







### **HVACR SYLLABUS**

### **123 HVACR Air Distribution**

Advanced

**Presentation Method:** Mentored, asynchronous, student self-paced (you will have 60 days access to complete the course). This course is delivered through web-based distance learning online, supplemented with: text book reading assignments, exploring and studying other web sites listed in the course resources, and completion of exams and quizzes.

**Prerequisites:** It is recommended that you have a good understanding of HVACR Fundamentals and have a working knowledge those topics prior to enrollment into this advanced course. It is suggested that you have basic word processing skills, reasonable reading and writing abilities, some familiarity with computer usage, and a keen interest in learning. You will need access to a computer that is connected to the Internet and a reasonably current browser.

## **123 HVACR Air Distribution**

(18 instructional hours)

#### **Course Description:**

123 Air Distribution begins with an in-depth discussion of the fundamentals of residential air flow, then turns the focus to residential duct design utilizing the Air Conditioning Contractors of America (ACCA) Residential Duct Systems, Manual D (required textbook) and ACCA Manual T (optional textbook). System selection, system performance characteristics, duct materials, blower performance, air –side devices and duct sizing procedures are covered in detail. This course is recognized for 18 hours of continuing education (CEHs) applicable to NATE recertification, and BPI recognized for 9 continuing education units (CEUs). Module topics are:

- Fundamentals of Air Flow
- Air distribution Systems
- Fundamentals of Air Conditioning Contractors of America (ACCA) Residential Duct Systems, Manual D
- Application of Air Conditioning Contractors of America (ACCA) Residential Duct Systems, Manual D Duct Sizing Procedures
- Application of Air Conditioning Contractors of America (ACCA) Air Distribution Basics for Residential and Small Commercial Buildings, Manual T
- Selection and Sizing of Supply Air Outlets and Return Air Inlets using the ACCA Manual T and Air Distribution Equipment Manufacturer Performance Data for an Example Residential Structure

**Course Outcomes/Objectives:** Each module begins with a description or overview of the learning module and a list of learning outcomes addressed within that module. As you study, focus on the learning outcomes stated.

**Industry Competencies:** All courses are aligned with the National Standards for HVACR education and the Home Performance industry as formulated by numerous industry groups such as ANSI/ACCA Quality Standards, AHRI, HVAC Excellence, BPI, PAHRA, PHCC, RSES, and others.

**Textbooks:** Air Conditioning Contractors of America (ACCA) Residential Duct Systems, Manual D (required textbook) and ACCA Manual T (optional textbook). Cengage: <u>Refrigeration and Air Conditioning Technology</u>, 7<sup>th</sup> Edition.

**Textbook Reading Assignments** are found on the Reading and Terms link in each module. The Reading and Terms link may show more than one edition of a textbook, or more than one textbook. Don't worry, you will want to read the Textbook Assignment that matches the Title and Edition of the book you have, or the book assigned by your Instructor. These reading assignments are not mandatory and are presented as options for your use as supplemental educational materials.

Instructional Assets: Check out the website links and additional resources for each module by clicking on the "Instructional Assets" link. It is your option to familiarize yourself with these instructional assets and take advantage of the positive effect they may have on your performance. If you notice a link that no-longer works, please let us know. Or if you would like us to add a link that you feel would complement the objectives of this module, we'd like to hear from you. Email the URL to links@campussupport.net.

**Instructor:** Your instructor will be assigned at the time that you register for a course. We rely on a pool of qualified instructors to serve our students. You are encouraged to use your instructor; he or she is there to help you be successful.

**Instructor Responsibilities:** Your instructor is a Subject Matter Expert in the topic area of this course. Your instructor has also completed a rigorous Online Faculty Training program. You may read your instructor's brief biography on our web site, under "About/Meet the Crew". Please feel free to send him/her an email with any questions you may have throughout this course. He or she is charged with responding to your communications within 24 hours.

## **Student Responsibilities:**

Online Participation: To be successful, you must move through all modules in this course with some self-discipline. It is recommended that you login and do some work in the course at least once every three days. Each module is designed to require approximately 3 hours of your time. There is more material than you need in each module. More time spent will be to your benefit. Concentrate on the objectives listed at the beginning of the module as you study. The end of module exam will open only after you've viewed at least 85% of the module slides and successfully completed the matching exercise. It's our way of using technology to guide your online learning experience. We want you to master the course content.

**Exam Re-set Guidelines:** Students are expected to be diligent in their studies and preparation prior to taking exams. Exams can be re-set only for two reasons: 1) the student experienced technical problems during an exam, or 2) after completing a course, the student earned a failing grade. If a student fails one or more module exam(s), but still passes the course, there is no reason to re-set an exam. Students may email their instructor with a request to re-set an exam explaining the reasons. Instructors will re-set a technical problem exam if they verify that the student could not complete the exam. Instructors will re-set a failed exam, after a course completion, if the student demonstrates that they have performed sufficient review of the module. Final exams will not be re-set.

**Spelling / Grammar:** This is not a course on English or writing, however, spell check is a good thing. If the instructor cannot understand your communications he/she will contact you. Do as well as you can, remember communication is a key point for dealing with your customers on the job as well.

Academic Honesty: Don't cheat! Actually, who cares? If you cheat during this course that means that you haven't learned the content. If you haven't learned the content that means that you will not be able to perform on the job. If you can't perform on the job either no one will hire you (we assume that is why you are taking the course) or someone will fire you. Who loses?

Academic honesty is at the core of every learning community. You are expected to represent yourself truthfully in the virtual learning environment. Access to your course is protected by a username and password. It is expected that you will protect your user name and password and not share it with any other individual.

Presenting the words, ideas, or expression of another as your own in any form is plagiarism. If you are uncertain about proper citation of sources, you should ask your instructor for direction. Ignorance is no excuse. There is **no tolerance** for cheating or plagiarism in our online learning community. No credit will be awarded to an assignment or discussion that has been proven to be plagiarized.

# **Grading:**

Category	Points Possible	Points Per Module
Module exams	600	100
Final exam	200	N/A
TOTAL:	800	
Final Grade Distribution		
75% - 100%	Pass	
0% - 74%	Fail	

**Certificate of Completion:** Successful completion of this course is accomplished by achieving 75% or higher. If you successfully complete the course and submit the required End of Course Survey, you will receive a course Certificate of Completion by email.

For questions or to request additional information please contact Student Services by emailing mentor@campussupport.net