



**TRINITY VALLEY COMMUNITY COLLEGE
ADMINISTRATIVE-MASTER SYLLABUS**

The Administrative- Master Syllabus is an administrative tool; it is **not intended to be distributed to students.** It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of TVCC, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction. The Administrative-Master Syllabus will demonstrate that there is consistency and comparability in course offerings.

Course Title

Engine Performance Analysis I

Course Prefix and Number

AUMT 2417

Department – Division

Workforce Education

Course Type – select from one of the following categories.

- Academic General Education Course (from ACGM – but not in TVCC Core)
- Academic TVCC Core Course
- WECM Courses

Semester Credit Hours: Lecture Hours: Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	4	6

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description

Theory, operation, diagnosis, and repair of basic engine dynamics, ignition systems, and fuel delivery system. Use of basic engine performance diagnostic equipment.

Prerequisites/co requisites

None

Topical Outline

- A. Fundamentals of Electricity, Magnetism, and Electronics**
- B. Automotive Fuels**
- C. Fuel Supply Systems, Intake Systems, Supercharger, and Turbochargers**
- D. Fuel Injection Systems**
- E. Carburetors**
- F. Ignition System Fundamentals and Service**
- G. Batteries and Battery Service**
- H. Starting System Fundamentals and Service**
- I. Charging System Fundamentals**
- J. Charging System Service**

Course Learning Outcomes

Upon completion of this course, the student will be able to:

1. Overhaul a carburetor
2. Check and make necessary adjustments to the carburetor type fuel system
3. Diagnosis and repair fuel injection type fuel systems
4. Diagnosis and repair problems in the ignition system
5. Diagnosis and repair problems in the electrical charging and starting systems

Relationship to General Education Outcomes – In addition to the core competencies, Trinity Valley Community College has established ten general education goals which specify knowledge and skills that students should gain from completing courses in the various component areas of the core curriculum. Information regarding curriculum and assessment as a means for the improvement of student learning through the general education component. (Select all that apply.)

Mark with an "X"	General Education Outcome
<input type="checkbox"/>	A. To communicate clearly and effectively in both oral and written English.
<input type="checkbox"/>	B. To improve reading skills focused on comprehending, analyzing, interpreting, and evaluating printed materials.

	C. To understand mathematical information and utilize mathematical skills.
	D. To demonstrate qualitative and quantitative critical thinking skills.
	E. To understand and appreciate cultural and ethnic diversity.
X	F. To utilize computer based technology in accessing information, solving problems, and communicating.
	G. To recognize and evaluate artistic achievements in the visual and performing arts.
	H. To improve basic understanding of political, economic, and social systems.
	I. To demonstrate knowledge of the physical universe and living systems.
X	J. To develop skills and strategies to become an engaged learner.

Required Text(s)

Automotive Encyclopedia

Optional Text(s)

None

Material/Technology to be supplied by the student.

None

Course Requirements/Grading System – describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course; not intended to restrict the individual nature by which each faculty member who teaches the course determines course requirements and final student performance, but should offer consistency within reason for all sections taught for those departments without a standardized format.

1. Attend class and lab regularly and participate in assigned projects.
2. Take 10 daily tests, 5 major exams, final exam and complete assigned lab work.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by	Signature	Date
Department Head	Signature	Date
Division Chair	Signature	Date
Vice President	Signature	Date