

THREE RIVERS COMMUNITY COLLEGE
BUILDING CODES & ORDINANCES
 Spring Semester 2005, Tuesday 9am - 11:50am

Instructor: Professor Mark Comeau, (885-2387), email mcomeau@trcc.commnet.edu

Grade: Quizzes (4) 50% Mid term 25% Final 25%

Course Objectives:

To introduce the Architectural Design and Technology students to the origins, scope and administration of local, state and federal codes and ordinances. Students will be exposed to the elements of these codes and ordinances and to the impacts they have on the design, construction, and occupancy of a project. Students will develop a working knowledge of the subject material as they track a hypothetical project from preliminary zoning research, through design and construction and ultimately the issuance of a “certificate of occupancy”.

Method: Lectures, Slide Lectures, Simulations, Class Discussion

Text: **International Building Code (IBC) 2003, (and Instructor Supplements)**

(Note: The course's weekly subjects follow the book's layout in sequential chapter order. Please read corresponding subject-chapter material prior to each class.)

<u>Week 1</u> (1/25)	Over-view (Introduction) A Historic Look at Codes & Ordinances	<u>Week 9</u> (3/22)	Spring Break No Classes in Session
<u>Week 2</u> (2/01)	Zoning Regulations Use, Bulk, Design & Hazard Zones	<u>Week 10</u> (3/29)	Accessibility pp225-236 Circulation & Barrier-Free
<u>Week 3</u> (2/08)	Use Group and Occupancy pp23-37 Table 302.3.2	<u>Week 11</u> (4/05)	Interior Environment p239-242 Walls, Floors & Ceilings
<u>Week 4</u> (2/15)	General Building Limitations pp73-77 Table 503	<u>Week 12</u> (4/12)	Exterior Envelopes pp243-265 Walls and Roofs
<u>Week 5</u> (2/22)	Types of Construction pp81-82 Tables 601 & 602	<u>Week 13</u> (4/19)	Structural Design pp267-343 Live/Dead Loads, Lateral Forces
<u>Week 6</u> (3/01)	Fire Resistance Rated Constr. pp85-110 Fire Walls, Penetrations & Openings	<u>Week 14</u> (4/26)	Materials pp362-341 Soils, Concrete, Masonry
<u>Week 7</u> (3/08)	Means of Egress pp193-223 Path-of-travel, Stairs, Exits	<u>Week 15</u> (5/03)	Materials pp437-542 Steel, Wood, Glazing, Gyp. Bd.
<u>Week 8</u> (3/15) Plumbing	Means of Egress Cont'd Path-of-travel, Stairs, Exits	<u>Week 16</u> (5/10)	MEP Systems Mechanical, Electrical &

COURSE REQUIREMENTS:

Notebook

Students will assemble a notebook, to be made up of handouts distributed at the beginning of each class. A 3” “*Slant-ring*” notebook with plastic sheet protectors is recommended – this will be a good resource for future reference.

EXPANDED COURSE OVERVIEW

History of architecture is an informative and intense course. Considerable information will be conveyed to the student while building a logical basis for understanding the design philosophies and conditions which shaped architecture from pre-history to the present.

The course is divided into (four) 4 week sections:

The first section examines the origins of architecture in Egypt, Mesopotamia and the Aegean. Differences in climate, geography, materials, philosophy, social structure and technology will be explored to discover how these are reflected in the architecture of each culture.

This section will also explore the classical architecture of Greece and Rome, as students are introduced to: the principles of the Architectural Orders and the elements of which they are composed; detailing; engineering advances; proportion, and planning theories.

Christian Architecture will be traced from it's origins in Rome through the synthesis of form, function, philosophy and structure in the Gothic Cathedrals.

The second section examines the origins of the Renaissance in Italy and the development of the various Renaissance styles from Early Renaissance through the Baroque Period. The economic, political, social and technical influences which shaped this movement will be explored to provide a better understanding of the meaning of the forms used.

This section will also explore the spread of Renaissance ideas and designs throughout Europe. Particular attention will be placed on the development of Renaissance design in France and England.

The development of architecture in America will be traced from the Colonial Period through the Gothic Revival. Students will explore the relationship of American architecture to cultural developments in Europe as well as the search for an appropriate American style.

The third section examines how society in general and architecture in particular reacted to the changes and technology brought about by the Industrial Revolution. Students will explore initial reactions as they found their expressions in architecture, a period covering the years roughly between 1850c and 1900c.

This section will also examine the period covering 1900c to World War I as architectural response was refined in a search to express the new century. The period covering World War I to World War II is the final portion of this section to be explored as students discover how the war graphically demonstrated the immense power of technology for both construction and destruction, thus, causing a general reassessment of values in society, architecture and design.

The fourth and final section examines the period from World War II to the present day. Students will discover how America emerged as the World power and leader in technology and architectural expression. Architectural periods covered which illustrate this include those such as the race of the skyscraper, the Modern Movement, the Chicago School, the Shingle Style, Post Modernism and more. This section will also explore the current period of architecture in practice today as well as provoke discussions concerning the civic and social responsibilities of architecture of the past and how it may influence that of the future.