

LANEY COLLEGE
Environmental Control Technology
Fall semester

Course: Advanced Building Commissioning

Course Number/code: ECT 026

Short Term Course: 8 weeks

Time: Saturday 8:00 AM – 12:00 PM

Instructor: Chuck Frost

Office: B151

Units: 1 unit.

Phone: (510) 464-3292

Course Description: This course will cover the building commissioning, re-commissioning and retro-commissioning process from the conceptual design, through the construction process, acceptance testing, to the training of maintenance and operations personnel.

Recommended Preparation: Fundamentals of Commissioning, English, Math, all ECT courses, Electricity and Instrumentation, Computer Information Systems, Fundamentals of DDC, Advanced DDC, Testing Adjusting and Balancing and HVAC system design

Text: Building Commissioning (Rebuild America Guide Series) provided by Department Of Energy.

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, two adjustable wrenches one 8" and one 12", combination wire cutter, stripper and crimper, one roll of electrical tape, wire connectors, fuse puller, multi-meter, pocket thermometer and tool box or pouch.

Topics: Chapters 1 thru 16

1. Fundamentals of heating, ventilation and air conditioning
2. Instruments, tools and materials
3. Basic HVAC control systems

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

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| 1. Drawing sequence of operation diagram | 200 points |
| 2. Commissioning process for building systems | 500 points |
| 3. Proper installation procedures | 200 points |
| 4. Safety procedures | 100 points |

Total: 1000 points

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.