

**University of Texas Medical Branch
Respiratory Care Department
RESC 4245 Neonatal and Pediatric Critical Care Clinical I
Course Syllabus – Fall 2009**

Instructors: Lindsay L. Fox Med, RRT
SHP 4.512
Office Phone: (409) 747-1631
Cell Phone: (832) 725-5383
Email: lfox@utmb.edu

Joy Powell, RRT-NPS
Office Phone: (409) 772-5693
Cell Phone: (281) 235-5066
Email: jjpowell@utmb.edu

Teddy Tovar
Houston Community College
Office Phone: 713-718-7385
Cell Phone: 713-408-4580
Email: teddy.tovar@hccs.edu

Course Description: 2 Credit Hours

This clinical practicum provides the student the opportunity to develop knowledge and skills in patient assessment and delivery of therapeutics to neonatal and pediatric patients. The student will have the opportunity, with guided supervision in the Pediatric Intensive Care Unit (PICU) to: 1) perform patient assessment(s); 2) administer aerosol and oxygen therapy, 3) apply bronchial clearance maneuvers; 4) maintain and perform artificial airway care; 5) participate in resuscitation of the pediatric patient; 6) observe and assist with patient transport; and 7) provide mechanical ventilatory support. Evaluation is based upon completion of competency check-offs. (140 clinical hours per enrollment period)

Prerequisites: RESC 3322 Neonatal and Pediatrics Didactic Course.

Course Objectives:

1. Assess the cardiorespiratory status of the neonate post-delivery
2. Initiate and modify oxygen therapy based on clinical and laboratory assessment.
3. Airway maintenance – assess patency, choose appropriate artificial airways, insert and maintain artificial airways.
4. Initiation, monitoring, assessment, and adjustment of mechanical ventilation.
5. Recommend and implement weaning from mechanical ventilation based on clinical and laboratory data. Monitor, evaluate, and adjust the weaning process based on clinical and laboratory data.
6. Recommend invasive and pharmacologic intervention based on clinical and laboratory data (i.e., monitoring of hemodynamic parameters, needle aspiration, using clinical protocols)
7. Recommend, administer, and assess the effect of aerosolized medications.
8. Recommend, administer, and assess the effect of bronchial hygiene therapy.
9. Assessment of respiratory status based on pulse oximetry, capnography, and laboratory data.

Required Course Materials:

Textbooks DataArc Clinical Tracking System

Respiratory Care Journal, current year.

Evaluation: Grades for the course are derived as follows:

Midterm Exam	15%
Final Exam	15%
Case study	10%
Competencies	10%
Affective Evals	10%
Physician interaction	
100 points/semester	5%
Daily Logs & SOAP Notes	30%
Evaluations of Instructors/Facilities	5%
Total	100%

Mid-Term Exam

At the middle of the semester you will take an adult clinical simulation examination (PCS-01, PCS-15, NCS-04, NCS-08, or NCS-09). You can review and practice these exams all semester. When you complete the exam on the day of the Mid-Term you will be given a score on information gathering and decision making. The average of these two scores will constitute your Mid-Term exam grade.

Final Exam

At the end of the semester you will take an adult clinical simulation examination (PCS-01, PCS-15, NCS-04, NCS-08, or NCS-09). It may or may not be the same exam that was given at Mid-Term. You can review and practice these exams all semester. When you complete the exam on the day of the Final you will be given a score on information gathering and decision making. The average of these two scores will constitute your Final exam grade.

Case Study

Each student will prepare a case study and care plan that is to be presented to the class at the end of the semester. The care plan should follow the design given to you in class. The presentation should be done in a PowerPoint format. You will be given the requirements and grading criteria later in the semester.

Competencies

Read over competencies in DataArc prior to your clinical rotation and be able to perform in a clinical setting. It is the responsibility of the student to approach the clinical instructor stating that he/she is prepared for competency testing. Evaluation/feedback is provided away from patient areas.

1. Transport with Oxygen
2. Small Volume Nebulizer and Or Metered Dose Inhaler performed in-line
3. Airway Clearance
 - a. Chestphysiotherapy (postural drainage, percussion, and vibration)
 - b. Positive expiratory pressure (PEP)
 - c. Intermittent percussive ventilation (IPV)
 - d. Flutter valve
 - e. Vest Therapy
 - f. Endotracheal and tracheal suctioning
4. Oxygen delivery devices
 - a. Nasal Cannula
 - b. Simple mask
 - c. Nonrebreather mask
 - d. Venturi mask
5. Arterial Blood Gas (puncture and analysis)
6. Cardiopulmonary resuscitation and manual ventilation

7. Mechanical Ventilation
 - a. Routine ventilator assessment
 - b. Ventilator parameter change

Grade for competencies is as follows:

100	Satisfactory completion of 90% of these competencies
90	Completion of 80-89% of the competencies
80	Completion of 75-79% of the competencies
70	Completion of 70-74% of the competencies
60	Completion of fewer than 70%

Physician Interaction (20 points per semester) It is the responsibility of the student to seek physician interaction. The clinical instructors will try to facilitate these activities by providing access to patient rounds, etc. Students must seek opportunities to solicit feedback, clarification of orders, etc. Documentation of physician interaction is accomplished through DataArc using the daily log function. Physician interaction points are earned in 4 categories; Patient Focused, Tutorial, Small group, and Large Group. Patient focused interaction earns 4 points per hour, tutorial interaction earns 3 points per hour, small group interaction earns 2 points per hour, and large group interaction earns 1 point per hour. An example of large group interaction is patient rounds. An example of patient focused interaction is contacting a physician regarding the care of your patient. Grading of physician interaction is as follows:

100	10 points or greater
90	8-9 points
80	6-7 points
70	4-5 points
60	2-3 points
25	0-1 points

Post Conference

Students are required to attend post conference on Friday of each week. (See Attendance/Punctuality) Each student will bring a copy of his/her SOAP note and be prepared to present it to the class at conference. Post conference will be in SHP 2.206 every Friday from 10:30am – 12:30pm. No Post Conference on the following dates: September 4th, November 27th, and December 4th.

Affective Evaluations

Your clinical instructor will provide an evaluation of your performance in the middle of your four week rotation (daily evaluation) and an affective evaluation at the end of your rotation. The student is required to view these evaluations and validate them. The final grade for affective evaluation is the average of all required evaluations.

Attendance/Punctuality

Attendance is mandatory. Each student is allowed a maximum of 1 absence for this rotation and still be able to successfully meet the objectives of the course. Greater than one (1) absence will require repeating the course. Post conference attendance and punctuality is also part of the attendance policy.

Students are expected to adhere to professional conduct which includes responsibility for one's actions and punctuality. Students are required to report to clinical rotations and log into DataArc 15 minutes before the start of the shift. Clocking in ten minutes after the start of shift constitutes as a tardy. Failure to complete a DataArc time clock entry (whether clocking in or clocking out) will also constitute as a tardy. Two tardies will equal an absence. Clocking in thirty minutes after the start of the shift will be counted as an absence. Leaving the shift early will also be counted as an absence.

Care Plans (SOAP Notes)

Each student is required to submit one SOAP note each week to WebCT by 8:00am on Friday morning. Each student is required to bring a copy of the SOAP note to conference and be prepared to present it to the group. See Appendix B for a rubric for SOAP notes.

Daily Logs

Daily Logs are to be completed each day after your clinical rotation. Your daily log is where you must enter physician contact time, the day's most significant experience, and the procedures you completed that day. Grading for Daily Logs is as follows:

100	All Daily Logs completed in required format
75	75% of Daily Logs completed in required format or 100% completed but not in required format
50	50% of Daily Logs completed in required format or 75% completed but not in required format
0	<50% of Daily Logs completed in required format or 50% or less completed but not in required format

Evaluations

Students are required to evaluate their clinical instructors and clinical facilities after each rotation. These are required as part of your clinical grade.

Evaluations of clinical instructors – 100
No evaluation of clinical instructors – 0

Evaluation of all clinical site – 100
No evaluation of clinical sites - 0

Course Policies: The minimum passing score for this course is 70.

Academic Progress: Information regarding the Student's academic progress in this course will be shared with their Academic Advisor and/or Department Chair. Student's making unsatisfactory progress may be referred to the Office of Student Affairs for assistance.

University Statement on Equality, Tolerance and Affirmative Action:

Please indicate by the end of the 2nd week of the course if you will need accommodations under the Americans with Disabilities Act (Public Law 101-336). If the need for ADA accommodations should arise during the semester you will need to make your request known to the ADA Coordinator in the Office of Student Affairs

Academic Integrity:

Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, and any act designed to give unfair advantage to a student or the attempt to commit such an act.

Procedures to be followed in the event of alleged academic dishonesty are described the Rules and Regulations of the Board of Regents of The University of Texas System, and the SAHS Student Handbook found at <http://www.sahs.edu>. Alleged academic dishonesty issues should be reported to the Associate Dean for Student Affairs.

Course Evaluations:

Students will be given the opportunity to evaluate the performance of the instructor and course near the end of the course/semester. When submitting course evaluations students must follow the guidelines provided by the course instructor or department.

Tentative Schedule/Course Assignments: (14 Clinical Weeks)

Week 7 Midterm Exam – Monday, October 12th
Week 14 Case Studies – Nov. 30 – Dec. 2nd
Week 15 Final Exam TBA