

# MESABI RANGE COLLEGE

## Course Outline

**Course Title:** Concrete

**Semester Course Prefix and Number:** CARP 1229

**Old Quarter Course Prefix and Number:**

**Submitted By:** Leo Lukas

**Approval Date:** 3-13-17

**Revision Date:**

**Number of Credits:**

1

**Number of Lecture Credits:**

**Semester(s) Offered:**

**Number of Lab Credits:** 1

**Number of Lab Hours:**

2

**Class Size:**

24

**Number of Studio/Demonstration/Internship Credits:**

Negotiated by AASC on:  
(date)

### **Course Purpose Code:**

0 – Developmental Courses

1 – Non-transferable

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.

9 – Continuing Education/Customized Training specialized credit course (not occurring in 0-5)

### **Catalog Description:**

This course includes actual “hands on” experience of the installations of concrete structures.

### **Prerequisites and/or recommended entry skills/knowledge:**

Course Prerequisite(s):

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.  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:

1. Analyze a foundation plan and layout a concrete foundation
2. Estimate the amount of concrete needed to complete a project
3. Explain the properties and qualities of concrete
4. Prepare the site and install the necessary forms and bracing for installation of a concrete structure
5. Operate the necessary equipment to pour and finish a concrete structure

**Student Assessment Methods:**

Tests, quizzes, performance test, participation

**Use of Instructional Technology:** (includes software, interactive video and other instructional technologies):

**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:**

**Approvals:**

Body	Representative Signatures	Date
Faculty Association		
Academic Affairs Standards Committee		
Chief Academic Officer		

**Distribution:** Original – Instructional Services  
**Copies:** Transfer Specialist, Originating Faculty Member, Records  
**Revised:** December 2012