MACOMB COMMUNITY COLLEGE
DIVISION OF ARTS AND SCIENCES

COURSE SYLLABUS

I. **DEPARTMENT/DISCIPLINE:** Health and Human Services/Respiratory Therapy

II. **COURSE TITLE:** CLINICAL INTERNSHIP II and III

III. **COURSE DESCRIPTION:** This course provides additional clinical experience for the respiratory therapy student. The student must complete 160 hours of clinical training. Objectives focus on pulmonary function testing, critical care pharmacology, arterial blood gases, and an introduction to mechanical ventilation. Fall Semester Only. (20 contact hours per week for the first 8 weeks [RSPT 2250] and the second 8 weeks [RSPT 2260]). Center Campus.

IV. **PREREQUISITES:** RSPT 1260
COREQUISITES: RSPT 2330, 2340, 2350

V. **COURSE NUMBER:** RSPT 2250 & RSPT 2260

VI. **SEMESTER CREDIT HOURS:** 2 CREDIT HOURS
CONTACT HOURS: 20 CONTACT HOURS (16 HOURS FOR PEDIATRIC SPECIALTY ROTATION)

VII. **EFFECTIVE TERM:** Fall 2005

VIII. **STUDENT ACADEMIC OUTCOMES: Upon completion of the course, the student will**

A. FOR CRITICAL CARE ROTATION I:
1. Develop professional behaviors and attitudes that contribute to satisfactory clinical practice.
a. The student will consistently arrive at the clinical site at the assigned time and prepared for the day's activities.
i. The student will have the following in their possession at all times:
- Results of personal physical examination.
- Verification of Hepatitis vaccine or waiver.
- Titers for communicable diseases or verification of recent vaccination.
- Result of TB skin test or chest x-ray result
- BLS Healthcare Provider card.
- Drug cards for medications commonly used in clinical practice.

b. The student will consistently demonstrate appropriate work appearance as outlined in the student handbook.

2. Effectively and accurately communicate, orally and through written documentation, to patients and other members of the Health Care Team.
    a. Given a clinical situation, the student will consistently demonstrate proper documentation of the intervention and the patient's response.
    b. Given a patient interaction, the student will demonstrate appropriate communication interpersonal skills.
    c. Given a clinical situation, the student will indicate proper techniques to maintain privacy in the healthcare setting.
3. Adequately demonstrate patient assessment skills through inspection, palpation, percussion and auscultation and correlate the results to the patient's pathophysiology.
    a. Given a clinical situation, the student will consistently identify the proper assessment techniques required.
    b. Given a clinical situation, the student will consistently state the anticipated outcomes of the assessment intervention.
    c. Given a clinical situation, the student will consistently demonstrate proper technique of assessment intervention.
4. Correlate assessment data and patients pathophysiology to determine a safe and appropriate treatment plan.
    a. Given a clinical situation, the student will consistently identify pathophysiological changes that are present.
    b. Given a clinical situation, the student will consistently identify clinical signs and symptoms that are emergent in nature and recommend appropriate steps to resolve.
    c. Given a clinical situation and appropriate patient information, the student will consistently identify the correct protocol or treatment plan to improve the patient's cardiopulmonary status.
5. Demonstrate an arterial blood draw from an arterial line, interpret results of an arterial blood gas and recommend appropriate treatment**.**
    a. State the normal values associated with blood-gas analysis.
    b. Given a clinical situation and appropriate patient information, the student will be able to make appropriate recommendations to correct the acid-base and oxygenation status.
    c. The student will demonstrate the proper procedure for drawing blood from an arterial line.
6. Develop psychomotor skills in performing respiratory therapy procedures safely and according to the acceptable treatment protocol.
    a. The student will demonstrate the proper procedure of suctioning with a 24-hour suction catheter.
    b. The student will demonstrate the ability to set-up a mechanical ventilator for patient use.
    c. The student will perform a routine ventilator check, according to department policy and procedure.
    d. The student will perform an assessment of the patient's readiness to be liberated from mechanical ventilation.

B. FOR CRITICAL CARE ROTATION II:

1. Demonstrate further development of professional behaviors and attitudes that contribute to satisfactory clinical practice.
    a. The student will consistently arrive at the clinical site at the assigned time and prepared for the day's activities.
        i. The student will have the following in their possession at all times:
            - Results of personal physical examination.
            - Verification of Hepatitis vaccine or waiver.
            - Titers for communicable diseases or verification of recent vaccination.
            - Result of TB skin test or chest x-ray result
            - BLS Healthcare Provider card.
            - Drug cards for medications commonly used in clinical practice.
    b. The student will consistently demonstrate appropriate work appearance as outlined in the student handbook.
2. Demonstrate growth in effective and accurate communication skills, demonstrated thorough oral and written documentation, to patients and other members of the Health Care Team.
    a. Given a clinical situation, the student will consistently demonstrate proper documentation of the intervention and the patient's response.
    b. Given a patient interaction, the student will demonstrate appropriate communication interpersonal skills.
    c. Given a clinical situation, the student will indicate proper techniques to maintain privacy in the healthcare setting.
3. Continued improvement of adequate patient assessment skills through inspection, palpation, percussion and auscultation and correlate the results to the patient's pathophysiology.
    a. Given a clinical situation, the student will consistently identify the proper assessment techniques required.
    b. Given a clinical situation, the student will consistently state the anticipated outcomes of the assessment intervention.
    c. Given a clinical situation, the student will consistently demonstrate proper technique of assessment intervention.
4. Demonstrate continued competency in correlating assessment data and patients pathophysiology to determine a safe and appropriate treatment plan.
    a. Given a clinical situation, the student will consistently identify pathophysiological changes that are present.
    b. Given a clinical situation, the student will consistently identify clinical signs and symptoms that are emergent in nature and recommend appropriate steps to resolve.
    c. Given a clinical situation and appropriate patient information, the student will consistently identify the correct protocol or treatment plan to improve the patient's cardiopulmonary status.

5. Demonstrate further development of psychomotor skills used in performing respiratory therapy procedures safely and according to the acceptable treatment protocol.
    a. The student will demonstrate the proper procedure of suctioning with a 24-hour suction catheter.
    b. The student will demonstrate the ability to set-up a mechanical ventilator for patient use.
    c. The student will perform a routine ventilator check, according to department policy and procedure.
    d. The student will perform an assessment of the patient's readiness to be liberated from mechanical ventilation.
6. Demonstrate competency in performing bedside pulmonary function measurements.
    a. The student will demonstrate proper calibration of a bedside pulmonary function device.
    b. The student will instruct a patient on how to perform a Forced Vital Capacity (FVC), Flow-Volume Loop (FVL), and Mandatory Volume Ventilation (MVV)
7. The student when given pulmonary function data will determine if a post-bronchodilator study is indicated and be able to calculate the percent change between pre- and post-bronchodilator measurements.

C. FOR PEDIATRIC SPECIALTY ROTATION:
1. The student will develop professional behaviors and attitudes that contribute to satisfactory clinical practice.
    a. The student will consistently arrive at the clinical site at the assigned time and prepared for the day's activities.
        i. The student will have the following in their possession at all times:
            - Results of personal physical examination.
            - Verification of Hepatitis vaccine or waiver.
            - Titers for communicable diseases or verification of recent vaccination.
            - Result of TB skin test or chest x-ray result
            - BLS Healthcare Provider card.
            - Drug cards for medications commonly used in clinical practice.
        ii. The student will consistently demonstrate appropriate work appearance as outlined in the student handbook.
2. Effectively and accurately communicate, orally and through written documentation, to patients and other members of the Health Care Team.
    a. Given a clinical situation, the student will consistently demonstrate proper documentation of the intervention and the patient's response.
    b. Given a patient interaction, the student will demonstrate appropriate communication interpersonal skills.
    c. Given a clinical situation, the student will indicate proper techniques to maintain privacy in the healthcare setting.

3. Correlate assessment data and patients pathophysiology to determine a safe and appropriate treatment plan.
    a. Given a clinical situation, the student will consistently identify pathophysiological changes that are present.
    b. Given a clinical situation, the student will consistently identify clinical signs and symptoms that are emergent in nature and recommend appropriate steps to resolve.
    c. Given a clinical situation and appropriate patient information, the student will consistently identify the correct protocol or treatment plan to improve the patient's cardiopulmonary status.
4. The student will develop psychomotor skills in performing capillary and arterial blood sampling, and will be able to interpret results and recommend an appropriate treatment plan.
    a. The student will identify and list normal capillary/arterial blood-gas values.
    b. The student will observe the proper procedure for performing a capillary blood gas.
    c. Given a capillary or arterial blood gas, the student will be able to:
        i. Interpret the CBG/ABG
        ii. Make recommendations to treat the acid base and/or oxygenation abnormality.
5. The student will be able to initiate, monitor and recommend an appropriate treatment plan for patients receiving ventilatory life support and be able to evaluate patient's response.
    a. The student will be able to set-up a mechanical ventilator for patient use.
    b. The student will perform a routine ventilator check, according to department policy and procedure.
    c. The student will be able to calculate appropriate values used to assess the pediatric or neonatal patient during mechanical ventilation.
    d. The student will complete patient assessment forms as designated by the clinical instructor.
6. The student will demonstrate safe administration of all respiratory therapy procedures.
    a. The student will set-up and maintain an oxygen hood.
    b. The student will observe endotracheal suctioning utilizing sterile technique.
    c. The student will demonstrate the proper procedure of bag/mask or bag/tube ventilation.
    d. The student will demonstrate the proper procedure for administering aerosolized medications.
7. The student will correlate, assess and evaluate the patient's cardiovascular status using invasive and/or non-invasive monitoring devices.
    a. The student will set-up and maintain a pulse oximeter.

IX. COURSE ASSESSMENT METHOD OF EVALUATION

A. Attendance and/or tardiness
B. Demonstration of students psychomotor skills at time of testing
C. Written Exams/quizzes (some agencies)
D. Affective (Subjective) Evaluation
E. Papers or Case Studies (some agencies)
F. Physician Contact Forms
G. Satisfactory completion of course objectives initialed by the student and clinical instructor or preceptor

X. COURSE CONTENT OUTLINE

A. Critical Care I
    1. Arterial Blood Gas Sampling
    2. Arterial Blood Gas Analysis (OPTIONAL)
    3. Ventilatory Assessment
    4. 24-hour Suction Catheter
    5. Ventilator Set-Up
    6. Routine Ventilator Check
    7. Non-Invasive Ventilation
B. Critical Care II
    1. Arterial Blood Gas Sampling
    2. Arterial Blood Gas Analysis
    3. Ventilatory Assessment
    4. 24-hour Suction Catheter
    5. Ventilator Set-Up
    6. Ventilator Circuit Change
    7. Routine Ventilator Check
    8. Non-Invasive Ventilation
    9. Bedside Pulmonary Function
C. Pediatric/Neonatal
    1. Ventilator Set -up
    2. Ventilator Circuit Change
    3. Routine Ventilator Check
    4. Neonatal/Pediatric Ventilator
    5. Manual Ventilation
    6. Capillary Blood Gas