

# Lassen Community College Automotive Technology Program Review October 2016

**LASSEN COMMUNITY COLLEGE**

Chad Lewis Automotive Instructor

Accepted by Academic Senate:

Accepted by Consultation Council:

Accepted by Governing Board:

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## SECTION 1: ACADEMIC PLANNING

### I. Program Overview, Objectives, and Student Learning Outcomes

#### Program Overview

The Automotive Technology Program at Lassen Community College currently consists of 19 individual courses. The student can earn an A.S. Degree in Automotive Technology, earn a Certificate of Achievement in Advanced Mechanics or Engine Repair, or earn a Certificate of Accomplishment in Basic Mechanics, General Mechanics, or Electrical. A student could also take individual courses as needed. A student could also take courses approved by the California Bureau of Automotive Repair to prepare them to take the test to earn their smog inspector license.

The Automotive Technology Program is designed to prepare the student with the necessary skills to acquire an entry-level position in the automotive industry. The program is also designed to assist those already employed in the industry and those in the community to improve their skills. The Automotive program offers course work in engine repair, chassis electrical, automatic transmissions and other components. The curriculum is updated with the assistance of industry advisory committee.

#### Objectives for as A.S. Degree in Automotive Technology

As an Automotive major, you will:

- Study the diagnostic procedures necessary to determine simple and complex problems, fix them and provide ongoing maintenance.
- Develop an in-depth understanding of why cars work the way they do, allowing you to better fix and maintain vehicles, and provide a higher level of service.
- Identify terms associated with automobiles as well as automotive components along with basic identification and proper use of various hand and power tools and shop equipment.

#### Program Student Learning Outcomes

Upon completion of the **Automotive Technology Associate in Science Degree** the student will be able to:

- 1 Diagnose a specific automotive malfunction; execute the appropriate corrective steps and verify the problem has been resolved.
- 2 Perform general maintenance and upkeep procedures on a variety of automobiles.

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### **Student Learning Outcomes for a Certificate of Achievement in Advanced Mechanics**

Upon completion of the **Certificate of Achievement – Advanced Mechanics** the student will be able to:

- 1 Diagnose common automotive drivetrain malfunctions, execute the appropriate corrective steps and verify the problem has been resolved.
- 2 Perform automotive preventative maintenance according to industry standards.
- 3 Perform standard documentation found on automotive repair orders.

### **Student Learning Outcomes for a Certificate of Achievement in Engine Repair**

Upon completion of the **Certificate of Achievement – Engine Repair** the student will be able to:

- 1 Diagnose various automotive engine systems malfunctions: execute the appropriate corrective steps and verify the problem has been resolved.
- 2 Perform automotive preventative maintenance according to industry standards.
- 3 Perform standard documentation found on automotive repair orders.

### **Student Learning Outcomes for a Certificate of Accomplishment in General Mechanics**

Upon completion of the **Certificate of Accomplishment – General Mechanics** the student will be able to:

- 1 Diagnose basic automotive chassis system malfunctions; execute the appropriate corrective steps and verify the problem has been resolved.
- 2 Perform automotive preventative maintenance according to industry standards
- 3 Perform standard documentation found on automotive repair orders.

### **Student Learning Outcomes for a Certificate of Accomplishment in Basic Mechanics**

Upon completion of the **Certificate of Accomplishment – Basic Mechanics** the student will be able to:

- 1 Diagnose basic automotive drivetrain malfunctions; execute the appropriate corrective steps and verify the malfunction has been resolved.
- 2 Perform automotive preventative maintenance according to industry standards
- 3 Perform standard documentation found on automotive repair orders.

### **Student Learning Outcomes for a Certificate of Accomplishment in Electrical**

Upon completion of the **Certificate of Accomplishment – Electrical** the student will be able to:

- 1 Diagnose basic automotive electrical system malfunctions; execute the appropriate corrective steps and verify the problem has been resolved.
- 2 Perform preventative maintenance and basic electrical system testing to verify proper operation of automotive starting, charging, and lighting systems.

### Description/Evaluation:

The Automotive Technology mission and goals compliment Lassen College's mission statement, which is included below. The Automotive Program provides the student with skills needed to diagnose and repair vehicles in the home setting as well as providing the student with skills to obtain gainful employment and to advance their careers in the automotive industry.

#### **Mission**

Lassen Community College provides outstanding programs for all pursuing higher education goals. The core programs offer a wide range of educational opportunities including transfer degrees and certificates, economic and workforce development, and basic skills instruction. The college serves students, both on campus and in outreach areas in its effort to build intellectual growth, human perspective and economic potential.

#### Strategic Goals

1. Institutional Effectiveness: Provide the governance, leadership, integrated planning and accountability structures, and processes to effectively support the learning environment, while ensuring responsible stewardship of public trust and resources.
2. Learning Opportunities: Provide an array of rigorous academic programs delivered via a variety of modalities that promote student learning and meet the needs of the local and global community.
3. Resource Management: Manage human, physical, technological and financial resources to sustain fiscal stability and to effectively support the learning environment.
4. Student Success: Provide a college environment that reaches-out-to and supports students, minimizes barriers, and increases opportunity and success through access and retention to enable student attainment of educational goals including completion of degrees and certificates, transfer, job placement and advancement, improvement of basic skills, and self-development through lifelong learning.

All of the Automotive Technology Program Student Learning Outcomes link to the Lassen Community College Institutional Student Learning Outcomes, which are posted below.

## **INSTITUTIONAL STUDENT LEARNING OUTCOMES**

Upon the completion of any course, educational activity or program, the student will demonstrate improvement in one or more of these areas:

### **ISLO 1: Communication**

Ability to listen and read with comprehension and the ability to write and speak effectively.

### **ISLO 2: Critical Thinking**

Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome.

### **ISLO 3: Lifelong Learning**

Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems.

### **ISLO 4: Personal/Interpersonal Responsibility**

Ability to develop and apply strategies to set realistic goals for personal, educational, career, and community development; ability to apply standards of personal and professional integrity; ability to cooperate with others in a collaborative environment for accomplishment of goals; ability to interact successfully with other cultures.

The Automotive Technology program Student Learning Outcomes (SLO's) for the Associates Degree and certificates are as follows:

### **Associate in Science Degree Automotive Technology**

1. Diagnose a specific automotive malfunction; execute the appropriate corrective steps and verify the problem has been resolved.
2. Perform general maintenance and upkeep procedures on a variety of automobiles

### **Certificate of Achievement Engine Repair**

1. Diagnose various automotive engine system malfunctions: execute the appropriate corrective steps and verify the problem has been resolved.
2. Perform automotive preventative maintenance according to industry standards.
3. Perform standard documentation found on automotive repair orders.

### **Certificate of Achievement Advanced Mechanics**

1. Diagnose common automotive drivetrain malfunctions, execute the appropriate corrective steps and verify the problem has been resolved.
2. Perform automotive preventative maintenance according to industry standards.
3. Perform standard documentation found on automotive repair orders.

#### **Certificate of Accomplishment – General Mechanics**

1. Diagnose basic automotive chassis system malfunctions; execute the appropriate corrective steps and verify the problem has been resolved.
2. Perform automotive preventative maintenance according to industry standards.
3. Perform standard documentation found on automotive repair orders.

#### **Certificate of Accomplishment – Electrical**

1. Diagnose basic automotive electrical system malfunctions; execute the appropriate corrective steps and verify the problem has been resolved.
2. Perform preventative maintenance and basic electrical system testing to verify proper operation of automotive starting, charging, and lighting systems.

No new courses have been added to the Automotive Technology curriculum since the last program review. The Diesel Maintenance and Repair course has been offered twice since the last IPR. The Smog Check Level 2 course has been offered twice since the last program review resulting in three students successfully earning their state of California Bureau of Automotive Repair Smog Inspector License and one student earning the California Bureau of Automotive Repair Smog Repair License. The full time faculty member for the automotive program is receiving training on hybrid vehicles and the plan is to begin offering hybrid vehicle repair courses next year. New program certificates for hybrid vehicles and for the smog program will be created in the near future.

Automotive service technicians and mechanics remains a solid career choice according to the Bureau of Labor Statistics. The 2015 median pay was \$18.20 per hour or \$37,850 per year nationally. California led the way with 61,140 jobs in this field and had the top wages of \$44,940 per year or \$21.61 per hour. These as well as other statistics are available at the BLS website here



<https://www.bls.gov/ooh/installation-maintenance-and-repair/automotive-service-technicians-and-mechanics.htm>

The automotive service technicians and mechanics data by state is listed here. <https://www.bls.gov/oes/current/oes493023.htm>

The Automotive Technology Program could benefit from more marketing and advertising. A promotional video was created for all CTE programs. The link for the automotive video is [here](#). There is also some occasional advertising that is done in the local Mountain Living magazine. The faculty member also makes rounds to the local high schools and charter schools to talk with students about the program.

**Planning Agenda:**

#1 A review of the programs mission and goals will be done at the next advisory meeting.

#2 Program SLO’s will be reviewed at the next advisory board meeting.

#3 More advertising and marketing needs to be created for the automotive program.

**II Student Outcomes**

**A. Trends and Patterns in Student Outcomes**

**Description/Evaluation:**

1. Provide in tabular form followed by an analysis
  - a. Number of degrees and certificates awarded during the last four years.

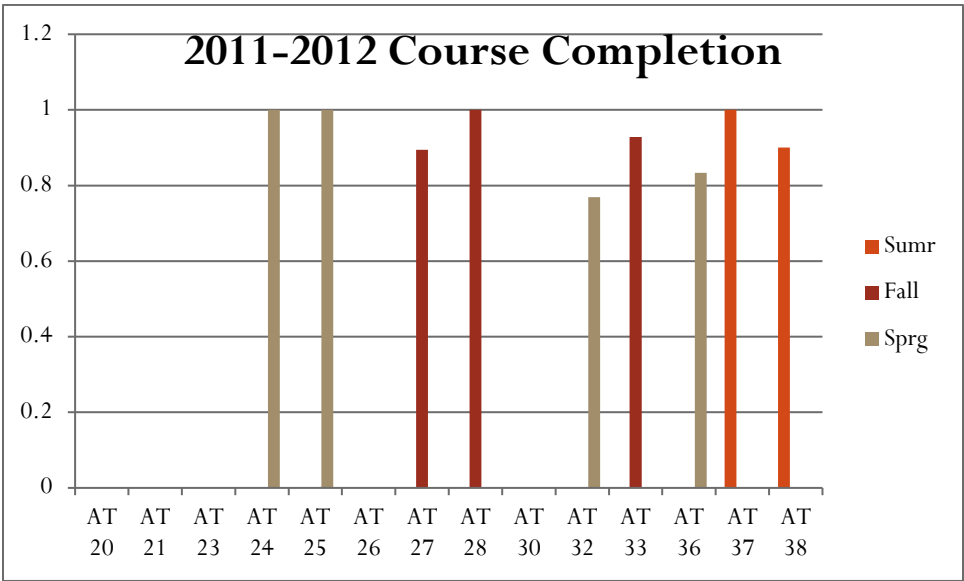
**Auto Program Awards**

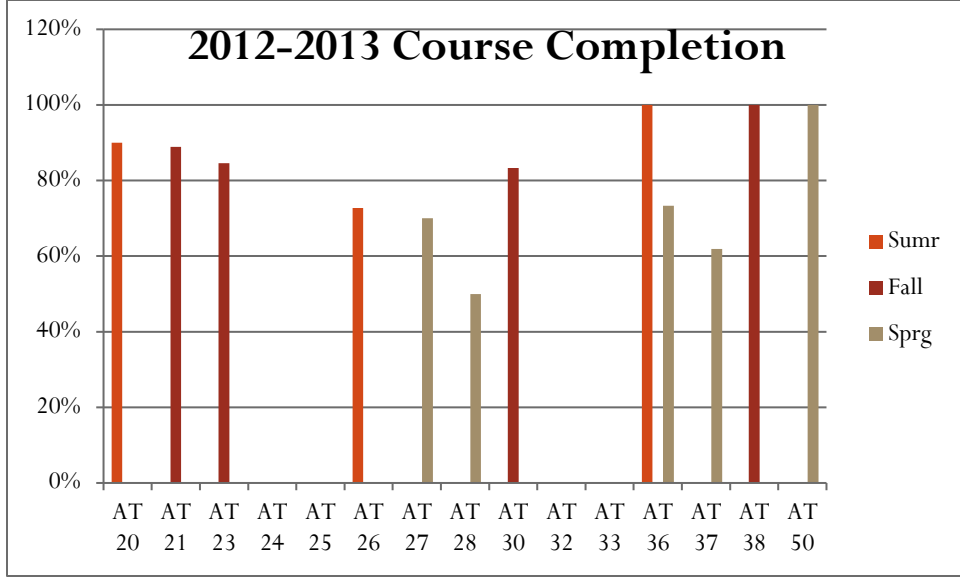
Award	Academic Year Awarded				
	2010-11	2011-12	2012-13	2013-14	2014-15
AS Automotive Technology			1	1	
Cert. of Achievement Advanced Mechanics				1	1
Cert. of Achievement Engine Repair				1	1
Tune-Up Certificate of Achievement				1	
Grand Total	0	0	1	4	2

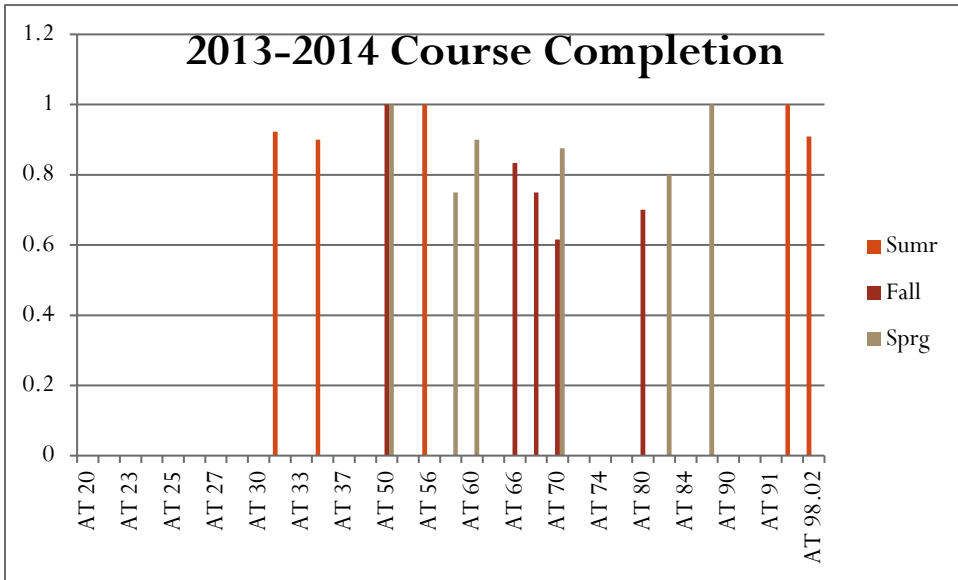
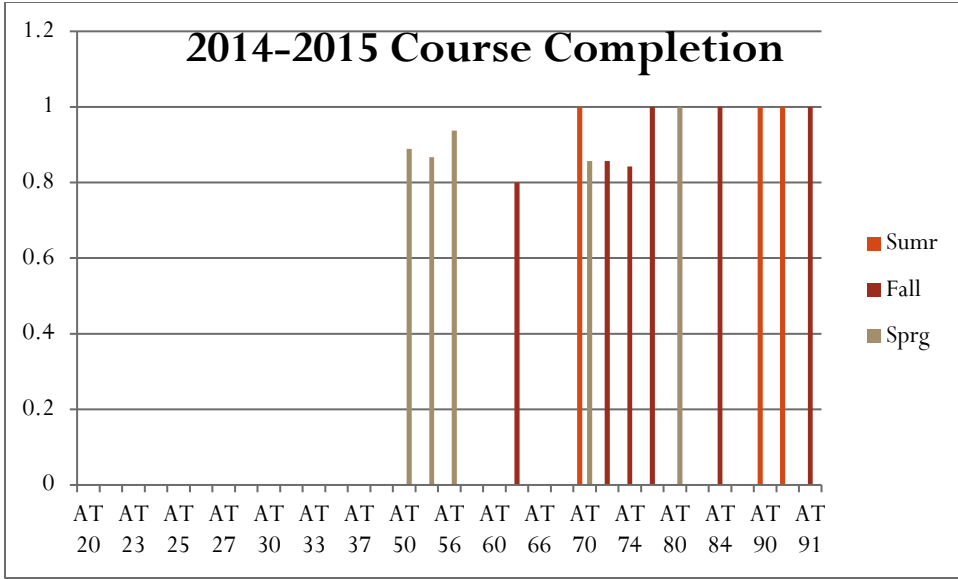
The number of degrees and certificates has increased in number over the last four years however; the number is still fairly small. One can speculate that some students are “skills builders” who take courses necessary for them to gain employment. Current students are more focused on earning the degree.

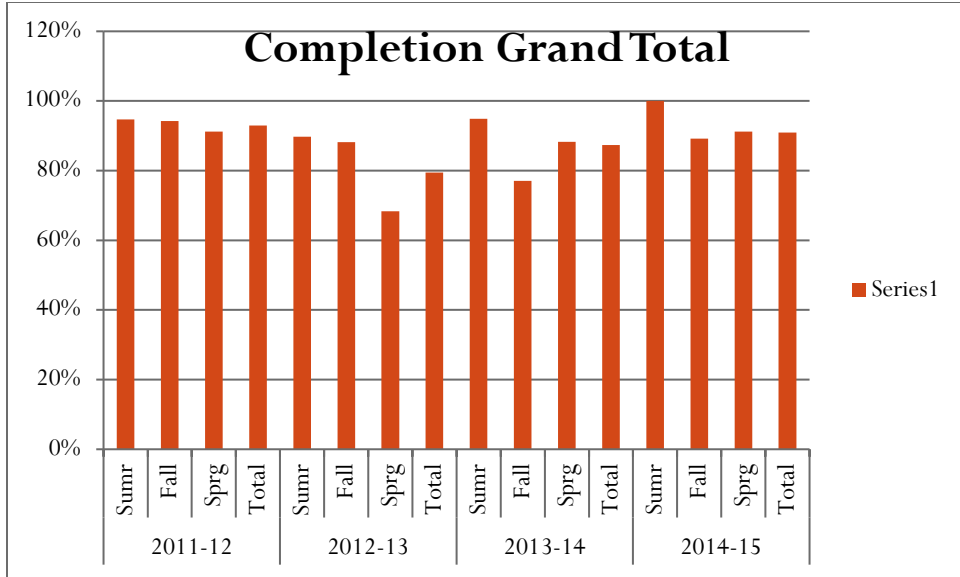
- b. Transfer numbers for the last four years  
Automotive Technology courses are not transferrable.

- c. Completion data for the last four years



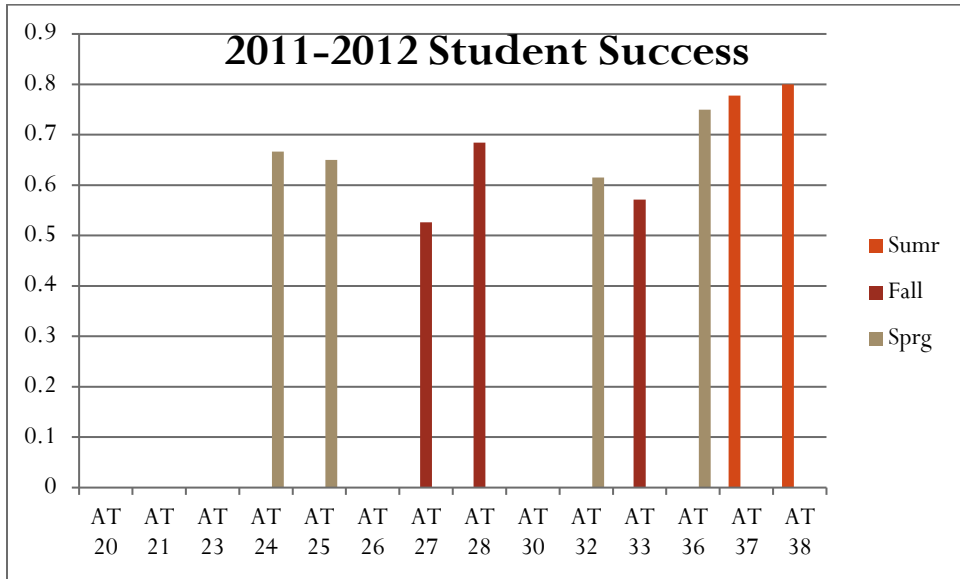


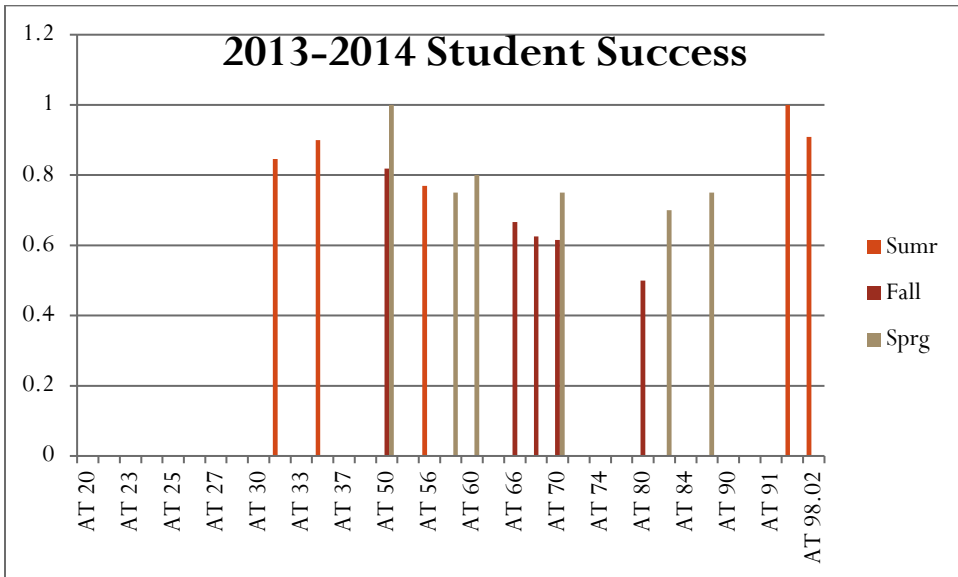
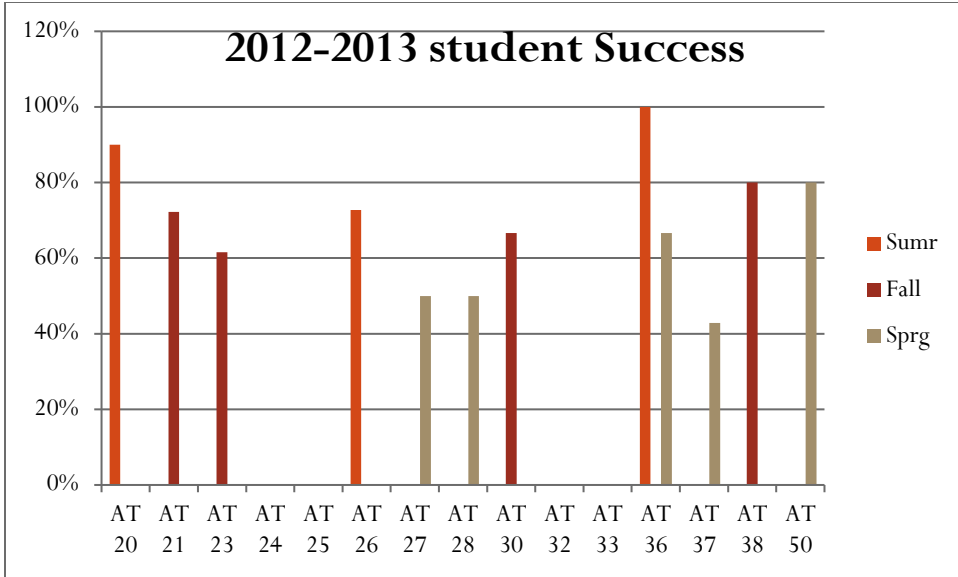


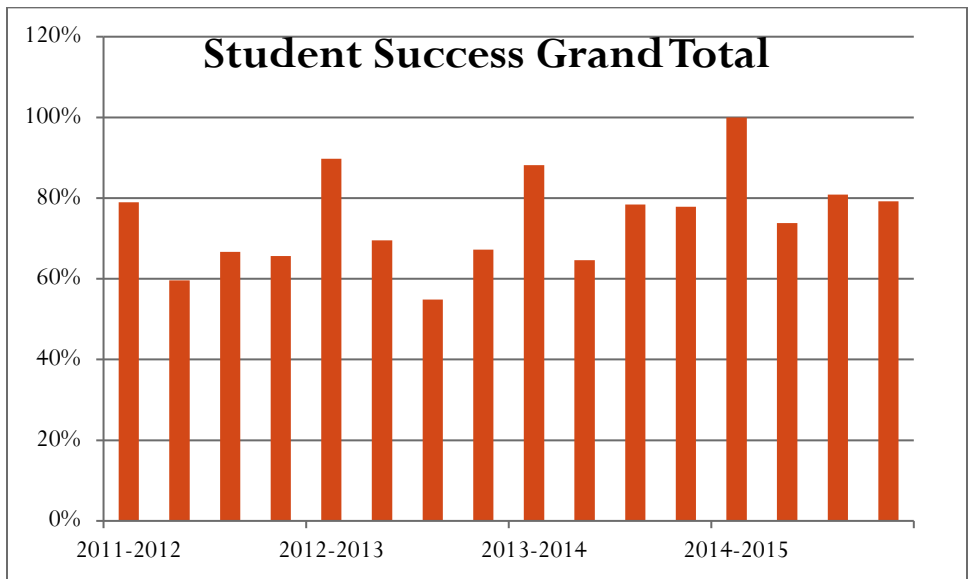
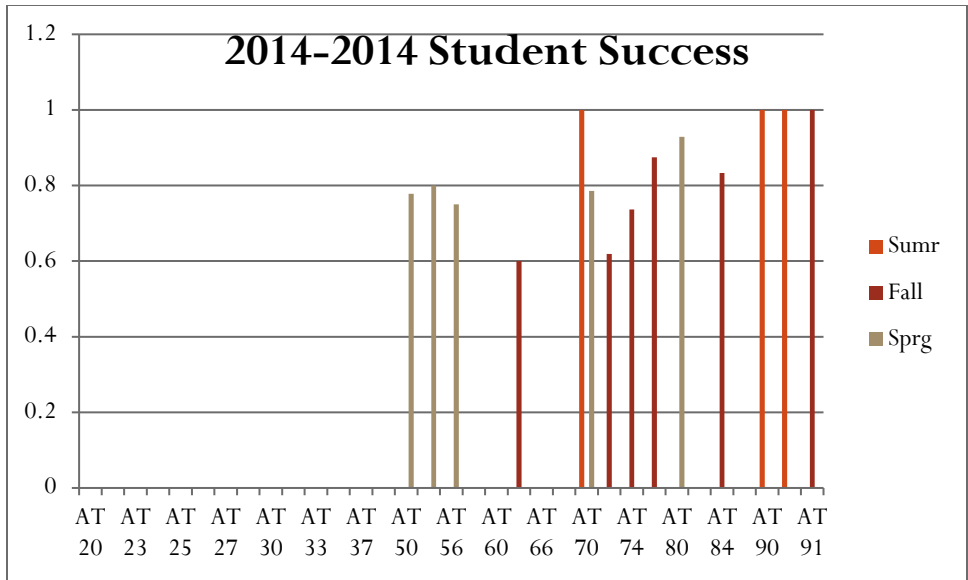


Completion rates in the automotive program are trending upwards.

d. Success data for the last four years







2. Evaluation

The Automotive program completion rate averages 88.6%. This is above the state average of 73.4% listed on the Student Success Scorecard found at [www.ccco.edu](http://www.ccco.edu). According to the KPI's provided enrollment per section is down substantially. The program needs to increase enrollment through advertisement and recruitment efforts. Herlong High School is the only high school in our service area that offers auto. There is an opportunity that is being lost to serve these students and increase enrollment in the auto program.

Planning Agenda:

#4 Work with area high schools to recruit students and if possible offer courses for the high school students.

#3 Increase advertising for the automotive program.

## B. Student Learning Outcome Assessment

SLO assessment is important to maintain and improve an effective learning experience for LCC students. Evaluating SLO results regularly is helpful for evaluating student learning and identifying emerging program needs. By contract, faculty are required to measure at least one SLO for every class taught each semester; these records are maintained in WEAVE and are available for review by faculty at any time.

### Description/Evaluation:

1. .

**Detailed Assessment Report**  
**Spring 2015 AT 50-Car Care Basics**  
As of: 10/30/2016 11:50 AM PDT  
**(Includes those Action Plans with Budget Amounts marked *One-Time, Recurring, No Request.*)**

**Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

**SLO 1: AT 50-SLO 1**

Identify vehicle information and perform basic preventative vehicle maintenance at a beginner level in 2.5 times flat rate time. Students will also be able to perform minor vehicle repairs and basic roadside repairs at a beginner level in 2.5 times flat rate time.

**Relevant Associations:**  
**Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

**Related Measures**

**M 1: Performance, Project or Lab Activities**

The area/subject faculty suggest using a Performance, Project or Lab Activities  
Source of Evidence: Performance (recital, exhibit, science project)

**Target:**  
80% of students will achieve 70% or higher.

**Details of Action Plans for This Cycle (by Established cycle, then alpha)**

**AT50-SP13-AP-clewis**

Labs were handed out as the subject was covered. The students that did not complete assigned lab also had poor attendance. I will have students focus on attendance in the future.

**Established in Cycle:** 2012-2013  
**Implementation Status:** Planned  
**Priority:** High

**Detailed Assessment Report**  
**Spring 2015 AT 54-Brakes**

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As of: 10/30/2016 11:50 AM PDT

(Includes those Action Plans with Budget Amounts marked *One-Time, Recurring, No Request.*)

## Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

### SLO 1: AT 54-SLO 1

Diagnose, analyze, and repair common brake malfunctions, using normal shop tools and equipment at a beginner level in 2.5 times flat rate time.

#### Relevant Associations:

#### Institutional Student Learning Outcomes Associations

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

#### Related Measures

#### **M 1: Performance, Project or Lab Activities**

The area/subject faculty suggest using a Performance, Project or Lab Activities

Source of Evidence: Performance (recital, exhibit, science project)

#### **Target:**

80% of students will achieve 70% or higher.

### SLO 2: AT 54-SLO 2

Demonstrate proper use of tools and equipment used when repairing and adjusting a vehicle braking system at a beginner level.

#### Relevant Associations:

#### Institutional Student Learning Outcomes Associations

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

#### Related Measures

#### **M 1: Performance, Project or Lab Activities**

The area/subject faculty suggest using a Performance, Project or Lab Activities

Source of Evidence: Performance (recital, exhibit, science project)

#### **Target:**

80% of students will achieve 70% or higher.

### Detailed Assessment Report

### Spring 2015 AT 56-Steering and Suspension

As of: 10/30/2016 11:50 AM PDT

(Includes those Action Plans with Budget Amounts marked *One-Time, Recurring, No Request.*)

## Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans

### SLO 1: AT 56-SLO 1

Diagnose, analyze, and repair common steering and suspension alignment malfunctions at a beginner Level in 2.5 times flat rate time.

#### Relevant Associations:

#### Institutional Student Learning Outcomes Associations

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

#### Related Measures

#### **M 1: Performance, Project or Lab Activities**

The area/subject faculty suggest using a Performance, Project or Lab Activities

Source of Evidence: Performance (recital, exhibit, science project)

#### **Target:**

80% of students will achieve 70% or higher.

#### **SLO 2: AT 56-SLO 2**

Demonstrate proper use of specialized tools and equipment in performing steering and suspension work.

#### Relevant Associations:

#### **Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

#### Related Measures

#### **M 1: Performance, Project or Lab Activities**

The area/subject faculty suggest using a Performance, Project or Lab Activities

Source of Evidence: Performance (recital, exhibit, science project)

#### **Target:**

80% of students will achieve 70% or higher.

### **Detailed Assessment Report**

## **Spring 2015 AT 58-Automotive Heating and Air Conditioning**

*As of: 10/30/2016 11:50 AM PDT*

**(Includes those Action Plans with Budget Amounts marked *One-Time, Recurring, No Request.*)**

### **Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

#### **SLO 1: AT 58-SLO 1**

Diagnose, analyze, and repair air conditioning units and their components that use R-12 and R-134A refrigerants at a beginner level in 2.5-Times flat rate time.

#### Relevant Associations:

#### **Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

#### Related Measures

#### **M 1: Performance, Project or Lab Activities**

The area/subject faculty suggest using a Performance, Project or Lab Activities

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Source of Evidence: Performance (recital, exhibit, science project)

**Target:**

80% of students will achieve 70% or higher

**SLO 2: AT 58-SLO 2**

Diagnose, analyze, and repair common heating system malfunctions at a beginner level in 2.5-times flat rate time.

**Relevant Associations:**

**Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

**Related Measures**

**M 1: Performance, Project or Lab Activities**

The area/subject faculty suggest using a Performance, Project or Lab Activities

Source of Evidence: Performance (recital, exhibit, science project)

**Target:**

80% of students will achieve 70% or higher

**SLO 3: AT 58-SLO 3**

Demonstrate proper use of specialized tools and equipment when evacuating and charging a vehicle air conditioning system at a beginner level.

**Relevant Associations:**

**Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

**Related Measures**

**M 1: Performance, Project or Lab Activities**

The area/subject faculty suggest using a Performance, Project or Lab Activities

Source of Evidence: Performance (recital, exhibit, science project)

**Target:**

80% of students will achieve 70% or higher

**Detailed Assessment Report**

**Spring 2015 AT 60-Shop Management and Service Writer**

*As of: 10/30/2016 11:50 AM PDT*

**(Includes those Action Plans with Budget Amounts marked One-Time, Recurring, No Request.)**

**Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

**SLO 1: AT 60-SLO 1**

Demonstrate the ability to communicate clearly with the customer regarding the repair of their vehicle and complete a work order to fulfill all legal requirements at a beginner level. The students will also be able to oversee workflow through a typical automotive repair shop including communicating with the technician, parts suppliers, and the customer at a beginner level.

**Relevant Associations:**

**Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

#### Related Measures

#### **M 1: Performance, Project or Lab Activities**

The area/subject faculty suggest using a Performance, Project or Lab Activities

Source of Evidence: Performance (recital, exhibit, science project)

#### **Target:**

80% of students will achieve 70% or higher

### **Detailed Assessment Report**

### **Spring 2015 AT 64- Diesel Repair and Maintenance**

*As of: 10/30/2016 11:50 AM PDT*

**(Includes those Action Plans with Budget Amounts marked One-Time, Recurring, No Request.)**

### **Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

#### **SLO 1: AT 64-SLO 1**

Diagnose and repair basic diesel engine malfunctions at a beginner level in 2.5 times flat rate time. The student will also be able to perform preventative maintenance procedures at a beginner level in 2.5 times flat rate time.

#### Related Measures

#### **M 1: Measure and Target**

Performance, Project, Lab Activities

Source of Evidence: Project, either individual or group

#### **Target:**

80% of students will achieve 70% or higher.

### **Detailed Assessment Report**

### **Spring 2015 AT 66-Manual Drive Train**

*As of: 10/30/2016 11:50 AM PDT*

**(Includes those Action Plans with Budget Amounts marked One-Time, Recurring, No Request.)**

### **Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

#### **SLO 1: AT 66-SLO 1**

Diagnose, analyze, and repair common problems found in manual transmissions, drive shafts, clutches, differentials, drive axles, and 4wheel drive systems at a beginner level in 2.5 times flat rate time.

#### Relevant Associations:

#### **Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

#### Related Measures

#### **M 1: Performance, Project or Lab Activities**

The area/subject faculty suggest using a Performance, Project or Lab Activities

Source of Evidence: Performance (recital, exhibit, science project)

**Target:**

80% of students will achieve 70% or higher

**Detailed Assessment Report**  
**Spring 2015 AT 68-Automatic Transmissions**

As of: 10/30/2016 11:50 AM PDT

(Includes those Action Plans with Budget Amounts marked *One-Time, Recurring, No Request.*)

**Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

**SLO 1: AT 68-SLO 1**

Demonstrate the ability to perform diagnostic tests and service procedures on common automatic transmissions and transaxles at a beginner level in 2.5 times flat rate time.

**Relevant Associations:**

**Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

**Related Measures**

**M 1: Performance, Project or Lab Activities**

The area/subject faculty suggest using a Performance, Project or Lab Activities

Source of Evidence: Performance (recital, exhibit, science project)

**Target:**

80% of students will achieve 70% or higher

**SLO 2: AT 68-SLO 2**

Diagnose, analyze, and correct malfunctions of unit components in automatic transmissions at a beginner level in 2.5-Times flat rate.

**Relevant Associations:**

**Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

**Related Measures**

**M 1: Performance, Project or Lab Activities**

The area/subject faculty suggest using a Performance, Project or Lab Activities

Source of Evidence: Performance (recital, exhibit, science project)

**Target:**

80% of students will achieve 70% or higher

**SLO 3: AT 68-SLO 3**

Demonstrate and proper use of specialized tools when working on automatic transmissions at a beginner level.

**Relevant Associations:**

**Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

#### Related Measures

#### **M 1: Performance, Project or Lab Activities**

The area/subject faculty suggest using a Performance, Project or Lab Activities

Source of Evidence: Performance (recital, exhibit, science project)

#### **Target:**

80% of students will achieve 70% or higher

### **Detailed Assessment Report Spring 2015 AT 70-General Automotive Lab**

*As of: 10/30/2016 11:50 AM PDT*

**(Includes those Action Plans with Budget Amounts marked One-Time, Recurring, No Request.)**

#### **Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

#### **SLO 1: AT 70-SLO 1**

Demonstrate effective time management and utilization of resources and skills to successfully complete an assigned automotive project at a beginner level in 3 times flat rate time

#### Relevant Associations:

#### **Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

#### Related Measures

#### **M 1: Performance, Project or Lab Activities**

The area/subject faculty using a Performance, Project or Lab Activities suggest

Source of Evidence: Performance (recital, exhibit, science project)

#### **Target:**

80% of students will achieve 70% or higher

### **Detailed Assessment Report Spring 2015 AT 72-Engine Repair and Machining-Short Blocks**

*As of: 10/30/2016 11:50 AM PDT*

**(Includes those Action Plans with Budget Amounts marked One-Time, Recurring, No Request.)**

#### **Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

#### **SLO 1: AT 72-SLO 1**

Diagnose, disassemble, initiate corrective measures, and reassemble an automotive engine short block to manufactures' specifications at a beginner level in 2.5 times flat rate time. Perform machining and balancing procedures commonly performed on cylinders, blocks, pistons and connecting rods at a beginner level in 2.5 times flat rate time.

#### Relevant Associations:

#### **Institutional Student Learning Outcomes Associations**

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1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

#### Related Measures

#### **M 1: Performance, Project or Lab Activities**

The area/subject faculty using a Performance, Project or Lab Activities suggest

Source of Evidence: Performance (recital, exhibit, science project)

#### **Target:**

80% of students will achieve 70% or higher

### **Detailed Assessment Report**

## **Spring 2015 AT 74-Engine Repair and Machining-Cylinder Heads**

*As of: 10/30/2016 11:50 AM PDT*

**(Includes those Action Plans with Budget Amounts marked *One-Time, Recurring, No Request.*)**

### **Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

#### **SLO 1: AT 74-SLO 1**

Diagnose, disassemble, initiate corrective measures, and reassemble an automotive engine cylinder head to manufactures' specifications at a beginner level in 2.5 times flat rate time.

#### Relevant Associations:

#### **Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

#### Related Measures

#### **M 1: Performance, Project or Lab Activities**

The area/subject faculty using a Performance, Project or Lab Activities suggest

Source of Evidence: Performance (recital, exhibit, science project)

#### **Target:**

80% of students will achieve 70% or higher

#### **SLO 2: AT 74-SLO 2**

Perform common cylinder head machining operations at a beginner level in 2.5 times flat rate time.

#### Relevant Associations:

The area/subject faculty using a Performance, Project or Lab Activities suggest

#### **Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

#### Related Measures

#### **M 1: Performance, Project or Lab Activities**

The area/subject faculty using a Performance, Project or Lab Activities suggest

Source of Evidence: Performance (recital, exhibit, science project)

**Target:**

80% of students will achieve 70% or higher

**Detailed Assessment Report  
Spring 2015 AT 76-Automotive Machining Lab**

*As of: 10/30/2016 11:50 AM PDT*

**(Includes those Action Plans with Budget Amounts marked *One-Time, Recurring, No Request.*)**

**Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

**SLO 1: AT 76-SLO 1**

Analyze and repair common automotive machine shop problems using industry standards at a beginner Skilled Level in 2.5 times flat rate time.

**Relevant Associations:**

**Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

**Related Measures**

**M 1: Performance, Project or Lab Activities**

The area/subject faculty using a Performance, Project or Lab Activities suggest

Source of Evidence: Performance (recital, exhibit, science project)

**Target:**

80% of students will achieve 70% or higher

**SLO 2: AT 76-SLO 2**

Demonstrate and safely use specialized tools and equipment in performing engine machine work.

**Relevant Associations:**

**Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

**Related Measures**

**M 1: Performance, Project or Lab Activities**

The area/subject faculty using a Performance, Project or Lab Activities suggest

Source of Evidence: Performance (recital, exhibit, science project)

**Target:**

80% of students will achieve 70% or higher

**Detailed Assessment Report  
Spring 2015 AT 80-Basic Electrical**

*As of: 10/30/2016 11:50 AM PDT*

**(Includes those Action Plans with Budget Amounts marked *One-Time, Recurring, No Request.*)**

**Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

**SLO 1: AT 80-SLO 1**

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Diagnose, analyze, and repair common electrical system malfunctions at a semi-skilled level in 2.5 times flat rate time.

**Relevant Associations:**

**Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

**Related Measures**

**M 1: Performance, Project or Lab Activities**

80% of students will achieve 70% or higher

Source of Evidence: Performance (recital, exhibit, science project)

**Target:**

80% of students will achieve 70% or higher

**SLO 2: AT 80-SLO 2**

Demonstrate proper use Halderman specialized tools and equipment in performing electrical repairs.

**Relevant Associations:**

**Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

**Related Measures**

**M 1: Performance, Project or Lab Activities**

80% of students will achieve 70% or higher

Source of Evidence: Performance (recital, exhibit, science project)

**Target:**

80% of students will achieve 70% or higher

**Detailed Assessment Report**

**Spring 2015 AT 82-Engine Performance I**

*As of: 10/30/2016 11:50 AM PDT*

**(Includes those Action Plans with Budget Amounts marked *One-Time, Recurring, No Request.*)**

**Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

**SLO 1: AT 82-SLO 1**

Use various meters and test equipment to diagnose, analyze, and repair ignition and fuel injection systems at a beginner level at 2.5 times flat rate time.

**Relevant Associations:**

**Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

### Related Measures

#### **M 1: Performance, Project or Lab Activities**

The area/subject faculty using a Performance, Project or Lab Activities suggest

Source of Evidence: Performance (recital, exhibit, science project)

#### **Target:**

80% of students will achieve 70% or higher

#### **SLO 2: AT 82-SLO 2**

Demonstrate proper use of specialized tools and equipment to diagnose, analyze, and repair ignition and fuel injection systems at a beginner level at 2.5 times flat rate time.

### Relevant Associations:

#### **Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

### Related Measures

#### **M 1: Performance, Project or Lab Activities**

The area/subject faculty using a Performance, Project or Lab Activities suggest

Source of Evidence: Performance (recital, exhibit, science project)

#### **Target:**

80% of students will achieve 70% or higher

#### **Details of Action Plans for This Cycle (by Established cycle, then alpha)**

##### **AT82-SP14-AP-CLewis**

The Action Plan for meeting SLO 1 and 2

**Established in Cycle:** Spring 2014

**Implementation Status:** Planned

**Priority:** High

### **Detailed Assessment Report**

#### **Spring 2015 AT 84-Engine Performance II**

*As of: 10/30/2016 11:50 AM PDT*

**(Includes those Action Plans with Budget Amounts marked *One-Time, Recurring, No Request.*)**

### **Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

#### **SLO 1: AT 84-SLO 1**

Diagnose, analyze, and repair common engine computer control system and sensor malfunctions at a beginner level in 2.5 times flat rate time.

### Relevant Associations:

#### **Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

### Related Measures

#### **M 1: Performance, Project or Lab Activities**

The area/subject faculty using a Performance, Project or Lab Activities suggest

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Source of Evidence: Performance (recital, exhibit, science project)

**Target:**

80% of students will achieve 70% or higher

**SLO 2: AT 84-SLO 2**

Demonstrate proper use specialized tools and equipment in the testing of computer modules, sensors and circuits at a beginner level.

**Relevant Associations:**

**Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

**Related Measures**

**M 1: Performance, Project or Lab Activities**

The area/subject faculty using a Performance, Project or Lab Activities suggest

Source of Evidence: Performance (recital, exhibit, science project)

**Target:**

80% of students will achieve 70% or higher

**Detailed Assessment Report**

**Spring 2015 AT 88-Vintage Vehicle Repair**

*As of: 10/30/2016 11:50 AM PDT*

*(Includes those Action Plans with Budget Amounts marked One-Time, Recurring, No Request.)*

**Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

**SLO 1: AT 88-SLO 1**

Diagnose, analyze, and repair common tune-up, and fuel system malfunctions, and basic electrical system malfunctions at a beginner level in 2.5 times flat rate time.

**Relevant Associations:**

**Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

**Related Measures**

**M 1: Performance, Project or Lab Activities**

The area/subject faculty using a Performance, Project or Lab Activities suggest

Source of Evidence: Performance (recital, exhibit, science project)

**Target:**

80% of students will achieve 70% or higher

**SLO 2: AT 88-SLO 2**

Demonstrate and safely use specialized tools and equipment in performing a tune-up.

**Relevant Associations:**

**Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

#### Related Measures

#### **M 1: Performance, Project or Lab Activities**

The area/subject faculty using a Performance, Project or Lab Activities suggest

Source of Evidence: Performance (recital, exhibit, science project)

#### **Target:**

80% of students will achieve 70% or higher

### **Detailed Assessment Report**

### **Spring 2015 AT 90A-Automotive Survival Lab**

*As of: 10/30/2016 11:50 AM PDT*

**(Includes those Action Plans with Budget Amounts marked One-Time, Recurring, No Request.)**

### **Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

#### **SLO 1: AT 90A-SLO 1**

Perform basic automotive maintenance procedures.

#### Relevant Associations:

#### **Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

#### Related Measures

#### **M 1: Performance, Project or Lab Activities**

The area/subject faculty using a Performance, Project or Lab Activities suggest

Source of Evidence: Performance (recital, exhibit, science project)

#### **Target:**

80% of students will achieve 70% or higher

### **Detailed Assessment Report**

### **Spring 2015 AT 90-Automotive Survival**

*As of: 10/30/2016 11:50 AM PDT*

**(Includes those Action Plans with Budget Amounts marked One-Time, Recurring, No Request.)**

### **Student Learning Outcomes/Objectives, with Any Associations and Related Measures, Targets, Findings, and Action Plans**

#### **SLO 1: AT 90-SLO 1**

Understand, define and use automotive vocabulary in the marketplace.

#### Relevant Associations:

#### **Institutional Student Learning Outcomes Associations**

1.2 Critical Thinking - Ability to analyze a situation, identify and research a problem, propose a solution or desired outcome, implement a plan to address the problem, evaluate progress and adjust the plan as appropriate to arrive at the solution or desired outcome

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1.3 Life Long Learning - Ability to engage in independent acquisition of knowledge; ability to access information including use of current technology; ability to use the internet and/or library to access and analyze information for relevance and accuracy; ability to navigate systems

**Related Measures**

**M 1: Performance, Project or Lab Activities**

The area/subject faculty using a Performance, Project or Lab Activities suggest

Source of Evidence: Performance (recital, exhibit, science project)

**Target:**

80% of students will achieve 70% or higher

**SLO 2: AT 90-SLO 2**

The student will be able to self-maintain or seek out qualified professionals for vehicle maintenance and repair.

**Related Measures**

**M 1: Performance, Project or Lab Activities**

The area/subject faculty using a Performance, Project or Lab Activities suggest

Source of Evidence: Performance (recital, exhibit, science project)

**Target:**

80% of students will achieve 70% or higher

2. **Analysis:** Assessing student learning outcomes by lab work appears to be an effective means of assessment. It is relatively easy to assess and students are more receptive to performing lab activities then written assessments.

**Planning Agenda:**

#5 Continue using lab activities to assess SLO's.

**C. Student Evaluation Summary**

The student survey portion of the evaluation procedure is designed to solicit comments concerning the program only, and is not an evaluation of instructors (See Attachment F, Student Survey).

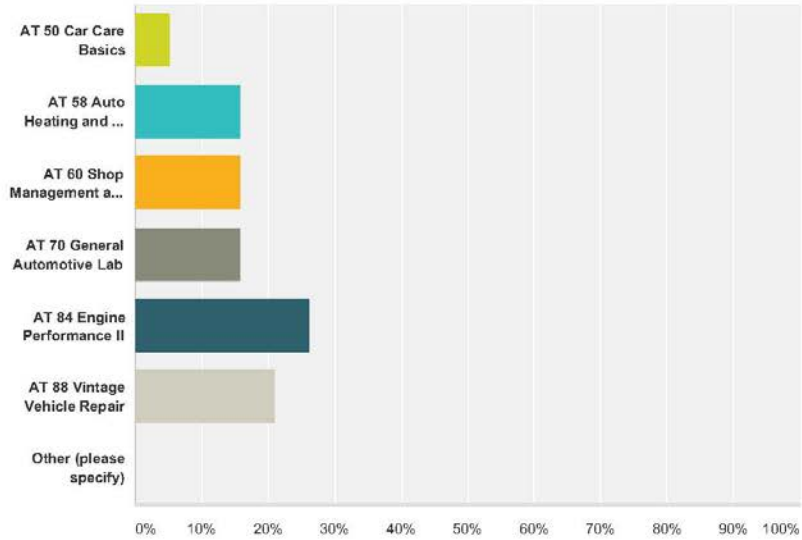
An anonymous questionnaire is considered to be the most effective format. This will encourage the students to be frank in their responses. The student evaluation will be scheduled and administered by the Office of Instruction during October/November and February/March of each instructional review process. The Office of Instruction staff will consult with the members of the self-evaluation group to determine the student sampling and consider any program-specific revisions to the student survey. The sampling will consist of a minimum of three core courses and other courses as selected by the self-evaluation team. (Example: The basic skills program might wish to survey courses with high enrollment of former basic skills students.)

**Description/Evaluation:**

Auto Technology Instructional Program Review 2016

**Q1 Which course in this program are you reviewing?**

Answered: 19 Skipped: 1



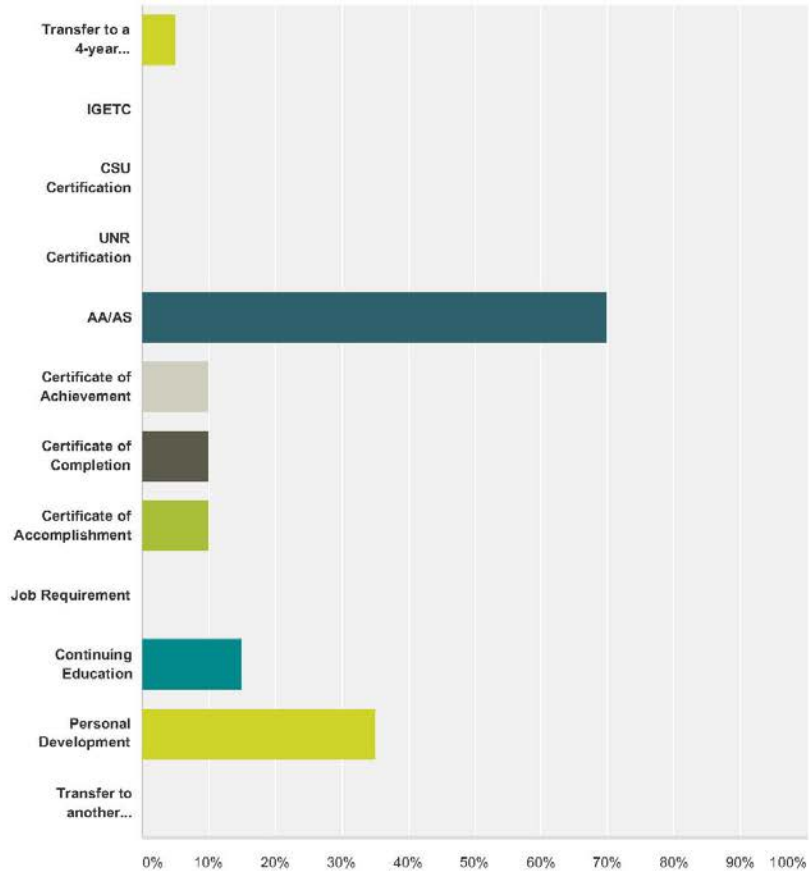
Answer Choices	Responses
AT 50 Car Care Basics	5.26% 1
AT 58 Auto Heating and Air Conditioning	15.79% 3
AT 60 Shop Management and Writing	15.79% 3
AT 70 General Automotive Lab	15.79% 3
AT 84 Engine Performance II	26.32% 5
AT 88 Vintage Vehicle Repair	21.05% 4
Other (please specify)	0.00% 0
<b>Total</b>	<b>19</b>

#	Other (please specify)	Date
	There are no responses.	

**Q2 Educational Goal: What is your educational objective at Lassen Community College. (Check all that apply).**

Answered: 20 Skipped: 0

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Answer Choices	Responses
Transfer to a 4-year Institution	5.00% 1
IGETC	0.00% 0
CSU Certification	0.00% 0
UNR Certification	0.00% 0
AA/AS	70.00% 14
Certificate of Achievement	10.00% 2
Certificate of Completion	10.00% 2
Certificate of Accomplishment	10.00% 2
Job Requirement	0.00% 0
Continuing Education	15.00% 3
Personal Development	35.00% 7

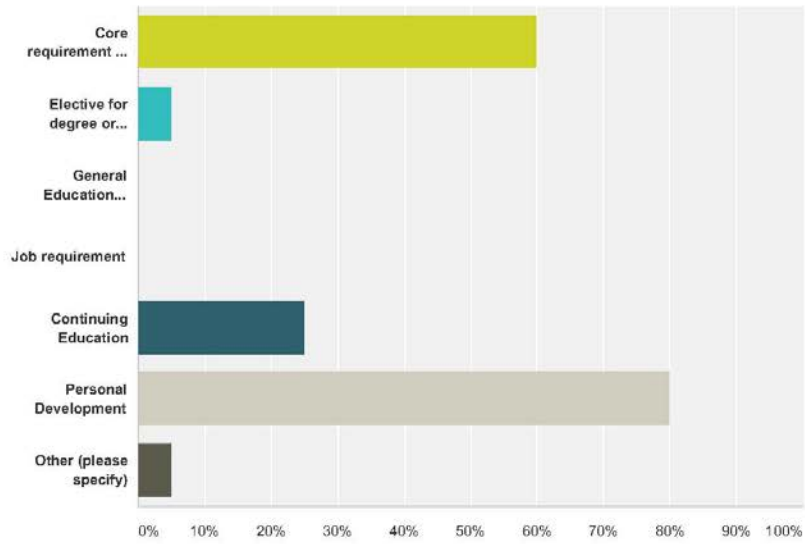
### Auto Technology Instructional Program Review 2016

Transfer to another community college	0.00%	0
<b>Total Respondents: 20</b>		

#	Title of degree or certificate:	Date
1	AS Degree in Automotive Technology	5/13/2016 9:51 PM
2	AS Degree in Automotive Technology	5/13/2016 9:50 PM
3	Automotive technology	5/12/2016 5:21 PM
4	Automotive Technology	5/11/2016 2:56 PM
5	AS Degree in Automotive Technology	5/10/2016 11:09 AM

### Q3 Why are you taking this course?

Answered: 20 Skipped: 0



Answer Choices	Responses
Core requirement for degree or certificate	60.00% 12
Elective for degree or certificate	5.00% 1
General Education course for degree or transfer	0.00% 0
Job requirement	0.00% 0
Continuing Education	25.00% 5
Personal Development	80.00% 16
Other (please specify)	5.00% 1
<b>Total Respondents: 20</b>	

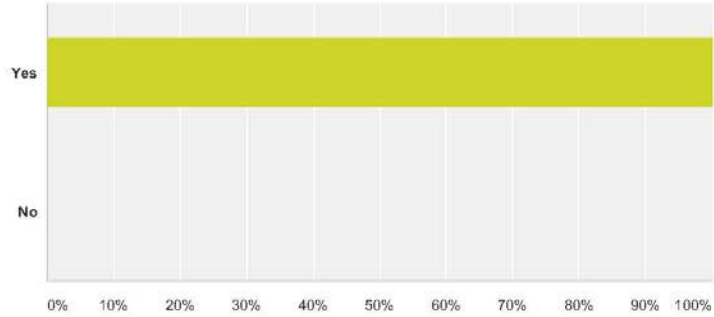


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#	Other (please specify)	Date
1	For mechanical skills	5/14/2016 11:58 AM

**Q4 Does the course content reasonably compare with the catalog/schedule description?**

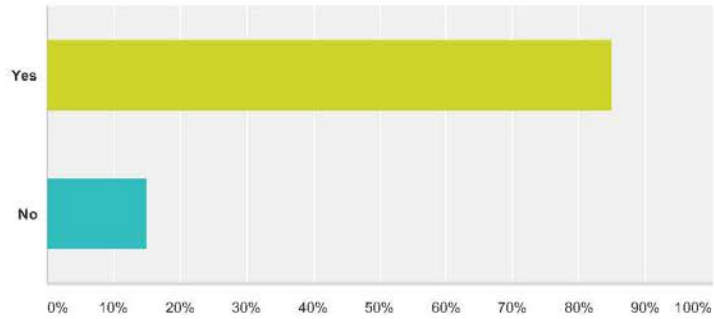
Answered: 20 Skipped: 0



Answer Choices	Responses	Count
Yes	100.00%	20
No	0.00%	0
<b>Total</b>		<b>20</b>

**Q5 Did the catalog clearly explain the order in which the courses in this program should be taken?**

Answered: 20 Skipped: 0



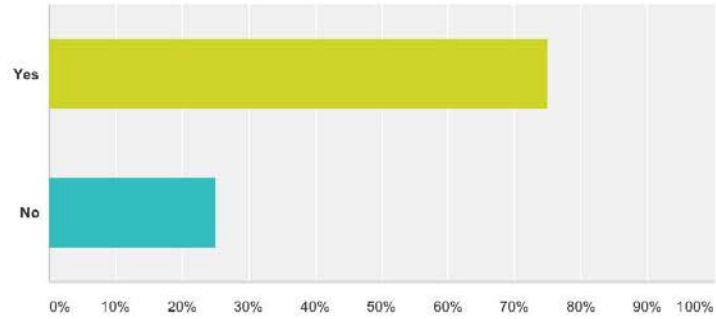
Answer Choices	Responses	Count
Yes	85.00%	17

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No	15.00%	3
<b>Total</b>		<b>20</b>

**Q6 Was any cost for this course/program, beyond registration and books clearly identified in the catalog?**

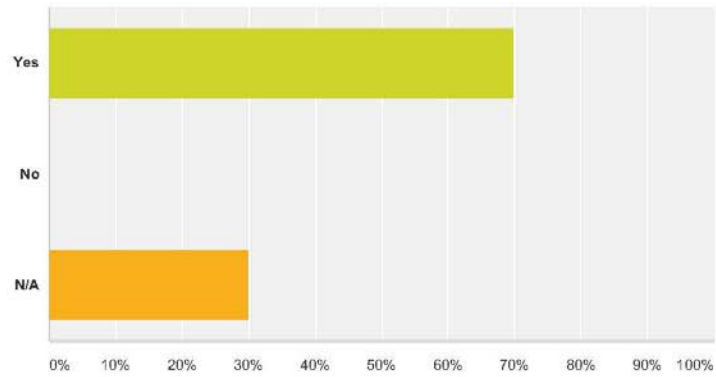
Answered: 20 Skipped: 0



Answer Choices	Responses
Yes	75.00% 15
No	25.00% 5
<b>Total</b>	<b>20</b>

**Q7 Did instructors use the required textbooks in the course?**

Answered: 20 Skipped: 0



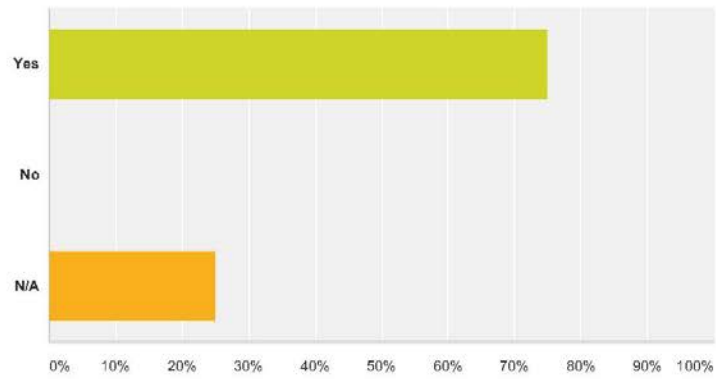
Answer Choices	Responses
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Yes	70.00%	14
No	0.00%	0
N/A	30.00%	6
<b>Total</b>		<b>20</b>

**Q8 Are the textbooks purchased for this course useful to you?**

Answered: 20 Skipped: 0

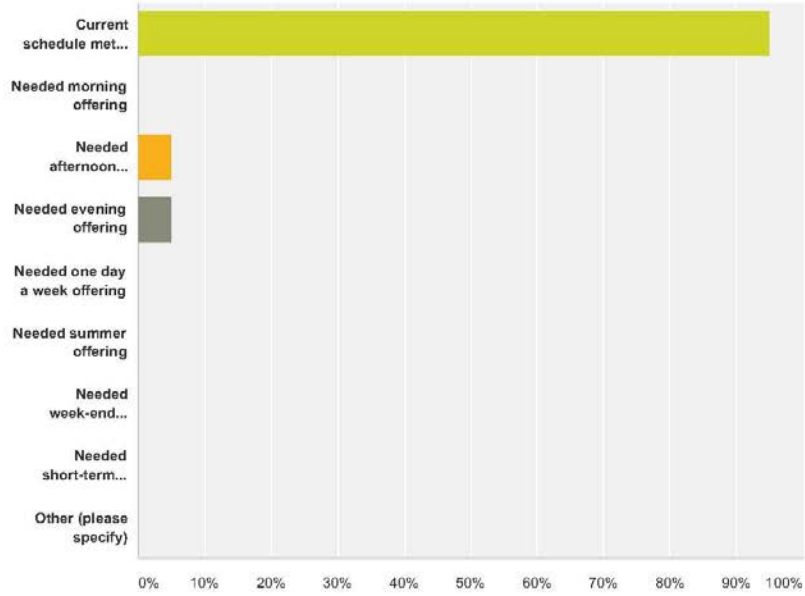


Answer Choices	Responses	Count
Yes	75.00%	15
No	0.00%	0
N/A	25.00%	5
<b>Total</b>		<b>20</b>

**Q9 Did the scheduling for this course meet your needs?**

Answered: 20 Skipped: 0

Auto Technology Instructional Program Review 2016



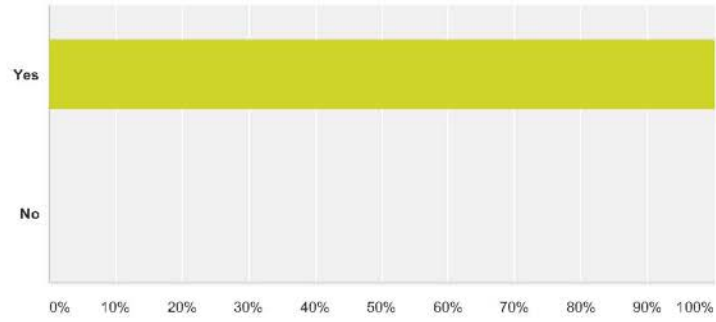
Answer Choices	Responses
Current schedule met my needs	95.00% 19
Needed morning offering	0.00% 0
Needed afternoon offering	5.00% 1
Needed evening offering	5.00% 1
Needed one day a week offering	0.00% 0
Needed summer offering	0.00% 0
Needed week-end offering	0.00% 0
Needed short-term (less than semester) offering	0.00% 0
Other (please specify)	0.00% 0
<b>Total Respondents: 20</b>	

#	Other (please specify)	Date
	There are no responses.	

**Q10 I was provided with reasonable access to the facilities**

Answered: 20 Skipped: 0

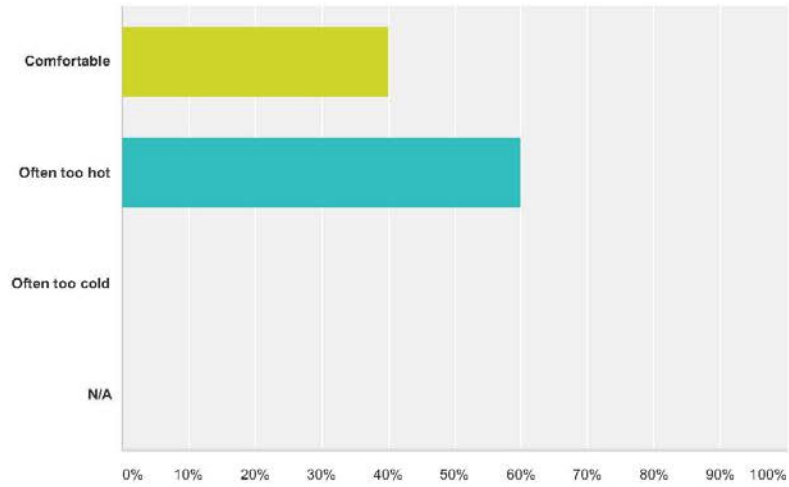
Auto Technology Instructional Program Review 2016



Answer Choices	Responses	
Yes	100.00%	20
No	0.00%	0
<b>Total</b>		<b>20</b>

Q11 When weather is hot outside, the facilities are:

Answered: 20 Skipped: 0

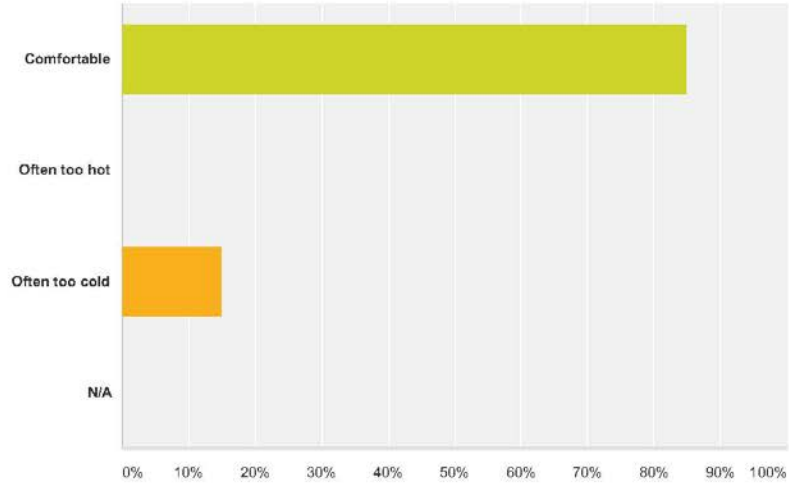


Answer Choices	Responses	
Comfortable	40.00%	8
Often too hot	60.00%	12
Often too cold	0.00%	0
N/A	0.00%	0

Total	20
-------	----

**Q12 When weather is cold outside, the facilities are:**

Answered: 20 Skipped: 0

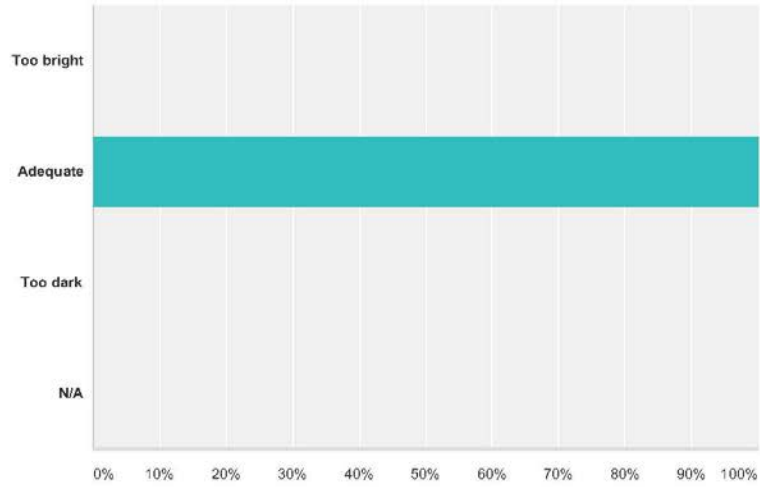


Answer Choices	Responses	
Comfortable	85.00%	17
Often too hot	0.00%	0
Often too cold	15.00%	3
N/A	0.00%	0
<b>Total</b>		<b>20</b>

**Q13 The lighting of the facilities are**

Answered: 20 Skipped: 0

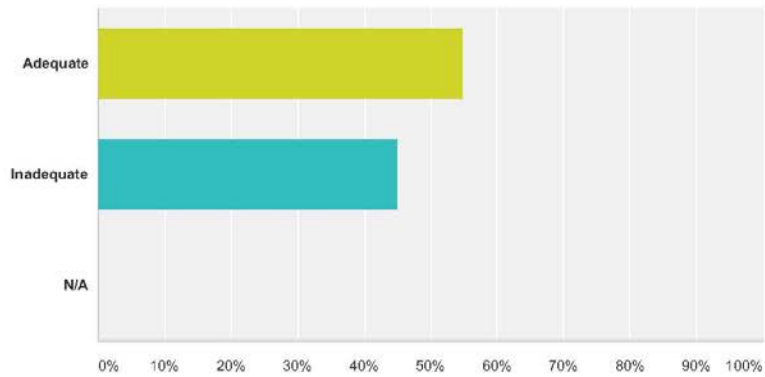
Auto Technology Instructional Program Review 2016



Answer Choices	Responses	Count
Too bright	0.00%	0
Adequate	100.00%	20
Too dark	0.00%	0
N/A	0.00%	0
<b>Total</b>		<b>20</b>

Q14 The chairs/tables/desks are

Answered: 20 Skipped: 0



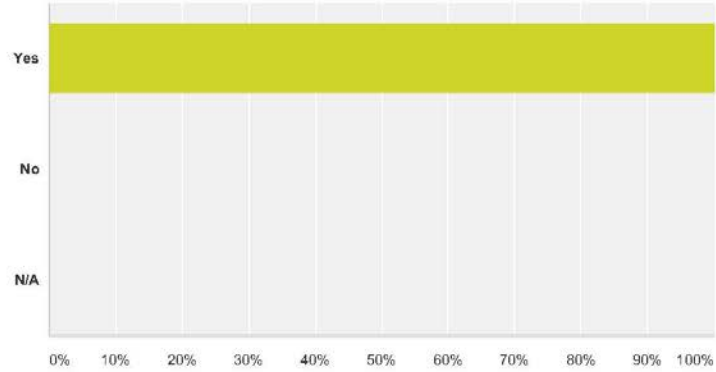
Answer Choices	Responses	Count
Adequate	55.00%	11

Auto Technology Instructional Program Review 2016

Inadequate	45.00%	9
N/A	0.00%	0
<b>Total</b>		<b>20</b>

**Q15 Is there enough space for you to do your work in class?**

Answered: 20 Skipped: 0



Answer Choices	Responses
Yes	100.00% 20
No	0.00% 0
N/A	0.00% 0
<b>Total</b>	<b>20</b>

**Q16 Please elaborate on your responses and include any additional facilities-related comments:**

Answered: 13 Skipped: 7

#	Responses	Date
1	No changes.	5/14/2016 8:16 PM
2	Large people cannot for comfortably in decks.	5/14/2016 7:35 AM
3	There needs to be more coolant/ oils for dominations.	5/13/2016 10:30 PM
4	The air conditioning is lacking. It gets awfully hot in the summer.	5/13/2016 9:13 PM
5	The air conditioning in the building is lacking. It can get awfully warm in the summer.	5/13/2016 9:11 PM
6	We need real adult tables and chairs	5/12/2016 5:23 PM
7	Air conditioning is need and we need better chairs and tables instead of desks	5/11/2016 3:06 PM
8	We need air conditioning and better seats	5/11/2016 3:02 PM

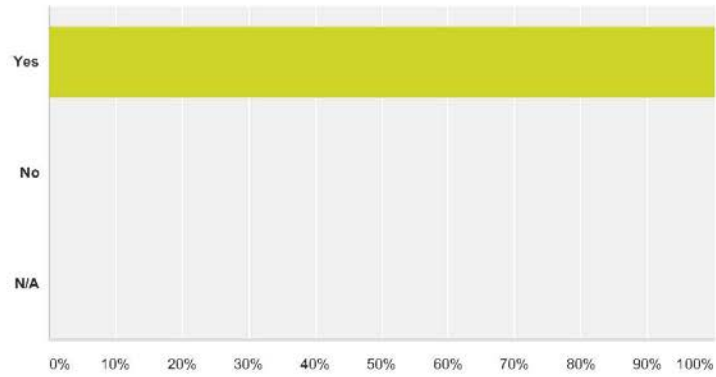


Auto Technology Instructional Program Review 2016

9	We need real adult tables and chairs	5/11/2016 3:00 PM
10	Air conditioning is needed and better more comfortable chairs and desks or tables	5/11/2016 3:00 PM
11	Need better desks or tables instead, current ones are extremely uncomfortable and we need air conditioning	5/11/2016 2:56 PM
12	We need better "desks" or tables and better air conditioning in the shop	5/11/2016 2:53 PM
13	It needs more oil, and or coolant for more dominations.	5/10/2016 5:57 PM

**Q17 Did the course/program provide the necessary equipment?**

Answered: 20 Skipped: 0

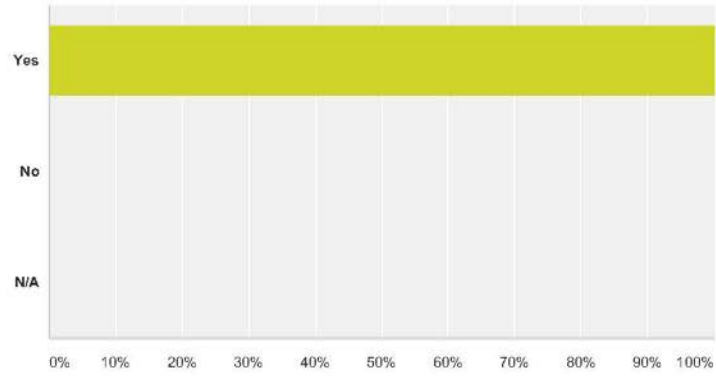


Answer Choices	Responses
Yes	100.00% 20
No	0.00% 0
N/A	0.00% 0
<b>Total</b>	<b>20</b>

**Q18 Is enough time on equipment allowed for each student?**

Answered: 20 Skipped: 0

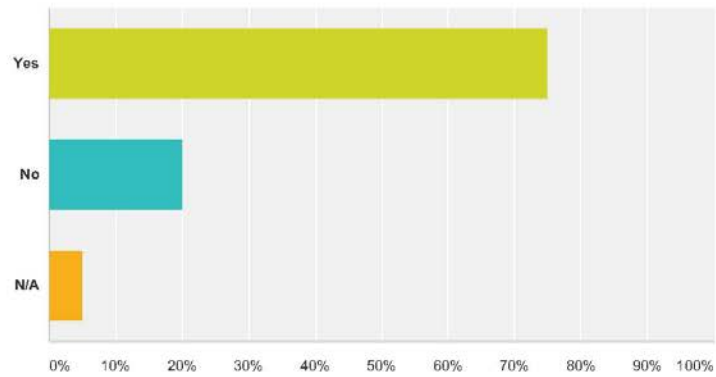
Auto Technology Instructional Program Review 2016



Answer Choices	Responses	Count
Yes	100.00%	20
No	0.00%	0
N/A	0.00%	0
<b>Total</b>		<b>20</b>

Q19 Is equipment current?

Answered: 20 Skipped: 0



Answer Choices	Responses	Count
Yes	75.00%	15
No	20.00%	4
N/A	5.00%	1
<b>Total</b>		<b>20</b>

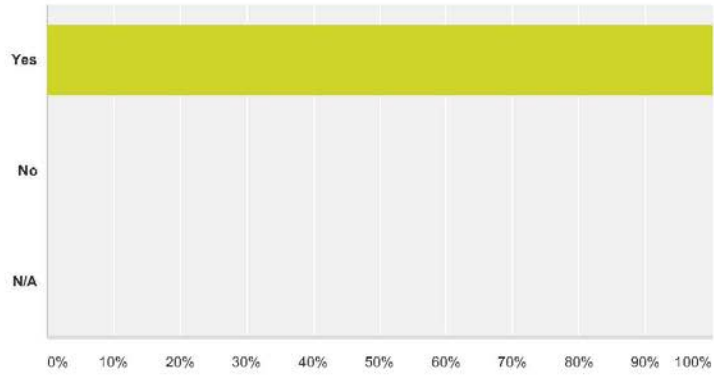
Q20 Is equipment generally in good

13 / 15

Auto Technology Instructional Program Review 2016

**operating condition?**

Answered: 20 Skipped: 0



Answer Choices	Responses	Count
Yes	100.00%	20
No	0.00%	0
N/A	0.00%	0
<b>Total</b>		<b>20</b>

**Q21 Describe how this course/program could be improved to better meet the needs of the student at Lassen Community College.**

Answered: 8 Skipped: 12

#	Responses	Date
1	No changes.	5/14/2016 8:16 PM
2	It needs a better air conditioner for the summer, because it gets to hot in the shop.	5/13/2016 10:30 PM
3	Tables and chairs	5/12/2016 5:23 PM
4	Need updated equipment	5/11/2016 3:06 PM
5	We need updated equipment	5/11/2016 3:02 PM
6	There is alot of new equipment, there could always be more.	5/11/2016 3:00 PM
7	We need updated equipment	5/11/2016 3:00 PM
8	We need more updated equipment	5/11/2016 2:53 PM

**Q22 Provide any additional comments on the course or program:**

Answered: 4 Skipped: 16

### Auto Technology Instructional Program Review 2016

#	Responses	Date
1	No changes.	5/14/2016 8:16 PM
2	Mr. Lewis has been a great instructor. He is very thorough and I really appreciate the time he spends with us sharing his knowledge and experience. I often recommend his course to friends and family.	5/13/2016 10:36 PM
3	Get AC iin the building and get rid of the gradeschool desks.	5/11/2016 3:00 PM
4	The course is amazing, it has taught me more then what I was expecting.	5/10/2016 5:57 PM

## Planning Agenda:

- #6 Provide A/C in the instructor's office and tool room.
- #7 Provide two portable evaporative coolers for the shop.
- #8 Provide tables and chairs to replace desks in the classroom.
- #9 Equipment is outdated. This will be listed in section IV of the IPR.

### III. Curriculum

#### A. Degrees and/or Certificates

##### Description/Evaluation:

- The Automotive Technology student can earn a variety of degrees and certificates. They are listed below along with the two-year plan for each.

## **AUTOMOTIVE TECHNOLOGY**

### **Associate in Science Degree**

#### **Automotive Technology**

**Required Core Courses:** 39 units

**Total Units:** 60 units

<b>Course Number</b>	<b>Course Title</b>	<b>Fall</b>	<b>Spring</b>
AT 50	Car Care Basics	3	
AT 54	Brakes		3(odd)
AT 56	Steering and Suspension		3(odd)
AT 58	Automotive Heating and Air Conditioning		3(even)
AT 60	Shop Management and Service Writer		2(even)
AT 66	Manual Drive Train	4(odd)	
AT 68	Automatic Transmissions	3(odd)	
AT 70	General Automotive Lab	2	2
AT 72	Engine Repair Short Block and Machining	4(even)	
AT 74	Engine Repair and Machining-Cylinder Heads	3(even)	
AT 80	Basic Electrical	3(odd)	
AT 82	Engine Performance I		3(even)
AT 84	Engine Performance II	3(even)	

**Electives:** 3 courses numbered 1-99

**General Education Requirements:** 18 units

See a counselor to prepare your educational plan with the latest scheduling information.

2015-2016  
Revised 07-30-15

# **AUTOMOTIVE TECHNOLOGY**

## **Certificate of Achievement**

### **Engine Repair**

**Required Core Courses:** 22 units

**Total Units:** 22 units

<b>Course Number</b>	<b>Course Title</b>	<b>Fall</b>	<b>Spring</b>
AT 50	Car Care Basics	3	
AT 58	Automotive Heating and Air Conditioning		3(even)
AT 60	Shop Management and Service Writer		2(even)
AT 70	General Automotive Lab	2	2
AT 72	Engine Repair Short Block and Machining	3(even)	
AT 74	Engine Repair and Machining-Cylinder Heads	3(even)	
AT 76	Automotive Machining Lab	3(even)	

AT 64	Diesel and Maintenance Repair	3	
AT 88	Vintage Vehicle Repair		3(even)

**Elective Core Courses:** 3 units

See a counselor to prepare your educational plan with the latest scheduling information.

2015-2016  
Revised 04-30-15

# **AUTOMOTIVE TECHNOLOGY**

## **Certificate of Achievement – Advanced Mechanics**

### **Automotive Technology**

<b>Course Number</b>	<b>Course Title</b>	<b>Fall</b>	<b>Spring</b>
AT 50	Car Care Basics	3	
AT 54	Brakes		3(odd)
AT 56	Steering and Suspension		3(odd)
AT 58	Automotive Heating and Air Conditioning		3(even)
AT 60	Shop Management and Service Writer		2(even)
AT 66	Manual Drive Train	3(odd)	
AT 68	Automatic Transmissions	3(odd)	
AT 70	General Automotive Lab	2	2

**Required Core Courses:** 23 units

**Total Units:** 23 units

See a counselor to prepare your educational plan with the latest scheduling information.

2015-2016  
Revised 04/30/15

October 2016 12/19/2016

Program Review

Lassen Community College Automotive Technology

## AUTOMOTIVE TECHNOLOGY

### Certificate of Achievement – Basic Mechanics

#### Automotive Technology

Course Number	Course Title	Fall	Spring
AT 50	Car Care Basics	3	
AT 54	Brakes		3(odd)
AT 56	Steering and Suspension		3(odd)
AT 80	Basic Electrical	3 (odd)	

**Required Core Courses:** 12 units

**Total Units:** 12 units

See a counselor to prepare your educational plan with the latest scheduling information.

2015-2016

Revised 04/30/15

## AUTOMOTIVE TECHNOLOGY

### Certificate of Accomplishment - Electrical

#### Automotive Technology

Course Number	Course Title	Fall	Spring
AT 50	Car Care Basics	3	
AT 80	Basic Electrical	3(odd)	
AT 82	Engine Performance I		3(even)
AT 84	Engine Performance II	3(even)	

**Required Core Courses:** 12 units

**Total Units:** 12 units

See a counselor to prepare your educational plan with the latest scheduling information.

2015-2016

Revised 04-30-30

## AUTOMOTIVE TECHNOLOGY

### Certificate of Accomplishment – General Mechanics

#### Automotive Technology

Course Number	Course Title	Fall	Spring
AT 50	Car Care Basics	3	
AT 54	Brakes		3(odd)
AT 56	Steering and Suspension		3(odd)
AT 60	Shop Management and Service Writer		2(even)
AT 64	Diesel Repair and Maintenance	3	

**Required Core Courses:** 14 units

**Total Units:** 14 units

See a counselor to prepare your educational plan with the latest scheduling information.

2015-2016

- The automotive technology program, degree and certificate learning outcomes are reviewed when curriculum is reviewed. They are also reviewed by the advisory committee periodically.
- There is the need for a few new courses and certificates in the auto program. The facility and the full time faculty member are certified to offer more courses by the California Bureau of Automotive Repair than are currently offered. These include Inspector Update Training Course, Repair Technician Update Training Courses, Citation Courses, and BAR Specified Diagnostic and Repair Training Courses. The addition of these courses will allow another certificate to be offered as well. The full-time faculty member also recently completed hybrid vehicle training. He is currently planning on getting ASE certification as well in the hybrid vehicle area. A hybrid course is being planned as well.
- Career/Technical programs: Attach dates of Advisory Committee meetings (a minimum of two meeting per year). Reference Committee Member Rosters and Minutes located in the Office of Academic Services. Summarize the advisory committee recommendations for program curriculum enhancement or improved student competencies
- Recent automotive advisory board meetings were held on 3-17-2016, 2-20-2015, and 5-29-2013. Brief e-mail meetings were also held. The meeting minutes for all meetings referenced curriculum review and new course ideas. The 2013 meeting was where the idea of a diesel course was brought up. The course was later written and has been taught twice since then. The emission courses and hybrid course were talked about at the final two meetings. Both of these courses are being planned and the curriculum will be written soon. The current automotive advisory board is listed below. NATEF certification remains a top priority for the auto program according to the advisory board. The minutes from the last meeting reflect this.

12/19/2016

October 2016

Program Review

Lassen Community College Automotive Technology



- **Automotive Program Advisory Committee**
  - **2015/2016 Academic Years**

<b>Individual</b>	<b>Company or Agency</b>	<b>Membership Qualification</b>	<b>Contact Information</b>
Bruce Davie	Owner Deal and Davie, Inc.	Voting	dealanddavie@frontiernet.net
Chad Nethery	Owner Susanville Ford	Voting	cnethery@susanvilleautocenter.com
Willis Dow	Rancher	Voting	willisdow@yahoo.com
Mike Busse	Manager Les Schwab Tires	Voting	mike.s.busse@lesschwab.com
Terry Jackson	Owner Jackson's Service Center	Voting	jackanddianne@frontiernet.net
Shaun Giese	Vocational Instructor Herlong High School	Voting	Rocky_Shaun@hotmail.com
Shellie Anderson	Adult Programs Supervisor Alliance for Workforce Development	Voting	sanderson@ncen.org
Lisa Gardner	Work Experience Coordinator Lassen Community College	Non-Voting	lgardiner@lassencollege.edu
Matt Montgomery	Information Technology Dept. Lassen Community College	Non-Voting	mmontgomery@lassencollege.edu

- Career/Technical programs: Use advisory committee recommendations, labor market or other standards to answer the following question: **Do the core courses in the certificates and degrees meet current employer skill requirements for the field?**

According to the Bureau of Labor Statistics Occupational Outlook Handbook, many employers require automotive technicians to become ASE (National Institute for Automotive Service Excellence) certified. ASE certification is available in nine different automobile specialty areas: automatic transmission/transaxle, brakes, light vehicle diesel engines, electrical/electronic systems, engine performance, engine repair, heating and air-conditioning, manual drive train and axles, and suspension and steering. The automotive technology program offers courses in all of these areas. ASE certification preparation is covered in all courses as well.

## Planning Agenda:

#10 Review degree and certificate learning outcomes at future advisory board meetings.

#11 Develop curriculums for emission courses and hybrid vehicle course.

## B. Courses

### Description/Evaluation

1. No courses added or deleted from the instructional program since the last instructional program review.
2. Each course offered within the instructional program has to be reviewed for accuracy and currency. Please see form in appendix D.

## Planning Agenda:

#12 Continue to update course outlines as needed.

## C. Articulation/Integration of Curriculum

### Description/Evaluation:

1. Attach a tabular comparison of Lassen Community College courses articulating with UC and CSU, indicating courses with approved C-ID designations as applicable (Obtain copies of Articulation Agreements from the Transfer Center)
2. Provide a narrative reviewing the Lassen Community College courses and courses at four-year institutions for course alignment. (i.e. two courses at Lassen needed to articulate with one course at UC).and the units requirements for Lassen Community College courses as compared to four-year institutions.

No automotive course qualifies to articulate to any UC or CSU.

## Planning Agenda:

No action required.

## III. Scheduling and Enrollment Patterns

### Description/Evaluation:

1. All auto courses have been scheduled according to the two-year plan with the exception of AT 80 Basic Electrical, AT 82 Engine Performance I, and AT 84 Engine Performance II. The reason they have deviated from the two-year plan is because they need to be taken in order and since there are only three courses, it is impossible for them to fall into the two-year plan.
2. The data for time of day FTES is a bit skewed because more courses are scheduled more often in the evening. The reason for this is more auto students are available in the evening. Also, courses scheduled during the day often compete with general education courses. The data does show that there are more FTES in the evening.
3. Automotive courses are scheduled at a variety of times of the day to accommodate student's needs. Late afternoon and evenings seem to work best based on enrollment patterns. High school students however have benefited from courses scheduled early in the day on the rare times they have been able to register for auto course. The auto program continues to be flexible and schedules courses to best accommodate student needs.

### Planning Agenda:

#13 Continue to schedule auto courses according to student input to meet their needs.

## IV. Equipment

### Description/Evaluation:

1. List capital outlay equipment, age of equipment and replacement schedule  
A complete inventory of the automotive tools and equipment was taken by the auto ISS in 2012. This is attached as an appendix. There are nearly 2,200 items on this list so I obviously will not list them here. Much of the tools and equipment are quite old and are in need of replacement. There has never been a replacement schedule for automotive tools and equipment. The items listed are things that need to be either replaced because of age and wear or purchased to comply with state or federal standards for the courses.
2. Identify any existing equipment maintenance/service agreements  
None
3. Evaluate the condition of capital outlay equipment in light of the replacement schedule and available funds.  
Again, there is no replacement schedule for any of our equipment, however, much of our equipment is old. For example, our steam cleaner is about 25 years old and our cylinder head and block surfacer is about 40 years old. The majority of tools and equipment in the auto program are funded primarily by VTEA funds,

Perkins funds, and other available grants. Below is a list of tools and equipment that are needs for the auto program

BAR 97 Smog Machine	\$18,500
A/C Recovery and Recycling Machine for 1234YF Refrigerant	\$6,500
1234YF Leak Detector	\$600
A/C Machine for Hybrid Vehicles	\$4,300
Steam Cleaner	\$4,700
Verus Edge diagnostic scan tool	\$13,500
Bench Brake Lathe	\$11,000
GM Multi Port Fuel Injection Trainer	\$14,500
Engine Management Trainer	\$10,500
MIG Welder	\$2,500
Plasma Cutter	\$1,850
2 Post Vehicle Lift	\$9,000
Engine Head and Cylinder Surfacar and boring machine	\$50,000

- Evaluate the effectiveness of and need for additional maintenance/service agreements.

We have no existing service contracts.

- Justify any proposed modification or additions to equipment available for students and/or faculty/instructional assistants within the program.

The above list is in order of importance.

The new smog machine is needed to teach all smog courses and is required by the California State Bureau of Automotive Repair (BAR). The current BAR 97 machine we have will need meet BAR minimum requirements by 2018.

The A/C machine for 1234YF refrigerant will be required to meet federal EPA requirements to service vehicles with this type of refrigerant. The refrigerant began being used by manufacturers in 2014 and will be required by 2021. The leak detector is also required equipment.

A separate A/C machine is required to service hybrid vehicles.

The steam cleaner needs to be replaced because of wear and age of our current machine. This was on the last program review and was never funded.

The Verus Edge scan tool and lab scope was also on the last program review. This is needed to replace our current scan tool, the MODIS. In 2007 the law required all new vehicles to use a CAN (Controller Area Network) for module communication. Our current scan tool does not communicate effectively with CAN systems.

Our current bench brake lathe is about 30 years old and lacks the correct adaptors to machine current vehicle brake rotors.

The GM Multiport Fuel Injection Trainer and the Engine Management Trainer would be an incredible resource to teach computer ignition and fuel control systems to students. The instructor would be able to create bugs in the system for the student to diagnose. This is difficult or impossible to do on a vehicle.

The MIG welder would replace an old welder we have. We use the welder for exhaust repair and occasionally while balancing crankshafts in the engine rebuilding courses.

The plasma cutter is needed to replace a broken machine. We use this on occasion for exhaust repair and while modifying vehicles donated to the program when it is necessary to cut metal to make demonstrations and vehicle mock up possible.

We need another vehicle lift to accommodate student needs in nearly every class we offer. We have only three lifts now and more are needed.

Finally, the surfacer is needed to replace a unit that is about 40 years old. Our current unit has a tank for coolant that is nearly rusted thru. The part set up tooling is worn and obsolete by today's standards making it difficult to machine many engines. Our current engine boring machine is also aged and they have a machine that will perform both surfacing and boring operations.

Planning Agenda:

List recommendations and necessary actions necessitated by the above evaluation. Complete Academic Planning, Student Services Planning, Facilities Planning, or Technology Planning Forms as appropriate for any recommendations requiring institutional action.

#14 Purchase listed tools and equipment as funds are available.

**V: Outside Compliance Issues (if appropriate for program)**

**Description:**

If appropriate, describe the role of outside compliance issues on the Special Program.

The automotive program is certified by the California State Bureau of Automotive Repair (BAR) to teach ASE alternative courses so students can qualify to take the BAR smog inspector test to earn a smog inspector license. The program is also certified to teach smog inspector update courses as required by BAR, and citation courses required by smog technicians that have received a citation. The program is required to maintain certain tools and equipment in order to remain licensed by the BAR to teach these courses. Any tools and equipment required are listed previously in this review.

The auto program has been working towards NATEF (National Automotive Technician Education Foundation) certification. All of the tools requirements have been met and now the application process can begin. The cost will be about \$4,000 for the certification process.

**Evaluation:**

Assess changes in compliance or identification of compliance-related needs and the impact on the Special Program.

The new smog machine as listed in the equipment section is required to continue meeting the BAR requirements.

#15 Fund NATEF certification process

Planning Agenda:

List recommendations and necessary actions necessitated by the above evaluation. Complete Academic Planning, Facilities Planning, Technology Planning and Human Resource Planning Forms as appropriate for any recommendations requiring institutional action.

[Click here to enter text.](#)

## **VI. Prioritized Recommendations**

### **A. Prioritized Recommendations for Implementation by Program Staff**

List all recommendations made in Section One that do not require institutional action (ie. curriculum development) in order of program priority.

#1 A review of the programs mission and goals will be done at the next advisory meeting.

#2 Program SLO's will be reviewed at the next advisory board meeting.

#4 Work with area high schools to recruit students and if possible offer courses for the high school students.

#5 Continue using lab activities to assess SLO's.

#10 Review degree and certificate learning outcomes at future advisory board meetings.

#11 Develop curriculums for emission courses and hybrid vehicle course.

#12 Continue to update course outlines as needed.

#13 Continue to schedule auto courses according to student input to meet their needs.

### **B. Prioritized Recommendations for Inclusion in the Planning Process**

List all recommendations made in Section One that should be included in Lassen College's planning and budgeting process, specifically in the Educational Master Plan, Student Services Master Plan, or Institutional Effectiveness Master Plan. Separate recommendations into the appropriate plan(s). Items to be included in the Human Resource Master Plan, Institutional Technology Master Plan, or Facilities Master Plan should be addressed in Sections Two, Three or Four in lieu of or in addition to inclusion in the Academic Master Plan. See **Appendix C** for Master Plan Overview to determine where recommendations are best placed.

**Prioritized Recommendations for Inclusion in Education Master Plan**  
 Program & Year (i.e. Automotive Technology 2014)

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost	Expected Outcome
3	More advertising and marketing needs to be created for the automotive program.	Immediately	None. CTE programs should be included more in current advertising	Increase enrollment
6	Provide A/C in the instructor's office and tool room.	Summer 2017	\$1,000	Increase employee morale and provide a place that is a reasonable temperature to work
7	Provide two portable evaporative coolers for the shop.	Summer 2017	\$9,500	Increase student learning
8	Provide tables and chairs to replace desks in the classroom.	Fall 2017	\$5,000	Increase student learning



9, 14	Purchase prioritized tool and equipment items as funding allows	Starting spring 2017	\$123,950	Comply with state and federal requirements. Increase student learning.
15	Fund NATEF certification process	Fall 2017	\$4,000	Increase enrollment

**Prioritized Recommendation for Inclusion in Student Services Master Plan**

Program & Year (i.e. Automotive Technology 2014)

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost	Expected Outcome

**Prioritized Recommendations for Inclusion in Institutional Effectiveness Master Plan**

Program & Year (i.e. Automotive Technology 2014)

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost	Expected Outcome


**Section Two: Human Resource Planning**

**I. Program Staffing**

**Description/Evaluation:**

1. List the current staffing for the program include: full-time and part-time faculty positions, instructional assistants and classified staff

The auto program is currently staffed by one full time faculty member, Chad Lewis, and one ISS, Rocky Kotaro.

2. This section provides an opportunity for analysis and justification of projected staffing needs to support the program. Clerical support by the Office of Academic Services and work-study needs may be included.

The program has in the past had adjunct faculty to help cover the load. One adjunct moved and another terminated his employment. The program would benefit from again hiring a part time faculty member.

**Planning Agenda:**

List recommendations and necessary actions necessitated by the above evaluation. Complete Academic Planning and Human Resources Planning Forms as appropriate for any recommendations requiring institutional action.

#16 An adjunct faculty member needs to be hired.

**II. Professional Development**

**Description/Evaluation:**

1. If available, reference Flex Contracts for full-time faculty teaching in the program for each of the last two years. [Copies may be available in the Office of Instruction].

In order to teach BAR smog classes, the full time faculty member must maintain a valid BAR inspector license, BAR repair license, and a BAR instructor license. The inspector license and repair license require updates training every two years. The instructor license requires a yearly update course. The full time faculty member also attended a hybrid vehicle training course that place over four 2 day courses. All of these activities were listed on flex contracts.

2. Describe the professional development and professional activities of the program faculty/instructional assistants in addition to flex obligation relevant to program improvement that has occurred during the period under review. (workshops, conferences, staff development, sabbatical leaves, work experience, etc.)

The full time faculty member is also a member of the CTE Leadership committee for the Academic Senate of California Community Colleges (ASCCC). The full time faculty member also serves as the CTE liaison as appointed by the local senate of the college. Chad has attended the following senate events:

December 9, 2016	North Far North Regional Consortium meeting
November 23, 2016	CTE Leadership Meeting
November 3-5, 2016	ASCCC Fall Plenary Session
October 26, 2016	CTE Leadership Meeting
September 27-29, 2016	CCCAOE Conference
September 16, 2016	CTE Leadership Meeting
June 8-11, 2016	Faculty Leadership Conference
May 5-7, 2016	CTE Leadership Conference
April 20-23, 2017	ASCCC Spring Plenary Session

Planning Agenda:

List recommendations and necessary actions necessitated by the above evaluation. Complete Academic Planning and Human Resources Planning Forms as appropriate for any recommendations requiring institutional action.

#17 Continue attended professional development opportunities as possible.

### III. Student Outcomes

#### Description/Evaluation:

Description/ Evaluation:

Describe any results from assessment of learning outcomes that affect human resource planning

None

Planning Agenda:

List recommendations and necessary actions necessitated by the above evaluation. Complete Academic Planning and Human Resources Planning Forms as appropriate for any recommendations requiring institutional action.

None

### IV. Prioritized Recommendation

#### **Prioritized Recommendations for Implementation by Program Staff**

List all recommendations made in Section Two that do not require institutional action (ie. curriculum development) in order of program priority

#### **Prioritized Recommendations for Inclusion in the Planning Process**

List all recommendations made in Section Two that should be included in Lassen College's planning and budgeting process. See **Appendix C** for Master Plan Overview to determine where recommendations are best placed.

[Click here to enter text.](#)

#### **Prioritized Recommendations for Inclusion in Human Recourse Master Plan**

Program & Year (i.e. Automotive Technology 2014)

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost	Expected Outcome
16	Hire adjunct faculty	Fall 2017	\$6,000 per semester	Improve student learning

### Section Three: Facilities Planning

#### I. Facilities

##### Description/Evaluation:

1. Describe and evaluate the Lassen Community College facilities available to the program.

The auto shop is located on the south side of campus along with AG, and welding. The facilities are for the most part satisfactory. As noted in the student surveys, temperature during the warm season is excessive. The biggest problems with the facilities is parking and the gate leading to the fenced area for auto is too small.

There is a common parking area shared by AG, welding, and auto. Most days this is filled to capacity. Many days the faculty does not have a space to park in the lot near the shop.

There is a fenced area near the shop for students to park project vehicles. The gate leading to this area is too small. A vehicle occasionally needs to be towed in and very often the tow truck can't fit through the gate. The vehicle must then be pushed to the gate.

2. Describe and evaluate additional facilities utilized off-campus by the program (attach any relevant rental agreements)

None

3. Describe any facilities needs identified by assessments of student learning outcomes

None

4. Justify any proposed modifications or additions to existing facilities that would better serve the program planned for the next five years.

A/C needs to be added to the office and tool room area. Very often the temperature exceeds 90 degrees in the late spring, summer, and early fall times of the semester. This is excessive.

The parking lot needs to expand to accommodate students and staff in multiple programs.

The gate leading to the auto parking area needs to be made larger to accommodate larger student vehicles and towing vehicles.

#### Planning Agenda:

List recommendations and necessary actions necessitated by the above evaluation. Complete Academic Planning, Facilities Planning, and Technology Planning Forms as appropriate for any recommendations requiring institutional action.

#18 Expand parking lot for AG, welding, and auto.

#19 Widen gate to auto parking area

## II. Prioritized Recommendations

### Prioritized Recommendations for Implementation by Program Staff

List all recommendations made in Section Three that do not require institutional action (ie. curriculum development) in order of program priority.

None

### Prioritized Recommendations for Inclusion in the Planning Process

List all recommendations made in Section Three that should be included in Lassen College's planning and budgeting process. See Appendix C for Master Plan Overview to determine where recommendations are best placed.

## Prioritized Recommendations for Inclusion in the Facilities Master Plan

Program & Year (i.e. Automotive Technology 2014)

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost	Expected Outcome
6	Add A/C to the office and tool room areas	Fall 2017	\$1,000	Provide improved working conditions
7	Provide large evaporative coolers for the shop area	Spring 2018	\$9,500	Improve student learning
18	Expand parking lot for AG, welding, and auto.	Fall 2018	Unknown	Improve student learning. Increase enrollment
19	Widen gate to auto parking area	Fall 2017	Unknown	Improve student vehicle access

### Section Four: Technology Planning

#### I. Technology

##### Description/Evaluation:

1. Describe and evaluate technology and technology support provided for instruction and instructional support.

The auto program does utilize several computers and printers. The program also uses a vehicle repair program. There are two main systems used in industry. One is called Mitchell and the other is ALLDATA. We have always used Mitchell in the past but switched recently to ALLDATA. Both programs should be used so students can get proficient with both systems.

2. Describe any technology and technology support needs identified by assessment of student learning outcomes.

The repair programs cost about \$1,500 per year each. Both programs should be funded.

Planning Agenda:

List recommendations and necessary actions necessitated by the above evaluation. Complete Academic Planning, Facilities Planning, Technology Planning and Human Resource Planning Forms as appropriate for any recommendations requiring institutional action.

#20 Fund both Mitchell and ALLDATA repair information systems annually.

## II. Prioritized Recommendations

### Prioritized Recommendations for Implementation by Program Staff

List all recommendations made in Section Four that do not require institutional action (ie. curriculum development) in order of program priority.

[Click here to enter text.](#)

### Prioritized Recommendation for Inclusion in the Planning Process

List all recommendations made in Section Four that should be included in Lassen College's planning and budgeting process. See **Appendix C** for Master Plan Overview **to determine where recommendations are best placed.**

### Prioritized Recommendations Inclusion in Institutional Technology Master Plan

Program & Year (i.e. Automotive Technology 2014)

Strategic Goal	Planning Agenda Item	Implementation Time Frame	Estimated Cost	Expected Outcome
20	Fund both Mitchell and ALLDATA repair information systems annually.	Fall 2017	\$3,000 per year	Improve student learning. Make auto students more employable.




**Appendix A:**

**Four-Column Model for Student Learning Outcomes**

(insert model here)

October 2016 12/19/2016

Program Review

Lassen Community College Automotive Technology

**Appendix B:**

## Institutional Student Learning Outcomes Inventory Chart

(insert chart here)

October 2016 12/19/2016

Program Review

Lassen Community College Automotive Technology

**Appendix C:**

**Promotional Materials**

(insert any promotional materials here)

**Automotive Technology Instructional Program Review  
Status of Curriculum Review March 30, 2016**

**Appendix D:  
Curriculum Review Form**

<b>Course</b>	<b>Curriculum Committee Review Completed</b>	<b>Curriculum Committee Review <u>Not</u> Completed</b>
AT-50 Car care Basics	11/04/2014	
AT-54 Brakes	08/18/2015	
AT-56 Steering and Suspension	08/18/2015	
AT-58 Automotive Heating and Air conditioning	08/18/2015	
AT-60 Shop Management and Service Writer	08/18/2015	
AT-64 Diesel Repair and Maintenance	04/22/2014	
AT-66 Manual Drive Train	08/18/2015	
AT-68 Automatic Transmissions	08/18/2015	
AT-70 General Automotive Lab	04/22/2014	
AT-72 Engine Repair and Machining-Short Block	08/18/2015	
AT-74 Engine Repair and Machining-Cylinder Heads	08/18/2015	
AT-76 Automotive Machining Lab	04/22/2014	
AT-80 Basic Electrical	08/18/2015	
AT-82 Engine Performance I	08/18/2015	
AT-84 Engine Performance II		
AT-88 Vintage Vehicle Repair	08/18/2015	
AT-90 Automotive Survival	04/22/2014	
AT-90A Automotive Survival Lab	04/22/2014	
AT-92 Smog Check Training Level 2-32 hour course	04/22/2014	
AS Automotive Technology	04/22/2014	
CA Engine Repair	04/22/2014	
CA Advance Mechanics	04/22/2014	
CA General Mechanics	04/22/2014	
COA Basic Mechanics	10/07/2014 (new)	
COA Electrical	03/04/2014	

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\_\_\_\_\_  
Mr. Chad Lewis, Subject Area Faculty Signature  
Date

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\_\_\_\_\_  
Ms. Alison Somerville, Curriculum and Academic Standards Committee Chair Signature  
Date

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Dr. Terri Armstrong, Vice President of Academic Services/AD Signature  
Date

12/19/2016

October 2016

Program Review

Lassen Community College Automotive Technology

2012 Automotive Inventory

## Appendix E: Tables

Table with multiple columns and rows, containing dense text and data, likely a detailed report or schedule. The text is too small to read accurately.



