Withlacoochee Technical College
2020-2021 Syllabus
HEATING, VENTILATION, AIR-CONDITIONING/REFRIGERATION (HVAC/R)

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Program Length:

This program is 1350 hours with the first 4 Occupational Completion Point (OCP) courses being 250 hours each and the final OCP course being 350 hours. Students need to complete each OCP course within the allotted time frame, otherwise various areas could be affected such as Financial Aid.

Note: This is NOT a self-paced course.

Program Description:

This program focuses on the understanding of the heating, air-conditioning, refrigeration and ventilation industry and demonstrates elements of the industry such as repairing equipment, time management, invoicing, technical and production skills, the underlying principles of technology, labor issues, community issues, and health, safety, and environmental issues.

Progress:

The class will work through Learning Guides which incorporate both classroom bookwork and hands-on activities that are completed in the lab area. Progress is tracked on a wall mounted Pacing Chart which all students maintain weekly. IT IS IMPERATIVE TO STAY ON PACE, AS THIS HAS A BIG IMPACT ON FINANCIAL AID.

All standards must be met to complete the program. Students do not progress in this program at the same pace. There are minimum pacing requirements in order to complete this program on time and prepare for the certification exams.

Certifications:

HVAC Excellence Employment Ready: Heat Pumps, Air Conditioning, and Electrical Theory
EPA 608
OSHA 10 (optional)
NATE ICE (optional)

Accreditation:

This program is accredited by HVAC Excellence.

Grade Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100-90</td>
</tr>
<tr>
<td>B</td>
<td>89-80</td>
</tr>
<tr>
<td>C</td>
<td>79-70</td>
</tr>
<tr>
<td>D</td>
<td>69-60</td>
</tr>
<tr>
<td>F</td>
<td>Below 60</td>
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</tbody>
</table>
How You Are Evaluated:

You will receive a grade on your Learning Guides, Attendance, and Employability Skills. These culminate to make up your total grade.

*NOTE: Attendance is 30% OF YOUR OVERALL GRADE and is usually the reason the reason students earn a low grade. Being here, much like showing up for work, is highly imperative.

Florida Department of Education Occupational Completion Points:

<table>
<thead>
<tr>
<th>OCP</th>
<th>COURSE NUMBER</th>
<th>COURSE TITLE</th>
<th>LENGTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>ACR0000</td>
<td>Introduction to HVAC/R</td>
<td>250 Hours</td>
</tr>
<tr>
<td>B</td>
<td>ACR0001</td>
<td>HVAC/R Fundamentals</td>
<td>250 Hours</td>
</tr>
<tr>
<td>C</td>
<td>ACR0012</td>
<td>HVAC/R Service Practices</td>
<td>250 Hours</td>
</tr>
<tr>
<td>D</td>
<td>ACR0013</td>
<td>HVAC/R Intermediate Service Practices</td>
<td>250 Hours</td>
</tr>
<tr>
<td>E</td>
<td>ACR0044</td>
<td>HVAC/R Advanced Service Practices (formerly ‘Air-Conditioning, Refrigeration and Heating Technician’)</td>
<td>350 Hours</td>
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<tr>
<td></td>
<td>OR</td>
<td>OR</td>
<td>OR</td>
</tr>
<tr>
<td></td>
<td>ACR0045</td>
<td>HVAC/R Advanced Commercial and Industrial Service Practices (formerly ‘Refrigeration Mechanic’)</td>
<td>350 hours</td>
</tr>
</tbody>
</table>

Physical Requirements:

In the program, much like the trade, you will be required to stand for long periods, kneel down to ground level, be in direct sunlight on concrete for hours, be inside freezing boxes, need to exert yourself when lifting items weighing 70-80 pounds, carry ladders, use wrenches, etc.

You will need to have a good back and be able to handle hot working conditions in order to succeed in this trade.

Safety:

Safety is taken very seriously and there are a number of ways to get hurt if you don't follow proper safety precautions. Safety glasses must be worn while in the lab area or outside. Long pants are a must for students who need to work in the lab as we will be brazing and soldering. Gloves are required because we will be working with refrigerants, and thought should be given to when and where you wear them. The program Safety Guidelines must be reviewed in class prior to entering the lab for the first time. Also, the last page must be signed and dated.

Discipline:

Refer to the WTC Student Handbook for discipline information. Program specific rules and expectations will be discussed in class.
Attendance:
Refer to the WTC Student Handbook for attendance information.

Dress Code:
Jeans and short-sleeved shirts are generally accepted in this class, and a jacket will be needed further along in the program for working on sub-zero temp equipment. Shorts are not acceptable for working in the lab due to working extremes. Closed-toed shoes or boots are required; flip flops or crocs are never allowed. See WTC Student Handbook for more details.

Housekeeping Tasks:
At the end of every day, we have a designated clean up time. Everyone will participate without any distinctions to maintain a clean, organized classroom and shop. Not helping out will result in a "0" for your Professionalism grade for that day.

Recommended Resources and Websites:
There are a few apps that you will need to download on your phone when in the program. These are small and simple, but crucial to taking proper readings on equipment. We have a small library of various reference books that you will be using as well for researching information.

Florida Department of Education Heating Ventilation Air-Conditioning Refrigeration Curriculum Frameworks

Unique to Program:
You will be required to have a drivers’ license in this trade in order to drive a service truck. A safe driving record is important to have, and most commercial insurance companies require a clean record in order to employ someone. A lot of companies now also require drug screening and testing. While here, you will earn an EPA card that is used in the trade. You cannot gain employment without it, and it allows you to purchase and work with refrigerants. You will also be required to earn 3 Industry Certifications while here, and these make gainful employment much easier.