

STATE UNIVERSITY OF NEW YORK
COLLEGE OF TECHNOLOGY
CANTON, NEW YORK



MASTER SYLLABUS

HVAC 208 – EPA Refrigeration Certification

CIP Code: 47.0201

Created by: Jay Simmons

Updated by:

Canino School of Engineering Technology

Department: HVAC Trades

Implementation Semester/Year: Spring 2027

A. TITLE: EPA Refrigeration Certification

B. COURSE NUMBER: HVAC 208

C. CREDIT HOURS (Hours of Lecture, Laboratory, Recitation, Tutorial, Activity):

# Credit Hours per Week	1
# Lecture Hours per Week	1
# Lab Hours per Week	0
Other per Week	

D. WRITING INTENSIVE COURSE:

Yes	
No	X

E. GER CATEGORY: **None:** ☒ **Yes:**

F. SEMESTER(S) OFFERED:

Fall	
Spring	X
Fall and Spring	

G. COURSE DESCRIPTION:

This course will introduce students to EPA requirements for safe handling of all refrigerants. Students will be able to obtain EPA 608 certification and certification to handle low GWP refrigerants.

H. PRE-REQUISITES: NONE
CO-REQUISITES: NONE

I. STUDENT LEARNING OUTCOMES:

Course Student Learning Outcome [SLO]	Program Student Learning Outcome [PSLO]	GER	ISLO & Subsets
a. Demonstrate knowledge of EPA Standards and regulations			5 – Industry, Professional, Discipline Specific, Knowledge and Skills

b. Demonstrate knowledge of Low GWP Refrigerants and proper handling			5 – Industry, Professional, Discipline Specific, Knowledge and Skills
c.			
d.			
e.			

KEY	<u>Institutional Student Learning Outcomes</u> <u>[ISLO 1 – 5]</u>
ISLO #	ISLO & Subsets
1	Communication Skills Oral [O], Written [W]
2	Critical Thinking <i>Critical Analysis [CA], Inquiry & Analysis [IA] , Problem Solving [PS]</i>
3	Foundational Skills <i>Information Management [IM], Quantitative Lit, /Reasoning [QTR]</i>
4	Social Responsibility <i>Ethical Reasoning [ER], Global Learning [GL], Intercultural Knowledge [IK], Teamwork [T]</i>
5	Industry, Professional, Discipline Specific Knowledge and Skills

J. APPLIED LEARNING COMPONENT:

Yes	X
No	

If yes, select [X] one or more of the following categories:

Classroom / Lab	X	Community Service	
Internship		Civic Engagement	
Clinical Practicum		Creative Works/Senior Project	
Practicum		Research	
Service Learning		Entrepreneurship [program, class, project]	

- K. TEXTS: ESCO EPA 608 Study Guide
- L. REFERENCES: N/A
- M. EQUIPMENT:
- N. GRADING METHOD: A-F
- O. SUGGESTED MEASUREMENT CRITERIA/METHODS:
- P. DETAILED COURSE OUTLINE:
 - I. EPA 608 Standards
 - A. Core Refrigeration Knowledge
 - B. Type 1 Refrigeration
 - C. Type 2 Refrigeration
 - D. Type 3 Refrigeration
 - II. Low GWP Refrigerants and Proper Handling
 - A. Low GWP Refrigerants and how they differ from traditional
 - B. Extra steps need to handle low GWP Refrigerants
- Q. LABORATORY OUTLINE: