

**RARITAN VALLEY COMMUNITY COLLEGE  
ACADEMIC COURSE OUTLINE**

**FITN 203 Exercise Measurement and Prescription**

**I. Basic Course Information**

A. Course Number and Title: FITN 203 Exercise Measurement and Prescription

B. New or Modified Course: Modified

C. Date of Proposal: Semester: Fall Year: 2016

**D. Effective Term: Fall 2017**

E. Sponsoring Department: Health Science Education

F. Semester Credit Hours: 3

G. Weekly Contact Hours:                      Lecture: 2  
  Laboratory: 2  
  Out of class student work per week: 4

H. Prerequisites: FITN 132 Cardiovascular Conditioning  
                          FITN 135 Introduction to Weight Training

I. Laboratory Fees: None

J. Name and Telephone Number or E-Mail Address of Department Chair at time of approval: Beryl Stetson, [Beryl.Stetson@raritanval.edu](mailto:Beryl.Stetson@raritanval.edu), 908 526-1200 x8208

**II. Catalog Description**

**Prerequisites:** FITN 132 Cardiovascular Conditioning  
                          FITN 135 Introduction to Weight Training

This course is designed to provide the student with practical experience in health related fitness assessment, analysis, and exercise programming based on assessment outcomes. Students will observe and administer assessments under the guidance and supervision of Exercise Science faculty that are appropriate for a variety of populations.

**III. Statement of Course Need**

A. This course is designed to help the student become proficient in the administration of physical fitness assessments and exercise prescription based on the assessment

outcomes. Students will apply skills in a practical setting and assess the healthy population, those with special medical considerations and the athletic population. Students will build on the outcomes achieved in FITN 132 & 135. It is a required course to enable the student to successfully complete the Associate Degree in Exercise Science and the Fitness Specialist Certificate of Completion.

- B.** The lab in this course is used learn and hone skills in the practical application of fitness tests for a variety of populations. This lab experience teaches skills that can be transferred directly to the job market.
- C.** This course generally transfers as an Exercise Science program requirement. This course generally transfers as an Exercise Science program elective.

#### **IV. Place of Course in College Curriculum**

- A. Free Elective.
- B. This course meets a program requirement for the Associate Degree in Exercise Science and Associate Degree in Exercise Science- Option in Sports Management 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](http://www.njtransfer.org); b) for all other colleges and universities, go to the individual websites.

#### **V. Outline of Course Content**

- A. The importance of Fitness Testing
  - 1. Principles of Assessment
    - a. Standardization
- B. Rationale for Pre-assessment Screening
  - 1. Informed Consent
  - 2. Explanation of Procedures
- C. Risk Factor Assessment
  - 1. Blood Pressure
  - 2. Measurement of Height, Weight & Waist Circumference
- D. Body Composition
  - 1. Gold Standard Test
  - 2. Clinical Measures
  - 3. Hydrostatic Weighing
  - 4. Anthropometry
    - a. Skin Fold Measurements
    - b. Circumference Measurements
  - 5. Bioelectrical Impedance
- E. Muscular Fitness
  - 1. Strength Assessments
  - 2. Endurance Assessments

3. Power Assessments
4. Speed Assessments
5. Interpretation & Program Design

F. Flexibility

1. Methods of Measurement
2. Range of Motion Measurement
3. Measurement Interpretation & Program Design

G. Cardiorespiratory Measurement

1. Field Tests
2. Submaximal Tests
3. Maximal Tests
4. Test Interpretation
5. Program Design

**VI. General Education and Course Learning Outcomes**

**A. General Education Learning Outcomes:**

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

1. Demonstrate and explain fitness assessment protocols for tests of the health related components of fitness for a variety of populations. (GE-NJ IL,NJ1)
2. Evaluate and present information obtained through fitness assessment to design an exercise prescription for a variety of populations in accordance with industry guidelines. (GE-NJ IL, NJ1) \*
3. Produce accurate lab reports. (GE-NJ1)

\*embedded critical thinking

**B. Course Learning Outcomes:**

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

1. Identify the Health & Skill Related Components of fitness,
2. Demonstrate a knowledge of testing protocol and the importance of pre-test preparation.
3. Define cardiorespiratory fitness, understand and demonstrate several tests for the component, evaluate the results and demonstrate the ability to apply those results to an effective exercise prescription.
4. Define body composition, understand and demonstrate several tests for the component, evaluate the results and demonstrate the ability to apply those results to an effective exercise prescription.
5. Define musculoskeletal fitness, understand and demonstrate several tests for the component, evaluate the results and demonstrate the ability to apply those results to an effective exercise prescription.

6. Define muscle flexibility, understand and demonstrate several tests for the component, evaluate the results and demonstrate the ability to apply those results to an effective exercise prescription.
7. Define muscular speed, agility and power, demonstrate several tests for each and evaluate and apply the results to an effective exercise prescription to enhance these skills.
8. Demonstrate an understanding of the acute and chronic effects of exercise and the physiological effects they may have on an individual.
9. Define the essential components of exercise prescription and use those components to effectively design exercise programs for a variety of populations and goals.

**C. Assessment Instruments**

- A. laboratory products
- B. case studies
- C. demonstrations/fitness testing
- D. small group work
- E. lecture & discussion

**VII. Grade Determinants**

- A. lab products
- B. projects
- C. quizzes/exams
- D. presentations/demonstrations

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. laboratory
- D. student oral presentations
- E. simulation/role playing
- F. student collaboration

**VIII. Texts and Materials**

- A. Nieman, *Exercise Testing and Prescription, A Health Related Approach*, 7<sup>th</sup> ed. , McGraw Hill, 2011
- B. *ACSM's Guidelines for Exercise Testing and Prescription*, 9<sup>th</sup> ed., Lippincott, Williams & Wilkins, 2013
- C. Case Studies

(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 Gymnasium