RARITAN VALLEY COMMUNITY COLLEGE
ACADEMIC COURSE OUTLINE

FITN 132 Cardiovascular Conditioning

I. Basic Course Information

A. Course Number and Title: FITN 132 Cardiovascular Conditioning

B. New or Modified Course: Modified

C. Date of Proposal: Semester: Fall Year: 2023

D. Effective Term: Fall 2024

E. Sponsoring Department: Health Science Education

F. Semester Credit Hours**: 2**

G. Weekly Contact Hours**:** 3 Lecture**:** 1
Laboratory**:** 2
Out of class student work per week: 2

H. ☐ Prerequisite (s):
☐ Corequisite (s):
☐ Prerequisite (s) and Corequisite (s):

I. Additional Fees**:** None

J. Name and E-Mail Address of Department Chair and Divisional Dean at time of approval**:**

Chair: Linda Romaine, **Linda.Romaine@raritanval.edu**
Dean: Dr. Sarah Imbriglio, **Sarah.Imbriglio@raritanval.edu**

II. Catalog Description

This course introduces the student to the benefits of performing a cardiovascular exercise program. Students will be taught how to administer and interpret field tests for cardiovascular fitness to include endurance, speed, and agility and use the information gathered from testing to design an appropriate program to meet the goals of competitive athletes, special populations, and the general population. A variety of training techniques will be introduced along with the benefits of a proper warm-up and cool-down.

III. Statement of Course Need

A. This course is designed to introduce the fitness professional to various types of cardiovascular training and the benefits of each. The course will teach the students the skills to effectively test, interpret the results, and design a program appropriate for the competitive athlete, the participant interested in health benefits from exercise, and special populations.

B. The laboratory portion of this class focuses on administering tests for cardiovascular fitness to prepare the student for both the workplace and transfer into a four-year program in the field.

C. This course generally transfers as an Exercise Science program requirement. This course generally transfers as a fitness/exercise program elective dependent on transfer institution.

IV. Place of Course in College Curriculum

A. Free Elective (This applies automatically to all college-level credit courses in the College.)
B. This course meets a program requirement for the Associate Degree in Exercise Science and the Fitness Specialist Certificate of Completion.
C. To see course transferability: a) for New Jersey schools, go to the NJ Transfer website, www.njtransfer.org; b) for all other colleges and universities, go to the individual websites.

V. Outline of Course Content

A. Overview of the cardiovascular system
   1. Basic definitions
   2. Functions and role of the cardiovascular system
   3. Energy systems – Aerobic vs. Anaerobic
B. Assessing the cardiovascular system
   1. Field-based tests
      a. Aerobic and anaerobic system testing
      b. Speed, Agility, and Quickness testing
   2. Overview of clinically based tests
C. Principles of Program Design
   1. Benefits of warming up and cooling down
   2. Determination of appropriate intensity
      a. Target heart rate calculations
      b. Alternative methods (i.e. RPE scale)
   3. Determination of training volume
      a. Frequency
      b. Time
   4. Special Populations

VI. A. Course Learning Outcomes:

At the completion of the course, students will be able to:

1. Define the cardiovascular system and its function.
2. Determine, conduct, and analyze the appropriate cardiovascular test(s) for various populations. (GE- IL, 1)*
3. Design and present (orally and/or in writing) an effective cardiovascular training program for various populations to include, general fitness, athletic development, and special populations. (GE- IL, 1)*
4. Analyze case studies and report information orally or in writing.

* embedded critical thinking

B. Assessment Instruments

1. Laboratory products
2. Research papers/projects
3. case studies
4. demonstrations

VII. Grade Determinants

A. essays/case studies
B. projects
C. tests
D. presentations

Given the goals and outcomes described above, LIST the primary formats, modes, and methods for teaching and learning that may be used in the course:

A. lecture/discussion
B. small-group work
C. case studies
D. laboratory
E. practical demonstrations

VIII. Texts and Materials

This course uses Open Educational Resources (OER) embedded into the course shell in RVCC's learning management system.

(Please Note: The course outline is intended only as a guide to course content and resources. Do not purchase textbooks based on this outline. The RVCC Bookstore is the sole resource for the most up-to-date information about textbooks.)

IX. Resources

A. Lab Equipment

B. RVCC Fitness Center
C. RVCC Athletic Fields & Track
D. RVCC Library

X. Check One: ☐Honors Course ☐Honors Options ☒ N/A