

**University of Massachusetts Lowell
School of Health and Environment
Department of Physical Therapy**

Cardiopulmonary Physical Therapy Laboratory 34.614 – Spring 2009

Instructors: Section 802: Wednesday 2:00 – 4:50 PM: Lauren Healey, PT, MS, CCS
Email: lhealey@partners.org
Section 801: Friday 9 – 11:50 AM: Joseph Coughlan, DPT
Email: joe.coughlan@gmail.com
Section 803: Friday 1 – 3:50 PM: Paul Ricard, DPT, CCS
Email: pricard@partners.org

Organizer: Sean Collins, PT, ScD, CCS
Email: Sean_Collins@uml.edu
Office: Weed Hall, Room 202
978-934-4375

Course Description:

Cardiopulmonary Physical Therapy Laboratory is taken concurrently with Cardiopulmonary Physical Therapy Lecture 34.612. The Laboratory experiences are designed to provide an opportunity to practice those examinations, evaluations and interventions discussed in lecture and demonstrate psychomotor proficiency in each procedure. The course emphasizes procedures employed by the physical therapist in dealing with cardiopulmonary conditions. In addition, during the lab students are expected to integrate and synthesize information from related courses in a variety of cardiopulmonary problem solving experiences.

Course Objectives (For specific expectations students are referred to the Lab Competency Checklist Expectations)

At the completion of this course, the student will be able to:

1. Demonstrate the following examination procedures: heart rate, pulse rate, blood pressure, respiratory rate, heart and lung auscultation, percussion, oximetry, observational examination of posture, head, neck and extremities, circulation, ventilation, respiration, pulmonary function testing, subjective signs and symptoms, ventilatory muscle strength, electrocardiograph, graded exercise testing, and rating of perceived exertion, thoracoabdominal movements and breathing patterns, ability to clear airway, and sputum.
2. Evaluate the clinical significance of the following examination procedures: heart rate, pulse rate, blood pressure, respiratory rate, heart and lung auscultation, percussion, oximetry, observational examination of posture, head, neck and extremities, circulation, ventilation, respiration, pulmonary function testing, subjective signs and symptoms, ventilatory muscle strength, body composition, electrocardiograph, graded exercise test, rating of perceived exertion, chest x-ray, arterial blood gases, laboratory tests, echocardiogram, ventilation and perfusion scan, oxygen consumption studies, thoracoabdominal movements and breathing patterns, ability to clear airway, and sputum.
3. Demonstrate treatment procedures including but not limited to strength training, aerobic conditioning, bronchopulmonary hygiene, airway clearance techniques, breathing exercises, chest wall mobilization techniques.
4. Evaluate the acute effects and chronic adaptations associated with each therapeutic procedure with consideration to the disease process and the physical therapy diagnosis and prognosis.
5. Demonstrate examination and treatment procedure modifications as necessary throughout the life span and disease severity.
6. Demonstrate professional behavior in all interactions. The criteria listed below are considered to be essential to the development of independent physical therapist and therefore to the completion of the student's educational experience. An unsatisfactory grade will be fully documented.

The Student:

- A. Respects patient privacy in all communications.
- B. Attends class, is punctual, follows directions, performs assigned tasks thoroughly and on time.
- C. Demonstrates knowledge of and adheres to departmental/institutional policies.
- D. Practices in a safe manner that minimizes risk to self and others.
- E. Presents self in a professional manner.
- F. Demonstrates professional behavior during interactions with others.
- G. Adheres to ethical and legal practice standards.
- H. Communicates effectively in ways that are congruent with situational needs including appropriate body language, written communication, active listening skills and questioning.
- I. Produces effective documentation to support the delivery of physical therapy services.
- J. Safely and efficiently performs physical therapy interventions.
- K. Implements a self-directed plan for professional development and lifelong learning, which includes self-assessment, self-correction and self-direction.
Developed by the Physical Therapy Program, University of Wisconsin-Madison, May et al. Journal of Physical Therapy Education. 0:1 Spring 1995.

General Information:

Time Allotment: 3 Hour Lab; 1 Credit

Students are expected to put in as many extra hours as are necessary to obtain the required knowledge and skills.

Placement: Concurrent with Lecture Course, 34.612, during second semester, first year.

Teaching Methods and Learning Experiences:

Laboratory Experiences consist of a variety of methods, including, discussions, AV materials, computer exercises, demonstrations, and practice sessions.

Evaluation Methods:

Lab Practice Checklist 70%

Final Case Examination 30% (Two testers)

Evaluation of the acquisition of course content by the student is the specific responsibility of the course instructor. The final grade is given based on your understanding of the course materials. The above listed methods assist in that evaluation but are not to be considered as the final determiners in your final grade.

Grading Policy:

A+	=	4.0	97-100	B-	=	2.7	80 – 82.9
A	=	4.0	93 – 96.9	C+	=	2.3	77 – 79.9
A-	=	3.7	90 – 92.9	C	=	2.0	73 – 76.9
B+	=	3.3	87 – 89.9				

The professor reserves the right to increase or decrease the final grade by up to 10% for behaviors outlined by the Faculty as required for professional success (see Student Manual, section on Generic Abilities).

Students are reminded that continuation in the program necessitates achieving an overall grade point average of 3.0 (B) or better.

Grades below 2.0 (C) are not acceptable. No more than 9 credits below 3.0 may be counted toward the DPT degree (grades of B-, C+, or C). If a student fails a lab practical, he/she will be given the opportunity to repeat the practical. However, upon passing the repeat practical the grade will be 70%, as per departmental policy.

Attendance: Students are required attend each laboratory. Unexcused absences will result in a course grade deduction.

Religious Holiday: Students who are observing a religious holiday are excused from class that day but will be responsible for the work missed. Students must speak with the professor before the scheduled class.

Make-up Examinations: Make-up examinations will be given only in specific cases of excused absence (illness, death in the family, or religious holiday). Circumstances that may warrant an absence should be discussed with the instructor before the scheduled time of the exam. Failure to notify the instructor as stated may result in a zero for the exam.

Dishonesty and Cheating Statement: All students are advised that there is a university policy regarding dishonesty and cheating, and a department Honor Code. It is the students' responsibility to familiarize themselves with these policies and to adhere to the Honor Code. If necessary, contact your advisor or instructor for clarification of these policies.

Special Accommodations: If a student needs special accommodations under the Americans with Disabilities Act in order to achieve course objectives and/or requirements, it is the student's responsibility to contact the faculty advisor and provide documentation from the Office of Disability Services within two weeks of receiving this syllabus.

Recommended Text: DeTurk & Cahalin, Cardiovascular and Pulmonary Physical Therapy (DC); Paz & West, Acute Care Handbook for Physical Therapists (PW)

Tentative Schedule:

Date	Weds	Date	Friday
1/28	Lab 1 (1)	1/30	Lab 1 (1)
2/4	Lab 2 (2)	2/6	Lab 2 (2)
2/11	No Lab - CSM	2/13	No Lab - CSM
2/18	Lab 3 (3,4)	2/20	Lab 3 (3,4)
2/25	Lab 4 (5, 6, 7)	2/27	Lab 4 (5, 6, 7)
3 / 4	Lab 5 (8)	3/6	Lab 5 (8)
3/11	Clinical	3/13	Clinical
3/18	Spring Recess	3/20	Spring Recess
3/25	Lab 6 (9, 10)	3/27	Lab 6 (9, 10)
4/1	Lab 7 (11, 12)	4/3	Lab 7 (11, 12)
4/8	Lab 8 – Cases - Practice – check 2	4/10	Lab 8 - Cases - Practice – check 2
4/15	Lab 9 - Cases - Practice – check 2	4/17	Lab 9 - Cases - Practice – check 2
4/22	Friday Schedule – no lab	4/24	University Day – no lab
4/29	Lab 10 - Cases - Practice – check 2	5/1	Lab 10 - Cases - Practice – check 2
5/6	Final Examination	5/8	Final Examination
5/13	Last Week of Classes (make up week)	5/15	Last Week of Classes (make up week)

***Numbers in (Parentheses) refer to the Laboratory Competency Checklist**