



MASTER COURSE OUTLINE

A. CARP 1250 Building Codes/Estimating

B. COURSE DESCRIPTION:

This course will introduce the student to residential construction estimating concepts and building codes. Students will be introduced to materials and methods used in residential construction projects. Application of linear, square, and cubic measurements and their relationship to the estimating process will be studied. Estimating software will be introduced. The application of the various Minnesota Codes and the International Residential Code used in residential construction will also be studied. 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). Prerequisites: CARP 1110.
(2 Cr – 1 lect, 1 lab)

C. *Core Theme: Critical Thinking

D. RIVERLAND INSTITUTIONAL LEARNING OUTCOMES:

This course addresses the following Riverland Institutional Learning Outcome(s):

- ILO 1: critical thinking (*Core Theme Goal 2*)
- ILO 2: awareness of the larger global community (*Core Theme Goal 7 or 8*)
- ILO 3: ethical, engaged citizenship (*Core Theme Goal 9 or Goal 10*)
- ILO 4: communication and collaboration (*Discipline Goal 1 and by any learning outcome(s) involving communication or collaboration*)

E. MAJOR CONTENT AREAS:

- Proper use of the International Residential Codes
- Local Codes, Zoning, Ordinances, and Permitting
- Public Health, Safety, and Welfare
- Principles and Application of Construction, Estimating, and Construction Math

F. GOAL TYPE, OBJECTIVES, AND OUTCOMES:

<u>GOAL TYPE</u>	<u>OBJECTIVES</u>	<u>OUTCOMES</u>
<u>*Critical Thinking</u>	Students will be able to 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.	The student will successfully 1. identify the requirements of the International Residential Code for a residential home and how they apply to residential construction.

<u>CS</u>	demonstrate International Residential Code knowledge.	<ol style="list-style-type: none"> 1. define and explain the purpose of building codes and zoning laws in residential construction. 2. explain the requirements for obtaining a building permit. 3. discuss the differences in various code books.
<u>CS</u>	create safe work area.	<ol style="list-style-type: none"> 1. demonstrate safe work habits and properly use safety equipment as it relates to building codes.
<u>CS</u>	demonstrate estimating calculation skills.	<ol style="list-style-type: none"> 1. identify the principles of estimating. 2. develop an understanding of the applicable codes and how they apply to residential construction estimating. 3. demonstrate consistency in the estimating process. 4. estimate costs using industry cost sources.

G. 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 Accessibility Services 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.

H. COURSE CODING INFORMATION:

Course Code S/Class Maximum 28; Letter Grade

Revision date: 03/08/17; 04/02/24

AASC Approval date: 04/18/17; 04/16/24

*These five MnTC Goals have been identified as Riverland Community College Core Themes. Every course in the Riverland Community College curriculum shall meet outcomes from one of these themes.

**These five MnTC Goals have been identified as Riverland Community College Disciplines. Riverland's MnTC courses also shall meet outcomes from a Discipline Area.

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.

*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

**Riverland Community College Discipline Areas	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