

Articulation Request and Agreement 2018-2019

Discipline:	Automotive Technology	
High School:	Sonora High School	
High School Course:	Automotive Services Technician I and II	
Columbia College Course:		
Date Accepted:	2018-2019	
Renewal:	2021-2022	

This request and agreement is submitted for consideration of the following course as an articulated course at Columbia College. Students would receive course credit at Columbia College.

Directions:

- Complete a separate form for each course.
- Attach the course outline for the course.
- Attach the course final if course is to be considered for credit.
- Mail to: Dean of Career Technical Education, 11600 Columbia College Drive, Sonora, CA 95370

Completed by High School Instructor:

High School/ROP:	Sonora High School
Instructor Name:	Todd Isman
Mailing Address:	430 North Washington Street, Sonora, CA 95370
	tisman@sonorahs.k12.ca.us
Contact Number:	

High School / ROP/CTE Course Title: Automotive Services Technician I and II

HS/ROCP Credits: 10

HS/ROCP Prerequisite(s): None

High School / ROP/CTE Course Description:

The "Automotive Services Technician" course is a comprehensive automotive program. The course will serve high school and adult students that meet age, grade level, and boundary requirements. Students will receive instruction in component identification, diagnosis and replacement, precision measuring, rebuilding and repair, adjustment and servicing procedures. Instruction will provide student with entry level skills in automatic transmission, transaxle, brakes, electrical systems, engine performance, engine repair, hearing and air conditioning, manual drive train and axles, and front-end repair. The advanced course will include core standards and basic principles. Instruction will include basic lecture, demonstration and live hands-on work. Evaluation will be academic and competency based.

College Course Title: AT 100 - Introduction to Automotive Technology

College Units:

4.0

College Prerequisite(s):

None

Advisories/Recommendations: None

Course Content and Format:

1. Automotive Industry Overview:

(Components of auto industry, Alternative forms of transportation, utilized in automobile manufacturing and other aspects of land transportation systems, Review Careers/Job Market/Employability, Leadership/Management, System analysis and problem solving)

2. Safety:

(General shop safety, Proper clothing and grooming, Safe use of hand and power tools, Restraint systems, Emergency fire and disaster procedures. OSHA rules and regulations, Waste and material disposal)

3. Tools, Equipment and Supplies:

(Review basic hand tools, operation and maintenance, Review basic power tools, operation and maintenance, Pertinent Business practices)

4. Scientific Principles:

(Math related to auto field, Measurement scales and systems used in transportation and energy operations, Physics, power, scales and systems used in transportation and field, Alternative forms of energy and transportation, including nuclear power, aerospace, and electric Automobiles, Review energy and transportation related environmental safety and health issues, Basic principles of electricity and electronics)

5. Communication Skills:

(applying written communication skills in an auto industry, including appointments, cost estimates, work orders, and using service manuals)

6. System Overview:

(Theory, Service and Repair (Braking Systems, Engine Performance, Heating and Air Conditioning, Suspension and Steering, Automatic Transaxle and Transmissions, Electrical Systems, Alternative Fuel Vehicles, Engine Repair, Manual Drive Trains and Axles)

Competencies and Skill Requirements (Use additional pages as necessary) At the conclusion of this course, the student should be able to:

- · Understand general principles of automobile manufacturing and the auto history.
- · Understand health hazards, safety practices and environmental hazards related to their work in the shop.
- · Understand how specific tools are used to perform maintenance and repair operations, and will select and use the correct tools and equipment for repair procedures.
- Understand scientific principles in relation to physical and chemical functions in transportation and energy systems.
- Apply verbal communication skills in the auto industry.
- · Understand basic theory, service and repair of the vehicles eight sub systems.

Measurement Methods (include any industry certification or licensure):

Satisfactory completion Lab Worksheets and Handouts - 60%

Test/Quizzes - 35%

Homework Assignments – 5%

In order to receive college credit, student must pass a competency exam with 70% or better, administered by Columbia College faculty, Erik Andal or his designee. The score on the exam administered by the college will also determine the grade reflected on the transcript as follows: 70%-100% = Pass

Note: Students that complete an articulated high school course and meet the specific articulation requirements for course will be awarded Columbia College credit. The transcript will be noted as CBE (Credit by Exam). In order to receive above credit,

students must complete a Columb months of completing the high sch	oia College Application for Admission within six (6) hool course.
Sample Textbooks or Other Support I	Waterials (including Software):
Modern Automotive Technology 7th Editi	on Goodheart-Willcox 2009
CC faculty Signature:	Date: 12 14) 8
[Office use only.] TOPs Code:	[Office use only.] Internal Tracking Number:

Completed by Columbia College

Columbia College and Sonora High School faculty have met and agree on the terms of the articulation agreement.

Department Faculty Signature	* Exclusion	☐ Approved ☐ Not Approved	12/1/12018
CTE Dean Signature	* llus Heure	✓ Approved □ Not Approved	/2, /7/ 2018
CTE Transition Officer Signature	* Carol Eleis	Approved Not Approved	12,17,1 2018
Admissions and Records Notified			12,17, 2018
High School Notified			12,17,1 2018