THREE RIVERS COMMUNITY COLLEGE FIRE ALARM & COMMUNICATION SYSTEMS SYLLABUS

COURSE TITLE: Industrial Hazards & Processes COURSE NO: FTA240 CREDIT HRS: 3

INSTRUCTOR: James Turner (Jim) **SEMESTER:** Spring 2009

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CLASS DAY & TIME: Wednesday 6:00 PM to 8:45 PM CLASS ROOM: Thames Campus, Room D230

REQUIRED TEXT: Operating Safely in Hazardous Environments

AUTHORS: Joseph A. Cocciardi

COURSE OBJECTIVE:

This course studies various industries, such as laboratories, metalworking, wastewater, spray finishing and nuclear power generation, as well as the regulations that impact them. An understanding of the various industrial processes utilized and their attendant fire and explosion hazards is afforded with the identification of applicable safety standards and measures to reduce potential problems

GRADING:

Score	Grade	GRADING NOTES
Α	96 – 100	Andresia Hannata. Thurs Divers Community Callege adheres to Anadomic Hannata in
A-	90 – 95	Academic Honesty - Three Rivers Community College adheres to Academic Honesty in
B+	87 – 89	addition to the Student Discipline Policy, sections 2:10 and 3:1-10, as provided by the Board
В	83 – 86	of Trustees of Connecticut Community Colleges. Please review your College Catalog for
B-	80 – 82	details.
C+	77 – 79	Late Mark. Turner who right to deduct 100/ from the markle reject that was received
С	73 – 76	Late Work – I reserve the right to deduct 10% from the possible points that you may receive
C-	70 – 72	for an assignment, for each class session that an assignment is late, up to three class
D+	67 – 69	sessions. After three class sessions, I will record a zero (0) for that assignment, unless you
D	63 – 66	have made previous arrangements with me and only in exceptional circumstances. All
D-	62 – 60	assignments must be submitted by the end of the last class.
F	BELOW 59	The semulates An incomplete is a temperature grade assigned by the faculty member when
ASSIGNMENT WEIGHTING 1. Quizzes 75% 2. Project 25%		Incompletes – An incomplete is a temporary grade assigned by the faculty member when course work is missing and the student agrees to complete the requirements. The student and instructor both must sign a contract to permit an "incomplete" grade. The contract will denote what must be completed to resolve the "I" grade. The "I" must be resolved by the end of the 10th week of the next academic semester (except summer) or it automatically converts to an "F" or "NC" for incomplete (remedial) courses.

SPECIAL NOTE(S):

- 1. No class on
- 2. Last Class is
- 3. All papers are to be submitted using APA format.

WEEKLY OBJECTIVES

- Week 1 January 21
 - Course Overview
 - Chapter 1: Public and Occupational Safety & Health: A Historical Perspective
 - Building Construction
- Week 2 January 28
 - Chapter 2: Current Regulations, Regulatory Agencies and Professional Associations: Roles & Responsibilities
 - Fire Protection Systems
- Week 3 February 4
 - Chapter 3: Recognizing and Identifying Hazardous Environments
 - Warehouse and Storage Occupancies
- Week 4 February 11
 - Chapter 4: Recognizing and Identifying Hazardous Materials
 - Motion Picture & Television Studios
- Week 5 February 18
 - Exam 1

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- Week 6 February 25
 - Chapter 5: Quantifying Hazardous Environments
 - Laboratories using chemicals
- Week 7 March 4
 - Chapter 6: Protective Planning
 - Nuclear Facilities/Electric Generating Plants
- Week 8 March 11
 - Chapter 7: Personal Protective Clothing
 - Flammable and Combustible Liquids
- Week 9 March 18
 - No Class Spring Break!
- Week 10 March 25
 - Chapter 8: Decontamination
 - Emergency Action Planning OSHA
- Week 11 April 1
 - Exam 2
- Week 12 April 8
 - Chapter 9: Responding to Emergencies
 - Industrial Safety Considerations Confined Spaces/hot work
- Week 13 April 15
 - Chapter 10: Medical Monitoring and Occupational Health
 - Industrial Safety Considerations Lock out/Tag out
- Week 14 April 22
 - Chapter 11: Personal Safety
 - Explosion Prevention/Deflagration Venting
 - NOTE: Individual Project Due
- Week 14 April 29
 - Compressed Gas Cylinders
 - Electrical Safety/Classified Locations (NEC)
- Week 15 May 6
 - Exam 3

INDIVIDUAL PROJECT

Select one of the projects below. You will be required to submit a report that must be at least 1,500 words in length, utilize at least three credible/verifiable references sources and written in APA formatting. Your report will include a synopsis of the event, the contributing factors that caused the event and any recommendations to prevent a reoccurrence. This report is due on week 14.

- Valero Refinery Asphyxiation Incident Delaware City, DE, November 5, 2005
 - Details: Two contract employees were overcome and fatally injured by nitrogen as they performed maintenance work near a 24-inch opening on the top of a reactor. One of the workers died attempting rescue.
- Partridge Raleigh Oilfield Explosion and Fire Raleigh, MS, June 5, 2006
 - Details: Three contractors died and one contractor suffered serious injuries in an explosion and fire at the Partridge-Raleigh Oilfield. The contractors, all employees of Stringer Oilfield Services, were standing on top of a series of four oil production tanks. They were preparing to weld piping to the tanks when a welding tool likely ignited flammable vapors from the tanks.
- Praxair Flammable Gas Cylinder Fire St. Louis, MO, June 24, 2005
 - On June 24, 2005, fire swept through thousands of flammable gas cylinders at the Praxair gas repackaging plant in St. Louis, Missouri. Dozens of exploding cylinders were launched into the surrounding community and struck nearby homes, buildings, and cars, causing extensive damage and several small fires.