



GROSSMONT-CUYAMACA
COMMUNITY COLLEGE DISTRICT

Grossmont-Cuyamaca College Community District
Articulation Agreement

High School Course	Credits	College Course	Units
Auto General Maintenance 1, 2	10.0	AUTO 99 Introduction to Automotive Technology	3.0
High school(s):		College:	
Monte Vista High School		Cuyamaca College	

1. Course Prerequisites

None

2. Recommended Preparation

None

3. College Course Description

This course presents basic information about automotive systems. Serves as a recommended preparation course for students interested in the Automotive Technology major.

4. Required Content for Articulation

- A. Introduction and safety
- B. History of automobile
- C. Four-stroke cycle engine operation
- D. Engine construction
- E. Engine lubrication
- F. Engine cooling system
- G. Diesel engine principles
- H. Fuel system
- I. Supercharging and fuel injection
- J. Electricity
- K. Starting and charging systems
- L. Ignition system
- M. Brakes
- N. Chassis and suspension
- O. Transmission and drivelines
- P. Tires and wheels
- Q. Emission controls

5. Required Competencies (SLOs) for Articulation

Students will be able to:

- A. Demonstrate standardized safety and hazardous waste handling practices.
- B. Identify the major automotive systems and describe how they work and interrelate to each other.
- C. Classify the various types of automotive repair businesses, and describe the differences between them.

6. Assessment Methods

A grading system will be established by the instructor and implemented uniformly. Grades will be based on demonstrated proficiency in subject matter determined by multiple measurements for evaluation, one of which must be essay exams, skills demonstration or, where appropriate, the symbol system.

- A. In-class activities that demonstrate students' ability to describe and adhere to basic safety and hazardous materials practices.
- B. Written exams and practical exercises that measure students' ability to recognize basic automotive system components and explain how they interactively work together. Optional pilot of the Cuyamaca Distance Education Hands-On Student Test.
- C. Quizzes and/or written assignments that measure students' ability to distinguish between the different types of automotive repair businesses.
- D. Performance project that demonstrates knowledge and abilities to construct a replica of an actual automobile, or propose a project approved by the instructor that demonstrates knowledge and abilities to construct and describe art relating to a principle or principles from the course objectives.

7. Texts and other supporting materials (software, etc.)

- A. Stockel and Johanson. *Auto Fundamentals*. 11th edition. Goodheart-Wilcox Co., 2015. ISBN: 9781619608207

8. Criteria for Course Articulation

- A. High school and college teachers attend articulation meetings to determine curriculum alignment and articulation competency rubric.
- B. Student must pass high school course with a grade of "B" or better for **BOTH** semesters and demonstrate mastery of all course competencies.

Agreement was based on Statewide Career pathways Project Template: Yes ____ No X

Articulation meeting held: **November 28, 2018**

Effective date: **Fall 2018**

Expiration date: **December 1, 2021**

High School Signatures

 3-6-19
Teacher Date

Michael Fleming
Teacher (print name)

 3/6/19
Principal Date

Joel Toypp
Principal (print name)

College Signatures

 3-13-19
Instructor/Division Chair, Cuyamaca Date

Brad McCombs
Instructor/Division Chair (print name)

 3-13-19
Dean of Career Education, Cuyamaca College Date

Larry McComore
Dean of Career Education (print name)

Monte Vista High School

High School