

JC Respiratory Care Program

RES 115 Clinical Practice I

Pre-Clinic Orientation Session

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The pre-clinical orientation days for RES 115 are two 4 hour sessions held at JC. They are scheduled to run April 29 from 11am-3pm in HLC 204 and May 4 from 1pm-4pm in JW 101.

For these orientation sessions you need to bring pretty much all your clinical related documents:

A. Internet documentation:

1. Calendar
2. Time in and time out
3. Journal
4. Activities/procedures
5. Patient diagnosis
6. PEF's (proficiencies)

B. Large notebook with:

1. note paper
2. THIS SYLLABUS
3. Clinical Information and Policies Handbook
4. Equipment list

Outline of Instruction

Division:	Allied Health	Area:	Respiratory Care
Course Number:	RES 115	Course Name:	Clinical Practice I
Prerequisite:	RES 100 - Respiratory Care Techniques I and RES 104 Cardiopulmonary Assessment I		
Corequisite:	RES 110 - Respiratory Care Techniques II and RES 114 Cardiopulmonary Pathophysiology.		
Credits:	5		

Course Description/Purpose

This course provides a hospital experience in which previously acquired classroom theory and laboratory skills can be exercised. Skills practiced include those associated with patient respiratory assessment, oxygen therapy, a wide range of bronchopulmonary hygiene therapies, and equipment processing.

Major Units

- Basic Adult and Pediatric Care

Educational/Course Outcomes

The course goals and objectives incorporate specific Associate Degree Outcomes (ADOs) established by the JCC 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. ADOs guarantee students achieve goals necessary for graduation credit, transferability, and professional skills needed in many certification programs. The ADOs and course objectives addressed in this class include the following:

- 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. **ADO 8**

Academic Honesty Policy: If there is any suspicion of academic dishonesty, JCC's Academic Honesty Policy will be followed and appropriate action will be taken, up to and including assigning a **failing grade** for the paper, project, report, exam, or the course itself (whichever is deemed necessary). To see the policy, visit: <http://www.jccmi.edu/policies/Academics/Policies/1004.pdf>.

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."

Getting Extra Help (Besides visiting the instructor during office hours):

It can be very frustrating when one does not understand concepts and is unable to complete homework assignments. However, there are many resources available to help with the study of respiratory care.

- **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, George Potter (Federer Room C)**. Arrange to get regular assistance from a tutor. 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.
- **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.

RES 115 ADULT BASIC CARE CLINIC SPRING 2015

This clinical semester consists of two basic care rotations, each approximately five weeks long.

The first rotation is an introduction to basic respiratory care with the bulk of activities performed in various patient areas of the hospital. During this introduction there will be instruction, review, and assessment of the student's basic respiratory therapy skills such as: cylinder usage, equipment processing, isolation procedures, medical chart evaluation, oxygen concentration analyzing, basic cardiopulmonary physical assessment, oxygen rounds, pulse oximetry, incentive spirometry, SVN and MDI medication aerosol therapy, LVN aerosol therapies, chest physiotherapy, and cardiopulmonary resuscitation (if activity is available).

The second rotation's tasks will continue to build on the knowledge and skills students have acquired in the first 5 weeks and may further include: intermittent positive pressure breathing, drawing radial artery blood samples, oro/nasotracheal or endotracheal tube suctioning, and cuff management.

The overall goal of this semester is to produce and sharpen the student's basic care skills and knowledge to a level where hiring agencies would feel comfortable in assigning these individuals, within appropriate orientation guidelines, to adult basic care areas.

EVALUATION

Points for evaluation are assigned in the following fashion:

- a. Pass/Fail Components (**ALL** must be satisfactory)
 - 1) completion of patient assessments (**2 in first rotation, 2 in second rotation**)
 - 2) satisfactory physician contact time
 - 3) completion of mandatory proficiencies
 - 4) satisfactory affective evaluations
 - 5) satisfactory attendance and completion of logs and student journals
 - 6) completion of equipment list assessments
 - 7) satisfactory completion of special project (total of 100 points)
- b. patient assessments = 20 points (**4 patient assessments**)
- c. clinical exams = 20 points (**2 exams**)
- d. physician contact = 20 points
- e. activities/procedures = 10 points
- f. proficiency evaluations = 20 points
- g. special project = 10 points
100 total points possible
- h. attendance = +1 if no absences/tardies during the semester, or
0 if only 1 absence/tardy during the semester, or
-1 for **each** unexcused absence beyond the first during the semester.

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.
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 will result in a 5 point deduction from the final clinical grade.**

GRADING

To pass RES 115 the final course average score must be $\geq 76\%$.

Final Course Average Score = (total pts earned/total pts possible) x 100

Grading Scale for All Respiratory Care Courses:

4.0 = 93 - 100	2.5 = 80 - 83	1.0 = 68 - 72
3.5 = 89 - 92	2.0 = 76 - 79	0.5 = 64 - 67
3.0 = 84 - 88	1.5 = 73 - 75	0.0 = Below 64

RES 115 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.

- Foundation #1. Isolation
- Foundation #2. Cleaning, Disinfection, Sterilization (Liquid)
- Foundation #3. Cylinder Safety & Transport
- Foundation #4. Handwashing
- Foundation #5. Medical Records/Chart Evaluation
- Foundation #6. **Measurement of O₂ Concentration**
- Foundation #7. Apical Pulse
- Foundation #8. Peripheral Pulse
- Foundation #9. Blood Pressure
- Foundation #10. **Patient Assessment**
 - #A.01.. **Oxygen Therapy**
 - #A.03.. Continuous Bland Aerosol Therapy (e.g. trach mask, high flow)
 - #A.05.. **Medication Nebulizer Therapy**
 - #A.06.. **Metered Dose Inhalers (MDI)**
 - #A.07.. Dry Powder Inhalers (DPI)
 - #A.08.. **Incentive Spirometry**
 - #B.01.. **Pulse Oximetry**

OPTIONAL - These tasks/skills are presented in lecture/lab this semester but due to either low availability of clinical activity or because the topic is covered very late in the semester the related PEF does not have to be done this semester. If you do have the chance to have your performance assessed on an optional task then take the opportunity; those tasks which are optional this semester are mandatory next semester and if assessed now will not have to be re-assessed during the next clinic.

- #A.10.. Chest Physical Therapy
- #A.11.. Vibratory PEP (Acapella[®], Flutter[®], Vest, etc.)
- #A.12.. Intermittent Pos. Press. Breathing (IPPB)
- #A.13.. Airway Suctioning (Exposed Catheter)
- #B.02.. Radial Artery Puncture
- #B.07.. 12-Lead Electrocardiography

JACKSON COLLEGE - RESPIRATORY CARE PROGRAM
RESPIRATORY CARE CONSULT SYSTEM[©] ADULT BASIC CARE

STUDENT _____
 SEMESTER... SPRING /FALL ASSESSMENT: #1 #2 #3 #4 #5 EXTRA ___ DATE _____

A. GENERAL PATIENT INFORMATION:

1. PRIMARY DISEASE: EMPHYSEMA CHRONIC BRONCHITIS ASTHMA CHF CHEST TRAUMA
 (limit selection to these) POST ABD/THORAX SURG PNEUMONIA LUNG CA OTHER _____

2. AGE 57 y/o 3. SEX M/F 4. BODY TYPE: Thin Moderate Obese

5. PRESENT PULMONARY DIAGNOSES: Pulmonary dx or cardiac/renal/neuro dx that directly affect pulmonary function ONLY! If the pulmonary dx is not in the chart, you must determine the most likely dx (get help from instructor).

6. PERTINENT HISTORY: Hx related to present condition &/or general pulmonary health. May include job (coal miner), smoking hx, (40 pack-years, has not smoked for 7 years), previous respiratory conditions (L pneumonectomy in 1997), etc.

7. RELEVANT SUBJECTIVE INFORMATION (from patient interview): Information from a bedside recent history; i.e., the IMMEDIATE history of the patient's present condition. Seek information specifically about
1) dyspnea (and variations including DOE, orthopnea, and PND),
2) presence of wheezing or other abnormal sounds associated with the respiratory cycle,
3) chest pain, and
4) cough (how often, how strong, is it productive).

EXAMPLE: Pt c/o DOE but denies orthopnea or PND. States he has a productive cough q AM and several times during the day of thick, yellow sputum. States he "breathes easier" after his bronchodilator therapy.

8. RESPIRATORY THERAPIES ORDERED (ONLY therapies done by RTs. Include ALL relevant order information.):
List ALL active orders which are actually implemented by RTs, as written in the chart. Do not forget to include O₂ tx.

- Example: Hospital Medications
1) O₂ @ 2 L/min by NC,
2) albuterol 2.5 mg in UD 2.5 mL NS by IPPB q4^o,
3) Atrovent MDI 4 puffs QID.
4) Vanceril MDI 2 puffs BID
Home medications
Combivent Qid
Advair 500/50 BID

B. RESPIRATORY PHYSICAL ASSESSMENT (FILL IN BLANK OR CIRCLE APPROPRIATE DESCRIPTORS):

1. RESP. RATE 11 Br/min 4. SVC 2.87 L 7. ORAL TEMP 37.5 °C
 2. TIDAL VOLUME 460 mL/Br 5. MIP -48 -cmH₂O 8. CENTRAL CYANOSIS.....Y(N)
 3. \dot{V}_E 5.06 L/min 6. WOB.....OK ⊕ ↑ 9. PERIPHERAL CYANOSIS.....⊕/N
 10. BREATH SOUNDS ALL abnormal/adventitious breath sounds. Note locations of all abnormalities.

11. SECRETIONS Note: 1) quantity 2) viscosity 3) color 4) cough effort.
Example: Patient expectorated approximately 5-10 mL of thick, yellow sputum with a strong cough effort.

12. PHYSICAL SIGNS OF COPD:
 a. ↑ A-P DIAMETER..... ⊕/N c. ORTHOPNEA..... Y(N) e. ↑ T_E..... ⊕/N
 b. DIGITAL CLUBBING..... ⊕/N d. ACCESSORY MUSCLE USE..... ⊕/N

C. CARDIOVASCULAR ASSESSMENT (FILL IN BLANK OR CIRCLE APPROPRIATE DESCRIPTORS):

1. HEART RATE 96 B/min
 2. RHYTHM.....REGULAR/IRREGULAR
 3. BLOOD PRESSURE...SYS 125 mmHg/DIAS 88 mmHg
 4. SKIN COLOR NL
 5. SKIN TEMP SL. WARM
 6. Periph. Edema Y(N)
 7. NECK VEIN ENGORGE Y(N)

D. NEUROLOGICAL ASSESSMENT (CIRCLE APPROPRIATE DESCRIPTORS):

1. LEVEL OF CONSCIOUSNESS..... Comatose Obtunded Somnolent Lethargic Awake/Alert
 2. DISORIENTED TO..... Person Place Time No apparent disorientation
 3. SIGNIFICANT CNS DRUGS: anti-convulsants, analeptics (resp. stimulants), respiratory depressants, pain medications

E. LABORATORY TESTS:

1. SPUTUM CULTURE Results pending
-
-
-
2. CHEST X-RAY RML atelectasis, hyperlucency of other lobes and flattening of diaphragms consistent with air-trapping.
-
-
-

3. LABS (start with MOST RECENT lab data and record others in REVERSE chronological order)

	Date	Time	Electrolytes:	K ⁺	Na ⁺	CO ₂	Cl ⁻		Glucose	BUN	Creat.
a.	2/7/14	1445		5.0	102	28	89		156	8	1.2
b.											
			CBC:	WBC	RBC	Hb	Hct	Plt.		Other:	
c.	2/7/14	1445		14K	5.6	18.9	48%	346K			
d.											

4. BLOOD GAS DATA (start with MOST RECENT ABG data and record others in REVERSE chronological order)

	Date	Time	pH	PaCO ₂	HCO ₃ ⁻	PaO ₂	SaO ₂ /SpO ₂	Hb	OXYGEN DEVICE	L/min	FI _O ₂
a.	2/7/14	1445					93%		NC	1.5	.26
b.	2/6/14	0630					88%		none		.21
c.	2/5/14	0645	7.39	53	29	94	96%	14.8	NC	2	.28
d.	2/4/14	0700	7.41	47	27	48	84%	14.6	NC	2	.28

F. MOST RECENT ABG

	DATA	INTERPRETATION & COMMENTS
Acid-base status	PaCO ₂ 53 mmHg HCO ₃ ⁻ 29 mEq/L pH 7.39	complete JC interpretation (compensated respiratory acidosis)
Ventilation status	PaCO ₂ 53 mmHg V _E 5.06 L/min	acceptable, hyper- or hypoventilation. note resp. effort (hypoventilation \bar{c} ↑ WOB but ok V _E)
Oxygenation status	PaO ₂ 94 mmHg SaO ₂ 96%; Hb 14.8 g/dL	JC interpretation. Note O ₂ %, [Hb], etc. (corrected hypoxemia on 2 L/min NC; good [Hb])

Worksheet For: Respiratory Care Consult Note

Recommendation	Therapy & Technique	Justification
Suggested Present Therapy(ies) to Continue As Prescribed		
Suggested Present Therapy(ies) to Alter		
Suggested Present Therapy(ies) to Discontinue		
Suggested New Therapy(ies)		
Suggested Additional Consults		

Asthma Management Drug Consult Worksheet

A resident just starting a pulmonary rotation has been assigned an asthmatic patient. The patient has moderate baseline bronchospasm and experiences severe exacerbations 2 to 3 times per year requiring hospitalization. The patient has been placed on mechanical ventilation twice during extreme conditions of status asthmaticus.

The resident asks you for a thumbnail sketch of the kinds of drugs that might be useful in the management of this patient's asthma.

- A. Name 2 modern **rescue/reliever bronchodilators** which operate through different modes of action (1a. & 1b. are different only in their isomeric make-up); and a combination drug.

	Mode of Action	Generic Name	Brand Name
1a.	_____	_____	_____
1b.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

- B. Name 3 **non-steroidal maintenance/controller bronchodilators** and their modes of action.

	Mode of Action	Generic Name	Brand Name
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____

- C. Name 3 categories of **maintenance/controller anti-allergic/anti-inflammatory** drugs, which work through different modes of action, a combination agent, and cite examples of drugs available in each category.

	Mode of Action	Generic Name	Brand Name
9.	_____	a. _____	_____
		b. _____	_____
		c. _____	_____
10.	_____	a. _____	_____
		b. _____	_____
		c. _____	_____
		d. _____	_____
11.	_____	a. _____	_____
		b. <u>formoterol+ budesonide</u>	<u>Symbicort</u>

CLINICAL CALENDAR

Month	Date	Day	Event
May	19, 21	Tues./Thurs	Orientation at hospitals
May	26	Tues.	First day of Rotation 1
June	8	Monday	Case study #1 due. Contract for special project due.
June	11	Thurs.	Formative Evaluation filled out by CI due
June	15	Monday	MANDATORY Clinical mtg. on JC campus 9:30-11:30am. All documentation validated on E*Value.
June	25	Thurs.	Clinical first half of clinical shift only; Last day of Rotation 1. Instructor CIC mtg. 12n-3pm. Summative Evaluation filled out by CI due. Students evaluate clinical site by June 26.
June	29	Monday	MANDATORY Clinical mtg. on JC campus 9:30-11:30am. Clinical Exam 1. Case study #2 due. All documentation validated on E*Value.
June	30	Tuesday	First day of clinical for Rotation 2
July	16	Thursday	Formative Evaluation filled out by CI due
July	20	Monday	MANDATORY clinical mtg. on JC campus 9:30-11:30am. Case study #3 due. All documentation validated on E*Value.
July	30	Thursday	Last day of Rotation 2. Summative Evaluation filled out by CI due. Students evaluate clinical site by July 31.
Aug	4	Tuesday	MANDATORY Clinical mtg. on JC campus 10am-1pm. Clinical Exam 2. Case study #4 due. Equipment list and special project documentation due. All documentation validated on E*Value.
Aug	6	Thursday	Lab Practical 9am-1pm. CIC meeting 1-3pm.

CLINICAL DOCUMENTATION: A SURVEY

TOPIC	REQUISITE ACTIVITY
1. Information & Policies book	Review pertinent elements for the start of a new semester.
2. RES 100 lecture calendar	Review what you have already learned.
3. RES 100 lab calendar	Review what you have already learned.
4. Clinic Syllabus	Review to familiarize with the broad goals of the ensuing semester.
5. RES 115 clinic calendar	Familiarize and place where it can be easily checked during the course of the semester.
6. RES 110 lecture calendar	Become familiar with this. Use during course of semester to coordinate clinical activity with classroom lecture content.
7. RES 110 laboratory calendar....	Become familiar with this. Use during course of semester to coordinate clinical activity and relate clinical expectations with laboratory content.
8. 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.
9. PEFs and Task Analyses	Become thoroughly familiar with so that tasks may be instructed on and your skills may be developed according to JCC Respiratory Care program standards. PEFs are completed by CIs with grade point values determined by the Clinical Coordinator.
10. Teaching modules.....	Some modules may be available for assisting you to advanced standing status (i.e., for students progressing at a faster rate than normal JC lecture/lab calendars indicate is occurring); check with the JC Clinical Coordinator as to what modules are available.
11. Equipment list	Use as a guide your performance and knowledge on a wide range of specific equipment related to the rotation's clinical tasks and skills. This form is completed by the CI and validated ,
12. Punch in and punch out	To be completed each and every day clinic is assigned. Note arrival/departure times on employee time-stamp clock and record to the closest minute.
13. Activity /Procedure.....	A document which records 1) your daily activity (tasks performed), and 2) totals for these categories for a defined cumulative period. This is entered under Px/Dx in E-value. This form is evaluated DAILY by the CI.

<u>TOPIC</u>	<u>REQUISITE ACTIVITY</u>
14. 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 dialogic comments in the students' journals. Journal entries are validated by a CI .
15. Physician contact forms.....	Notes taken on physician contacts and validated by CIs. The generated entries are evaluated with grade point values determined by the Clinical Coordinator.
16. 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.
17. Clinical Quiz Items.....	CIs are responsible for generating a minimum of 20 test points , preferably NBRC format multiple choice items, for the rotation's scheduled exam(s). There will be an additional 30 items from the JC Respiratory Care program. The clinical coordinator will administer and score all 50 items.
18. 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 with the student , and submitted to the clinical coordinator.
20. 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 behaviors supporting the instructor's evaluation of the student, the proper completion of this document can be time consuming. This form is completed by the CI, validated, conferenced over with the student , and submitted to the clinical coordinator.