Automotive Heating / Air Conditioning 42888 AU3.303

Spring 2022

Instructor: Beau Buganski Class Schedule: M/T/W/TH 8am - 11:50am, March 28th to April 28th 2022

Office Hours: Phone/Email/Video conferencing available by appointment Email: bugansb@linnbenton.edu

What can you expect from this course? Over the next 5 weeks, you will explore the automotive heating ventilation and air conditioning (HVAC) system. You will become familiar with system operation, diagnosis, component replacement and common service practices. We will meet online via video conferencing software to discuss automotive HVAC system theory, component identification and operation. Your goal is to absorb concepts and details from readings, lectures and discussions to complete hands-on lab activities after our virtual meeting each class day.

What will you know after completing this course? Upon successful completion of this course, you will demonstrate knowledge and competency of the following.

- 1. Identify automotive HVAC systems and components.
- 2. Proper techniques to inspect, diagnose, disassemble and repair automotive HVAC systems.
- 3. Locate and interpret specifications and repair instructions using online reference materials.
- 4. Understand proper tool usage and techniques to diagnose test, replace and repair heating and air conditioning system failures.
- Understand the use of automotive refrigerant recovery and recycling equipment in accordance with local, state and federal health / safety and environmental regulations.

(note: you must possess an ASE 609 refrigerant handling certification before you can perform any A/C system repairs.)

Grading System:

Attendance	20% of final grade
Chapter Review Homework	10% of final grade
Chapter Quizzes	20% of final grade
Weekly Review Tests	10% of final grade
Lab work	20% of final grade
ASE Style Final Exam	20% of final grade

Attendance: Attendance, participation, professional attitude, You will earn a maximum of 3 points per day.

Attendance: You are required to attend class meetings and labs. You will earn a maximum of 3 points per day. You will get 2 points for showing up on time and staying the entire class period and an additional point if you are engaged and participate during discussions. You will only get 1 point if you are late or leave early. There are no excused absences and you will only get partial credit for missing the lecture or lab session.

Professional attitude: Be respectful and courteous to everyone. You will be held accountable to the **Student Code of Conduct**, which outlines expectations pertaining to academic honesty (including cheating and plagiarism), classroom conduct, and general conduct.

Quizzes: Some quizzes will be graded, and some will not. The ungraded quizzes are participation quizzes and you will receive a 100% for participating. We will review the answers in class so you must be present to receive credit.

Homework Assignments: The textbook assignments are based on the chapter readings each week. The readings precede the lectures, so it is important to do them on time. Assignments will close one week after their due date. I will accept assignments up to one week late with a 10% penalty. If you find an assignment is closed you must email me and explain why you failed to turn it in on-time and why I should accept your late submission.

ASE Lab Activities: There are a total of 32 hands on Labs that require a vehicle, tools, and equipment to complete. You will be provided the necessary tools and equipment to complete these labs.

ASE style Final Exam: The exam will be on Thursday, April 28th, 2022. The questions are based on information from textbook chapters 1 - 15. This is a multiple-choice ASE style exam. The test will be open from 12am to 11:59 pm and you will have 4 hours to complete the test once you have started. No late tests will be accepted unless other arrangements are made with the instructor prior to the start of the test being taken.

Make-up Homework / Quizzes: Students absent for any evaluation will need to schedule an appointment with the instructor.

Reading Assignments: Chapter readings are assigned daily and precede the following days lecture. Please complete the chapter review questions as homework and turn in at the start of the next class. You should be ready to discuss chapter topics with the class and prepared for a quiz.

Textbook: 8TH Edition Automotive Heating and Air Conditioning by James Halderman

Class Timeline

Reading assignments: Text: 8TH Edition Automotive Heating and Air Conditioning

WEEK 1	Chapters 1/2/3
WEEK 2	Chapters 4/5/6
WEEK 3	Chapters 7/8/9
WEEK 4	Chapters 10 / 11 / 12
WEEK 5	Chapters 13 / 14 / 15
FINAL	April 28th, 2022

College Policies

Disability services and emergency planning:

Students who may need accommodations due to documented disabilities, who have medical information which the instructor should know, or who need special arrangements in an emergency should speak with their instructor during the first week of class. If you believe you may need accommodations but are not yet registered with the Center for Accessibility Resources (CFAR), please visit the CFAR Website for steps on how to apply for services or call 541-917-4789.

LBCC Comprehensive Statement of Nondiscrimination

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, gender, gender identity, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information see Board Policy P1015 in our Board Policies and Administrative Rules. Title II, IX, & Section 504: Scott Rolen, CC-108, 541917-4425; Lynne Cox, T-107B, 541-917-4806, LBCC, Albany, Oregon. To report: linnbenton-advocate.symplicity.com/public report.

Know your rights and responsibilities

LBCC students have rights: the right to free speech, the right to assemble, the right of a free press, etc. LBCC students also have responsibilities to their community: the responsibility to participate and engage in class, the responsibility to advocate for their needs (ask for help), the responsibility to support a respectful teaching and learning environment, the responsibility to treat all persons with respect, the responsibility to be truthful and honest in all work and communications, and the responsibility to follow staff directions, local, state, and federal laws.

Rights and responsibilities balance together to create the best learning environment. For example, while you have free speech in the café or courtyard, in class the instructor decides whose turn it is to talk and what the topics for conversation will be. Students are free to believe what they believe, but instructors may require students to learn and recite concepts, principles, or theories for a class even if the student does not believe those concepts. You play a role in creating a positive community at LBCC.

Please review your rights and responsibilities (<u>http://linnbenton.edu/go/studentrights</u>). If you believe a student is violating your rights, ask to be treated with respect. If that does not cure the situation, report to Associate Dean Dr. Lynne Cox, Takena Hall Rm. 107. If you believe a faculty member or LBCC employee is violating your rights, please report to Human Resources, Scott Rolen, Calapooia Center Rm. 108.