Discipline: **Automotive Technology**

Date Accepted: **4 / 26 / 2012**  
Renewal due during: **Spring 2013**  
(one-year term agreement)

**Articulation Request and Agreement**

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:**
1. Use a separate form for each course.
2. Attach the course outline for the course.
3. Attach the course final if course is to be considered for credit.
4. Mail to: Dean of Instructional Services, Career Technical Education  
   11600 Columbia College Drive  
   Sonora, CA 95370

*Completed by High School Instructor*

<table>
<thead>
<tr>
<th>High School/ROP:</th>
<th>Summerville High School</th>
</tr>
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<tbody>
<tr>
<td><strong>Instructor Name:</strong></td>
<td>Tom Dibble</td>
</tr>
<tr>
<td><strong>Telephone Number:</strong></td>
<td>928-4228</td>
</tr>
<tr>
<td><strong>Email Address:</strong></td>
<td><a href="mailto:tdibble@summbeans.k12.ca.us">tdibble@summbeans.k12.ca.us</a></td>
</tr>
<tr>
<td><strong>Address:</strong></td>
<td>17555 Tuolumne Road</td>
</tr>
<tr>
<td></td>
<td>Tuolumne, CA 95379</td>
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</tbody>
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**High School / ROP Course Title:** Automotive Service Technician I and II

**High school / ROP Course Description:**

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 servicing 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.
<table>
<thead>
<tr>
<th>College Course Title:</th>
<th>Introduction to Automotive Technology AT100</th>
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</thead>
<tbody>
<tr>
<td>College Units:</td>
<td>4</td>
</tr>
<tr>
<td>HS/ROCP Credits:</td>
<td>20</td>
</tr>
<tr>
<td>College Prerequisite(s):</td>
<td>None</td>
</tr>
<tr>
<td>HS/ROCP Prerequisite(s):</td>
<td>Student will read at 7th grade level. Student will complete 5th grade math (fractions, division). Instructor approval required.</td>
</tr>
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</table>

**Advisories/Recommendations:**

None

**Course Content**

1. **Automotive Industry Overview.** (Components of auto industry, Alternative forms of transportation, utilized in automobile manufacturing & other aspects of land transportation systems, Review Careers/Job Market/Employability, Leadership/management, System analysis & problem solving)

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

3. **Tools, Equipment & Supplies.** (Review basic hand tools, operation & maintenance, Review basic power tools, operation & maintenance, Review basic supplies storage & maintenance, Review basic equipment storage & maintenance, Pertinent business practices)

4. **Scientific Principles.** (Math related to auto field, Measurement scales & systems used in transportation & energy operations, Physics, power, & energy related to the automotive & transportation field, Alternative forms of energy & transportation, including nuclear power, aerospace, & electric Automobiles, Review energy & transportation related environmental safety & health issues, Basic principles of electricity & electronics)

5. **Communication Skills.** (Applying written communication skills in auto industry, including appointments, cost estimates, work orders, and using service manuals)

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

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The student will understand the general principles of automobile manufacturing & the auto industry.
Student will understand the health hazards, safety practices, & environmental hazards related to their work in the shop
The student will understand how specific tools are used to perform maintenance & repair operations, & will select & use the correct tools & equipment for repair procedures
The student will understand scientific principles in relation to physical & chemical functions in transportation & 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 college credit student must: Pass final exam prepared by Columbia College Automotive Instructor, Erik Andal with a passing grade of 70% or above.

Sample Textbooks or Other Support Materials (including Software):

Tim Gilles. Delmar Learning.

CC faculty Signature: [Signature] Date: 4-26-2012

[Office use only.]
TOPs Code:

[Office use only.]
Internal Tracking Number:
Completed by Columbia College

This portion is completed after CC faculty and H.S. faculty meet and agree on the terms of the articulation agreement.

Department faculty: ☑ Approved ☐ Not Approved

Dean: ☑ Approved ☐ Not Approved

CTE Transition Coordinator: ☑ Approved ☐ Not Approved

Admissions and Record notifications: ☑ date: 2/26/12

High school notification: ☑ date: 4/26/12