

## Articulation Request and Agreement 2018-2019

<b>Discipline:</b>	<b>Automotive Technology</b>
<b>High School:</b>	<b>Summerville High School</b>
<b>High School Course:</b>	<b>Automotive Service Technician I/II</b>
<b>Columbia College Course:</b>	<b>AT 100 – Introduction to Auto Technology</b>
<b>Date Accepted:</b>	<b>2018-2019</b>
<b>Renewal:</b>	<b>2021-2022</b>

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, Sonoma, CA 95370

### **Completed by High School Instructor:**

<b>High School/ROP:</b>	Summerville High School
<b>Instructor Name:</b>	Tom Dibble
<b>Mailing Address:</b>	17555 Tuolumne Road, Tuolumne, CA 95379
<b>Email Address:</b>	tdibble@summbears.k12.ca.us
<b>Contact Number:</b>	(209) 928-4228 Ext 282

<b>High School / ROP/CTE Course Title:</b>	Automotive Service Technician I and II
<b>HS/ROCP Credits:</b>	20.0
<b>HS/ROCP Prerequisite(s):</b>	Student will read at 7 <sup>th</sup> grade level. Student will complete 5 <sup>th</sup> grade math (fractions, division). Instructor approval.
<b>High School / ROP/CTE Course Description:</b>	The "Automotive Service 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 serving procedures. Instruction will provide students with entry level skills in automatic transmission, transaxle, brakes, electrical systems, engine performance, engine repair, heating 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.

<b>College Course Title:</b>	AT 100 – Introduction to Automotive Technology
<b>College Units:</b>	4.0
<b>College Prerequisite(s):</b>	None
<b>Advisories/Recommendations:</b>	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, Review basic supplies storage and maintenance, Review basic equipment storage 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 and energy related to the automotive and transportation 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 auto industry, including appointments, cost estimates, work orders and using service manuals.)
6. **Systems 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:**

- The student will understand the general principles of automobile manufacturing and the auto industry.
- Student will understand the health hazards, safety practices, and environmental hazards related to their work in the shop.
- The student will 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.
- The student will understand scientific principles in relation to physical and chemical functions in transportation and energy systems.
- The student will be able to apply verbal communication skills in the auto industry.
- The student will have a basic understanding of the theory, service and repair of the vehicles eight sub systems.

**Measurement Methods (include any industry certification or licensure):**

In order to receive Columbia College credit student must:

Pass final exam prepared by Columbia College Automotive Instructor Erik Andal with a passing grade of 70% or above.

**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 Columbia College Application for Admission within six (6) months of completing the high school course.**

**Sample Textbooks or Other Support Materials (including Software):**

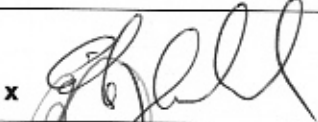
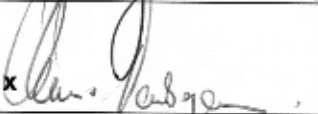
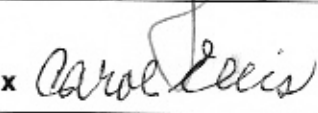
Automotive Service, 4<sup>th</sup> Edition (2012)

Tim Gillies, Delmar Learning

CC faculty Signature: 	Date: 12/14/18
[Office use only.] TOPs Code:	[Office use only.] Internal Tracking Number:

**Completed by Columbia College**

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

Department Faculty Signature	x 	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Not Approved	12/14/2018
CTE Dean Signature	x 	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Not Approved	12/17/2018
CTE Transition Officer Signature	x 	<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Not Approved	12/17/2018
Admissions and Records Notified			12/17/2018
High School Notified			12/17/2018