SYLLABUS

DATE OF LAST REVIEW: 02/2013

CIP CODE: 24.0101

SEMESTER: Departmental Syllabus

COURSE TITLE: Exercise Testing and Prescription

COURSE NUMBER: EXSC0213

CREDIT HOURS: 3 credits

INSTRUCTOR: Departmental Syllabus

OFFICE LOCATION: Departmental Syllabus

OFFICE HOURS: Departmental Syllabus

TELEPHONE: Departmental Syllabus

E-Mail: Departmental Syllabus

KCKCC issued email accounts are the official means for electronically communicating with our students.

PREREQUISITES: BIOL0121, General Biology or BIOL0143, Human Anatomy and Physiology

REQUIRED TEXT AND MATERIALS: Please check with the KCKCC bookstore, http://www.kckccbookstore.com/ for the required texts for your particular class.

COURSE DESCRIPTION:
This course is a survey of the practical aspects of the physical fitness industry. The topics covered include health appraisal, exercise testing and prescription for patients ranging from apparently healthy to those with known disease.

METHOD OF INSTRUCTION
A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates and panels, conferencing, learning experiences, and performances outside the classroom. Methodology will be selected to best meet student needs.
COURSE OUTLINE:

I. Physical Fitness Testing Concepts
   A. Cardio respiratory Endurance
   B. Muscular Strength
   C. Muscular Endurance
   D. Flexibility
   E. Body Composition
II. Interpretation of Test data
   A. Cardio respiratory Endurance
   B. Muscular Strength
   C. Muscular Endurance
   D. Flexibility
   E. Body Composition
III. Principles of Exercise Prescription
   A. Cardio respiratory Endurance
   B. Muscular Strength
   C. Muscular Endurance
   D. Flexibility
   E. Body Composition
IV. Special Populations
   A. Exercise Testing & Prescription for Cardiac Patients
   B. Exercise Testing & Prescription for Pulmonary Patients
   C. Exercise Testing & Prescription for Children
   D. Exercise Testing & Prescription for Elderly
   E. Exercise Testing & Prescription for Pregnancy.

EXPECTED LEARNER OUTCOMES:

A. The student will be able to evaluate the potential health risks of an individual through a fitness screening.
B. The student will be able to demonstrate fitness testing skills for cardiovascular endurance.
C. The student will be able to demonstrate fitness testing skills for muscular strength.
D. The student will be able to demonstrate fitness testing skills for muscular endurance.
E. The student will be able to demonstrate fitness testing skills for joint flexibility.
F. The student will be able to demonstrate fitness testing skills for body composition analysis.
G. The student will be able to demonstrate personal skills which enhance effectiveness during the administration of the fitness test.
H. The student will be able to interpret test results.
I. The student will be able to prescribe exercise according to test results.
J. The student will be able to test and prescribe exercise for special populations.
K. The student will be able to utilize internet and demonstrate computer skills.

COURSE COMPETENCIES:
The student will be able to evaluate the potential health risks of an individual through a fitness screening.

1. The student will be able to effectively screen an individual prior to a fitness assessment.
2. The student will be able to determine the risk factors of the individual who has been screened.
3. The student will be able to report when an individual may need a physician present for testing.
4. The student will be able to demonstrate personal skills which enhance effectiveness during the health risk appraisal.

The student will be able to demonstrate fitness testing skills for cardiovascular endurance

5. The student will be able to define the concept of cardiovascular endurance.
6. The student will be able to explain the concept of Vo2max.
7. The student will be able to differentiate between maximal and submaximal exercise testing.
8. The student will be able to explain why testing various testing modes are necessary.
9. The student will be able to administer the submaximal cycle ergometer test.
10. The student will be able to administer the submaximal treadmill test.
11. The student will be able to administer the 3-minute step test.
12. The student will be able to administer a walking and running field test.
13. The student will be able to explain the test termination criteria.

The student will be able to demonstrate fitness testing skills for muscular strength

14. The student will be able to define the concept of muscular strength.
15. The student will be able to explain and demonstrate the 1 RM for the upper and lower body.

The student will be able to demonstrate fitness testing skills for muscular endurance

16. The student will be able to define the concept of muscular endurance.
17. The student will be able to administer the field test for push-up sand sit-ups.

The student will be able to demonstrate fitness testing skills for joint flexibility

18. The student will be able to define flexibility.
19. The student will be able to administer the sit-and-reach test.

The student will be able to demonstrate fitness testing skills for body composition analysis

20. The student will be able to differentiate between lean and fat body mass.
21. The student will be able to administer the skinfold body composition test.

The student will be able to interpret all test results
22. The student will be able to differentiate between standards and norms in test results.
23. The student will be able to explain test results in layman’s terms.

*The student will be able to prescribe exercise according to test results*

24. The student will be able to prescribe an exercise program based on results from a cardiovascular endurance test.
25. The student will be able to prescribe an exercise program based on results from a muscular strength test.
26. The student will be able to prescribe an exercise program based on results from a muscular endurance test.
27. The student will be able to prescribe an exercise program based on results from a flexibility test.
28. The student will be able to prescribe an exercise program based on results from a body composition test.

*The student will be able to test and prescribe exercise for special populations*

29. The student will be able to test and prescribe exercise for an individual with heart problems.
30. The student will be able to test and prescribe exercise for an individual with pulmonary problems.
31. The student will be able to test and prescribe exercise for a young child.
31. The student will be able to test and prescribe exercise for an elderly person.
32. The student will be able to test and prescribe exercise for a pregnant female.
33. The student will be able to discuss modality changes for other medical implications.
34. The student will be able to utilize the internet to explore various health & fitness related websites.
35. The student will be able to send messages within the online classroom.
36. The student will be able to complete the online quizzes within the virtual classroom.

**ASSESSMENT OF LEARNER OUTCOMES**

Student progress is evaluated by means that include, but are not limited to, exams, written assignments, and class participation.

**SPECIAL NOTES:**

This syllabus is subject to change at the discretion of the instructor. Material included is intended to provide an outline of the course and rules that the instructor will adhere to in evaluating the student’s progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome any time.

Kansas City Kansas Community College is committed to an appreciation of diversity with respect for the differences among the diverse groups comprising our students, faculty, and staff that is free of bigotry and discrimination. Kansas City Kansas Community College is committed
to providing a multicultural education and environment that reflects and respects diversity and that seeks to increase understanding.

Kansas City Kansas Community College offers equal educational opportunity to all students as well as serving as an equal opportunity employer for all personnel. Various laws, including Title IX of the Educational Amendments of 1972, require the college’s policy on non-discrimination be administered without regard to race, color, age, sex, religion, national origin, physical handicap, or veteran status and that such policy be made known.

Kansas City Kansas Community College complies with the Americans with Disabilities Act. If you need accommodations due to a documented disability, please contact the Director of the Academic Resource Center, in RM 3354 or call at: 913-288-7670.