MIDLAND COLLEGE SYLLABUS AUMT 2317 ENGINE PERFORMANCE ANALYSIS I 2-4

<u>Course Description</u>: Theory, operation, diagnosis of drivability concerns, and repair of ignition and fuel delivery systems. Use of current engine performance diagnostic equipment. May be taught manufacturer specific.

Students MUST actively participate by completing an academic assignment required by the instructor by the official census date. Students who do not actively participate in an academically-related activity will be reported as never attended and dropped from the course.

<u>Text, References and Supplies</u>: Required: Cengage Unlimited digital e-book-- "AUTOMOTIVE SERVICE INSPECTION MAINTENANCE REPAIR" by Tim Gilles 6th Edition. (Note: only one workbook is required for ALL courses: AUMT 1305, 1307, 1310, 1316, 2317)---- Cengage Unlimited ISBN-13: 9781337956413

<u>Course Goals/Objectives</u>: Utilize safety procedures; explain engine dynamics; diagnose and repair ignition and fuel delivery systems; and use current engine performance diagnostic equipment.

- A. BATTERY DIAGNOSIS AND SERVICE
- B. GENERAL ENGINE DIAGNOSIS
- C. COMPUTERIZED ENGINE CONTROLS DIAGNOSIS AND REPAIR
- D. IGNITION SYSTEM DIAGNOSIS AND REPAIR
- E. FUEL, AIR INDUCTION, AND EXHAUST SYSTEMS DIAGNOSIS AND REPAIR
- F. EMISSIONS CONTROL SYSTEMS DIAGNOSIS AND REPAIR
 - a. Positive Crankcase Ventilation
- G. ENGINE RELATED SERVICE

Students may perform the following tasks in order to maintain safe lab and classroom spaces:

- Participate in shop and classroom maintenance which may include, but not limited to sweeping, mopping, disposing of trash, cleaning work benches, organize tools and equipment, organize tool room, disinfect classroom tables and chairs.
- Disassemble discontinued lab training vehicles or equipment for salvage.
- Repurpose lab vehicles to be utilized in lab assignments.
- Other course related tasks as assigned by instructor.

Student Contributions and Class Policies:

1. Student/Participant must furnish a set of approved safety eye glasses.

2. Student/Participant must understand class attendance is critical; therefore, three consecutive

absences or five total absences may be considered justification for failure or dismissal from class.

3. Punctuality, being prepared for class, being alert, participating pro-actively and exhibiting a respectful and appropriate attitude will be required.

MIDLAND COLLEGE SYLLABUS AUMT 2317 ENGINE PERFORMANCE ANALYSIS I 2-4

Evaluation of Students:	 10% = Attendance/Punctuality 10% = Professionalism/Participation 25% = Mid-term & Final exams 40% = Skills Objectives (Lab Assignments) <u>15% = Knowledge Objectives (Classroom Assignments)</u> 100% Total 	
	90 and above 80-89 70-79 60-69 59 and below	A B C D F

Course Schedule: This class meets for 2 lecture hours and 4 lab hours per week.

SCANS Information: SCANS skills are taught and/or reinforced in automotive courses. The student must locate, read, interpret and understand instruction information and direction materials. The participant must communicate thoughts, ideas and information through verbal and written mediums. Practical arithmetic and mathematics will apply continually throughout automotive technology training. Listening, interpreting, and responding to verbal communications and instructions as well as speaking in response to questioning will be a daily involvement. Thinking, reasoning, visualizing and problem solving are required assets to the automotive technician. The student/participant must display responsibility, self-management and honesty.

Administrative Information:

Curt Pervier, Dean, Applied Technology

Lisa Hays, Division Secretary, Applied Technology (432) 685-4676 Fax: (432) 685-6472

Students should feel free to contact the instructor at any time. Appointments are encouraged.

*Syllabus subject to change as deemed necessary by the instructor to ensure learning objectives and course goals are met.

MIDLAND COLLEGE SYLLABUS AUMT 2317 ENGINE PERFORMANCE ANALYSIS I 2-4

Non-Discrimination Statement

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individual has been designated to handle inquiries regarding the non-discrimination policies:

Tana Baker

Title IX Coordinator/Compliance Officer 3600 N. Garfield, SSC 131 Midland, Texas 79705 (432) 685-4781 tbaker@midland.edu

For further information on notice of non-discrimination, visit the ED.gov Office of Civil Rights website, or call 1 (800) 421-3481.

Americans with Disabilities Act (ADA) Statement:

Midland College provides services for students with disabilities through Student Services. In order to receive accommodations, students must visit <u>www.midland.edu/accommodation</u> and complete the Application for Accommodation Services located under the Apply for Accommodations tab. Services or accommodations are not automatic, each student must apply and be approved to receive them. All documentation submitted will be reviewed and a "Notice of Accommodations" letter will be sent to instructors outlining any reasonable accommodations.