# RARITAN VALLEY COMMUNITY COLLEGE ACADEMIC COURSE OUTLINE

## FITN 123- Prevention & Care of Athletic Injuries

#### I. Basic Course Information

A. Course Number and Title: FITN 123 – Prevention & Care of Athletic Injuries

B. New or Modified Course: Modified

C. Date of Proposal: Semester: Fall Year: 2021

D. Effective Term: Fall 2022

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: 5

H. Prerequisites: None

I. Laboratory Fees: None

J. Department Chair at time of approval:

Linda Romaine, Linda.Romaine@raritanval.edu, 908 526-1200 x8290

Divisional Dean at time of approval:

Dr. Sarah Imbriglio, Sarah.Imbriglio@raritanval.edu, 908 526-1200x8241

## **II. Catalog Description**

### **Prerequisites: None**

This course is designed to introduce the student to the professional practice of the sports medicine professional, while examining their role in the prevention, assessment, treatment, documentation and rehabilitation of sports related injuries. Students will learn proper on the field and off the field assessment of both life threatening and non-life threatening injuries, and be introduced to the standards of professional practice within sports medicine. Review of major muscles, joint structure, joint actions, types of forces and their effect on the

tissues of the body, therapeutic modalities, therapeutic exercise, and the healing process will be conducted in this course.

### III. Statement of Course Need

- **A.** This course is designed to introduce the student to the field of sports medicine and the basic competencies required in the field. Students will gain proficiency of beginner skills in the identification, treatment, and prevention of basic injuries. Emphasis is placed on learning musculoskeletal anatomy and recognizing the common signs and symptoms of injuries, illnesses, and disorders commonly seen in the physically active population.
- **B.** In the laboratory portion of the course, the content focuses on the clinical proficiencies and psychomotor competencies needed for the sports medicine professional. Students learn and practice identifying stages of healing, structuring a pre-participation examination as well as a basic injury assessment, performing appropriate documentation, teaching therapeutic exercises, and designing injury prevention programs.
- **C.** This course generally transfers as an Exercise Science/Sports Medicine program requirement. This course generally transfers as a Health 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, Associate Degree in Exercise Science Option in Sports Management, and Associate Degree in Exercise Science Option in Sports Medicine & Rehabilitation.
- C. To see course transferability: a) for New Jersey schools, go to the NJ Transfer website, <a href="www.njtransfer.org">www.njtransfer.org</a>; b) for all other colleges and universities, go to the individual websites.

### V. Outline of Course Content

- A. Overview of the Sports Medicine Profession and Evidenced-Based Practice
- B. Pre-participation Examination
- C. Protective Equipment
- D. Taping and Wrapping Procedures
- E. Tissue Healing & Wound Care
  - 1. Injury Mechanisms
  - 2. Soft Tissue Injuries and Management
  - 3. Bone Injuries and Management
- F. Therapeutic Modalities
  - 1. Cryotherapy
  - 2. Thermotherapy
  - 3. Ultrasound
  - 4. Electrotherapy
- G. Therapeutic Exercise Program

- 1. Development
  - a. Phase 1-4
- H. Psychology of Injury, and Psychological Disorders
  - 1. Role of the Sports Medicine Professional
- I. Environmental Conditions
  - 1. Heat Related
  - 2. Cold Related
  - 3. Thunderstorms
- J. Injury Assessment
  - 1. Emergency Medical Service
  - 2. HOPS
    - a. History of Injury
    - b. Observation & Inspection
    - c. Palpation
    - d. Physical Examination Tests
  - 3. SOAP notes
    - a. Subjective
    - b. Objective
    - c. Assessment
    - d. Plan
- K. Head Injury
  - 1. Concussions
    - a. Anatomy
    - b. Etiology
    - c. Signs and Symptoms
    - d. Assessment
    - e. Management
    - f. Prevention/Managing Risk of Injury
- L. Spinal Injuries
  - 1. Cervical/Thoracic/Lumbar
    - a. Anatomy
    - b. Etiology
    - c. Signs and Symptoms
    - d. Management
    - e. Prevention/Managing Risk of Injury
- M. Upper Extremities
  - 1. Shoulder/Arm/Wrist/Hand
    - a. Anatomy
    - b. Etiology
    - c. Signs and Symptoms
    - d. Management
    - e. Prevention/Managing Risk of Injury
- N. Lower Extremities
  - 1. Pelvis/Hip/Knee/Ankle/Foot
    - a. Anatomy
    - b. Etiology

- c. Signs and Symptoms
- d. Management
- e. Prevention/Managing Risk of Injury
- O. Special Populations
  - 1. Injury and the Female Athlete
  - 2. Injury and the Senior Athlete
  - 3. Disabled Athletes

## VI. General Education and Course Learning Outcomes

## A. General Education Learning Outcomes:

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

- 1. Identify and explain the nature and extent of an injury and the proper on-site assessment and treatment of the injury. (GE-NJ 1)
- 2. Review case studies and present an accurate analysis orally or in writing. (GE-NJ 1)\*
- 3. Write a paper using scholarly sources describing the effect of injury findings on changes in rules and practices in sports and activities. (GE-NJ, NJ IL)\*

### **B.** Course Learning Outcomes:

- 1. Identify the risk factors of physical activity, and demonstrate the ability to develop appropriate injury prevention programs that address cardiovascular fitness, strength training, flexibility, nutrition and environmental factors.
- 2. Identify appropriate taping techniques, protective sports equipment, associated regulatory guidelines, and proper fitting skills.
- 3. Explain the appropriate protocol for providing care to acute, chronic, and catastrophic sports injuries, athletic associated illnesses, and how to properly document (history, observation, palpation, special testing, functional testing, standard terminology) these instances.
- 4. Explain the anatomical structure and function of different regions of the body, problematic biomechanics, and different mechanisms associated with injury.
- 5. Describe the physiology of the inflammatory and healing processes of the human body and how it is monitored during the rehabilitation process, and demonstrate basic rehabilitation skills.
- 6. Explain the psychological impact of athletic and fitness related injuries.
- 7. Demonstrate basic knowledge of the rehabilitation process and the goals of returning active individuals safely to activity.
- 8. Identify and explain the importance of screening procedures including disqualifying conditions for athletic participation.

<sup>\*</sup>Embedded Critical Thinking

## C. Assessment Instruments

- 1. laboratory products
- 2. research papers
- 3. practical skills demonstrations
- 4. Tests and quizzes

#### VII. Grade Determinants

- A. Lecture and lab participation
- B. Research Papers
- C. Homework Assignments
- D. Tests/quizzes

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. Simulation/role playing
- E. Homework Assignments

## **VIII. Texts and Materials**

- Arnheim's Principles of Athletic Training: A Competency Based Approach -13<sup>th</sup> ed., William E. Prentice, McGraw Hill 2017.
- Muscles: Testing and Function with Posture and Pain, 5<sup>th</sup> ed. ISBN/ISSN
  :9780781747806, Patricia G. Provance BS, PT, William Romani PT, PhD, Florence P. Kendall BS, PT, FAPTA, Mary Rodgers PT, PhD, Elizabeth Kendall McCreary BA, Lippincott Williams & Wilkins, 2005

(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. RVCC Library

B. RVCC Exercise Science Lab

## X. Honors Options: n/a