COURSE INFORMATION FORM

DISCIPLINE  
INTE

COURSE TITLE  
Industrial Rigging

CR.HR  3  LECT HR.  3  LAB HR.  CLIN/INTERN HR.  CLOCK HR.  

CATALOG DESCRIPTION
This course is designed to demonstrate to the student safe and correct means of rigging and hoisting equipment. Topics will include wire rope, synthetic and chain slings. The student will learn the fundamentals of wire rope maintenance, center of gravity calculations and safe crane operation.

PREREQUISITES
None

EXPECTED STUDENT OUTCOMES IN THE COURSE (ESO)
Upon completion of this course, the student will be able to:

1. Identify different kinds and types of fiber rope and their characteristics.
2. Identify the different kinds and types of wire rope and their characteristics.
3. Clean and lubricate wire rope.
4. Describe the federal regulatory requirements related to hoisting and rigging.
5. Evaluate area, volume and weight of loads.
6. Evaluate the center of gravity of equipment.
7. Set up slings and hoists.

GENERAL EDUCATION OUTCOMES (ESO)
Specify which general education outcomes, if any, are substantially addressed by the course. Numbers in parentheses identify the Expected Student Outcomes linked to the specific General Education Outcome.

Critical Thinking: Define, analyze and evaluate information, materials and data  (ESO)
Unambiguously define problems and issues  (4, 7)
Integrate information and see relevant relationships that broaden and deepen understanding  (6, 7)
PROGRAM-LEVEL OUTCOMES

CAREER AND TECHNICAL EDUCATION PROGRAM OUTCOMES
Specify which Career and Technical program outcomes, if any, are substantially addressed by the course by completing the “Career and Technical Education template” to show the relationship between course and program outcomes to assessment measures.

The student will demonstrate:

- the ability to apply foundational skills in an industrial setting, safely and to industry guidelines
- the ability to think critically and apply problem-solving skills

CLASS-LEVEL ASSESSMENT MEASURES
Student accomplishment of expected student outcomes will be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

1. Practical examination: 1 - 3, 5 – 7
2. Project: 4
Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An *asterisk can be used to mark an item as optional.

I. Fiber and wire rope fundamentals
   A. Applications
   B. Maintenance

II. Rigging fundamentals and handbook

III. Area, volume and center of gravity determinations

IV. Lifting with cranes
   A. Braking
   B. Stabilizing
   C. Grounding

V. Standards
   A. Standard ANSI B70.17-1980
   B. Standard ANSI B70.17-1976
   C. Standard ANSI B30.9-1984
   D. Standard ANSI B30.16-1981

VI. Marlinspike work