

University of New Mexico, Valencia
AUTT 115 501: Brake Systems, 44099 (11)

UNM Valencia, AUTT 115-501 Brake Systems

Summer 2019 Tuesdays and Wednesdays 9 A:M to 12:20 P:M

Instructor: J. Anthony Chavez

Office Hours 8:30:00 A:M to 12::20 P:M Tuesdays and Wednesday and by appointment

Class held at Valencia High School in the Auto Classroom720 and the Shop

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Course Description

To review brake system technology

Prerequisite

Basic knowledge of Auto Shop Safety

Safety is the # 1 priority must follow rules that are posted.

Objectives

(Upon successful completion of this course the student Will be Able to :)

1. Explain the hydraulic and mechanical principles of a brake system
2. Identify the major parts of an automotive brake system
3. Define the basic functions of the major parts of a brake system
4. Compare drum and disc brakes
5. Explain the operation of power brakes
6. Describe the operation of parking brakes
7. Correctly answer ASE certification test questions requiring knowledge of automotive brakes systems

Course Content and Scope

A. Topics: The Topics to be addressed in this course are:

1. Basic Automotive Safety, and diagnosis and repair using various shop equipment and repair Methods
2. Proper use of shop equipment and computer test equipment

B. Appropriate Reading.

1. Readings may be assigned from college level material such as books, reports, Professional journals, and similar materials associated with the course material.

C. Writing Assignments.

Typical writing assignments may include.

1. Completing assigned papers or reports.
 2. Providing written answers to assigned questions.
 3. Performing arithmetic calculations as assigned.
- D. Appropriate outside assignments
- Students are expected to spend a minimum of 1 hours outside of class in preparation for each hour of theory in class. Appropriate assignments include:
1. Preparing writing assignments.
 2. Studying as needed to perform successfully in class.

Teaching Methods

May Include:

1. Lecture with, or without, various visual aids.
2. Group problem solving, discussions, debate, and /or critique.
3. Demonstration.
4. Computer assisted instruction.
5. Hands-on shop assignments.

Grading/Evaluation policy

A student's grade will be based on multiple measures of performance, and will reflect the level of accomplishment of the objectives set forth above as well as the level of understanding of the topics enumerated under " Content and Scope". A finale Grade of " C " or better will indicate that the student has the ability to successfully apply the principles taught in this course to subsequent courses, to the work-place, or to personal goals as appropriate. The assessment process will also measure independent critical thinking skills and will reflect the student's ability to demonstrate their accomplishments by.

1. Performing on written or oral examinations.
2. Performing on outside assignments including shop assignments.
3. Contributing to class discussion.
4. Maintaining attendance per current policy.
5. Hands-on diagnosis and repair.
6. Completion of assigned ASE/NATEF task lists.

Appropriate text and material:

Modern Automotive Technology Text Book

Classroom and Shop Manuals.

Safety Glasses (Mandatory)

Personal tools (Optional)

Respectful Campus Policy

The Auto Department affirms its commitment to the joint responsibility of instructors and students to foster and maintain a positive learning environment. UNM students and instructors

are bound by the terms of the Student Code of Conduct, which is published in the UNM Pathfinder at: <http://pathfinder.unm.edu/policies.htm#studentcode>

Tools/Equipment/Shop

1. All tools are to be checked out.
2. All tools will be cleaned when checked back in.
3. No tools will be taken home or out of shop.
4. It is the responsibility of the student to maintain and keep the shop clean and orderly.

Attendance

Because students who miss two weeks- or one-eighth of a sixteen-week semester- of class time generally have missed too much class work to make up, you may be dropped from the course if your absences total three for a class that meets two times a week. However, please realize that though missing two classes may not get you dropped, every absence makes it harder and harder for you to stay up-to-date on assignments and complete work on time. The Auto Department does not differentiate between sick days, doctor appointments, and fun days. **Note:** Arriving late, leaving class early, sleeping in class, or not being prepared results in an absence. If you have an extenuating circumstance, please talk to me!

Drop Policy

Dropping or being dropped from a course can affect your GPA, enrollment status, and financial aid status/award. Always talk to your instructor before it's too late about the possible consequences of a drop and opportunities for avoiding it.

Disability

If you are a student with a disability that may hinder or impair your ability to complete this course, please inform me as soon as possible so arrangements can be made. The University of New Mexico-Valencia Campus offers students with disabilities academic adjustments or accommodations in their classes to help them succeed. It is your responsibility to register your disability with Student Services located in the Student Services building at UNM-Valencia Campus. Please call 505-925-8560 for more information.