

University of Louisiana at Lafayette
College of Education
Class Syllabus

Course: KNES 450

Schedule: **Section 1**, TR 10-30-11:45

Instructor: Dr. J.M. Clemons

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Semester: Fall, 2006

Office Location: Bourgeois Hall 125-B

Office Hours: By appointment

Course Description:

KNES 450: Laboratory Fitness Assessment (3,0,3)

This course will include a brief review of basic clinical exercise physiology and instruction on the following topics: administrative concerns surrounding health related fitness testing, methods and procedures of clinical assessment of cardiorespiratory fitness, introduction to basic electrocardiography and exercise prescription for the apparently healthy individual.

Prerequisites: KNES 303 or permission of the instructor.

Required Text:

ACSM's Guidelines for Exercise Testing and Prescription, 7th edition, American College of Sports Medicine, Philadelphia: Lippincott, Williams & Wilkins, 2006.

Conceptual Framework: The Responsive Professional

The conceptual framework of the UL Lafayette College of Education is designed to expand upon the institution's commitment to be a responsive university. Teacher candidates are expected to demonstrate knowledge, skills, and dispositions associated with the four elements of a ***Responsive Professional***. Responsive Professionals demonstrate expertise in knowledge and practice. They are reflective practitioners who respect diversity and demonstrate a commitment to professionalism.

Course Objectives and Corresponding Unit Outcomes:

By the end of the course each student should be able to:

1. safely and effectively administer an exercise stress test using the Quinton Q5000 stress test recorder and monitor. (K2)
2. properly prepare a subject for a 12 lead EKG. (K2, D4)
3. assess cardiorespiratory fitness using sub-maximum and maximum exercise tests. (K2, DISP 7, K7)
4. discuss the physiological responses to acute and chronic aerobic and anaerobic exercise.(K2)
5. estimate oxygen consumption (VO₂) for various activities (i.e., level and graded walking, leg ergometry, arm cranking and stepping) by applying the appropriate metabolic equations provided by the American College of Sports Medicine (A.C.S.M) (K2)
6. monitor and interpret blood pressure in supine, sitting and standing positions and also during exercise (i.e., treadmill, cycle ergometry and step ergometry) using a standard anaeroid or mercury sphygmomanometer. (K2, D5)
7. describe basic EKG waves, EKG lead configurations, normal resting and exercise EKG, electrical axis deviations, ventricular conduction disturbances, cardiac rhythm disturbances, myocardial ischemia, infarction and miscellaneous EKG patterns. (K2, K7)
8. interpret the results of an exercise test. (K2, DISP 7, DISP 8)
9. be able to prescribe an exercise program based upon fitness test results for normal, healthy adults with medical clearance to exercise moderately.(K2, DISP 7, DISP 8).
10. explain how differential ratings of perceived exertion (RPEs) can be used in exercise prescription and during testing protocols. (K2)
12. understand the essential components of an appropriate informed consent that might be used in a Human Performance Laboratory. (K2, D4)

13. list the exercise concerns of children, the elderly and pregnant women. (K2, D4)
14. understand the clinical conditions influencing exercise prescription for hypertension, peripheral vascular disease, diabetes mellitus and obesity. (K2, D5).

Course Requirements:

1. Prior to participating in a lab activity each student should complete a Health Status and Statement of Understanding Form (or PAR-Q).
2. **Attire:** Students must be properly attired for lab activities, (i.e., loose fitting shorts, gym shorts, running shorts, sweats, warm-ups, T shirts, tennis shoes, running shoes, lifting shoes, etc). Street clothes or street shoes (e.g., hard soled shoes, deck shoes or sandals) are not permitted on workout days. When a student is improperly attired, they will be asked to leave and will receive an unexcused absence for that day. Keep extra clothes in your locker so that this doesn't happen.

PASS-PORT Artifacts: NA

Field Experiences: NA

Technology Integration: Moodle (can be accessed through Ulink)

Emergency Evacuation Procedures:

A map of this floor is posted near the elevator marking the evacuation route and the Designated Route Area. This is an area where emergency service personnel will go first to look for individuals who need assistance in exiting the building. Students who may need assistance should identify themselves to the teaching faculty.

Course Evaluation:

There will be approximately 3 tests of approximately 50 points each and a final project to be completed outside of class for the same amount of points. All in-class tests will be objective (e.g., multiple choice, true/false and matching and will be taken on Scantrons. A take home EKG exam may be administered in addition to the written tests. Guidelines for the outside project will be provided later.

Grading Scale

90% of total points	A
80%	B
70%	C
60%	D
< 60%	F

Professional Associations:

American College of Sports Medicine
Louisiana Association of Exercise Physiologists
National Strength and Conditioning Association

Professional Journals:

Medicine and Science in Sport and Exercise
Journal of Strength and Conditioning Research

Related Materials and Resources:

All course materials and resources are on Blackboard.

Course Policies and Procedures

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Attendance Policy

The university allows each faculty member to determine what constitutes excessive absences (excused or unexcused) as long as it is not less than 10% of the total number of class meetings (Undergraduate Bulletin, 2005-2007, Vol. 82, Number 1, April, 2005, page 443-444). Students enrolled in classes that meet two times per week will be allowed **three** absences (excused or unexcused). For this class, excused absences will be defined as: (1) illness [documented by a health professional], (2) serious accident [documented by police report or injury report] (3) required attendance at an authorized university sponsored event [documentation required] (4) or permission from the Instructor **PRIOR** to the class that is to be missed. Make up or extra credit is not allowed for unexcused absences.

If you exceed three absences, no points will be deducted from your grade (i.e., you will receive exactly what you earn for the class based upon the standard grading scale outlined below). If; however, grade adjustments or grade curves are instituted, you will **NOT** be allowed to benefit from such adjustments whether it occurs on a regular exam, final exam or in calculation of final grades. Upward adjustment of test scores is **NOT** an entitlement and will only be applied to those who meet the attendance standards outlined in this syllabus. It makes no sense to statistically enhance grades of students who miss class excessively.

Punctuality: Life is not predictable, therefore, it's understandable that on occasion one may be late; however, in doing so, it is likely to result in being marked absent due to the roll being called at the beginning of class. It is your responsibility to advise the Instructor when you come in late rather than attempt to slip in undetected. A revision of the attendance record should be made on the day the tardiness occurs and you should witness the instructor making the correction. Attempting to convince the teacher later in the semester that you were present on a date that you were marked absent is likely to be futile. Being late once will be tolerated; however, there will be a penalty of one unexcused absence thereafter. Please be on time, In a TR. class of 30 students; if each student was late just once a semester, the class would be disrupted every day throughout the entire semester. For this reason, a person who is late twice will be given an unexcused absence and each time thereafter will result in another unexcused absence.

Academic Honesty

The College of Education adheres to the policy on academic honesty as outlined on page 427 in the Undergraduate Bulletin (2003-2005) .

Students Requiring Special Accommodations

Students requiring special accommodations must register with the Office of Services for Students with Disabilities and provide official documentation to the instructor in a timely manner.