ACR 170/5001: Heat Load/Duct Design (87475)
Spring/2019/MW/3:00-3:45/In-person/DOW Room 101/100

Instructor Contact Information
Instructor Name/Title: Doug Adams/Professor
Office Hours: Monday thru Thursday 8:30/2:00/Appointment
Office Location: Devert Owens, Room 101
Phone Number: 606-487-3300
Email Address: adams.doug@kctcs.edu

Course Information
Introduces the fundamentals needed to calculate heat gain and heat loss, thereby determining air conditioner/furnace size. This information will be used to calculate the correct duct size. Procedures to layout a duct system as outlined in ACCA MANUAL D are presented.

Textbook Information and Supplies
REFRIGERATION AND AIR CONDITIONING TECHNOLOGY, 8th Edition

Course Competencies/Student Learning Outcomes
1. Practice/observe safety practices/techniques.
2. Introduces the fundamentals needed to calculate
3. heat gain
4. heat loss
5. determine air conditioner size
6. determine furnace size
calculate the correct duct size & layout a duct system

Course Structure, Evaluation, and Grading Methods
Learners are expected to be prepared for class (notebook, textbook, lab book, pen/pencil, calculator, hand tools*). Cell phones are to be on silent mode and not used during class. No food or drinks are allowed in class.

*Students are expected each day to bring a tool kit consisting of basic hand tools into lab. Sharing of tools will not be permitted.
A tool list will be provided by the instructor.

Initiative/Attitude – THIS COURSE WILL CONSIST OF BOTH PLANNED CLASSES AND INFORMAL TEACHING AND LIVE WORK. YOU CAN LEARN MUCH BY YOUR OWN OBSERVATION, IF YOU KEEP YOUR MIND ACTIVE AT ALL TIMES. HOW MUCH YOU LEARN WILL BE ENTIRELY UP TO YOU. YOU WILL BE GIVEN THE OPPORTUNITY ---- YOU MUST TAKE ADVANTAGE OF IT YOURSELF. THE
PLANNED INSTRUCTION WILL CONSIST OF CLASSES, DEMONSTRATIONS AND OTHER LEARNING EXPERIENCES THROUGHOUT THE PROGRAM.
INFORMAL LEARNING WILL GO ON CONSTANTLY, LARGELY TO THE EXTENT OF YOUR PARTICIPATION, LEARNING IS AN ACTIVE PROCESS AND YOU CANNOT ACQUIRE IT IF YOU PLAY A PASSIVE ROLE.

Grading Policy/Scale
Course Evaluation will consist of two areas with each area worth 100 points. The final grade of each area will be averaged together to render the final grade for the course. The areas and an explanation of each are as follows:

1. Attendance – Attendance is 75% of your grade for this course. You are allowed one unexcused absence; each additional unexcused absence will lower a 100% attendance grade by 10 points. For example, five unexcused absences resulting in an attendance grade of 50%. An excused absence is death in the immediate family, hospital stay, doctor’s excuse, related cooperative experience that is pre-approved by the instructor and pre-approved absence by the instructor. Repeated tardiness could result in an unexcused absence.
If the need for an absence arises the instructor should be notified whenever possible before the impending absence.

2. Assignments & Quizzes* – Assignments, quizzes and/or class participation and involvement are 25% of your grade for this course. The points for Assignment & Quizzes will be determined by the number of Assignment & Quizzes divided into 100. For example: if 5 Assignment & Quizzes were assigned each would be worth 20 points each, 5 x 20=100. The points for assignments are based on completion of each assignment.

* Assignment & Quizzes may also include but are not limited to, text review questions, class handouts, homework, lab and lecture projects, and hand tools for lab work.

Notebook – Bonus points will be given toward the final grade for a portfolio that should be kept in a three ring binder in a neat and orderly fashion. Tabs should be used to separate the areas of the portfolio into: different classes, classroom handouts, lecture notes, lab journal, and assignments.

Course Evaluation Summary:
<table>
<thead>
<tr>
<th>Attendance</th>
<th>75%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment &amp; Quizzes</td>
<td>25%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
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The grading scale is as follows:
90 – 100     A
80 – 89      B
70 – 79      C
60 – 69      D
Below 60     F

Students will receive their grade via email.
Class Policies/Procedures

Inclement Weather Class Policy/Procedure
During periods of inclement weather, HCTC will either open at 11:00 or be closed. On days that HCTC open at 11:00 a.m., all courses scheduled BEFORE 11:00 a.m., will be canceled. Decisions regarding evening classes will be made by 4:00 p.m. Check local radio, TV stations, or the HCTC website for information.

General Class Make-up, Late Assignment Class Policy/Procedure
Classes missed due to inclement weather will be made up with additional assignments that may include but are not limited to, on-line work, text review questions, class handouts, and homework. It will be the responsibility of the learner to call attention to missed test, handouts and assignments.

Attendance Class Policy/Procedure
Attendance Policy is covered in Course Structure, Evaluation, and Grading Methods section of this syllabus.

Withdrawal Class Policy/Procedure
A student may officially withdraw from any class up to and including the date of midterm with a W grade assigned to the student’s record.

Accommodations Procedure
HCTC recognizes that a disability may preclude a student from demonstrating required course competencies or from completing course requirements. In compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, any qualified student with disabilities may request appropriate course accommodations to ensure that full benefits are received and that the instructor is aware and can make the proper adjustments. Students are encouraged to meet with the Disability Services Representative to develop and complete an Accommodations Plan.

Julie Caudill, HCTC Disabilities Services Representative
Phone: 606-487-3486 and Email: jcaudill0129@kctcs.edu

Appeals Process
Always begin the informal process by talking to your instructor. If issues cannot be resolved, then talk with the Dean/Supervisor (see below for contact information) of the faculty member. For information about academic rights, academic offenses, and the student’s formal right to appeal, review the KCTCS Code of Student Conduct.

Dean/Supervisor Contact Information
Dean/Supervisor: Tony Back       Phone Number: 606-487-3302
Office Location: Devert Owens Room 112  Email Address: tony.back @kctcs.edu
Safety/Dress code:
Safety glasses must be worn from the time you enter until you exit the Air Conditioning Lab, NO EXCEPTIONS. No short paints “shorts” or open toed shoes “sandals” are allowed in the Air Conditioning Lab. Safety Inspection: Students and instructor are required to conduct a monthly safety inspection of the classroom and lab facilities. Any safety concern/observation is to be documented and corrections made. Feedback and suggestions are encouraged. SAFETY is everyone’s responsibility.

Children in the Classroom:
Due to safety concerns no children are allowed.

Cell Phone Use:
Cell phones are allowed in the classroom for family and emergency issues only and must be on silent mode. If you must answer a call leave and reenter the classroom being undistruptive to the class as possible. Abuse of cell phone privileges will not be tolerated!

Tobacco-free policy:
The tobacco-free policy applies to all areas of campus prohibits the use of all tobacco products on all grounds and parking areas (traditional cigarettes, e-cigarettes, chewing tobacco, pipes, cigars, snuff, etc.)

Emergency Instructor Absence:
When Instructor has an emergency situation that causes them to be late or have to miss class HCTC will not cancel class for that day. Students are to wait for HCTC personnel to inform them of the change for that day and proceed accordingly.

Emergency absence assignments will be as listed:
* Continue with current lesson
* Work on documentation for KY HVAC Licensing requirements

Housekeeping/Clean-up: Daily housekeeping is the responsibility of each. Floor swept, trash emptied. Work area and trainers kept clean, neat, and orderly and returned to the original condition. Extension cords hung up, tools and meters returned back to tool room. Supplies returned to storage area.

Additional Syllabus Information:
Review the HCTC Website: (from HCTC Website Click Academics > Syllabus Information)

Print Version of URLs listed in the syllabus:
Academic Calendar: https://hazard.kctcs.edu/academics/academic_calendar.aspx
HCTC Syllabus Website: http://hazard.kctcs.edu/Academics/Syllabus_Information.aspx
Student Code of Conduct: https://kctcs.edu/current_students/code_of_student_conduct.aspx