

# MESABI RANGE COLLEGE

## Course Outline

**Course Title:** Blueprint Reading and Estimating I  
**Semester Course Prefix and Number:** CARP 1221  
**Old Quarter Course Prefix and Number:**

**Submitted By:** Leo Lukas  
**Approval Date:** 3-13-17  
**Revision Date:**

**Number of Credits:** 3      **Number of Lecture Credits:** 1  
**Semester(s) Offered:**      **Number of Lab Credits:** 2      **Number of Lab Hours:** 4  
**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 offers the basics of reading and drawing blueprints for residential construction and estimating material requirements and creating material lists.

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

Course Prerequisite(s): None  
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. <input checked="" type="checkbox"/> None                                | 6. <input type="checkbox"/> The Humanities and Fine Arts     |
| 1. <input type="checkbox"/> Communications                                 | 7. <input type="checkbox"/> Human Diversity                  |
| 2. <input type="checkbox"/> Critical Thinking                              | 8. <input type="checkbox"/> Global Perspectives              |
| 3. <input type="checkbox"/> Natural Sciences                               | 9. <input type="checkbox"/> Ethical and Civic Responsibility |
| 4. <input type="checkbox"/> Mathematical/Logical Reasoning                 | 10. <input type="checkbox"/> People and the Environment      |
| 5. <input type="checkbox"/> History and the Social and Behavioral Sciences |                                                              |

**Learning Outcomes:** (including any relevant competencies listed in the Minnesota Transfer Curriculum)

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

1. Identify construction drawing, and explain how drawings are made and the importance of them
2. Calculate dimensions and relate math to construction problems
3. Identify the drawing scale of a print and show the use of an architect's scale
4. Identify common types of lines, and match drawing symbols with their meanings
5. Make sketches of objects in correct proportions and create orthographic views
6. Understand how building codes impact the building process, and why specifications are necessary

**Student Assessment Methods:**

Tests and quizzes, final test, house print and drawings, workbooks, 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