

# Syllabus Automotive Brakes and Manual Drivetrains

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## Description of the course content:

- The Brakes class is an 18 week class with a major concentration on Brakes and minor emphases on Manual Drivetrains.
- Instructional delivery will focus on hands on learning and career and employability skill development.
- The Brakes class is MLR certified by ASE which insures students are instructed on the most relevant and up to date automotive trends and repairs. The ASE Education Foundation standards are in line with State CTE standards.
- The Brakes/Manual Drivetrain class standards are:
  - Supplemental Tasks, Safety, Tools, Preparing a Vehicle for Service (2 weeks)
  - V A. General Brake Systems Diagnosis (1 weeks)
  - V B. Hydraulic System Diagnosis and Repair (2.5 weeks)
  - V C. Drum Brake Diagnosis and Repair (2.5 weeks)
  - V D. Disc Brake Diagnosis and Repair (3 weeks)
  - V E. Power Assist Units Diagnosis and Repair (1 weeks)
  - V F. Miscellaneous (Wheel Bearings, Parking Brakes) (1.5 weeks)
  - V G. Electronic Brake, Traction and Control (1.5 weeks)
  - III A-F Manual Drivetrain and Axles (2 weeks)

## Course pacing:

- The Brakes/Manual Drivetrain class will cover four automotive standards the first quarter and four the second quarter.

## Course resources:

- Textbook, Automotive Technology Principles, Diagnosis, and Service. 5<sup>th</sup> Edition. Copyright 2016.
- Online service information is obtained from Mitchell on Demand. [prodemand.com](http://prodemand.com)
- The website Moodle is used for taking tests and storing course materials.
- PowerSchool is used for checking grades and attendance.
- Web site, [thetechcenter.org](http://thetechcenter.org) is used as a point of entry for students to login to Moodle and PowerSchool.
- Electude may be used to supplement the textbook.

## Certifications:

- Students will have an opportunity to take the State Certification test in Automotive Brakes if they earned a "C" or better in the brakes class.

## Working conditions:

- Students will work as a team member in small groups consisting of 4 to 7 students.
- Students will work on school cars to reinforce skills learned in the lab.
- Students who are performing well in the brakes class will work on customer cars.
- Students will keep the work areas clean and organized at all times.
- Students are required to wear a uniform, safety glasses and leather shoes while in the shop.

#### Attendance Expectations:

- Students are expected to attend class every day that their home schools are in session.
- If students cannot attend class they are expected to call or email me and let me know.

#### How you earn your grade:

1st Quarter 42% of overall Grade		
	Hands on Tasks (Lab Book)	30%
	Written Tests (Summative Assessments)	30%
	Career and Employability (P. 19)	30%
	Chapter Questions Misc. Assignments	10%
1st Quarter total		100%
2nd Quarter 42% of overall Grade		
	Hands on Tasks (Lab Book)	30%
	Written Tests (Summative Assessments)	30%
	Career and Employability (P. 19)	30%
	Chapter Questions Misc. Assignments	10%
2nd Quarter total		100%
Semester Totals		
	1st Quarter	45%
	2nd Quarter	45%
	Final Hands-on Evaluation	10%
Semester Totals		100%

100-94%	A	74-76	C
90-93	A-	70-73	C-
87-89	B+	67-69	D+
84-86	B	64-66	D
80-83	B-	60-63	D-
77-79	C+	59 or less	E

Embedded Core Credit	
English (ELA)	.5 Credit
Mathematics	1.0 Credit
Science	.5 Credit

#### Career and Employability:

- Students will receive a Career and Employability grade that provides feedback on the skills of: **Professionalism, Initiative, Respect, Responsibility** and **Safety**. Students will also earn scores in Career Planning. The combination of these scores will be the students Career and Employability grade.
- Articulated credit:  
The brakes class articulates to Grand Rapids Community College and several other technical schools. To earn articulation to a post-secondary school the student must have received a grade of "B" or higher in the class. Students who miss more than two days a week in a work based learning assignment will not receive articulated credit.

#### Student Organizations:

- Students will have the opportunity to participate in several student organizations and our apprenticeship program. Students will need an instructor's recommendation to participate.

#### Returning Students:

**Students interested in returning for a second year of automotive training must maintain a "C" average in both semesters of their first year. Allowance may be made for extenuating circumstances through an appeals form submitted to the automotive instructors. The appeals process will last no longer than 5 school days.**