

**LANEY COLLEGE**  
**Environmental Control Technology**  
Spring Semester -2010

**Course:** Indoor Air Quality

**Course Number/code:** ECT 213, 21512

**Time:** Tuesdays - 9:00 PM –9:50 PM

**Instructor:** Hadley Hartshorn

**Office:** B151

**Units:** 1 unit

**Phone:** (510) 464-3292

**Course Description:**

Discussion to the terminology, measurement and study of the issues that compromise and/or improve indoor air quality. An introduction to building indoor air quality standards and maintenance procedures associated with comfort and health problems faced by workers and managers. A team oriented problem based exercise in the measurement of indoor air quality will be completed.

**Outcomes:**

1. Develop an understanding of factors that affect indoor air quality
2. Develop an understanding of techniques that improve indoor air quality.
3. Understand how to investigate indoor air quality concerns.
4. Develop an understanding of the ASHRAE 62.1 standard

**Prerequisites:** none

**Text:** “Indoor Air Quality”, John L. Berggren, LAMA Books, ISBN 0-88069-022-4

**Supplies Needed:** Pencils, paper

**Recommended Tools:** none

**Topics:**

<u>Week</u>	<u>Date</u>	<u>Day</u>	<u>Text Chapter</u>	<u>Unit Description</u>
1	1/26/2010	Tuesday	-	Overview of IAQ Issues
2	2/2/2010	Tuesday	1	IAQ and the Technician
3	2/9/2010	Tuesday	2	Air Contaminants

4	2/16/2010	Tuesday	3	Problems in the HVAC System
5	2/23/2010	Tuesday	4	Air Filters and Air Cleaners
6	3/2/2010	Tuesday	5	Other Problems that Affect IAQ
7	3/9/2010	Tuesday	6	Baseline Survey
8	3/16/2010	Tuesday	1-6	-----MIDTERM -----
9	3/23/2010	Tuesday	-	-----Problem Based Exercise -----
10	3/30/2010	Tuesday	7	IAQ Survey
11	4/6/2010	Tuesday	8	----- NO CLASS -----
12	4/13/2010	Tuesday	9	Test Equipment
13	4/20/2010	Tuesday	-	Finding Solutions
14	4/27/2010	Tuesday	-	ASHRAE 62.1-Part 21
15	5/4/2010	Tuesday	-	ASHRAE 62.1-Part 2
16	5/11/2010	Tuesday	-	ASHRAE 62.2
17	5/18/2010	Tuesday	-	Problem Based Review
18	5/25/2010	Tuesday		----- FINAL EXAM -----

**Evaluation:** Grades for the class will be assigned in accordance with the number of points earned for various class activities. The maximum number of points for each activity will be assigned as indicated below.

1. Class Attendance and Participation	30 points
3. Midterm Assessment	20 points
4. Problem Based Exercise	20 points
5. Final Exam	30 points

**Total: 100 points**

**Safety:** Students are expected to observe safety practices typical for a classroom environment

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

**Note:** Cellular phone use is not allowed in class.