#### **Bergen Community College**

#### **Division of Health Professions**

#### **Respiratory Care Program**

RSP- 231 Respiratory Care Clinical Externship IV

#### **Course Information**

Semester and Year: Course and Section Number: RSP-231-001 Meeting Times and Locations: Instructor: Office Location: Departmental Secretary: Office Hours:

Contact information:

#### **Course Description**

This course is designed to provide the student with the opportunity to develop advanced skills in the management of ventilator patients in adult critical care areas. Students will also receive an introduction to the neonatal / pediatric intensive care units. In addition, rotations through specialty areas are provided. Emphasis is placed on patient evaluation and education, decision-making skills, communication, and critical thinking skills.

Credits: 2 (16 hours clinical)

Prerequisites: RSP-226

Co-requisites: RSP-240 and RSP-250

#### **Student Learning Outcomes**

As a result of meeting the requirements in this course the student will:

- 1. Assess and evaluate the patient's condition and formulate a care plan.
- 2. Interprets and communicates information with all team members.
- 3. Assemble equipment and perform procedures safely with minimal supervision.
- 4. Independently demonstrate the required clinical competencies.
- 5. Explain to a patient the procedure being performed.
- 6. Demonstrate integrity and professional qualities and accepts responsibilities.

## **Means of Assessments**

A student in this course is assessed through:

- 1. Completing required competency check offs that are used to assess the student's affective, cognitive, and psychomotor skills.
- 2. A final written exam that contains multiple choice and calculation questions that are used to assess cognitive competency.
- 3. Summative evaluations assessing a student's preparation, knowledge, psychomotor skills, professionalism, and organization.
- 4. A computer-based practical simulation exam that is used to assess affective, cognitive, and psychomotor domains.

# **Course Content**

- 1. Demonstrate proficiency in previous clinical course competencies and clinical learning outcomes.
- 2. Initiate and adjust the conventional invasive and non-invasive ventilation in the critically ill patient.
- 3. Demonstrate effective monitoring, management, and discontinuance of conventional invasive and non-invasive ventilation.
- 4. Describe the procedure for calibration and quality control of the blood gas analyzer.
- 5. Explain the monitoring and maintenance of thoracic drainage systems.
- 6. Demonstrate the procedure for performing blood gas sampling through an arterial line.
- 7. Describe purposes of pulmonary function testing.
- 8. Differentiate lung volume and capacity measuring tests, air flow-volume measuring tests, and supplementary pulmonary function tests.
- 9. Describe methods of obtaining lung volumes and capacities, flow-volumes, and supplementary pulmonary function tests.
- 10. Describe a systematic means of interpreting pulmonary function test results.
- 11. Describe the rationale, utilization, and basic techniques for bronchoscopy.
- 12. Describe the rationale, utilization, and basic techniques for pulmonary rehabilitation.

## **Course Texts Assessment Materials**

Required

- Kacmarek R. Egan's Fundamental of Respiratory Care, 12th ed. Elsevier, 2021 ISBN 13: 978-0-323-51112-4
- Computer software: competency system by Clinical Trac

## Exams, Checkoffs, and Evaluation Requirements

- Competency check offs are used to determine a student's level of knowledge and skill. Each checkoff must be satisfactorily completed. The competency evaluation for each procedure must be attained at a satisfactory level within the prescribed time. 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. 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 80% 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.
- The written final exam is used to assess comprehension of the clinical learning outcomes of the course.
- Each student will have an evaluation of clinical performance at the end of each clinical rotation. The average of these evaluations will be part of the final course grade.
- The computer-based practical simulation exam will evaluate psychomotor and cognitive skills that require higher-level critical thinking skills.

## **Grading Policy**

Assessment	Percentage
Instructor Evaluations	60%
Competency checkoffs	10%
Written Exam	15%
Clinical Simulation Exam	15

## Grade Scheme

Letter	Description	% Range
A	The student must show superior theoretical knowledge and demonstrate superior laboratory skills.	93 – 100
B+	The student must merit high-quality classroom work and theoretical knowledge and demonstrate high-quality laboratory skills.	88 - 92.9
В	The student must show above-average knowledge and laboratory skills.	83 - 87.9
C+	The student meets the standard of achievement with reasonable knowledge and demonstrates reasonable laboratory skills.	78 – 82.9
F	The student fails to meet minimum course standards.	<78

Missed Exams and Late Work

Missed exams and late work will be penalized with a grade no greater than seventy-eight percent (78%). Clinical competency checkoffs cannot be reconciled because the evaluation method is participatory and will be recorded as zero (0). Exams are to be completed before the end of the semester. A grade of zero (0) will be recorded if an exam is not completed before the end of the semester.

## Academic Integrity Policy and Attendance Policy

# Academic Integrity

Academic dishonesty is a serious violation of BCC policy and personal ethics and will be treated as such if the reason for suspicion should arise. Students should be careful to avoid plagiarism, falsification, and compliance. Academic integrity is vital to an academic community and for fair evaluation of student assessments. All assessments submitted must be your own, completed in accordance with the college's academic policies and the student code of conduct. You may not engage in unauthorized collaboration or make use of any artificial intelligence (AI) composition systems. Academic dishonesty also includes cheating on examinations. Refer to the BCC student code of conduct, student handbook for additional information, and the statement on plagiarism

(https://catalog.bergen.edu/content.php?catoid=4&navoid=163#academic-dishonesty).

# **BCC** Attendance Policy

All students are expected to attend every scheduled meeting of each course for 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 maintained by the instructor for administrative and counseling purposes.

## **Course Attendance Policy**

Students are allowed one (1) absence per semester. Any absences after that will have a 5-point deduction from the final grade. The absence should be scheduled ahead of time and the instructor should be notified so that they can plan accordingly. See the department policy and procedure manual for details on the course attendance and lateness policy.

## **Departmental Policy Statements**

- Acceptable quality of work and mature behavior is always expected from every student. Students are regarded as professionals and are expected to conduct themselves accordingly.
- High standards of professional performance demand that students maintain good academic progress throughout their course of study in the program.
- Students demonstrating chronic tardiness or absenteeism will be placed on academic warning or probation and may be subjected to termination from the program.
- 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 email or phone the department office.

- All students are required to adhere to the policies and procedures of the school as outlined in the college catalog.
- Additional department policies are in the Student Policies and Procedures Manual.
- Remediation
  - The program's defined process for addressing deficiencies in a student's knowledge, skills, professional behavior, and competencies so that the correction of these deficiencies can be ascertained and documented. The program must conduct these evaluations equitably and with sufficient frequency to facilitate prompt identification of learning deficiencies and the development of a means for their remediation within a suitable time frame.
  - The remediation process is initiated by faculty when any student is at risk of failing a course due to difficulty accomplishing course objectives and / or requirements. At-risk behaviors include academic deficiency (non-passing quiz, examination, laboratory competency), lack of clinical competency (not abiding by policy and procedures, unsafe behavior), and lapses in professional conduct.

# Support Services

- The program faculty maintains office hours for counseling and is available to provide tutorial assistance to students.
- Students must make appointments in advance to meet with the respective instructors.
- Students may also obtain assistance from the <u>College Tutoring Center</u>. Appointments must be made in advance through this center.
- The College has a <u>personal counseling center</u> for those students who may need personal assistance. Appointments are made directly through this center.
- Any problems, concerns, or questions should be directed to the course instructor or the student's advisor.
- Statement on Civility
  - Refer to the <u>Standards of Conduct</u> Subsection found in the Student Judicial Affairs Policies & Procedures Section found in the Student Handbook.
- Academic Integrity
  - Refer to the Academic Integrity Subsection; found in the <u>Academic Regulations</u>.
- Other possible College, Divisional, or Departmental Policy Statements to be referenced.
  - o ADA statement
    - Students with documented disabilities who require accommodations by the
      - American with Disabilities Act (ADA) can request support services from the Office of Specialized Service of Bergen Community College located in room L-115 of the Pitkin Learning Center. (www.bergen.edu/oss)
  - Sexual Harassment statement
  - Statement on acceptable use of <u>BCC technology</u>.
- Support Services
  - o <u>Writing Center</u>
  - o <u>Math Lab</u>

- Online Writing Lab (OWL)
- o <u>Office of Specialized Services</u>
- BCC Library
  - The <u>Sidney Silverman Library</u> 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, and finding current articles among many other media services available.

# Weekly Assignments / Objectives

Week	Topic / Activity
1	Orientation to ICU / department policies Patient assignments in ICU or intermediate care unit Review performance of ABG's PFT lab rotations begin
2	Review quality assurance / controls on ABG machines Patient assignments in ICU or intermediate care unit Develop a home care program for ventilator dependent patient Specialty rotations begin
3	Begin assessment and evaluation of a patient on non-invasive ventilation ABG's / A-Lines if available Patient assignments in ICU or intermediate care unit
4	Evaluate non-invasive ventilation as compared to mechanical support ABG's / A-Lines Patient assignments in ICU or intermediate care unit
5	Review weaning parameters mechanical ventilation concepts determine: Vd/Vt, and Qs/Qt Relate ventilator settings to ABG's and case studies scenarios Patient assignments in ICU or intermediate care unit
6	Weaning, ventilator circuit changes, hemodynamic monitoring concepts Case studies
7	Mechanical ventilation concepts determine: AaDO2 and anion gap Relate ventilator settings to ABG's <i>Computer simulation exam</i>
8	Relate ventilators to disease states Case studies
9	Relate disease states to ventilator adjustments Hemodynamic monitoring Case studies
10	Review Bi-PAP, weaning parameters Case studies
11	Review ventilator settings to ABG's Overall ventilatory management
12	Hemodynamic monitoring Overall ventilatory management
13	Review proficiency of semester goals Review management of the critically ill patient
14	Review management of the critically ill patient Computer simulation exam
15	Review management of the critically ill patient Final exam

Note to Students: This course outline is tentative and subject to change, depending upon the progress of the class.

# **Competency Topics from Clinical Trac**

These competencies are required to be completed or reevaluated this semester. It is the responsibility of each student to complete the competencies listed below.

Competency	
B.05 ABG Analysis	C.08 BIPAP/NIPPV
B.03 Arterial Line Draw ABG	C.01 Routine Ventilator Check
B.02 Arterial Puncture	C.21 Ventilator Graphics Analysis
B.09 Capnography	C.15 Ventilator Parameter Change
F.04 Hand Washing	C.03 Initiation of Mechanical Ventilation
F.01 Isolation	C.07 Ventilator Weaning
C.20 Initiation of BiPAP/NIPPV	