Course Outline

Course Title: Construction Trades Internship 2(A)  Submitted By: Leo Lukas
Semester Course Prefix and Number: CARP 2280  Approval Date: 1/10/19
Old Quarter Course Prefix and Number:

Number of Credits: 7  Number of Lecture Credits: 7
Number of Lab Credits:  Number of Lab Hours:  
Class Size: 24  Number of Studio/Demonstration/Internship Credits:

Course Purpose Code:
- 0 – Developmental Courses
- 1 – Non-transferable
- X 2 – Technical course related to career programs
- 3 – College course which has the primary goal of applying certain concepts (e.g. vocal ensemble)
- 4 – Other college course not considered a part of MNTC (e.g. computer science, health, physical education)
- 5 – Course which is intended to fulfill the Minnesota Transfer Curriculum (MNTC) requirements or intended for transfer.
- 6 – Continuing Education/Customized Training specialized credit course (not occurring in 0-5)

Course Description:
This course provides the essential framework for students desiring to become proficient in the skilled trade of construction. It is through this internship the student has the opportunity to learn the necessary skills through lecture and the hands-on approach with a licensed contractor. This course will include lecture and fieldwork. This course provides an advanced study of concrete, form layout, reinforcing steel requirements. Safety requirements of trenches/excavation, and rigging are thoroughly discussed in lecture.

Prerequisites and/or recommended entry skills/knowledge:
Course Prerequisite(s): Completion Construction Trades Internship 1(B)
Reading Prerequisite:
Composition Prerequisite:
Mathematics Prerequisite:

Career Programs and Transfer Majors Accessing this Course:

Minnesota Transfer Curriculum Goal(s) partially met by this course if applicable:
(Notes: No more than two goals may be met by any one course. AASC review and the Chief Academic Officer’s approval are required.)
0. X None
1. _____ Communications
2. _____ Critical Thinking
3. _____ Natural Sciences
4. _____ Mathematical/Logical Reasoning
5. _____ History and the Social and Behavioral Sciences
6. _____ The Humanities and Fine Arts
7. _____ Human Diversity
8. _____ Global Perspectives
9. _____ Ethical and Civic Responsibility
10. _____ People and the Environment
Learning Outcomes: (including any relevant competencies listed in the Minnesota Transfer Curriculum)

Upon completion of this course, the student will be able to:

- Identify various concrete ingredients and the proper amount used in different concrete mixtures
- Calculate concrete volume for rectangular and circular structures
- Describe how to lay out formwork, for foundations, slab on grade, vertical walls, and horizontal formwork
- List applications of reinforced concrete and describe general requirements for working with reinforcing steel
- List safety considerations for trenches/excavation: identify soil types and bearing capacities of soil
- Discuss OSHA 29 CFR 1926 requirements for crane signal, rigging, and rigging equipment
- Identify and demonstrate the proper use of common rigging hardware and equipment

Student Assessment Methods:
Assessment methods will be determined by the instructor.

Use of Instructional Technology: (includes software, interactive video and other instructional technologies): May include:
- Bright Space Desire to Learn
- PowerPoint presentations
- Internet web search

Additional Special Information: (special fees, directives on hazardous materials, etc.)

Transfer Information: (Please list colleges/majors that accept this course in transfer.)

Affiliated Mesabi Range College Courses and Programs:

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Distribution: Original – Instructional Services
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