



RCTC

Regional Career Technical Center

Course Title:
**Automotive
Technology**
Instructor:
Mr. Reavis
734-482-8480 Work
734-482-9866 FAX
734-740-4872 Cell

First Semester 2012-2013 Course Syllabus

Course Overview

This is an entry-level course for auto technicians that is open to juniors and seniors and utilizes the State mandated NATF curriculum. The new NATEF Standard (just released in May 2012) now will provide exposure to all eight ASE Certification areas over a two year course of study. Students performing at employable levels should be able to pass the State of Michigan or A.S.E. certification tests in the areas studied. While the course is designed to be a two-year program, students may enroll for either one or two years. During the 2012-13 school-year, we will be concentrating on Brakes for the first semester and Electrical/Electronic Systems the following semester. We will also have component sections on Safety, Hazardous Materials, Hand Tools, Power Tools, Measuring Instruments, Fasteners, Tires, Heating & A/C, and Hybrid Vehicles. The class is approximately 40% classroom work and 60% lab work. Students provide their own work clothes and some hand tools.

Students may earn a full high school math credit in addition to college credits with Washtenaw Community College, Ferris State University, University of Northwestern Ohio, Universal Technical Institute (UTI), Wyo-Tech (formerly Wyoming Technical College), Ohio Technical College (OTC), or Lincoln Technical Institute on an articulation basis while in high school. With instructor's permission, students may elect this class for a second year.

Prerequisites

- **Must be either a junior or senior in high school**
- **Must have a genuine interest in Automotive Technology**
- **Must be able to provide own transportation to the auto center if coming from a school that does not provide it**

Course Content

We will (over a two year period) cover all eight ASE Master Mechanic Certification Areas

- **A1 Engine Repair (2013-14)**
- **A2 Automatic Transmission/Transaxle (2012-13)**
- **A3 Manual Drive Train and Axles (2013-14)**
- **A4 Suspension and Steering (2013-14)**
- **A5 Brakes (2012-13)**
- **A6 Electrical/Electronic Systems (2012-13)**
- **A7 Heating and Air Conditioning (2012-13)**
- **A8 Engine Performance (2013-14)**

Course Materials

- **Textbook (Introduction to Automotive Service by James Halderman © 2013 ISBN 978-0-13-300533-2)**
- **Lab Sheets**
- **Safety glasses**
- **Shoes (no spike heels, slippers, or open toed shoes are permitted)**
- **Students are encouraged to bring a change of clothes or coveralls**

Course Policies

Absences and Makeup Work

- *If a student will be absent for any reason, they must call the instructor directly and explain the reason for the absence. (His cell# is 734-740-4872).*
- *Students are permitted a maximum of five (5) sick days and one (1) personal day per semester. All other absences will be considered unexcused (except for those where the student is required to attend another school sanctioned function and the student supplies verification from the instructor or sponsor.)*

Class Participation

- *Each day the student is present for the entire class period they can receive up to 20 participation points.*
- *Participation points will be used as a factor in determining the shop portion of the class grade.*
- *In order to receive the above participation points, the student must actually participate. Those who just sit around or wander around during shop time will receive zero points for the day. Students who sleep in class will receive zero points for the day.*

Classroom Rules/ Expectations

- *Students who are tardy (unexcused) will receive a maximum of ½ of the day's points if no later than 1 hour. After 1 hour, they will be prorated based on the time of arrival.*
- *Students who leave early (unexcused) will receive no points for the day.*
- *Students who leave early (excused) will receive points prorated based on the time of departure.*
- *Students who are in the shop area without properly worn safety glasses will lose 5 points PER instance (up to the total of 20 points for the day).*
- *Students coming to class without proper shoes will be required to sit in the classroom until someone can provide proper shoes for them to wear. They will lose ½ of the day's points if they do not put on the proper shoes within 10 minutes of the start of class. If they do not have them for an hour or more, they will lose ALL points for the day.*
- *Since schedules can vary from day-to-day, students must come prepared to work in the classroom AND/OR the shop area EVERY day.*

Homework Policy

- *Class work is assigned a due date. It must be submitted by the end of class on the due date.*
- *When class time is designated as time to work on homework, the student must be actively working on it to receive that day's participation points.*
- *Students who have been absent will lose participation points for using time that is designated as shop time to do their homework unless the day they missed had been a day that had been designated as time to work on homework.*
- *Class work that is submitted the first day after returning from an excused absence will be considered as being on time.*
- *Late class work (not submitted on the due date) will receive 75% of the score it would have received if it had been on time, if submitted the day after it was due. The grade will lose an additional 1% for each additional school day that it is late.*
- *Class work that is late due to an unexcused absence will receive 60% of the score it would have received if it had been on time, if submitted the day after it was due. The grade will lose an additional 1% for each additional school day that it is late.*

Grading Policy

Grade Distribution

Grading is determined 50% by classroom work (including, but not limited to, in-class assignments, home work, and quizzes) and 50% by shop achievement (including participation points and accomplishment of NATEF designated required tasks)

Types of Assessments

Classroom portion:

- ***Homework has a weight of 1***
- ***In-class work has a weight of 1***
- ***Quizzes have a weight of 2***
- ***Various additional assignments will be weighted according to the importance of the assignment (students will be informed of weights at the time the assignment is given)***

Shop portion:

- ***Shop assignments are aligned with the national NATEF task lists***
- ***Credit will be assessed based on participation and successful completion of assignments***
- ***Tasks will be performed in small groups***

Progress Reports

- ***Will be issued per YPSD schedule***
- ***Within reason can be issued more frequently at student or parent request***
- ***Students will be informed on a regular basis about missing assignments.***

Course Procedures

Work Requirements

- ***In order to receive the above participation points, the student must actually participate. Those who just sit around or wander around during shop time will receive zero points for the day.***
- ***Students who sleep in class will receive zero points for the day.***
- ***In order to receive credit for the shop portion of the grade, students must complete a detailed accounting of what tasks they did and how they did them.***

Students must keep a notebook that contains:

- ***Any hand-outs***
- ***Homework and class work that has been returned***
- ***Quizzes that have been returned***
- ***Shop task sheets that have been returned***
- ***Any other assignments that have been returned***

RCTC Automotive Technology
Tentative classroom schedule for the first semester of 2012-2013 school year.*

Class Work	Homework assigned	Work due
9-5 through 9-7 Present and test for safety		
9-10 through 9-14 Trade School/Career Presentations		
9-17 through 9-21 Welding demonstrations and tests		
Tuesday 9-25 Chapter 6: Shop Safety <ol style="list-style-type: none"> 1. Read chapter in class and discuss 2. Do questions at end of chapter in class 3. Do study guide in class 		Questions at end of chapter 6
Tuesday 10-9 Chapter 6: Shop Safety <ol style="list-style-type: none"> 1. Hand back chapter questions and review 2. Take quiz on Chapter 6 Chapter 7: Environmental and Hazardous <ol style="list-style-type: none"> 3. Read chapter in class and discuss 4. Do questions at end of chapter in class 5. Do study guide in class 		Questions at end of chapter 7
Tuesday 10-16 Chapter 7: Environmental and Hazardous <ol style="list-style-type: none"> 1. Hand back chapter questions and review 2. Take quiz on Chapter 7 Chapter 9: Hand Tools <ol style="list-style-type: none"> 3. Read chapter in class and discuss 4. Do questions at end of chapter in class 5. Do study guide in class 		Questions at end of chapter 9
Tuesday 10-23 Chapter 9: Hand Tools <ol style="list-style-type: none"> 1. Hand back chapter questions and review 2. Take quiz on Chapter 9 Chapter 10: Power Tools and Shop Equipment <ol style="list-style-type: none"> 3. Read chapter in class and discuss 4. Do questions at end of chapter in class 5. Do study guide in class 		Questions at end of chapter 10
Tuesday 10-16 Chapter 10: Power Tools and Shop Equipment <ol style="list-style-type: none"> 1. Hand back chapter questions and review 2. Take quiz on Chapter 10 Chapter 18: Vehicle Lifting and Hoisting <ol style="list-style-type: none"> 3. Read chapter in class and discuss 4. Do questions at end of chapter in class 5. Do study guide in class 		Questions at end of chapter 18

<p>Thursday 10-18 Chapter 18: Vehicle Lifting and Hoisting</p> <ol style="list-style-type: none"> 1. Hand back chapter questions and review 2. Take quiz on Chapter 18 <p>Chapter 12: Vehicle Service Information, Identification, and Routine Maintenance</p> <ol style="list-style-type: none"> 3. Read chapter in class and discuss 4. Do questions at end of chapter in class 5. Do study guide in class 		<p>Questions at end of chapter 12</p>
<p>Tuesday 10-23 Chapter 12: Vehicle Service Information, Identification, and Routine Maintenance</p> <ol style="list-style-type: none"> 1. Hand back chapter questions and review 2. Take quiz on Chapter 12 <p>Chapter 35: Tires and Wheels</p> <ol style="list-style-type: none"> 3. Read chapter in class and discuss 4. Do questions at end of chapter in class 5. Do study guide in class 		<p>Questions at end of chapter 35</p>
<p>Tuesday 10-30 Chapter 35: Tires and Wheels</p> <ol style="list-style-type: none"> 1. Hand back chapter questions and review 2. Take quiz on Chapter 35 <p>Chapter 36: Brakes and Antilock Braking Systems</p> <ol style="list-style-type: none"> 3. Read chapter in class and discuss 4. Do questions at end of chapter in class 5. Do study guide in class 		<p>Questions at end of chapter 36</p>
<p>Tuesday 11-6 YPSD Professional Development Day No RCTC</p>		
<p>Tuesday 11-13 Chapter 36: Brakes and Antilock Braking Systems</p> <ol style="list-style-type: none"> 1. Hand back chapter questions and review 2. Take quiz on Chapter 36 <p>Chapter 8: Fasteners and Thread Repair</p> <ol style="list-style-type: none"> 3. Read chapter in class and discuss 4. Do questions at end of chapter in class 5. Do study guide in class 		<p>Questions at end of chapter 8</p>
<p>Tuesday 11-20 Chapter 8: Fasteners and Thread Repair</p> <ol style="list-style-type: none"> 1. Hand back chapter questions and review 2. Take quiz on Chapter 8 <p>Chapter 11: Measuring Systems and Tools</p> <ol style="list-style-type: none"> 1. Read chapter in class and discuss 2. Do questions at end of chapter in class 3. Do study guide in class 		<p>Questions at end of chapter 11</p>
<p>Tuesday 11-27 Chapter 11: Measuring Systems and Tools</p> <ol style="list-style-type: none"> 1. Hand back chapter questions and review 2. Take quiz on Chapter 11 <p>Chapter 17: Under Hood Inspection</p> <ol style="list-style-type: none"> 3. Read chapter in class and discuss 4. Do questions at end of chapter in class 5. Do study guide in class 		<p>Questions at end of chapter 17</p>

Tuesday 12-4 Chapter 17: Under Hood Inspection 1. Hand back chapter questions and review 2. Take quiz on Chapter 17		
Tuesday 12-11 Key Train in Computer Lab		
Tuesday 12-18 Shop time if everything is caught up		
Tuesday 12-25 Winter Vacation - no RCTC		
Tuesday 1-1 Winter Vacation - no RCTC		
Tuesday 1-8 Review chapters 6, 7, 8, 9, 10, 11, 12, 17, 18, 35, and 36 for EXAM.		
Thursday 1-10 Exam on chapters 6, 7, 8, 9, 10, 11, 12, 17, 18, 35, and 36		
Tuesday 1-15 Practice and review day for hands on exam.		
Thursday 1-17 Hands-on Exam		
Tuesday 1-22 Final exams at home schools		
Thursday 1-24 Final exams at home schools		

*** Instructor reserves the right to modify as needed**

Signature(s) I, _____, have read the information contained in this course syllabus and understand what will be expected of me in order to be successful in this class.

Signed _____