Course Description
Lecture hours, laboratory hours, and credits: 0 lectures, 8 lab hours, 1 credits
Co-requisites: RSP-110 and RSP-119
Course Description: This course introduces the student to the hospital environment. The student studies the relationship of the respiratory care department with other medical departments in the hospital. The student learns charting, patient rounds, respiratory equipment modalities, medication administration, and bronchial hygiene therapy.

Student Learning Objectives: As a result of meeting the requirements in this course, at a minimum proficiency of 78%, the student will:

1. Locate and become well acquainted with the clinical site, including the respiratory therapy department, patient care areas, related areas where respiratory therapy may be required, and the medical library.
2. Locate the respiratory therapy policy and procedure manual and refer to it as needed or directed.
3. Identify the respiratory therapy department's chain of command and define its role in his/her clinical course.
4. Demonstrate where to place written communication in the respiratory therapy department's records, and in the patient's chart.
5. Perform procedures necessary to prevent indirect patient contamination, including asepsis, strict hand washing, and obedience to all required isolation precautions.
6. Demonstrate and perform the proper hand-washing technique.
7. Demonstrate proper isolation procedures with an understanding of the specific isolation category and cause.

8. Discuss and analyze various equipment cleaning / sterilization processes, such as pasteurization, gas sterilization, and chemical disinfection / sterilization.

9. Compare and contrast various equipment cleaning / sterilization procedures, including Disassembling and reassembling equipment.

10. Describe procedures pertinent to handling emergency situations (i.e., fire safety, proper storage of medical gases).

11. Properly demonstrate patient positioning techniques, including consideration for safety, comfort, and permitted / optimal positions.

12. Identify oxygen and other compressed gas storage areas in the clinical site. This will include cylinder storage areas inside and outside the hospital and the bulk liquid oxygen system.

13. Explain the entire cylinder color codes, markings, and safety systems.

14. Demonstrate correct safe operating procedures for cylinder gases and their pressure and flow regulating devices.

15. Demonstrate initiation, application, or change of simple oxygen delivery devices during actual patient use.

16. Perform oxygen therapy rounds on selected patients.

17. Discuss the rationale for specific oxygen delivery systems and be able to select and assemble the appropriate equipment necessary to carry out a respiratory care oxygen therapy plan.

18. Identify disposable humidifiers and explain their purpose and safety systems.

19. Assess the patient’s subjective response to oxygen therapy.

20. Determine the FIO2 of various oxygen delivery systems, after becoming familiar with oxygen analyzers and their appropriate use.

21. Assess and evaluate the following information about a patient: arterial blood pressure, heart rate, respiratory rate, depth of breathing, skin color and condition, finger nail condition, posture, cough, breath sounds and speech pattern.

22. Demonstrate proper use of nebulizers and related delivery or therapeutic equipment during actual patient care and after thorough instruction and practice of the procedure.

23. Describe the goals, indications, contraindications, side effects, and hazards for various types of therapy administered to patients. This will include oxygen therapy, humidification therapy, and incentive spirometry therapy.

24. Identify and properly demonstrate the various sustained maximal inspiration (SMI) devices that each hospital utilizes.

25. Demonstrate proper administration of incentive spirometry (IS) therapy to actual patients including discussing the indications, contraindications, and hazards / side effects for incentive spirometry therapy.

26. Analyze the proper suctioning procedures and assist with patient assessment and oxygenation during the procedure.

27. Demonstrate the correct procedure for aerosol therapy administration.

28. Effectively document written communication in the patients’ record following the performance of pertinent procedures.

29. Demonstrate knowledge of any procedure covered in clinical or lab / lecture, by completing unannounced or spontaneous oral quizzes to the satisfaction of his/her instructor.

30. Demonstrate ability to perform selected procedures with minimal supervision by satisfactorily completing competency evaluations administered by the clinical instructor.

31. Be able to correctly assess and evaluate the following information concerning patients: depth of breathing, accessory muscle use, symmetry of chest, symmetry of chest wall movement, skin color and condition, finger nail condition, posture, scars, cough, speech pattern, position of trachea, jugular vein distention, breath sounds,
32. Demonstrate proper function of all aerosol / humidity therapy, especially that being delivered to artificial airways such as tracheotomies and endotracheal tubes.

33. Identify contraindications to coughing, explain means of assessing cough effectiveness, suggest alternative methods of airway clearance, and demonstrate proficiency in the instruction of the proper coughing techniques.

34. Analyze and interpret the content of key sections in patient’s records.

35. Demonstrate and perform making notations in the respiratory therapy progress notes section of the patient's chart for all appropriate situations. (Initially, the notes must be written on scrap paper and approved by the clinical instructor before being transferred to the permanent document.)

36. Describe various aerosolized medications administered by a respiratory care practitioner, including normal dosage, drug category, hazard / side-effects, action, indications, contraindications, and limitations.

37. Demonstrate proficiency in MDI administration including a spacer device.

38. Demonstrate proficiency in peak flow administration.

39. Demonstrate proficiency in aerosol therapy, including proper medication administration techniques and recognizing, indications, contraindications and hazards / side-effects.

40. Identify equipment utilized for airway care, be able to describe the functions of various pieces of equipment, and show proficiency in equipment use.

41. Explain the importance of a patent airway, describe the procedures for maintaining a patent airway, and demonstrate proficiency in the maintenance of a patent airway.

42. Describe the steps of an intubation procedure (both oral and nasal). Including indications, hazards / side-effects, important anatomical features, patient monitoring techniques, and methods for evaluating the adequacy of the established airway.

43. Observe and assist with intubation procedures.

44. Explain and demonstrate proper cuff inflation techniques.

45. Perform correctly cuff management on various patients having artificial airways.

46. Observe tracheotomy care and demonstrate the correct procedure.

47. Observe the surgical procedure of tracheotomy when accessible.

48. Demonstrate the proper procedures with the various apparatus used for suctioning, i.e., closed systems, yankauers.

49. Discuss and demonstrate the procedure of tracheobronchial / nasotracheal aspiration, including indications, patient preparation, equipment preparation, sterile technique, patient monitoring techniques, important time intervals, hazards / side effects and special problem situations.

50. Attend any cardiac / pulmonary arrests that are convenient to the clinical situation, to observe all techniques employed in an attempt to successfully resuscitate a patient. The student will monitor closely, the duties and actions of the respiratory care personnel.

51. Demonstrate proficiency in ventilation via mask, ET tube, and tracheostomy tube.

52. The student may perform cardiopulmonary resuscitation (CPR) on adult pediatric and neonatal patients, once they have demonstrated proficiency on mannequins and has become officially certified.

53. Be evaluated on the above objectives, in full, and is expected to pursue certification promptly following instruction and adequate practice of skills.

54. Demonstrate proficiency in the ability to accurately utilize, read, understand and correctly evaluate pulse oximetry readings and be able to make appropriate recommendations regarding these readings.

55. Develop questions to be presented to their clinical instructor, which directly relate to their clinical experience.
Course Content

This course will be presented and delivered at specific hospital sites. Each site can offer different exposures to the equipment used in respiratory care.

Special Features of the Course

Moodle is used to enhance the interaction with the student.

Anecdotal Notes:

Each student is required to complete and review with his or her own instructor a daily log for each day in clinical into the DataArc system. Each clinical instructor must validate these logs in the DataArc system.

Clinical files are available in the clinical coordinator's office HP-237. All students are responsible for making certain that their competencies are complete and must hand in all required materials.

Course Texts and/or Other Study Materials

Kacmarek R. Egan's Fundamental of Respiratory Care, 11th ed. Elsevier, 2017
- Computer software: competency system by DataArc

Reading assignments from Egan’s textbook:
- Bedside Assessment of the Patient
- Airway Pharmacology
- Airway Management
- Humidity and Bland Aerosol Therapy
- Aerosol Drug Therapy
- Storage and Delivery of Medical Gases
- Medical Gas Therapy
- Lung Expansion Therapy
- Airway Clearance Therapy
- Principles of Infection Prevention and Control
- Quality, Patient Safety, and Communication, and Recordkeeping

Research, Writing, and/or Examination Requirement(s)

Competency Evaluations:

Prior to performing a competency in the clinical setting, the student must have successfully completed the competency in the laboratory. The clinical instructor will then evaluate individual competencies performed by the student in the hospital and enter them into the DataArc system. The competency evaluation for each task must be attained at a satisfactory level. For this portion of the final course grade, the student will be graded on completing a minimum of 78% of assigned competencies to receive full credit.

A student who has successfully achieved a competency will be expected to repeat the competency, when necessary, at an acceptable level during subsequent clinical experiences.

Means of Assessment

Students will be assessed in the following methods: via clinical instructor evaluations entered into the DataArc system, procedural competency evaluations via DataArc system, practical exams, and a final written exam in multiple choice format via the computer in Moodle.
Grading Policy

Grade Computation:
The clinical instructor will evaluate individual competencies performed by the student. The competency evaluation for each procedure must be attained at a satisfactory level within a prescribed time period.

Evaluation of Clinical Performance:
Each student will have an evaluation of overall clinical performance at the end of each clinical rotation. The average of these evaluations will be the basis for part of the final course grade.

Grading Format:
<table>
<thead>
<tr>
<th>Evaluation Category</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructor Evaluations</td>
<td>50%</td>
</tr>
<tr>
<td>Competency Evaluations, Assignments</td>
<td>15%</td>
</tr>
<tr>
<td>Practical Exam</td>
<td>20%</td>
</tr>
<tr>
<td>Written Exam</td>
<td>15%</td>
</tr>
</tbody>
</table>

Grade Determination:
- **A**  Student must show superior work, excel in laboratory and contribute positively to class discussions.  93 - 100
- **B+** Student must merit superior work in the classroom and in practical exercises.  88 - 92.9
- **B**  Student must show above average work in the clinical setting and above average standard of achievement in the laboratory.  83 – 87.9
- **C+** Student must meet and attain the standard of achievement with reasonable theoretical knowledge and laboratory skills.  78 – 82.9
- **F**  Student fails to meet acceptable standards in classroom or laboratory performance.  <78
- **N**  Incomplete

Late Work or Assignments:
Late work and make-up examinations will be penalized with a grade being nor greater than 78%. Late work will be submitted as soon as possible; make-up exams will be completed at the end of the semester.

Attendance Policy

BCC Attendance Policy:
All students are expected to attend punctually every scheduled meeting of each course in which they are registered. Attendance and lateness policies and sanctions are to be determined by the instructor for each section of each course. These will be established in writing on the individual course outline. Attendance will be kept by the instructor for administrative and counseling purposes.

Course Attendance Policy: For every absence, in any given semester, there will be 5 points taken off the student’s final grade. See the department policy and procedure manual for the course attendance and lateness policy.
### Departmental Policy Statements

1. Acceptable quality of work and mature behavior are expected from every student at all times. Students are regarded as professionals and are expected to conduct themselves accordingly.
2. High standards of professional performance demand that students maintain good academic progress throughout their course of study in the program.
3. Students demonstrating chronic tardiness or absenteeism will be placed on academic warning or probation, and may be subjected to termination from the program.
4. Absence from a class during a scheduled exam will be subject to the policy of the instructor for that specific course. If the student is going to miss a scheduled exam it is expected that the student will contact the instructor ahead of time by e-mail or phone to the department office.
5. All students are required to adhere to the policies and procedures of the school as outlined in the college catalogue.
6. Additional department policies are located in the Student Policies and Procedures Manual.

### Student and Faculty Support Services

1. The program faculty maintain office hours for counseling and are available to provide tutorial assistance to students.
2. Students must make appointments in advance to meet with the respective instructors.
3. Students may also obtain assistance from the College Tutoring Center. Appointments must be made in advance through this center.
4. The College has a personal counseling center for those students who may need personal assistance. Appointments are made directly through this center.
5. Any problems, concerns, or questions should be directed to the course instructor or the student’s advisor.
6. Statement on Civility
   a. Refer to the Standards of Conduct subsection found in the Student Judicial Affairs Policies Section found in the Student Handbook.
7. Academic Integrity
   a. Refer to the Academic Integrity Subsection: found in the Academic Regulations, Academic Policies Section found in the College Catalog.
8. Other College, Divisional, and/or Departmental Policy Statements to be referenced
   a. ADA Statement
   b. Sexual Harassment Statement
   c. Statement on acceptable use of BCC technology.
   d. Statement on the purpose and value of faculty office hours.
   e. Policy on use of Social Media during clinical experiences.
9. Student and Faculty Support Services
   a. List support services, e.g., the Writing Center, the Math Lab, the Tutoring Center, Online Writing Lab (OWL), Office of Specialized Services, etc.
10. BCC Library
    a. The Sidney Silverman Library is committed to providing a quiet, welcoming, respectful atmosphere conducive to study and research in an environment that is comfortable, clean, and safe. The use of the library will be beneficial in providing resources on researching topic information, citation styles, finding current articles among many other media services available.