CASPER COLLEGE COURSE SYLLABUS
AUTO 1740  Brake Systems

Semester/Year: Spring 2015

Lecture Hours: 2 (catalog)  Lab Hours: 4  Credit Hours: 4

Class Time: 1:00 – 3:50 P.M.  Days: MTWTH(1/20/15-3/12/15)  Room: CS111/113

Instructor’s Name: Randy Waldron

Instructor's Contact Information: Office CS 118  Office Phone:268 2386  Email: rwaldron@caspercollege.edu

Office Hours: as posted on office door

Course Description: An introduction to braking systems, this course will cover basic theory and service of hydraulic systems, power brake systems, parking brakes, and antilock systems. Diagnostics, service and repair procedures are emphasized.

Statement of Prerequisites: none

Goal: The objective of this course is to achieve an understanding of automotive brake systems, and develop basic troubleshooting and diagnostic skills necessary to service automotive brake systems

Outcomes: Upon completion of this course, students will be able to demonstrate competency in the:
Identification and research of applicable vehicle identification, components, and their repair information
Proper usage and interpretation of tools, specifications and safety procedures
Proper usage and completion of job sheets and work orders.
Identification and interpretation of brake system components and concerns, determine necessary action.
Diagnosis and repair of hydraulic systems, drum brake systems, disc brake systems, power assist systems, parking brake systems and antilock brake and traction control system
Demonstrate effective oral and written communication
Solve problems using critical thinking and creativity
Use appropriate technology and information to conduct research
Casper College may collect samples of student work demonstrating achievement of the above outcomes. Any personally identifying information will be removed from student work.

Course Objectives: Demonstrate the Knowledge and skills that are required to identify and interpret brake concerns and determine necessary actions.
Demonstrate the Knowledge and skills that are required to perform vehicle brake service and maintenance per manufacture recommendations

Methodology: Theory, operation and service will be presented by lecture, with handouts, presentations, demonstrations and hands-on laboratory activities. The student is required to study the corresponding material appropriate for the lecture and laboratory work.
**Evaluation Criteria:**
Lecture: Chapter Quizzes and Class assignments.
Lab: Correct and timely completion of job and job sheet = 80%
Work Ethics (safety, participation, shop and tool maintenance) = 20%
Final exam

(Final grades will be computed as follows)

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<tr>
<th>Percentage</th>
<th>Grade</th>
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<tr>
<td>100 - 90%</td>
<td>A</td>
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<td>89 - 80%</td>
<td>B</td>
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<td>79 - 70%</td>
<td>C</td>
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<td>69 - 60%</td>
<td>D</td>
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<td>59 -</td>
<td>F</td>
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**Class Policies: Last Date to Change to Audit Status or to Withdraw with a W Grade:**
Withdrawal deadline April 17
Only officially registered students are allowed to participate in classroom or laboratory activities. See attached automotive policy statement.

**Student Rights and Responsibilities:** Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

**Academic Dishonesty:** (Cheating & Plagiarism) Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion from school. See the Casper College Student Code of Conduct for more information on this topic.

**Official Means of Communication:** Casper College faculty and staff will employ the student's assigned Casper College email account as a primary method of communication. Students are responsible to check their account regularly. This is also, where you will find course evaluation links during course evaluation periods.

**ADA Accommodations Policy:** If you need academic accommodations because of a disability, please inform me as soon as possible. See me privately after class, or during my office hours. To request academic accommodations, students must first consult with the college’s Disability Services Counselor located in the Gateway Building, Room 344, (307) 268-2557, bheuer@caspercollege.edu. The Disability Services Counselor is responsible for reviewing documentation provided by students requesting accommodations, determining eligibility for accommodations, and helping students request and use appropriate accommodations.

**Calendar or schedule indicating course content:**
Brake Systems
Drum Brakes
Disc Brakes
Anti-Lock and Traction Control
AUTOMOTIVE DEPARTMENT
POLICY STATEMENT

Attendance
Students are expected to attend all classes for which they are registered and are accountable for all class work during an absence.

Work Ethics
Work Ethics are used as part of the rating/grading function. Shop cleanup, poor job attitude, and poor work habits, deliberate misuse of tools and equipment, horseplay and safety violations will result in a lowered grade or failure in the class. Disregard for the safety of yourself and/or others will result in dismissal from the program especially regarding grinding and sanding tools, stones and brushes on the grinders.

SAFETY
SAFETY: Personal and equipment safety standards will be strictly enforced. It is the individual’s responsibility to develop and use a safe work attitude. For every task students will comply with personal and environmental safety practices associated with clothing, eye protection, hand tools, power equipment, proper ventilation, and the handling, storage, and disposal of chemicals/materials in accordance with local, state, and federal safety and environmental regulations.

Students are expected to look presentable. You should have several pair of coveralls or shop work shirts, and leather work shoes. Steel toes are recommended. It is your responsibility to keep them clean.

Tools
Tools will be issued to each student and the student will be responsible for any loss. Breakage of tools will not be charged to the student if the broken tool is reported to the Instructor and is not the result of misuse.

Exams
Exams are pre-scheduled for each class. Tests and quizzes are given at random. Make-up exams, tests, and quizzes may be allowed at the instructor's discretion. A failing grade will be given for any test missed.

Grades
Grades will be given for each class. Any grade lower than a C is considered failing for an automotive student. A grade of C or better is required for a certificate in Automotive Technology. Grades of D will receive college credit but are not considered adequate for job recommendation or referrals.

Test-driving
Test-driving vehicles will be allowed with the instructor's permission. Part chasing is allowed by instructor's permission only. Any student leaving the shop without the instructor's permission will receive an absence.

Suspension
Each student has been shown the location and demonstrated the use of the emergency electrical shut-off equipment.

Suspension from any automotive class will result in a failing grade and the student will not be allowed to re-enroll in any automotive class at Casper College.

Due to safety regulations, no student will be permitted to wear headphones in the shop or classroom.

Loud, vulgar, and/or obscene language will not be permitted.

Removal
Removal from any automotive class will result in a failing grade. Removal can result from poor attendance - low ability and poor attitude - disrespect for college property or automotive instructors - failing and poor grades. Theft will NOT be tolerated and immediate suspension will result and possible criminal charges will be filed.

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