

## Master Syllabus

### OPT 2211 - Industrial Risk Management

**Division:** Science, Mathematics and Engineering

**Department:** Operations Technology

**Credit Hour Total:** 2.0

**Lecture Hrs:** 2.0

**Date Revised:** October 2012

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#### Course Description:

This course provides a comprehensive approach to the factors that contribute to safe and environmentally sound practices in business and industry.

#### General Education Outcomes:

- ▣ Oral Communication Competency
- ▣ Critical Thinking/Problem Solving Competency
- ▣ Computer Literacy Competency
- ▣ Information Literacy Competency

#### Course Outcomes:

##### Safety impacts on profitability

Be able to explain the reasons why an effective safety program is able to save a organization money not act as a cost drain.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% correct or better on local exams

##### Personal safety & environmental integrity

Describe key elements necessary to preserve personal safety and environmental integrity in a business or industrial application.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% correct or better on local exams

**Assessment Method:** Simulations

**Performance Criteria:** 70% of possible points or better on a simulated safety/environmental demonstration

##### Measures to control or eliminate accidents

After viewing or discussing potentially hazardous situations, be able to indentify appropriate measures to mitigate or eliminate such conditions.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% correct or better on local exams

**Assessment Method:** Simulations

**Performance Criteria:** 70% of possible points on a simulated safety/environmental demonstration

##### Pollution Control

After viewing or discussing potential environmental hazards, be able to recognize these conditions and select appropriate measures to mitigate or eliminate hazards.

**Assessment Method:** Locally developed exams

**Performance Criteria:** 70% correct or better on local exams

**Assessment Method:** Simulations

**Performance Criteria:** 70% of available points on a simulated safety/environmental demonstration

#### Outline:

Reason that a safety program is a major ingredient for profit in the workplace

Components of a safety organization

Specific operational hazards that include:

Materials handling problems

Principles of safeguarding

Ways to control tool accidents

Basic fire prevention/protection

Blood borne pathogens

Selection and use of personal protective equipment

Compliance with Hazard Communication regulations including interpretation of Material Safety Data Sheets (MSDS) and hazard analysis according to both Hazardous Material Information Guide (HMIG) and National Fire Prevention Association (NFPA) guidelines.

Selection and implementation of proper emergency response practices and equipment.

Means to control/reduce generating water pollutants

Air pollution legislation for business and industry

Waste management planning for common business/industry materials such as oils, solvents and paints.