

LANEY COLLEGE
Environmental Control Technology
Mechanical and Electrical Codes
Spring – 2010

Course: Mechanical and Electrical Codes
Course Number: ECT 211 Course code: L1 20451
Time: Tuesday 8:30 PM - 9:50 PM
Term Course: 18 weeks Units: 1.5
Instructor: Joseph Tanios
Office: LG -241
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Course Description: This course will provide a general introduction to codes, regulations, and standards that govern the design, installation and operation of Air Conditioning, Heating, Ventilation, and Refrigeration systems. Students will develop an understanding of the code through its adoption and enforcement by local building authorities.

Objective: Students will be able to understand and explain code application and enforcement mechanisms. Identify common model codes and standards from organizations such as ICBO, NFPA, ANSI, and describe which codes are applicable in California.

Recommended preparation: Basic skills in reading, writing, communication, and electrical and mechanical knowledge.

Text: 1. Code Check Electrical: kardon, Hansen, and Casey; Fourth Edition
2. Code Check HVAC: Kardon, Hansen, and Casey; Second Edition
3. Uniform Mechanical Code, National Electrical Code and Uniform Building Codes are desired
But not necessary. (Optional)

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

1. Attendance and Class participation	20%
2. Homework	10%
3. Midterm	30%
4. Final	40%

Total: 100 %

Grading:

91-100%	A
81-90%	B
71-80%	C
61-70%	D

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

Student must attend class dates indicated in the schedule below on time and follows class etiquette. Please keep cell phones turned OFF or on mute mode during class session. It is the student's responsibility to add or drop class on time to avoid getting "F" or "FW" at the end of the class.

Due to brevity of the class please read session topics before attending class.

<u>Session:</u>	<u>Date:</u>	<u>Topics:</u>
1	1-26-10	General Introduction and Class Outline Content
2	2-02-10	Key & Examples, Abbreviations and Glossary
3	2-09-10	Appliance Access, Location and Ohm's Law (Instructor to verify enrollment due)
4	2-16-10	Lecture Appliance Installation and Grounding
5	2-23-10	Electrical Heat and forced Air
6	3-02-10	Air Conditioning and Bonding, and Equipment Grounding
7	3-09-10	Ground Fault Circuit Interrupters (GFCIs) and Heat Pumps
8	3-16-10	Ground, Arcing and Faults
9	3-23-10	Ducts, Combustion Air and service equipment
10	3-30-10	(Midterm)
11	4-06-10	No Class Spring Recess
12	4-13-10	Service and sub-panels, Exhaust and Ventilation, Temporary Wiring
13	4-20-10	Boilers, Services Calculation and Multiwire Circuits (Instructors attendance verification due)
14	4-27-10	Water Heater, Branch Circuits for Bathrooms, Laundry and Kitchens,
15	5-04-10	Wall Floor Furnaces and Conductor Ampacity, Oil & Propane, Cables, Protection and Voltage Drop
16	5-11-10	Natural Gas Piping, Conduit and Tubing Fireplaces, Wood Stoves and Chimneys
17	5-18-10	Oil and Gas Venting, Boxes and Appliances, Swimming Pools and Lighting
18	5-25-10	(final exam)

Should you have any issues or concerns, and like meet with me, please schedule a meeting by phone or email. I will make myself available to meet and discuss.

Thank you,
Joseph