

MASTER COURSE OUTLINE

A. CARP 1215 Blueprint Reading II

B. COURSE DESCRIPTION:

This course introduces basic information concerning blueprint reading, estimating, and computer-aided design and drafting (C.A.D.D.) for residential construction. Students study and read a series of residential construction working drawings. The student identifies different blueprints used in building a residential home. This course is part of the Carpentry program which is accredited by the Home Builders Institute (HBI) and the National Association of Home Builders (NAHB). Prerequisite: CARP 1110 and CARP 1121.

(2 Cr – 1 lecture, 1 lab)

C. **Core Theme: Critical Thinking

D. MAJOR CONTENT AREAS:

- Drawing types and advanced components
- Construction plans and specifications
- Reading construction working drawings
- Identification of abbreviations and line types used in blueprint reading
- Introduction to basic computer-aided design and drafting (C.A.D.D.)
- Basic estimating in residential construction
- Drafting and estimating of a construction project.

E. GOAL TYPES, OBJECTIVES, AND OUTCOMES:

<u>GOAL</u>	<u>OBJECTIVES</u> Students will be able to	<u>OUTCOMES</u> The student will successfully
<u>**Critical Thinking</u>	gather factual information and apply it to a given problem in a manner that is relevant, clear, comprehensive, and conscious of possible bias in the information selected.	<ol style="list-style-type: none"> 1. review required working drawings for residential construction. 2. compare the difference between residential drawings and commercial drawings.
<u>CS</u>	recognize different construction drawing types and specifications.	<ol style="list-style-type: none"> 1. identify isometric, orthographic, oblique, and presentation drawings. 2. draw an orthographic sketch from a isometric drawing. 3. draw a two-point perspective. 4. describe the components of a working drawings. 5. list construction divisions and review specifications within each division.
<u>CS</u>	apply proper procedures in reading construction working drawings.	<ol style="list-style-type: none"> 1. identify line types used in construction drawings.

		<ol style="list-style-type: none"> 2. identify construction drawing symbols. 3. read and complete questions related to a complete set of residential and light commercial working drawings including floor plans, elevations, detail drawings, electrical, and plumbing.
<u>CS</u>	understands the principles of C.A.D.D.	<ol style="list-style-type: none"> 1. explore and explain the principles of C.A.D.D.
<u>CS</u>	complete a cost estimate for a construction project.	<ol style="list-style-type: none"> 1. calculate the surface area's square footage, linear footage, and cubic footage necessary to complete a total estimate for a construction project. 2. calculate amount needed for itemized material to build a construction project. 3. calculate total cost of material for garage. 4. describe critical areas of bid and importance of a complete estimate. 5. describe labor costs of constructing the construction project.

F. SPECIAL INFORMATION:

This course may require use of the Internet, the submission of electronically prepared documents and the use of a course management software program. Students who have a disability and need accommodations should contact the instructor or the Student Success Center at the beginning of the semester. This information will be made available in alternative format, such as Braille, large print, or current media, upon request.

G. COURSE CODING INFORMATION: Course Code S/Class Maximum 28; Letter Grade

Revision date: 04/01/14; 2/27/20
AASC Approval date: 04/21/2020

*Riverland Community College Disciplines	MnTC Goal Number
Communication (CM)	1
Natural Sciences (NS)	3
Mathematics/Logical Reasoning (MA)	4
History and the Social & Behavioral Sciences (SS)	5
Humanities and Fine Arts (HU)	6

**Riverland Community College Core Themes	MnTC Goal Number
Critical Thinking (CT)	2
Human Diversity (HD)	7

Global Perspective (GP)	8
Ethical and Civic Responsibility (EC)	9
People and the Environment (PE)	10

*These five MnTC Goals have been identified as Riverland Community College Disciplines.

** These five MnTC Goals have been identified as Riverland Community College Core Themes.

NOTE: The Minnesota Transfer Curriculum “10 Goal Areas of Emphasis” are reflected in the five required discipline areas and five core themes noted in the Riverland Community College program of study guide and/or college catalog.

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