

COURSE INFORMATION

Course prefix/No.: AET 103
Course Title: International Building and Residential Codes
Lecture Hours/Week: 3.0
Lab Hours/Week: 0
Credit Hours/Semester: 3.0

[Distance Learning Attendance/VA Statement](#)
[Textbook Information](#)

COURSE DESCRIPTION

This course is an introduction to the international building codes and the international residential codes, as well as local code requirements.

COURSE COMPETENCIES

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

Module 1

Administration

- state the duties and powers of the Building Official.
- name the permits, Construction Documents, and fees to be paid prior to starting construction.
- state the purpose and effect of a Stop Work Order.
- state the definition of the Certificate of Occupancy.
- interpret relevant terms in the International Residential Code 2003 and explain their definitions.

Building planning

- interpret and use code requirements for locating the building on the lot.
- interpret and follow codes that apply to light, ventilation and heating
- interpret and use codes that apply to minimum room sizes.
- interpret and use ceiling height codes.
- interpret and use codes the rules that apply to sanitation and toilet, bath and shower spaces.
- interpret and use codes the rules that apply to garages and carports.
- interpret and use codes that apply to the emergency escape and rescue openings.
- interpret and use codes that apply to stairways, ramps, exterior exit balconies, guards and doors.
- interpret and use codes that apply to insulation, moisture vapor retarders, protection against decay and termites.
- explain and use flood-resistant construction codes.

Module 2

Foundations

- interpret and use codes applicable to footings.
- interpret and use codes applicable to foundation walls and foundation drainage.
- interpret and use codes applicable to foundation waterproofing and dampproofing.
- interpret and use codes applicable to underfloor space.

Floors

- interpret and use codes applicable to wood floor framing.
- interpret and use codes applicable to floor sheathing.
- interpret and use codes applicable to pressure treated wood floors on ground.
- interpret and use codes applicable to steel floor framing.
- interpret and use codes applicable to concrete floors.

Module 3

Wall construction

- interpret and use wood wall framing codes.
- interpret and use steel wall framing codes.
- interpret and use codes applicable to wood structural panels and particleboard.
- interpret and use masonry construction codes.
- interpret and use codes applicable to exterior windows and glass doors.
- interpret and use codes applicable to interior and exterior wall covering.

Roof-Ceiling construction

- interpret and use wood roof framing codes.
- interpret and use steel roof framing codes.
- interpret and use codes applicable to ceiling finishes.
- interpret and use roof ventilation and attic access codes.

Module 4

Roof Assemblies

- interpret and follow codes related to roof covering materials.
- interpret and use codes related to roof sheathing, underlayment, shingles, fasteners, and flashing.
- interpret and use codes related to clay and concrete tile roofing.
- interpret and use codes related to wood shingle roofing.
- interpret and use codes related to metal shingle and metal panel roofing.
- interpret and use reroofing codes.

Chimneys and fireplaces

- interpret and follow masonry chimney codes.
- interpret and follow codes related to factory-built chimneys.
- explain requirements for an exterior air supply for fireplaces.

REQUIREMENTS

Attendance Policy

The college attendance policy, stated in the college handbook, will be honored. The instructor will provide specific requirements for the course.

Academic Honesty

Students are expected to adhere to the college policy regarding student conduct as stated in the college handbook.

Assignments

Students are expected to complete all assignments and any supplementary exercises designated by the instructor.

EVALUATION STRATEGIES/GRADING

Students must complete all modules, including assignments, projects, labs, and tests. Students must earn at least a "C" in order for the course to serve as a prerequisite and for the course to apply towards a certificate.

Grading Scale

A = 90-100

B = 80-89

C = 70-79

D = 60-69

F = 0-59

Evaluation Method

Tests/Projects (minimum of four total)	12.50% for each Module
Work Attitude	6.25% for each Module
Lab	6.25% for each Module

25% X 4 module grades = 100% Final Grade

Work Attitude is defined as:

- Participation
- Responsibility
- Cooperation
- Professionalism
- Appearance
- Attendance
- Effort
- Self Motivation
- Safety
- Works Independently

ENTRY LEVEL SKILLS

The student must be able to read and solve basic mathematical equations.

PREREQUISITES/CO-REQUISITES

Prerequisites: RDG 031 or equivalent

Co-requisites: None

METHODS OF INSTRUCTION

Lectures, reading assignments, projects, discussions, video presentations, multimedia presentations, and web content are the major teaching methods used in this course. See instructor for specifics.

LAB EXERCISES

See addendum and/or instructor for additional details.