the instructor will adhere to in evaluating the student’s progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome any time.

Kansas City Kansas Community College is committed to an appreciation of diversity with respect for the differences among the diverse groups comprising our students, faculty, and staff that is free of bigotry and discrimination. Kansas City Kansas Community College is committed to providing a multicultural education and environment that reflects and respects diversity and that seeks to increase understanding.

Kansas City Kansas Community College offers equal educational opportunity to all students as well as serving as an equal opportunity employer for all personnel. Various laws, including Title IX of the Educational Amendments of 1972, require the college’s policy on non-discrimination be administered without regard to race, color, age, sex, religion, national origin, physical handicap, or veteran status and that such policy be made known.

Kansas City Kansas Community College complies with the Americans with Disabilities Act. If you need accommodations due to a documented disability, please contact Director of the Academic Resource Center at 913-288-7670.