Syllabus

AUMT 2434/1034 Engine Performance Analysis II

Automotive Technology

BRAZOSPORT COLLEGE

LAKE JACKSON TEXAS

PREPARED BY:	Rick Underdahl INSTRUCTOR	DATE:	September 2015
RECOMMENDED BY:	DIVISION CHAIRMAN	DATE:	
APPROVED BY:	DEAN	DATE:	

The Brazosport College District shall not discriminate against, or exclude from participation in any benefits or activities either on the staff or in the student body, any person on the grounds of sex, race, color, religion, national origin, age or handicap.

AUMT 2434/1034

Engine Performance Analysis II

COURSE DESCRIPTION

A study of diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems; and proper use of advanced engine performance diagnostic equipment. May be taught manufacturer specific. Prerequisites: AUMT1307 and AUMT 2317 (3, 3)

COURSE FOCUS

Utilize appropriate safety procedures; explain the operation, diagnosis, and repair of emission control systems; describe the operation, diagnosis, and repair of computerized engine performance systems and advanced ignition and fuel systems; and demonstrate proper use of advanced engine performance diagnostic equipment.

TEXT AND REFERENCES

Automotive Technology Curriculum

Author(s): <u>CDX Automotive</u>

- ISBN-13: 9781284027327
- Online Course pages © 2015 Access Code Subscription Length: 365 Days

Required course materials are available at the Brazosport College bookstore, on campus or online at <u>http://www.brazosport.edu/bookstore</u>. A student of this institution is not under any obligation to purchase a textbook from the college bookstore. The same textbook is/may also be available from an independent retailer, including an online retailer.

COURSE GOALS

The following list of course goals will be addressed in the course.

- 1. Identify types of emission systems
- 2. Diagnose emission systems
- 3. Repair emission systems
- 4. Explain the theory and operation of computerized engine systems
- 5. Identify computerized engine components
- 6. Explain the procedures and precautions for safely using tools and equipment
- 7. Explain what should be done to maintain a safe work area
- 8. Demonstrate proper use of advanced diagnostic equipment
- 9. Explain advanced diagnostic procedures.
- 10. Interpret results of diagnostic data
- 11. Determine needed repairs necessary to restore engine performance
- 12. Perform OBD I diagnostics
- 13. Perform OBD II diagnostics
- 14. Perform advanced fuel system diagnostics
- 15. Demonstrate proper and safe procedures in diagnosing and repairing engine performance problems

STUDENT CONTRIBUTIONS

Students are expected to attend regularly scheduled classes. They should complete all reading and outside class assignments prior to the scheduled meetings. The student will assist in demonstrations, complete assignments and tests demonstrating appropriate knowledge and skills in the specific areas designated. Students will be asked to complete an Instructor/Course Evaluation at the end of the course.

COURSE EVALUATION

A = 100 - 90 B = 98 - 80 C = 78 - 70 D = 69 - 60F = 59 and below

COURSE SCHEDULE

The class meets for 3 lecture hours and 3 lab hours per week.

STUDENTS WITH DISABILITIES

Brazosport College is committed to providing equal education opportunities to every student. Brazosport College offers services for individuals with special needs and capabilities including counseling, tutoring, equipment, and software to assist students with special needs. Please contact the Special Populations Counselor, 979.230.3236, for further information.

ACADEMIC HONESTY

Brazosport College assumes that students eligible to perform on the college level are familiar with the ordinary rules governing proper conduct including academic honesty. The principle of academic honesty is that all work presented by you is yours alone. Academic dishonesty including, but not limited to, cheating, plagiarism, and collusion shall be treated appropriately. Please refer to the Brazosport College Student Guide for more information. This is available online at http://www.brazosport.edu. Click on the CATALOGS AND SCHEDULES link under STUDENTS.

Academic dishonesty violates both the policies of this course and the Student Code of Conduct. In this class, any occurrence of academic dishonesty will be referred to the Dean of Student Services for prompt adjudication, and will, at a minimum, result in an automatic zero for the assignment. Sanctions may be imposed beyond your grade in this course by the Dean of Student Services.