

MARTIN COMMUNITY COLLEGE
COURSE SYLLABUS
Semester/Year: Spring 2011

COURSE NUMBER: AHR 235 01	INSTRUCTOR: Don Golden
COURSE TITLE: Refrigeration Desgin	OFFICE NO: Building 3 Room 19-A
CREDIT HOURS: 3	OFFICE/VIRTUAL HOURS: 10:00-12:00 T,Th
CONTACT HRS/WK: 4 (2 Class, 2 Lab)	PHONE NO: 252-789-0271
PREREQUISITES: AHR 110	FAX: 252-792-0826
COREQUISITES: None	E-MAIL: dgolden@martincc.edu

COURSE DESCRIPTION:

This course covers the principles of commercial refrigeration system operation and design. Topics include walk-in coolers, walk-in freezers, systems components, load calculation, equipment selection, defrost systems, refrigeration line sizing, and electric controls. Upon completion, students should be able to design, adjust, and perform routine service procedures on a commercial refrigeration system.

PROGRAM LEARNING OUTCOMES:

1. Install, service, and troubleshoot air conditioning, heating and refrigeration systems and associated components.
2. Select and properly use a variety of air conditioning, heating, and refrigeration tools and equipment.
3. Prepare and interpret electrical, mechanical, and piping drawings.

COURSE LEARNING OUTCOMES:

1. Diagnose the malfunctions of a commercial refrigeration system.
2. Isolate the malfunctions of the commercial refrigeration system.
3. Estimate the cost of repairs.

REQUIRED TEXTBOOKS:

Althouse, Andrew, Carl Turnquist and Alfred Bracciano, (2000) Modern refrigeration and air conditioning. Tinley Park, IL: Goodhart-Willcox Co. ISBN 1-56637-724-2

SUPPLEMENTAL RESOURCES:

Basic hand tools from first year. Also a recovery unit, charging scale, vacuum pump, and leak detector.

LEARNING/TEACHING METHODS:

Labs working on refrigeration equipment, DVD power point, lecture, and outside reading assignment.

ASSESMENTS/METHODS OF EVALUATION:

1. Outside Reading Assignments -20%
2. Projects- 20%
3. Quizzes-20%
4. Tests-20%
5. Final Exam-20%

GRADING POLICY:

Martin Community College's Commercial Refrigeration curriculum uses the 7- point scale in its grading system.

Letter Grade	7-Point
A	93-100
B	85-92
C	77-84
D	70-76
F	69 and below

COURSE OUTLINE:

Week 1-2 Chapter 13 Commercial Systems
Week 3-4 Chapter 13 Commercial Systems
Week 5-6 Chapter 14 Commercial Systems-Applications
Week 7-8 Chapter 14 Commercial Systems-Applications
Week 9-10 Chapter 15 Servicing and Installing Commercial Systems
Week 11-12 Chapter 15 Servicing and Installing Commercial Systems
Week 13-14 Chapter 16 Commercial Systems-Heat Loads and Piping
Week 15-16 Review of Chapters and Exams

STUDENT ATTENDANCE POLICY:

Regular and prompt attendance is expected in class. When a student is absent for reasons of illness or emergency, he/she is responsible for course work missed and should consult with the instructor at the next meeting of the class. Class notes should be obtained from a classmate. Attend class regularly. A strict attendance policy is necessary since many of the projects and learning will occur during class time. Attendance means staying for the entire class period, not leaving. The maximum number of hours that may be missed is based on the 20% rule. If a student misses more than 20% of class room hours they will receive an F. Anyone unable to attend a course at least 80% of the time, should reconsider taking the course. Students unwilling or unable to finish the course should withdraw. This is the students' responsibility. Punctuality will also be considered in grade assignment. Chronic tardiness is rude. It is also disruptive to the class and limits the student's opportunity to learn. If the student is unable to be punctual, he/she should consider restructuring his/her schedule in order to attend, or withdraw. Chronic lateness will be considered as nonattendance. In order to drop this class, the student must initiate the process rather than simply disappearing from class.

COURSE POLICIES:

1. An absence up test day requires a written note from your doctor in order to take a make test.
2. You have three (3) days to make up the test.
3. After three (3) days you will be given a 0 on the test you missed.

REQUEST FOR EXCUSED ABSENCES FOR RELIGIOUS OBSERVANCES*

***In compliance with G.S. 115D-5, MCC policy permits a student to be excused, with the opportunity to make-up any test or other missed work, a minimum of two excused absences per academic year for religious observances required by the student's faith. The policy limits the excused absences to a maximum of two days per academic year.**

Students who wish to be excused for a Religious Observance required by their faith must complete and submit a request form to the instructor(s) prior to the census date of each class. The ***Request for Excused Absences for Religious Observances*** form can be picked up from Student Services. This does not supersede the college-wide attendance policy as outlined in the college catalog or syllabus, with the exception of a reasonable accommodation for the make-up of missed course work.

If you cannot reach your instructor, you may contact Dr. Phyllis Broughton, Dean of Academic Affairs and Student Services at (252)789-0246 by phone, pbroughton@martincc.edu by e-mail, or in person at her office in Building 2, Room 33.

To access the Martin Community College Career Catalog for policies and curriculum requirements, please go online to www.martincc.edu.

If you have a need for a disability-related accommodation, please notify the Student Services counselor at (252) 789-0 293.