**PMOSH Course 1**

**Special Topics: BCP 8803/6100: Fundamentals of Occupational Safety and Health Program Management**

**Instructors:** Daniel Castro, James Howry and Paul Schlumper, Dana Atkinson

**Course Description:**

This course introduces the core elements of an effective safety and health management system; central issues critical to each element’s proper implementation and OSHA’s hierarchy of controls.

# Prerequisites: Admission to PMOSH Program

# Textbooks: - Occupational Health and Safety Management: A Practical Approach; Charles D. Reese; 3rd edition (2015) (CRC Press); Occupational Safety and Health for Technologists, Engineers, and Managers; Goetsch, David; 8th edition (2014) (Prentice Hall); and selected literature readings and case studies.

# Course Objectives:

Students will able to identify complex occupational safety and health issues and related hazards and apply relevant workplace control measures.

# Learning Outcomes:

By the end of this course, a student will:

1. Describe the main components of an occupational safety and health programs
2. Explain the importance of each component
3. Identify characteristics of an effective safety and health program elements
4. Identify characteristics of organizations with effective safety and health programs
5. Describe the attributes and goals of an effective safety and health program

**Grading:**

Quizzes: 15 %

Projects: 30 %

Midterm Exam: 25 %

Final Exam: 30 %

1. Students are required to participate in the online learning platform through discussion boards, Q&A sessions, and online debates. Instructors will monitor participation and engage online with students.
2. The course contains 3 unit assessments (quizzes) – to be completed at the ends of units 2,4 and 6.
3. Assignments include independent research to conduct analysis, determine objectives, and develop implementation plans, and share findings with the cohort through the online discussion boards.
4. There will be 3 course projects: a written report on an independent research study in an area of accident causation/human failure, and a scenario based case study. In the case study, questions related to the scenario will encompass occupational health and safety principles and prevention strategies introduced throughout the course.

# Learning Accommodations:

# If needed, we will make accommodations for students with documented disabilities. These accommodations must be arranged in advance and in accordance with the Office of Disability Services (http://disabilityservices.gatech.edu).

# Academic Integrity:

Students are encouraged to study together and collaborate on case studies, but each student must submit their own work unless the assignment is specifically structured as a group assignment/project. Any reference sources (including online sources) used to prepare written assignments must be paraphrased in your own words and cited. Students are to neither receive nor provide help to others during exams. Any student suspected of behavior in violation of the Georgia Tech Honor Code will be referred to the Office of Student Integrity. The Georgia Tech Honor Code is available on the Office of Student Integrity website (<http://www.osi.gatech.edu)>

**Topics:**

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| Week | Topic | Assessments |
| 1 | The Safety and health movement   * Milestones in the safety movement * Tragedies * Organized labor * The safety and health profession * Ethics and Safety   Goetsch, Chapter 1, 24, & 27; Reese Chapter 1 | Students will be required to write a research paper on the history and evolution of safety using a specific milestone or event as the foundation for their research. |
| 2 | Intro and Definitions:   * Hazard types * Risk v. hazards * Safety Terminology * Regulatory Agencies and SME’s   Reese, Chapter 17  Goetsch, Chapter 6 | Quiz 1- Multiple choice quiz related to information covered in units 1-2 |
| 3 | Basic Principles of Safety and Health Program Management I  Management commitment and employee involvement   * Policy statements * Resource requirements * Leadership and safety * Safety Committees, etc.   Reese, Chapters 4 + 5 |  |
| 4 | Basic Principles of Safety and Health Program Management II  Hazard Analysis and Hazard Prevention and Controls   * Inspections v. Audits * Documentation requirements. * Communication of hazards   Reese, Chapters 8 + 9 | Quiz 2- Multiple choice quiz related to information covered in units 3-4 |
| 5 | Safety and Health Training   * Training concepts/ methodologies * Evaluating effectiveness of training programs * Technology and training   Goetsch, Chapter 12; Reese, Chapter 16 | Student will be required to conduct an independent research project on occupational safety and health training, methodologies, and effectiveness (2 pages).  Mid Term/ Comprehensive Exam (25%) |
| 6 | Safety and Health Programs   * Writing effective programs * Resources * Regulatory requirements * Analyzing effectiveness of programs   Reese, Chapter 4 + 17 | Quiz 3- Multiple choice quiz related to information covered in units 4-6 |
| 7 | Accident Investigation/ Root Cause   * Workman Comp * Investigation techniques * Documentation * Recordkeeping requirements (OSHA)   Goetsch, Chapter 8 | Student will be provided a case study and will be asked to document their investigation using one of several approved methods. |
| 8 | Promoting safety in the workplace   * Demonstrating corporate commitment * Incentive programs * Wellness programs   Goetsch, Chapter 27 + 28 | Cumulative Final Exam (30%) |

Reading assignments will correspond to weekly lectures. Students will be expected to read texts and periodicals as assigned.