

# **RARITAN VALLEY COMMUNITY COLLEGE ACADEMIC COURSE OUTLINE**

## **CRMJ-125 INTRODUCTION TO ARSON INVESTIGATION**

### **I. Basic Course Information**

- A. Course Number and Title: CRMJ-125 Introduction to Arson Investigation
- B. New or Modified Course: Modified
- C. Date of Proposal: Semester: Spring Year: 2023
- D. Effective Term: Fall 2023
- E. Sponsoring Department: Business and Public Service
- F. Semester Credit Hours: 3.0
- G. Weekly Contact Hours: Lecture: 3 hours  
Laboratory: None  
Out of class student work per week: 6 hours
- H. ☐ Prerequisite (s) None  
☐ Corequisite (s): None  
☐ Prerequisite (s) and Corequisite (s): None
- I. Laboratory Fees: None
- J. Name and Telephone Number or E-Mail Address of Department Chair and Divisional Dean at time of approval: Tracy Rimple, tracy.rimple@raritanval.edu Dean Patrice Marks, Patrice.marks@raritanval.edu

### **II. Catalog Description**

This course examines theories of fire investigation and the role of the fire investigator. The methodology of fire investigation, motives of arsonists, fuels, incendiary fires, explosions and auto fires will be discussed, as will formulation and testing of a hypothesis with regard to the origin and cause of a fire. Students will develop the basic knowledge of the methodology utilized by fire investigators.

### **III. Statement of Course Need**

- A. This course will expose students to the field of fire investigation including the history of fire investigation, the classification of fires, the organization of fire/arson investigation systems (local, county, state, and federal), and the technological and scientific challenges faced in modern fire investigations.
- B. No lab component.
- C. This course generally transfers as a Criminal Justice course or as an elective

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

- A. Free Elective
- B. This course serves as an elective for the Criminal Justice AS degree
- 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. Basic Fire Methodology
- B. Basic Fire Science
- C. Fire Patterns
- D. Building Systems
- E. Fire Protection Systems
- F. Planning the Investigation
- G. Documentation of the Investigation
- H. Origin Determination
- I. Fire Cause Determination
- J. Classification of Fire Cause
- K. Analyzing the Incident for Cause and Responsibility

### **VI. A. Course Learning Outcomes:**

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

- 1. Explain and apply the scientific method as it relates to fire investigation. (GE- 3)
- 2. Develop a historical understanding with respect to the evolution of fire investigations in the United States. (GE- 3)

### **C. Assessment Instruments**

- A. Examination/Quizzes
- B. Research papers
- C. Field exercise
- D. Video analysis-exercise and discussion

## **VII. Grade Determinants**

- A. Examinations/Quizzes
- B. Projects
- C. Class Presentations
- D. Service Learning Option

Modes of teaching and learning used in this course:

- A. Lecture/discussion
- B. Small-group work
- C. Student written presentation
- D. Student oral presentations
- E. Guest Speakers

## **VIII. Texts and Materials**

**Required Text:** International Association of Arson Investigation. Fire Investigator: Principles and Practices. Jones and Bartlett Publishers. Latest edition

(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**

N/A

## **X. Honors Options**

N/A