



Clinical Practice III

RES 205.01

Winter 2021

Number of Credits: 5

Days Class Meets: Internet based learning

Meeting Times: Variable – day and night shift

Location: Clinical affiliates as assigned

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Office Hours: Mon – Thursday 9am – 3pm
additional by virtual appt

Online: JetNet course
Trajecsyst Tracking System
CastleBranch health record tracking
RT Board Review

Course Description

This clinical course allows students to assist in the pulmonary management of adults on mechanical ventilation. An integrated approach to patient care will be stressed through accurate patient assessment and application of various equipment and therapies. Students will also function as members of the health care team.

Prerequisite(s)

- RES 120 Respiratory Care Techniques III
- RES 124 Respiratory Pharmacology
- RES 125 Clinical Practice II
- RES 126 Cardiopulmonary Pathophysiology I

Course Goals

The course goals and objectives incorporate specific General Education Outcomes (GEOs) and Essential Competencies (ECs) established by the JC Board of Trustees, administration, and faculty. These goals are in concert with four-year colleges, universities, and reflect input from the professional communities we serve. GEOs and ECs guarantee students achieve goals necessary for graduation credit, transferability, and professional skills needed in many certification programs. The course objectives addressed in this class include the following:

- **Performance (EC 1):** Each student will be expected to **Perform properly, according to clinical proficiency guidelines, the following procedures in adult ICUs: routine ventilator checks, ventilator circuit changes and ventilator preparation and application, initiation of weaning protocol, and initiation of continuous distending pressure therapy.**
- **Attitudinal (EC 2):** Each student will be expected to **Display acceptable fluency in professional attitudes, professional medical ethics, and concern for patient's rights as prescribed in the Respiratory Care program's Clinical Policies manual.**
- **Attitudinal (GEO 7):** Each student will be expected to **Display acceptable fluency in professional attitudes, professional medical ethics, and concern for patients from diverse backgrounds as prescribed in the Respiratory Care program's Clinical Policies manual.**

Course Objectives

Major Units:

- Adult Critical Care: (Introduction)
- Adult Critical Care: (Advanced)

Textbooks/Reference Materials

Required Texts: RES program clinical classes have no assigned textbooks, as the students are expected to review materials as needed from the lecture/lab classes to enhance their clinical learning. The textbooks from the other program classes are used for this purpose, as well as journals and other references as needed.

Textbook Zero: All texts are available in digital format from the book store / many online sources.

Expected Time Commitment:

For each credit hour in this course, the student is expected to put in a minimum of three hours of study time. Use your time management skills to plan for a minimum of six hours each week. The best way to utilize your time is to set up a schedule in which you are participating early in the week and many times throughout the week (see discussion board requirements below). New weekly assignments will appear every Monday. To keep everyone together as we travel down the online road there will be no jumping ahead.

Ground Rules for Online Communication & Participation:

- Online threaded discussions are public messages, and all writings in this area will be viewable by the entire class or assigned group members.
- Posting of personal contact information is discouraged (e.g. telephone numbers, address, personal website address).
- Online Instructor Response Policy: I will check email frequently and will respond to course-related questions within 24 hours.
- Observation of "Netiquette": All your online communications need to be composed with fairness, honesty, and tact. Spelling and grammar are very important in an online course. Your level of professionalism has a direct correlation to the content you post.
 - Grammarly, is a free tool available to assist you during your online journey.
- Two words: **REMEMBER HIPPA.** Make sure never to identify patients or employees of your institution by name or title when commenting on your clinical practice experience. **The intent is that your experiences will be a valuable asset to this class – share them wisely.**

Guidelines for a Productive Discussion

- The discussion board is your space to interact with your peers related to current topics or responses to your peer's statements. It is expected each student will participate in a mature and respectful fashion.
- Participate actively in the discussions, having completed the readings, and thought about the issues.
- Pay close attention to what your classmates write in their online comments. Ask clarifying questions, when appropriate. These questions are meant to probe and shed new light, not to minimize or devalue comments.
- Think through and reread your comments before you post them.
- Assume the best of others in the class and expect the best from them.
- Value the diversity of the class. Recognize and value the experiences, abilities, and knowledge each person brings to class.
- Your posts should be more than four sentences and offer a different perspective, provide clarification, or provide a resource or new data.

CLINICAL DOCUMENTATION: TOPIC REQUISITE ACTIVITY

1. **Information/Policies book** Review pertinent elements for the start of a new semester.
2. **RES 210 lecture calendar** Review what you have already learned.
3. **RES 210 lab calendar** Review what you have already learned.
4. **Clinical Syllabus** Review to familiarize with the broad goals of the ensuing semester.
5. **RES 225 clinical calendar** Familiarize and place where it can be easily checked during the course of the semester.
6. **PEF list** Become familiar with this. Use during course of semester to request clinical assignments and establish an appropriate pace of progression through the clinic. Remember that check-offs will be done during the 8-day neo rotation ONLY—plan accordingly.
7. **PEFs/Task Analyses** Become thoroughly familiar with so that tasks may be instructed on and your skills may be developed according to JC Respiratory Care program standards. PEFs are completed by CIs with grade point values determined by the Clinical Coordinator.
8. **Clock in and clock out** To be completed each and every clinical day. Clock in and out IMMEDIATELY at start/end of clinical days.
9. **Activity /Procedure** A document which records 1) your daily activity (tasks performed), and 2) totals for these categories for a defined cumulative period. Done during neonatal rotation only.
10. **Student journals** Journal entries based on daily clinical activities and events are completed by students and can be read by CIs and JC program personnel to facilitate student/program communications. Entries are to be made daily within 24 hours of the end of the clinical shift. CIs or the clinical coordinator may enter comments in the students' journals.
11. **Physician contact** Notes taken on physician contacts and validated by CIs. The generated entries are evaluated with grade point values determined by the Clinical Coordinator. Done during neonatal rotation only—plan accordingly to complete in time.
12. **Patient Assessment forms**..... You are to complete this form, it will be evaluated by CIs for accuracy and completeness and is used by CIs to guide group discussions of interesting patient cases. Patient assessments are to be done as scheduled on calendar and are graded by the clinical coordinator. Done during neonatal rotation only.
13. **Formative evaluation forms**..... A short evaluation of student progress on several key attributes. Because the program requests an anecdotal recording of critical student behaviors, the proper completion of this document is more time consuming than may first appear to be the case. This form is completed by the CI, validated, conferenced over and signed to indicate review by the student, and submitted to the clinical coordinator. Done during neonatal rotation only.
14. **Summative evaluation forms**..... A comprehensive evaluation of student progress performed by the CI near the completion of a clinical rotation. Because the program requests an anecdotal recording of critical student

Exams

- All exams are timed. They will be open for 2 days. The total time for each exam will be determined by the number of questions on the exam; you will receive approximately two minutes per question. Prior to each exam, the time limit will be displayed. The questions will be randomized and will only be open for one single attempt. **Mobile devices are not recommended for taking tests or submitting assignments.**
- **If you wait until the last minute to take an exam and you have technical difficulties, you will not be extended time and your exam will be considered late. You will be eligible to receive 50% of the grade earned.** Respondus To protect the fairness and integrity of the exams, students will be required to take exams using Respondus Lockdown Browser and Monitor. This is an online test proctoring software that requires a download to your computer. Training and practice of Respondus technology will be provided in advance of the first exam. A Mac or PC that has a webcam and microphone is required to use Respondus. If you do not have this technology, please contact your instructor right away. Students are expected to complete the Respondus Practice quiz on time. This is to give our IT department time to help troubleshoot issues before exam 1 begins. Failure to complete the Respondus quiz on time may result in instructor-initiated drop.

Grading Procedure

Grading follows a dual track in clinical—the grade assigned for the class, based on points, and the pass/fail element of the class.

Pass/Fail Grade Elements (ALL must be satisfactory; any not completed with an acceptable score will result in failure from clinical):

1. Completion of patient assessments (**2 in this rotation**)
2. Satisfactory physician contact time (**20 points**)
3. Completion of mandatory proficiencies
4. Satisfactory affective evaluations
5. Satisfactory attendance and completion of logs and student journals
6. Satisfactory completion of daily ICU report sheets for each assigned patient
7. Satisfactory completion of special project (total of **100** points)

Points-Based Grade Elements

1. Patient assessments = 25 pct (**2 patient assessments**)
2. Clinical exams = 25 pct (**2 exams**)
3. Physician contact = 10 pct
4. Logs (activities/procedures) = 20 pct
5. Proficiency evaluations = 10 pct
6. Special project = 10 pct

100 pct possible

Attendance = +1 if no absences/tardies during the term, or
0 if only 1 absence/tardy during the term, or
-1 for each absence beyond the first during the term.

Also regarding attendance:

1. Please refer to the JC Clinical Information and Policies Handbook, which states that “Any absence is considered unexcused if not accompanied by an appropriate notification of absence to the Clinical Instructor”.
2. In addition, students have been informed that they need to contact the Clinical Coordinator in case of absence (**text or call**).
3. Please be sure you have the correct phone numbers available in advance of your needing to use them.
4. Failure to call in properly will result in the consequences spelled out in the Handbook, and will also result in a **5 point deduction** from the final clinical grade for **each occurrence**.
5. **Failure to maintain current health records and CPR certification will result in the immediate removal from clinical and/or a weekly 5 point deduction from the final grade until records are in compliance.**

RES 205 PROFICIENCY EVALUATION LIST:

MANDATORY - All skills/tasks listed as MANDATORY must be evaluated, in writing (PEF), by the end of the clinical semester. The **bolded** activities are used to determine the PEF component of the clinical grade.

- A.14 **Cuff Management - Artificial Airway Care**
- B.06 Bedside Monitoring - Parameters
- C.01 **Routine Ventilator Check**
- C.02 **Ventilator Circuitry Change**
- C.03 **Initiation of Mechanical Ventilation**
- C.04 Continuous Distending Pressure Therapy (PEEP / CPAP)
- C.06 Critical Care Transport (Adult)
- C.07 IMV and Ventilator Weaning
- C.08 **NIPPV**
- C.10 Extubation

During an exam, only pencils, exam/Scantron, and program provided simple calculator are allowed. All cell phones, smart watches, personal graphing calculators and other electronic devices are not allowed. These may be placed in a book bag, purse or other suitable container and stored at the front of the room for the duration of the exam.

Students will be expected to complete an evaluation of the course on-line in JetNet at the conclusion of the semester.

Grading Scale for *All Respiratory Care Courses*

To pass RES 205 the final course average score must be $\geq 76\%$.

| GPA | GRADE RANGE | GPA | GRADE RANGE |
|------------|--------------------|------------|--------------------|
| 4.0 | 93-100% | 1.5 | 73-75% |
| 3.5 | 89-92% | 1.0 | 68-72% |
| 3.0 | 84-88% | 0.5 | 64-67% |
| 2.5 | 80-83% | 0.0 | 0-64% |
| 2.0 | 76-79% | | |

Required Extras

- Grey Scrubs. See **Program Handbook** for **other requirements**.
- Trajecsys tracking system
- ACEMAPP/ CastleBranch health record tracking

Academic Honesty Policy

If I suspect you of academic dishonesty, I will follow JC's Academic Honesty Policy and take appropriate action up to and including assigning a failing grade for the paper, project, report, exam, or the course itself (whichever I deem necessary). To see the policy, visit: <https://www.iccm.edu/wp-content/uploads/StudentCodeOfConduct.pdf>.

Academic Honesty is defined as ethical behavior that includes student production of their own work and not representing others' work as their own, by cheating or by helping others to do so.

Plagiarism is defined as the failure to give credit for the use of material from outside sources.

Plagiarism includes but is not limited to:

- Submitting other's work as your own
- Using data, illustrations, pictures, quotations, or paraphrases from other sources without adequate documentation
- Reusing significant, identical or nearly identical portions of one's own prior work without acknowledging that one is doing so or without citing this original work (self-plagiarism)

Cheating is defined as obtaining answers/material from an outside source without authorization.

Cheating includes, but is not limited to:

- Plagiarizing in any form
- Using notes/books/electronic material without authorization
- Copying
- Submitting others' work as your own or submitting your work for others
- Altering graded work
- Falsifying data
- Exhibiting other behaviors generally considered unethical
- Allowing your work to be submitted by others

Incompletes Policy

(Excerpt from JC Policy) "A student may request an incomplete from the instructor. The incomplete will be granted only if the student can provide documentation that his or her work up to that point is sufficient in quality, but lacking in quantity, due to circumstances beyond the student's control. Furthermore, a written plan for making up the missing work within one semester must be completed by the student. Final determination of whether an incomplete will be given is the instructor's decision."

Help

It can be very frustrating when you do not understand concepts and are unable to complete homework assignments. However, there are many resources available to help you with your study of respiratory care (besides visiting me during office hours):

- **CENTER FOR STUDENT SUCCESS:** Tutors (plus additional services for academic success) can be accessed by calling **796-8415** or by stopping by the **Center for Student Success, Bert Walker Hall, Room 138**. Arrange to get regular assistance from a tutor. Also, students requiring special assistance (including those affected by the Americans with Disabilities Act) should contact the Center for Student Success. This is the first step in acquiring the appropriate accommodations to facilitate your learning. It is important to contact a Center for Student Success professional **prior to the start of the semester** in order to receive accommodations in a timely manner. While we will make every effort to coordinate accommodations in a timely manner, failure to self-identify prior to the start of the semester may delay notification to instructors and timeliness of acquiring accommodations. **Accommodations do not automatically carry over to the next semester.** <https://www.jccmi.edu/center-for-student-success/accommodations-for-students-with-disabilities>
- **STUDY GROUP:** Find a study partner or a study group. Sometimes it helps to work through problems with another person.
- **JETNET:** There will be material posted there to help students and allow them to ask questions of the instructor and/or the group.
- **EMAIL:** The best and quickest way to get a hold of me, besides attending class, of course.
- **Redo problems** from tests and homework assignments, particularly ones that you got wrong or have trouble understanding. Remember that you must crawl before you can walk. Similarly, you must have a good handle on the basics of respiratory care before you can master the advanced concepts.

Student Responsibilities

See Respiratory Care Program Handbook for program expectations.

Attendance Policy

See Respiratory Care Program Handbook for program expectations.

In compliance with Federal Title IV funding requirements, as well as college initiatives, reporting of student participation in classes will occur at several designated times each semester. Students identified as no longer participating will be dropped or administratively withdrawn from the class.

Caveat

All clinical cancelled, **regardless** of reason, will be made up at a later time to be determined by course instructor.

Failure of Course

See program handbook for program reentry process.

RES 205 Adult Critical Care Clinic Guidelines / Policies

Students will spend their entire ICU rotation in the same hospital. The clinical topic **emphasis** will change with each phase.

The first phase is an introduction to ventilator patients in various adult intensive care units. During this introduction there will be review, practice, and assessment of the students' basic critical care skills such

as: airway management (including suctioning and endotracheal tube cuff maintenance), blood gas sampling from the radial artery or arterial line, and ABG analysis, and gathering of weaning parameters (V_E , V_T , VC, and NIF). Treatments and other procedures performed previously in RES 105 and 125 on general floors will now be performed with ICU patients. Students will perform ventilator checks and may be involved in the transport of critically ill cardio-respiratory patients.

The second phase's tasks will continue to build on the knowledge and skills students have acquired in the first half of the rotation and will include: ventilator set up and application, performing ventilator circuit changes, doing compliance studies (as permitted), establishing IMV ventilator therapy, weaning and extubating patients (as ordered by a physician and permitted by the host clinical agency), and initiating and maintaining CPAP therapy (as ordered by a physician). The timetable for a student attempting new tasks will be determined by that student's performance as evaluated by the clinical instructor. The pace may vary from student to student but all tasks on the list of Mandatory Proficiency Evaluation Forms for RES 205 must be performed and have a documented assessment of performance by the end of the semester.

The overall goal of this semester is to produce and sharpen the students' critical care skills and knowledge to a level where hiring clinical agencies would feel comfortable in assigning these individuals immediately (but within their orientation guidelines) to the adult ICUs to provide basic ventilator care.

Students will be responsible to clock in and clock out in the online tool to document the attendance at the clinical site. In addition, students should complete procedure counts for each clinic day.

Tardiness in turning in clinical documents to the Clinical Coordinator—i.e., past the due dates specified in the class calendar—will result in a loss of points from the log component of the clinical grade as determined by the Coordinator. NOTE: journals, time tracking and physician documentation should be completed within 24 hours of the end of your clinical day. Points will be deducted accordingly.

RES 205 Clinical Objectives

The following objectives will be used to construct the mid-term clinical exam:

Given appropriate information for the adult patient:

- 1.1 determine if a patient is indicated for mechanical ventilation.
- 1.2 suggest ventilator parameters for a patient being placed on mechanical ventilation, including mode, volume, rate, flowrate, oxygen percentage, PEEP, sigh volume/frequency, alarm settings and other settings as available.
- 1.3 determine which ventilator parameter needs adjustment to correct a patient's response to mechanical ventilation.
- 1.4 interpret normal flow, volume, pressure graphs as seen on modern ventilators.
- 1.5 identify hazards associated with mechanical ventilation and recognize the patient assessment data associated with these hazards.
- 1.6 determine which ventilator alarm will sound given a variety of patient situations.
- 1.7 determine the correct action in response to a ventilator/patient interface malfunction or change in patient condition.
- 1.8 determine if a patient is indicated for weaning from mechanical ventilation.
- 1.9 perform common calculations associated with the management of mechanically ventilated patients.
- 2.1 select initial ventilator parameters based upon the specific cardiopulmonary management goals of a variety of diseases and conditions common to the ICU.
- 2.2 change ventilator parameters based upon the patient's response to, and in keeping with, the specific cardiopulmonary management goals of a variety of diseases and conditions common to the ICU. Information given to make these changes can include data gathered from the patient's physical assessment, lab values (ABG, etc.), and monitoring (ventilator graphics, etc.)
- 2.3 identify the purpose of various drugs used in the management of the above diseases or conditions.
- 2.4 determine an appropriate weaning technique and suggest initial settings for oxygen and other parameters such as pressure support for patients with the above diseases or conditions.

The **final clinical exam** will be a **modified NBRC Certification exam**. It will include **all topics** covered in the program to date.

RES 205 Patient Assessments

Although there may be many unique and interesting patient cases available for assessment during this clinic, the major thrust is in basic adult critical care. As such, the most benefit will come from in-depth familiarization with commonly encountered disease states. With this in mind, the patient assessments are to be selected from the following types of ventilator cases: COPD with a complicating pneumonia, chest trauma, ARDS, coronary artery bypass surgery, neurotrauma, cardiogenic pulmonary edema, or non-cardiogenic pulmonary edema. Although only four patient assessments will be evaluated for points you may complete more, for purposes of interest, and education if you wish.

See attached Sample Case Study for guidance.

APA guidelines

Resource-- Purdue OWL, APA Formatting and Style:

- In Text Citations:
https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/in_text_citations_the_basics.html
- Reference List:
https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/reference_list_basic_rules.html
- Reference citations with multiple authors:
https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/reference_list_author_authors.html
- Reference list: Articles in Periodicals:
https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/reference_list_articles_in_periodicals.html
- APA sample paper, last page for reference list:
https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/apa_sample_paper.html

Samples:

- **Journal:** Watts, G. E., & Hammons, J. O. (2002). Leadership development for the next generation. *New Directions for Community Colleges*, 120(1), 59.
- **Single report:** Weisman, I. M., & Vaughan, G. B. (2002). *The community college presidency: 2001*. Washington, DC: American Association of Community Colleges.
- **Website:** Wai-Packard, B. (2009). *The definition of mentoring*. Retrieved on Nov. 23, 2015 from http://ehrweb.aaas.org/sciMentoring/Mentor_Definitions_Packard.pdf.
- **Textbook:** Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. New York, NY: Falmer.

Ask for help with citations at least a week ahead if possible.

Adult ICU Competency Guidelines

The goal of JC is to produce respiratory therapists who are ready to competently work in the ICU by graduation. Please use the following guidelines when assigning ICU patients, and filling out the students' evaluations in order to determine competency of our students.

These are **bare minimum** requirements. Students can be assigned a higher patient load before the time frame stated below if the student is capable of safely caring for more patients.

It is recommended that students **NOT be given more than 6 intubated/BiPAP patients during a shift** on their ICU rotation.

- | | |
|-----------|---|
| Weeks 1-2 | Students should be competent to care for 2 vented and/or Acute BiPAP patients |
| Weeks 3-6 | Students should be competent to care for 3 vented and/or Acute BiPAP patients |
| Weeks 7-9 | Students should be competent to care for 4 vented and/or Acute BiPAP patients (meaning, student should be able to care for a reasonable RRT workload at or near employee level) |

Competent= Capable to assume all respiratory care of assigned patients in a timely and proficient manner. The student should also be knowledgeable of the patient's current hemodynamic status, pertinent medical history and make suggestions for the care of their patients.

Calendar

See **Lab & Lecture Cal WN20**.

Important Dates: Winter 2020

| DATE | EVENT |
|-----------------------|--------------------------------|
| JAN. 11, 2021 | DAY AND EVENING CLASSES BEGIN |
| JAN. 11 – MAY 2, 2021 | SEMESTER DATES |
| MAR. 8-14, 2021 | MID-SEMESTER BREAK. NO CLASSES |
| MAY 1, 2021 | COMMENCEMENT |
| MAY 2, 2021 | END OF WINTER SEMESTER |