

#### **TECHNOLOGY**

<u>CODE:</u> TEC 120 <u>TITLE:</u> Safety Management

**DIVISION:** STEM

Course Description: An overview of fundamentals of Safety Management Principles. A detailed review of OSHA regulations and standards pertinent to engineers and managers that expect to perform and/or influence safety related activities in an engineering construction project. Minimum safety requirements are discussed in a practical context for immediate application in engineering construction field operations. Course material includes a review of OSHA Standards for the Engineering Construction Industry, a review of selected sections of OSHA Standards for General Industry, a review of general principles of Engineering construction safety management. Furthermore, at the end of the course, eligible students\* receive an OSHA "30 Hour Training Certificate in Occupational Safety and Health for Construction".

CREDITS: 3 cr.

\*Students in online classes are not eligible to receive the OSHA "30 Hour Training Certificate in Occupational Safety and Health Construction".

### REQUIRED MATERIALS (CHECK BOOKSTORE FOR LATEST EDITION):

Click on the bookstore for the supplies which you are attending each class. Rcbc.edu/bookstore

### **COURSE LEARNING OUTCOMES:**

Upon completion of this course, students will be able to:

- Demonstrate an understanding of the importance and significance of labor laws
- Apply OSHA safety standards to engineering construction
- Outline the principles and philosophy to properly apply safety standards
- Select appropriate methods to identify potential hazards and the tools to avoid, correct, or mitigate exposures
- Identify methods to integrate safety principles into effective management practices

### GENERAL EDUCATION OUTCOMES IN THIS COURSE:


## **CORE COURSE CONTENT:**

- Module 1A: Introduction to OSHA and the OSH Act
- Module 1B: Basic Safety Orientation
- Module 2: Walking & Working Surfaces
- Module 3: Emergency Action Plan
- Module 4: Hazardous Materials
- Module 5: HAZWOPER
- Module 6: Personal Protective Equipment
- Module 7: Confined Spaces & Permit Required Confined Spaces
- Module 8: Lockout/Tagout
- Module 9: Materials Handling & Storage
- Module 10: Machine Guarding Safety
- Module 11: Welding, Cutting, and Brazing
- Module 12: Electrical Safety
- Module 13: Hazard Communication
- Module 14: Hazardous Substances & Industrial Hygiene
- Module 15: Bloodborne Pathogens
- Module 16: Record Keeping & Reporting
- Module 17: Workplace Violence
- Module 18: Safety and Health Programs
- Module 19: Ergonomics
- Module 20: Hazards of Asbestos in the Workplace
- Module 21: Lead Safety in the Workplace
- Module 22: Ionizing and Non-Ionizing Radiation Safety
- Module 23: Formaldehyde Awareness
- Module 24: Process Safety Management of Highly Hazardous Materials

# Course Activities:

Course activities vary from course to course and instructor to instructor. Below is a listing of some of the activities students can anticipate in this course:

- ▶ Writing assignments: students will analyze current issues in the field using current articles from the popular press as well as library research including electronic resources databases.
- Speaking assignments: students will present research individually or in groups using current technology to support the presentation (e.g., PowerPoint presentation); students will participate in discussions and debates related to the

topics in the lessons. Discussions may also focus on cross-cultural and legalethical dilemmas as they relate to the course content.

- ▶ <u>Simulation activities</u>: Trends and issues will analyzed for their ethical as well as social or legal significance. Students might role-play common situations for classmates to analyze. Current news articles may be used to generate discussion.
- ► <u>Case Studies</u>: Complex situations and scenarios will be analyzed in cooperative group settings or as homework assignments.
- ▶ <u>Lectures:</u> This format will include question and answer sessions to provide interactivity between students and instructor.
- **Speakers:** Representatives from various related fields may be invited to speak.
- ▶ Videos: Related topics will provide impetus for discussion.

## EDUCATIONAL TECHNOLOGY:

Rowan College at Burlington County advocates a technology enhanced teaching and learning environment. Advanced technological tools may be used in any course section to facilitate instruction. Many of our sections are web-enhanced, which means that some of your work will be submitted or completed online. Web enhancements may include online materials, grade books, testing and quizzes and assignment submission. Many students enjoy the flexibility and convenience that these online enhancements have provided, however if you have concerns about the technology involved, please speak to your instructor immediately.

### **STUDENT EVALUATIONS:**

The student will be evaluated on the degree to which student learning outcomes are achieved. A variety of methods may be used such as tests, quizzes, class participation, projects, homework assignments, presentations, etc.

See individual instructor's course handouts for grading system and criteria (point value for each assessment component in course, e.g. tests, papers, presentations, attendance etc.), number of papers and examinations required in the course, and testing policy including make ups and/or retests.

#### GRADING STANDARD:

- A Mastery of essential elements and related concepts, plus demonstrated excellence or originality.
- B+ Mastery of essential elements and related concepts, showing higher level understanding.
- B Mastery of essential elements and related concepts.

- C+ Above average knowledge of essential elements and related concepts.
- C Acceptable knowledge of essential elements and related concepts.
- D Minimal knowledge of related concepts.
- F Unsatisfactory progress. This grade may also be assigned in cases of academic misconduct, such as cheating or plagiarism, and/or excessive absences.

For other grades, see the current ROWAN COLLEGE AT BURLINGTON COUNTY catalog.

### **COLLEGE POLICIES:**

The current college catalog and student handbook are important documents for understanding your rights and responsibilities as a student in the RCBC classroom. Please read your catalog and handbook as they supplement this syllabus, particularly for information regarding:

- ► Academic Integrity Code
- Student Conduct Code
- Student Grade Appeal Process

# **OFFICE OF STUDENT SUPPORT AND DISABILITIES SERVICES:**

RCBC welcomes students with disabilities into the college's educational programs. Access to accommodations and support services for students with learning and other disabilities is facilitated by staff in the Office of Student Support (OSS). In order to receive accommodations, a student must contact the OSS, self-identify as having a disability, provide appropriate documentation, and participate in an intake appointment. If the documentation supports the request for reasonable accommodations, the OSS will provide the student with an Accommodation Plan to give to instructors. Contact the Office of Student Support at 609-894-9311, ext. 1208 or visit the website at: <a href="https://www.rcbc.edu/studentsupport">www.rcbc.edu/studentsupport</a>

## ADDITIONAL SUPPORT/LABS:

RCBC provides academic advising, student support personal counseling, transfer advising, and special accommodations for individuals with disabilities free to all students through the Division of Student Services. For more information about any of these services, visit the Laurel Hall on the Mt. Laurel Campus, or call (609) 894-9311 or (856) 222-9311, then dial the desired extension:

- Ext. 1557 Academic Advisement and Counseling
- Ext. 1803 Special Populations
- Ext. 2737 Transfer Center

Or visit the following websites:

Academic Advising <a href="https://www.rcbc.edu/advising">www.rcbc.edu/advising</a>
Student Support Counseling
Transfer Center <a href="https://www.rcbc.edu/counseling">www.rcbc.edu/counseling</a>
<a href="https://www.rcbc.edu/transfer">www.rcbc.edu/transfer</a>

or visit the Tutoring Cente	er Website at www.rc	495 at (609) 894-93 bc.edu/tutoring	<b>,</b> ,	
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