

Common Course Outline
AIRC 214
Residential Estimates and Sales
3 Semester Hours

The Community College of Baltimore County

Description

AIRC 214 - 3 credits – Residential Estimates and Sales explores the procedures used to calculate costs for residential and commercial HVAC installations and services. The course emphasizes both hand calculations and computer programs to estimate accurate charges. Students develop skills necessary for success in sales of HVAC systems, parts, service and new installations.

3 credits: 3 lecture hours per week

Prerequisite: AIRC 115, AIRC 205, and AIRC 210 or approval of program coordinator

Overall Course Objectives

Upon completion of this course the student will be able to:

1. use load calculation information to select proper size equipment;
2. develop techniques to price equipment and establish bids;
3. arrange subcontract work as a portion of installation package;
4. formulate sales techniques for small and medium size companies;
5. develop prospecting techniques for new business;
6. calculate cost using the RS MEANS™ calculation technique;
7. determine sheet metal, piping, equipment and electrical portions of a residential or commercial project;
8. explore advertising needs of small business;
9. develop short and long-term effective business plans; and
10. create an effective sales tracking tool for focused selling.

Major Topics

- I. Manual cost estimation techniques
- II. Computerized cost estimation techniques
- III. Customer proposal development
- IV. Customer relations
- V. Sales careers
- VI. Service contracts and how to assure constant cash stream
- VII. Commercial marketing
- VIII. Associations and networking
- IX. Sales tasks
- X. Comparative fuel scenarios

XI. Hybrid HVAC systems and estimates

Course Requirements

Grading/exams: Grading procedures will be determined by the individual faculty member and will be provided on the first day of class.

The following will be required for this course:

1. Approved practical project or written paper
If a written paper is assigned, the following will apply:
 - a. Topic of the paper will be selected by the student and should relate to the subject material of the course.
 - b. The paper should be six (6) to eight (8) pages in length, typewritten, and double-spaced. It should include in addition to the six (6) to eight (8) pages of text, an author and title page and bibliography utilizing a minimum of three reference resources excluding classroom materials.
 - c. All papers are due when 80% of the class sessions are completed.
2. Midterm exam
3. Comprehensive final
4. Minimum of three (3) classroom assignments
5. Minimum of four (4) homework assignments
6. Class discussion and participation

Other Course Information

This is a Heating, Ventilating, Air Conditioning, and Energy Technology program elective.