### THREE RIVERS COMMUNITY COLLEGE

# **BUILDING CODES & ORDINANCES ARC K227**

Tuesday 6:30 - 9:15pm, Room D-124

Instructor: Rick Staub • ARCHITECT, ph 860-434-7707, email <a href="mailto:staub@pointonearchitects.com">staub@pointonearchitects.com</a>

Credits: 3 Hours: 3, Pre-requisites: ARC 135/L

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

#### Course Objectives:

Introduce the architecture, civil, and construction 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>Unit 1</u>	Over-view (Introduction) A Historic Look at Codes & Ordinances	<u>Unit 8</u>	Means of Egress Cont'd Path-of-travel, Stairs, Exits
Unit 2	Zoning Regulations Use, Bulk, Design & Hazard Zones	<u>Unit 9</u>	Accessibility Circulation & Barrier-Free
Unit 3	Use Group and Occupancy Associated Tables	<u>Unit 10</u>	<b>Interior Environment</b> Walls, Floors & Ceilings
Unit 4	General Building Limitations Associated Table	<u>Unit 11</u>	<b>Exterior Envelopes</b> Walls and Roofs
<u>Unit 5</u>	<b>Types of Construction</b> Associated Type of Constr. Table	<u>Unit 12</u>	Structural Design Live/Dead Loads, Lateral Forces
<u>Unit 6</u>	<b>Fire Resistance Rated Construction</b> Fire Walls, Penetrations & Openings	Unit 13	Materials Soils, Concrete, Masonry
Unit 7	Means of Egress Path-of-travel, Stairs, Exits	<u>Unit 14</u>	Materials Steel, Wood, Glazing, Gyp. Bd.
	Spring Break No Classes	Unit 15	MEP Systems Mechanical, Electrical & Plumbing

### **LEARNING OUTCOMES:**

- Understand the role, intent, and performance of Codes and Ordinances in development and construction.
- Demonstrate the ability navigate regulatory documents (sections & paragraphs) and their inter-relationships.
- Analyze and understand building systems and their integration in design and performance.
- Demonstrate the ability to apply research and investigative methods to projects of varying scope and complexity and apply proper interpretation of the codes.

## ACADEMIC PERFORMANCE

## **Lecture Period:**

Students shall respect the classroom environment. Professors invest valuable time in lecture preparation to make the course content organized, interesting, and understandable and to make the learning environment collegial. Unless specifically directed by the professor, students shall refrain from sending email and instant messages, or from engaging in other activities (reading non-course materials, engaging in private conversations and so on), that disrespect the classroom environment and learning conditions for others.

Access to the Internet can be a valuable aid to the classroom learning environment. Students are encouraged to use laptops, smart phones, and other devices in order to explore concepts related to course discussions and topics. Students are discouraged from using technology in ways that distract from the learning community (e.g. Facebook, texting, work for other classes, etc.) and if found doing so, will be asked to leave the classroom for the day and will not get credit for attendance that class period.

### **Assessment:**

Assessment of your mastery of the Courses learning objectives is administered through quizzes, exams, and essays. These are announced with ample preparation time and sometimes a study guide. Upon absence from a class in which an assessment is given, it is the student's responsibility to request, coordinate and schedule, a makeup date and time with the professor. Assessments not made up within one week from when initially given will result a three point reduction from the score earned, per class period lapse.

# **Online Learning Portfolio:**

All students are required to maintain an online learning portfolio in Digication that uses the college template, in as much as it is pertinent and supported by outcome products of this course. Through this electronic tool students will have the opportunity to monitor their own growth in college-wide learning. The student will keep his/her learning portfolio and may continue to use the Digication account after graduation. A Three Rivers General Education Assessment Team will select and review random works to improve the college experience for all. Student work reviewed for assessment purposes will not include names and all student work will remain private and anonymous for college improvement purposes. Students will have the ability to integrate learning from the classroom, college, and life in general, which will provide additional learning opportunities. If desired, students will have the option to create multiple portfolios.

## **Integrity:**

Any and all exams, papers or reports submitted by you and that bears your name is presumed to be your own original work that has not previously been submitted for credit in another course unless you obtain prior written approval to do so from your professor.

In all of your assignments, including homework or drafts of papers, you may use words or ideas written by other individuals in publications, web sites, or other sources but only with proper attribution. "Proper attribution" means that you have fully identified the original source and extent of your use of the words or ideas of others that you reproduce in your work for this course, usually in the form of a footnote or parenthesis.

As a general rule, if you are citing from a published source or from a web site and the quotation is short (up to a sentence or two), place it in quotation marks; if you employ a longer passage from a publication or web site, please indent it and use single spacing. In both cases, be sure to cite the original source in a footnote or in parentheses. (See <a href="http://www.plagiarism.org/plag">http://www.plagiarism.org/plag</a> article <a href="how do I cite sources.html">how do I cite sources.html</a> for more information on citing.)

If you are uncertain about the expectations for completing an assignment or taking a test or examination, be sure to seek clarification from your professor beforehand.

Finally, you should keep in mind that as a member of the Three Rivers Community College community, you are expected to demonstrate integrity in all of your academic endeavors and will be evaluated on your own merits.

Be proud of your academic accomplishments and help to protect and promote academic integrity. The consequences of cheating and academic dishonesty may include a formal discipline file, possible loss of financial scholarship or employment opportunities, and denial of admission to a four year college.