

LANEY COLLEGE
Environmental Control Technology
Spring Semester

Course: HVAC Installation Practices

Course Number/code: ECT 018 L20444

Time: Thursday 6:00 PM – 10:00 PM

Instructor: Nick Kyriakopedi

Office: B151

Office hours: Thursdays 5:30 to 6:00pm

Phone: (510) 464-3292

Units: 1 unit.

Course Description: Introduction to practical applications on residential and light commercial HVAC systems: Including safety, Title 24 requirements, proper sizing and installing electrical and mechanical devices such as, HVAC equipment, ventilation, flue pipes, (flex, and square and rigid duct pipes).

Student Outcomes:

1. Demonstrate safe handling of sheet metal and tools used for cutting, bending, etc.
2. Demonstrate proper and safe techniques for installing ducts and pipes.
3. Demonstrate proper techniques for measuring, cutting and threading black pipe.
4. Explain state and local applicable code requirements for proper installation practices.

Recommended Preparation: ECT 016

Text: Modern Refrigeration and Air Conditioning , Althouse, Turnquist and Bracciano Pub. Goodheart Wilcox Ed. 1996

Supplies Needed: Pencils, colored felt tip pens, graph paper with 1/8" squares, circle template, line paper, safety glasses, gloves, medium flat blade and Philips screwdrivers, 1/4" and 5/16" nut drivers, two adjustable wrenches one 8" and one 12" and tool box or pouch.

Recommended Tools: Power drill, Sheet Metal Cutters, Sheet Metal Bender and Hammer

Topics: Chapters 19, 20, 23, 24

1. Air Conditioning and Heating Installation Practices
2. Duct Sizing
3. Tools and Instrumentation
4. Title 24
5. Types of ducts and materials

Evaluation: The following classroom work and projects will be evaluated and graded.

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| 1. Mechanical and Sheet Metal Installation | 200 | 100% – 90% A |
| 2. Sheet Metal and Ducts Connecting materials | 200 | 90% - 80% B |
| 6. Class Participation | 350 | 80% - 70% C |

5. Mid term examination	100	70% - 60% D
7. Final examination	150	60% - 50% F
Total points:	1000	

Safety Test: Students taking this course are required to take the safety test the first day of instruction.

Attendance: Students may be dropped from the course if the number of absences exceeds two days worth of class meetings. However, extenuating circumstances may warrant consideration.

Note: During class please shut off all cell phones and no eating or drinking. You will be given one break of fifteen minutes during class.

Please Note: This class meets for only 8 weeks.

On this short term course, if you miss 1 class your grade will drop one grade point, if you miss 2 classes your grade will drop 2 points and if you miss 3 classes you will have to repeat the course no exceptions.