



STEEL CENTER
FOR CAREER AND TECHNICAL EDUCATION

SYLLABUS

Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC-R): CIP 47.0201 Mr. Brian McCrory • 2021-2022

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Program Description:

HVAC-R (47.0201): An instructional program that prepares individuals to apply technical knowledge and skills to install, repair and maintain commercial and domestic heating, air conditioning and refrigeration systems. Instruction includes theory and application of basic principles involved in conditioning of air (cooling and heating); filtering and controlling humidity; operating characteristics of various units and parts; blueprint reading; use of technical reference manuals; the diagnosis of malfunctions; overhaul, repair and adjustment of units and parts such as pumps, compressors, valves, springs and connections; and repair of electric/electronic and pneumatic control systems.

Textbooks:

NCCER core curriculum: 5th ed., 2015 Pearson Education Inc., *Blueprints and Plans for HVAC*. 2nd ed. Clifton Park: Delmar Learning, 1996. Print.

Silberstein, Eugene. *Residential Construction Academy: HVAC*. 2nd ed. Clifton Park, NY: Cengage Learning, 2012. Print.

Industry Certifications:

- Mainstream Engineering Certifications:
 - HVAC Technician Certification EPA Clean Air Section 608 Universal
- R-410A Technician
- OSHA-10 Hour Construction Safety Training through Career Safe online

Assessment and Evaluation:

All tests, quizzes and projects will be graded using Steel Center's grading scale:

93-100	A
85-92	B
77-84	C
70-76	D
70-0	E

Measures of Achievement:

1. **Work Ethics (daily grade):** This grade accounts for 34% of a student's total grade. The scale is a 0-10 base on preparation, participation, behavior, staying on task and proper dress. (Including safety glasses)
 - a. **Absences will result in a 0 out of 10. Upon returning to school students may request to make up the work missed to obtain an 8 out of 10 for the daily grade**
2. **Skills Grade (task grade):** This grade accounts for 33% of a student's total grade and is comprised of the evaluation and recording of lab activities the students are assigned each grading period.
3. **Knowledge Grade (test and assignment grade):** This grade accounts for 33% of a student's total grade. The knowledge grade will include but not limited to homework, quizzes, time cards, weekly logs, midterm, and final exams.

Rules and Regulations:

Student Handbook rules and regulations supersede all classroom rules.

1. Proper Attire
 - a. All students must be dressed in school appropriate attire in the class room.
 - b. In the shop, students must have: boots, jeans, safety glasses, and gloves.
2. Present and Prompt (time management)
 - a. Be on time to class and stay in class
 - b. Stay on task
3. Professional
 - a. Be respectful to everyone and every thing

- b. Model appropriate behavior
- 4. Productive (follow directions)
 - a. Prompt compliance
 - b. Thoroughness in following directions
- 5. Procedures
 - a. Preparedness, safety, tools, equipment, instruction, assignments and clean up.

Consequences to these Rules and Regulations:

- 1. Verbal Warning.
 - a. Redirection based on teacher discretion
- 2. Point Deductions of Daily Grade (per category).
 - a. 1 point if minor
 - b. 2 points if major
- 3. Parental Consultation
 - a. Phone call if minor
 - b. Parent teacher conference if major
- 4. Office Referral
 - a. Discipline based on Administration discretion.

STEEL CENTER for CTE

HVAC-R

MR. McCrory



SYLLABUS AND PROGRAM RULES

ACKNOWLEDGEMENT SHEET

FOR STUDENT:

With my signature, I acknowledge that I am fully aware of the rules, procedures, and expectations for my CTE program of study. I understand that my signature indicates awareness and not necessarily approval.

Student name: _____

Student signature: _____

Date: _____

FOR PARENT/GUARDIAN:

With my signature, I acknowledge that I am fully aware of the rules, procedures, and expectations for my son's or daughter's CTE program of study. I understand that my signature indicates awareness and not necessarily approval.

Parent/Guardian signature: _____

Parent/Guardian signature: _____

Date: _____

Note: This document shall be filed and maintained by program instructors. Unsigned or unreturned signature sheets are noted and filed accordingly.