



AUT150 Brakes I Syllabus

Course Information

Credits	3
Campus	Washburn Institute of Technology
Address	5724 SW Huntoon
City/State/Zip	Topeka, Kansas 66604
Office Fax	785-273-7080

Description

Brakes I is a basic introduction to automotive brake technology. The emphasis in this course is on diagnosing and maintaining brake systems. It covers identification of brake parts and how they function, the use and types of friction materials and heat dissipation, stripping and refitting both disc and drum brakes, rotor diagnosing including measurement and cutting, identification of pad types, hydraulic principles and brake bleeding. The course is closely aligned with NATEF/ASE task list for A5 and will prepare the student to take the Automotive Service Excellence (ASE) exams. Classroom time is divided between lecture, discussion, and individual learning activities.

Textbooks

MAT (Modern Automotive Technology) Online Edition; ISBN: 9781619603707
Auto Brakes Online Edition ISBN: 978-1-61960-744-6

Student Learning Outcomes:

- A. Communicate effectively
- B. Integrate technology
- C. Learn effectively
- D. Demonstrate cooperative teamwork skills
- E. Apply safety in the workplace
- F. Think critically and creatively
- G. Demonstrate responsible work ethics

Competencies

A separate document is available listing the competencies.

Guidelines for Success

Assessment Plan

Assessment is an integral part of the educational process at Washburn Tech and accurate feedback is an important tool in continuously improving the institution's technical programs. Students can expect to participate in assessment activities prior to entry into programs, within specific courses and following program completion for specific fields of study.

Grading Rationale

Lab Activities 40% - A composite evaluation of hands-on tasks performed in the lab such as: Tool usage; use of reference materials; adherence to safety (zero tolerance); work completed to industry standards; and instructor evaluation of work.

Professional Behavior 30% - A daily grade is based on a ten point system. No points are earned if absent (exceptions may be made for school related activities). Missed work may be made up at the instructor's discretion. Areas evaluated include: participation, attitude, professionalism, safety and sanitation.

Classroom Activities 10% - A composite grade based on the quality of completed classroom assignments such as: written assignments, homework, and oral presentations.

Quizzes and Tests 10% - Quizzes (daily or weekly), end of topic written or performance exams, and mid-term exams.

Final Exams 10% - A composite grade based on written, oral, and performance exams such as: end of course written or performance exams and hands-on performance exams.

Grading Scale

A 93-100%

B 85-92%

C 77-84%

D 69-76%

F 0-68%

Course Structure

A typical course is 60% hands-on lab and 40% classroom based learning. In addition to the three hour per day on-campus sessions you can anticipate an average of 20% or 3 hours per week of outside class work.

Attendance

Daily attendance and active participation leads to successful performance. Whether excused or unexcused, absences limit the student's learning. The expectation is that students will attend class and will be on time.

Disability

The Special Support Services (SSS) Office is responsible for assisting in arranging accommodations and for identifying resources at Washburn Institute of Technology for persons with disabilities. Qualified students with disabilities MUST register and provide documentation with the office to be eligible for services. New requests for accommodations should be submitted two months or more prior to the date services should begin; however, contact the SSS Office as soon as a need may arise. Depending on the accommodation request, four to eight week lead time may be needed for timely and effective provision of services. SSS coordinates and assist in arranging services it deems appropriate of eligible students on a case-by-case basis.

If you are a student with a disability that may substantially limit your ability to participate in this class and believe you will need accommodations, it is your responsibility to contact:

Special Support Services Coordinator

Phone: 785-228-6356

E-Mail: ssscoordinator@washburn.edu



