## LANEY COLLEGE Environmental Control Technology

Blueprint Reading and Interpretation Spring - 2010

| Course:        | Blueprint Reading and Interpretation            |              |            |
|----------------|---|--------------|------------|
| Course Number: | ECT 012 L1802                                   | Term Course: | 17 weeks   |
| Time:          | Tuesday 7:00 PM - 8:20                          | ) PM         | Units: 1.5 |
| Instructor:    | Joseph Tanios                                   |              |            |
| Office:        | LG-241  |              |            |
| Phone:         | (510) 615-5537                                  |              |            |
| Email:         | Tanios 99@hotmail.com OR jtanios@oaklandnet.com |              |            |

Course Description: This course will introduce students to basic techniques for reading and interpreting typical design documents, drawing, and specifications. Emphasis will be given to interpreting HVAC mechanical and electrical drawings.

Course Objectives: Students will be able to read and interpret blueprints and understand the design documents and be familiarized with project specifications.

Recommended Preparation: ECT 210, English and Math

Text: Frank Miller, Wilma Miller and Joseph Moravek <u>Blueprint Reading for HVAC</u>, Delmar Publishers, Third Edition.

Supplies needed: Pencils, colored felt tip pens, graph paper with 1/8" squares, calculator, Architectural and Engineering ruler.

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

| 1. Read, write and interpret drawings and specifications | 10%         |
|--|-------------|
| 2. Attendance  | 20%         |
| 3. Homework  | 10%         |
| 4. Midterm   | 30%         |
| 5. Final   | 30%         |
| Total: 1   | 100 %       |
| Grading:   | 91 - 100% A |
| Ĩ  | 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 consideration. Students must attend class dates indicated in the schedule below on time and follow class room etiquette. Please turn cell phones **OFF** or on mute mode during class session.

It is the student's responsibility to read assigned study chapter and return homework on time to the instructor.

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.

| Session: | Date:   | Topics:   |
|----------|---------|---|
| 1        | 1-26-10 | General Introduction and Class Outline Content  |
| 2        | 2-02-10 | Basic Math, Measurement and scale.  |
| 3        | 2-09-10 | Safety, Rules for Technicians on the Job, and Federal Law   |
| 4        | 2-16-10 | Linear Measurement  |
| 5        | 2-23-10 | Angular Measurement in Circle   |
| 6        | 3-02-10 | learning to use the Architect's Scale Rule  |
| 7        | 3-09-10 | Learning to use the Engineer's Scale  |
| 8        | 3-16-10 | Standardized abbreviations and symbols and Working Drawing  |
| 9        | 3-23-10 | Drawings and How are created  |
| 10       | 3-30-10 | Midterm Exam,   |
| 11       | 4-06-10 | spring recess   |
| 12       | 4-13-10 | Section Elevations and Detail Drawings<br>Span Types and Weights of Lines specifications and who uses |
| 13       | 4-20-10 | Construction Drawings. Little Blocks<br>Orthographic Projection and Oblique Drawings                  |
| 14       | 4-27-10 | Reading Architectural Plans and Ductwork Work   |
| 15       | 5-04-10 | (Instructor attendance verification)<br>Reading Architectural and Electrical                          |
| 16       | 5-11-10 | Reading Plumbing Plans  |
| 17       | 5-18-10 | Class review and Introduction to load calculation Lighting  |
| 18       | 5-25-10 | Final Exam  |

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

Thank you, Joseph