## At Your Pace Online LLC 1383 2nd Ave., Gold Hill, OR 97525 877-724-6150 www.TradesmanCE.com

# Syllabus for Utah 3-Hour Energy Conservation & 2018 IMC Chapters 6-11

**Instructor: Dan Whaley** 

Utah Office of Administrative <u>Rule R156-55a-303b</u> requires contractors with a renewal cycle that ends after January 1, 2020 to "complete at least one of their six continuing education hours in energy conservation".

This 3-hour class provides this one hour of required energy conservation code followed by an exploration of every significant change made to the 2018 International Mechanical Code in Chapters 6 through 11), including any amendments made by Utah to these Chapters. These Chapters cover a wide array of topics the most notable of which are Ducts (in Chapter 6) and Refrigeration (in Chapter 11).

The class uses a cut-and-paste approach as the best way to show what's been eliminated and added. A discussion on why the change was made and how it impacts plumbers and HVAC contractors in the field, based in part on the proceedings of the ICC Technical Committees.

# **Learning Objectives:**

By the end of this class students will be:

- Employ the most up-to-date codes & methods for HVAC regarding Ducts, Combination Fire/Smoke Damper Ratings, High-Volume Large-Diameter Fans, and Hot Water Boiler Expansion Tanks,
- Refresh and clarify regulations and best practices on refrigerants, including Refrigeration Machinery Room Requirements, and Special Requirements for Group A2L Refrigerants;
- Apply energy efficient practices wherever possible; and
- Understand the intent as well the specifics of Utah regulation of HVAC in order to better utilize the resources needed to meet both energy and HVAC code requirements.

## Syllabus:

#### **Total Time: 3 Hours 2 Minutes**

Section/Topic Titles	Section Time
I. Changes to Chapter 6 – Duct Systems	
Including an exploration of Section 601.5 Return Air Openings, 602.2.1 Materials Within Plenums, Plastic Plumbing Piping & Tubing, Phenolic Duct, 607.1.2 Ducts That Penetrate Fire-Resistance-Rated Assemblies, and 607.3.2.3 Combination Fire/Smoke Damper Ratings	1 hour 4 Minutes
II. Changes to 2018 IMC Chapter 7-10 - Combustion Air, Chimneys and Vents, Specific Appliances, Boilers, Water Heaters and Pressure Vessels	- 23 Minutes
Including High-Volume Large-Diameter Fans, Safety and Relief Valve Discharge, and Hot Water Boiler Expansion Tank	
III. Changes to 2018 IMC Chapter 11 - Refrigeration	46 Minutes
Including a review of recent developments in the Phase-Out and Addition of Refrigerants, Table 1103.1, and 1104.2.2 Industrial Occupancies and Refrigerated Rooms, 1105.6 Machinery Room General Requirements; 1106 Machinery Room Special Requirements, and 1106.5 Special Requirements for Group A2L Refrigerant Machinery Rooms	
IV. Overview of the Energy Conservation Code, Key Concepts and Definitions/ Thermal Envelope	17 Minutes
V. Changes to the 2015 Residential International Energy Conservation Code, including Air Leakage Duct Testing, Whole-House Mechanical Fan Efficacy, and ERI Compliance Alternatives	34 Minutes
VI. News & State and National Resources, including the Coronavirus Response, Energy Efficiency in Utah, ASHRAE, and ACEEE	8 Minutes

## **Course Details:**

## **Requirements:**

Our system is offered online and so there are a few requirements in order to complete our course. Our course can be taken with a minimal system that meets all of the requirements, but the learning experience will be best if the system meets the recommendations.

**Required:** Internet capable device. Our course is compatible with smartphones, tablets & traditional computers. It is not necessary that students own this device, merely that they have access to such a device.

Required: Internet connection.

**Recommended:** High-speed internet connection. Our course uses a number of videos and therefore the experience will be better with a high-speed connection.

**Required:** Up-to-date browser.

Recommended: Up-to-date version of Google Chrome.

# **Course Setup:**

The course satisfies the requirement for a minimum of two questions per hour by posing 5 review questions to students based on the material just presented. This presents a way to track student progress and verify student engagement in the material as well as a way for students to use the

information in an interactive way as an additional teaching tool. In order to mark the course as complete students will need to answer all of the guestions attached to the course.

Upon enrolling in our course students will have access for 365 days. After this 365-day period they may contact us to have their enrollment renewed.

Any questions, concerns, or issues that arise while taking the class can be addressed by calling the contact number, writing to the contact email, or sending a message through the "Suggestion Box" included in the course. Any message will receive a response within one business day & usually within one hour.

After finishing all course content, the student will need to fill out the "Completion Questionnaire" so that their completion can be reported to the Utah Uniform Building Code Commission (UBCC).

## **Notification of Class Completion:**

After finishing all course content, the student will need to fill out the "Completion Questionnaire" so that their successful completion of the class can be reported to the UBCC. Students will also be furnished with a completion certificate.

#### Refunds:

All tuition and fees paid by the applicant shall be refunded if the applicant is rejected by the school before enrollment. All tuition and fees paid by the applicant shall be refunded if requested within three business days after the terms and conditions have been accepted (on the enrollment page). All refunds will be returned within thirty business days. After the initial three business days have elapsed, AYPO will happily refund 100% of the purchase price for any course which the student has not yet begun.

Refunds of all or some portion of the purchase price may be available in situations where the student has already started taking the course, but not yet completed it. In general, for individuals who have already completed an entire course, refunds will not be available. Our office staff may be reached at (877) 724-6150 for more information about refund requests.

#### Attendance and Dismissal:

Students who enroll in this class are required to complete 100% of the course to receive credit. Since this class is presented online, enrolled students are not dismissed.

#### **Course Content:**

At Your Pace Online is responsible for the content of this course.