

COURSE SYLLABUS  
Southeast Missouri State University

Department of Industrial & Engineering Technology

Course No: IM601

Title of Course: Organizational Industrial Safety and Ergonomics New: Spring 2000

- I. Catalog Description and Credit Hours of Course: This course will examine the role and importance of management in producing and maintaining a safe workplace environment. Topics covered will include the role of Occupational Safety and Health Administration (OSHA) in industry and business, OSHA inspections, regulations, and required documentation and legal and ethical issues regarding safety issues. (3 credit hours)
- II. Prerequisite (s): Graduate Student Status or Permission of Instructor.
- III. Purpose or Objectives of the course: Upon completion of this course, the student should be able to:
  - A. define the role of management has in providing a safe workplace.
  - B. define the role and scope of OSHA.
  - C. be familiar with the relevant OSHA regulations and required documentation.
  - D. be familiar with what a safety audit is and be able to conduct one.
  - E. develop a personal viewpoint on legal and ethical aspects of the subject matter presented.
  - F. understand the role Ergonomics has in workplace improvement.
- IV. Expectations of Students:
  - A. Research Paper: There will be a major paper over some aspect of the course work. The exact topic will be decided in conference with the instructor. The format and content requirements of this paper will be addressed before the paper is assigned.
  - B. Class Discussion: Students will be expected to share their viewpoint of the subject matter presented in class discussions. These discussions are an opportunity for individuals to share their viewpoints and thoughts with others.

- C. Oral Presentation: All students will research, prepare, and conduct a class presentation over a technical or scientific topic of their chose related to subjects presented. All topics must be approved by the instructor prior to beginning work. This presentation can be coordinated with and be related to the assigned research paper.
  - D. Assignments: A variety of case studies, minor papers and assignments will be conducted throughout the semester. All students are expected to complete these assignments.
  - E. Tests: Students will be required to take two exams (mid-term & final) over subject matter presented.
- V. Course Content or Outline (Weeks):
- A. Course Overview – Structure, Discipline & Purpose
  - B. Role and Scope of OSHA (1)
  - C. OSHA Regulations and Industrial Management (2)
  - D. OSHA required Documentation and the Role of Management (3)
  - E. Compliance audits (4)
  - F. OSHA Case Studies (5)
  - G. OSHA and the Future (6)
  - H. Ergonomics Training For Workers and Management (7)
  - I. Review & Midterm Exam (8)
  - J. Evaluating Ergonomics Programs (9)
  - K. Manufacturing Workplace Design (10)
  - L. Auditing Ergonomics (11)
  - M. Ergonomics: Lowering Costs and Continuous Improvement (12)
  - N. Managing Workplace Injuries (13)
  - O. Economics Evaluations of Ergonomics (14)
  - P. Presentations, Review and Final Exam (15-16)

- VI. Textbook (s) and/or Other Required Materials or Equipment:
- A. Karwowski, W. & Salvendy, G. (Eds.) (1998) Ergonomics in Manufacturing: Raising Productivity Through Workplace Improvement. Dearborn, MI: Society of Manufacturing Engineers.
  - B. Additional material provided will be case studies and instructor produced material.
- VII. Basis for Student Evaluation: Students will be evaluated based upon the following:
- A. Written Exams (Midterm and Final) (30%)
  - B. Research Paper (30%)
  - C. Oral Presentation (30%)
  - D. Discussion & Participation (10%)
  - E. Grading scale:
    - 1. 90 – 100 = A
    - 2. 80 – 89 = B
    - 3. 70 – 79 = C
    - 4. Below 70% = F
- VIII. Disabilities Statement: If you have special needs addressed by the Americans With Disabilities Act and need course materials in an alternative format, notify your course instructor immediately. Reasonable efforts will be made to accommodate your special needs.