# **Assessment: Course Four Column**

SPRING/SUMMER 2015



# El Camino: Course SLOs (IND) - Automotive Technology

#### **ECC: ATEC 1:Introduction to Automotive Service**

#### Course SLO

SLO #1 Safety Exam - Given an in class exam, based on readings, classroom discussions and demonstrations, the student will be able to work in the Automotive Shop safely and pass the Automotive Safety dangers and safe shop practices, Exam with 100% accuracy.

Course SLO Status: Active Course SLO Assessment Cycle: 2014-

15 (Spring 2015)

**Input Date:** 11/12/2013

### Assessment Method Description

Exam/Test/Quiz - Students will take a multiple choice written safety examination after an introduction and extensive review of personal protective equipment, shop safety proper use of hand tools, power tools, shop equipment and safety requirements for the course and shop lab exercises/work.

#### **Standard and Target for Success:**

75% of students will achieve a 100% on the safety examination on the first attempt and, after further review, class discussion, demonstrations and instruction. 100% of students will achieve a 100% on the safety examination. A 100% on the safety examination will be required prior to working in the automotive shop/lab.

# Assessment Data & Analysis

Semester and Year Assessment Conducted: 2014-15 (Spring 2015)

Standard Met?: Standard Met

70% of students achieved a 100% on the safety examination on the first attempt. After further review, class discussion, demonstrations and instruction, 100% of students will achieve a 100% on the safety examination. (10/08/2015)

Faculty Assessment Leader: Mike

Anderson

**Faculty Contributing to Assessment:** 

**Reviewer's Comments:** 

#### **Actions**

null.courseAction: Use updated and interactive media for presentation and testing which would include graphics and/or video, and review The Automotive Safety test questions, to possibly make changes to the current Safety exam which may be more beneficial in greater student success in achieving better understanding of safety protocols.

Purchase or develop updated Automotive Safety media covering the safety practices used in the automotive industry today (10/08/2016)

Action Category: Program/College Support

# ECC: ATEC 11:Brakes, Suspension and Four Wheel Alignment

#### Course SLO

#### SLO #1 Safety Exam - Given an in class exam, based on readings, classroom discussions and demonstrations, the student will be able to work in the Automotive Shop safely and pass the Automotive Safety dangers and safe shop practices, Exam with 100% accuracy.

**Course SLO Status:** Active Course SLO Assessment Cycle: 2014-

15 (Spring 2015)

Input Date: 11/12/2013

# Assessment Method Description

Exam/Test/Quiz - Students will take a multiple choice written safety examination after an introduction and extensive review of personal protective equipment, shop safety proper use of hand tools, power tools, shop equipment and safety requirements for the course and shop lab exercises/work.

#### **Standard and Target for Success:**

75% of students will achieve a 100% on the safety examination on the first attempt and, after further review, class discussion, demonstrations and instruction. 100% of students will achieve a 100% on the safety examination. A 100% on the safety examination will be required prior to working in the automotive shop/lab

# Assessment Data & Analysis

#### Semester and Year Assessment Conducted: 2014-15 (Spring 2015)

Standard Met?: Standard Met

Though most of the students (66%) passed with an 100%, a few (33%) students had to review and correct their answers to attain an 100% understanding of the safety procedures in the auto shop (10/08/2015)

Faculty Assessment Leader: Mike

Anderson

**Faculty Contributing to Assessment:** 

**Reviewer's Comments:** 

#### **Actions**

null.courseAction: Use updated and interactive media for presentation and testing which would include graphics and/or video, and review The Automotive Safety test questions, to possibly make changes to the current Safety exam which may be more beneficial in greater student success in achieving better understanding of safety protocols.

Purchase or develop updated Automotive Safety media covering the safety practices used in the automotive industry today (10/08/2016)

Action Category: Program/College Support

null.courseFollowUp: The instructors feel that the competency is foundational and should remain as a key SLO for the course while continuing to reinforce constantly updated safety concepts relating to automotive tool and equipment design, usage, safety and testing. Purchase of updated Automotive Safety media covering the safety practices used in the automotive industry today is still pending. (10/15/2015)

# ECC: ATEC 22A:Introduction to Tune-Up, Electrical and Fuel Systems

#### Course SLO

SLO #1 Safety Exam - Given an in class exam, based on readings, classroom discussions and demonstrations, the student will be able to work in the Automotive Shop safely and pass the Automotive Safety dangers and safe shop practices, Exam with 100% accuracy.

**Course SLO Status:** Active Course SLO Assessment Cycle: 2014-

15 (Spring 2015)

Input Date: 11/12/2013

# Assessment Method Description

Exam/Test/Quiz - Students will take a multiple choice written safety examination after an introduction and extensive review of personal protective equipment, shop safety proper use of hand tools, power tools, shop equipment and safety requirements for the course and shop lab exercises/work.

#### **Standard and Target for Success:**

75% of students will achieve a 100% on the safety examination on the first attempt and, after further review, class discussion, demonstrations and instruction. 100% of students will achieve a 100% on the safety examination. A 100% on the safety examination will be required prior to working in the automotive shop/lab.

# Assessment Data & Analysis

Semester and Year Assessment Conducted: 2014-15 (Spring 2015)

Standard Met?: Standard Met

The students were able to understand and apply the safety rules and principles which pertain to Automotive Technology requirements of working safely in the auto shop which included the proper use of hand tools and power tools.

Though most of the students (75%) passed with an A, some (25%) students had to review and correct their answers to attain an A understanding of the safety procedures in the auto shop (10/08/2015)

Faculty Assessment Leader: Mike

Anderson

**Faculty Contributing to Assessment:** 

**Reviewer's Comments:** 

#### **Actions**

null.courseAction: 1. Use updated and interactive media for presentation and testing which would include graphics and/or video.

2. Purchase or develop updated Automotive Safety media covering the safety practices used in the automotive industry today. (10/08/2016)

Action Category: Program/College Support

# ECC: ATEC 22B:Advanced Tune-Up, Electrical and Fuel Systems

#### Course SLO

SLO #1 Safety Exam - Given an in class exam, based on readings, classroom discussions and demonstrations, the student will be able to work in the Automotive Shop safely and pass the Automotive Safety dangers and safe shop practices, Exam with 100% accuracy.

**Course SLO Status:** Active Course SLO Assessment Cycle: 2014-

15 (Spring 2015)

Input Date: 11/12/2013

# Assessment Method Description

Exam/Test/Quiz - Students will take a multiple choice written safety examination after an introduction and extensive review of personal protective equipment, shop safety proper use of hand tools, power tools, shop equipment and safety requirements for the course and shop lab exercises/work.

#### **Standard and Target for Success:**

75% of students will achieve a 100% on the safety examination on the first attempt and, after further review, class discussion, demonstrations and instruction. 100% of students will achieve a 100% on the safety examination. A 100% on the safety examination will be required prior to working in the automotive shop/lab.

# Assessment Data & Analysis

Semester and Year Assessment Conducted: 2014-15 (Spring 2015)

Standard Met?: Standard Met

The students were able to understand and apply the safety rules and principles which pertain to Automotive Technology requirements of working safely in the auto shop which included the proper use of hand tools and power tools.

Though most of the students (85%) passed with an A, some (15%) students had to review and correct their answers to attain an A understanding of the safety procedures in the auto shop. (10/08/2015)

Faculty Assessment Leader: Hiram

**Faculty Contributing to Assessment:** 

**Reviewer's Comments:** 

#### **Actions**

null.courseAction: Use updated and interactive media for presentation and testing which would include graphics and/or video.

2. Purchase or develop updated Automotive Safety media covering the safety practices used in the automotive industry today (10/08/2016)

**Action Category:** Teaching Strategies

# **ECC: ATEC 23:Major Tune-Up and Emission Controls**

#### Course SLO

SLO #1 Safety Exam - Given an in class exam, based on readings, classroom discussions and demonstrations, the student will be able to work in the Automotive Shop safely and pass the Automotive Safety dangers and safe shop practices, Exam with 100% accuracy.

**Course SLO Status:** Active Course SLO Assessment Cycle: 2014-

15 (Summer 2015) Input Date: 11/12/2013

# Assessment Method Description

Exam/Test/Quiz - Students will take a multiple choice written safety examination after an introduction and extensive review of personal protective equipment, shop safety proper use of hand tools, power tools, shop equipment and safety requirements for the course and shop lab exercises/work.

#### **Standard and Target for Success:**

75% of students will achieve a 100% on the safety examination on the first attempt and, after further review, class discussion, demonstrations and instruction. 100% of students will achieve a 100% on the safety examination. A 100% on the safety examination will be required prior to working in the automotive shop/lab.

# Assessment Data & Analysis

Semester and Year Assessment Conducted: 2014-15 (Spring 2015)

Standard Met?: Standard Met

The students were able to understand and apply the safety rules and principles which pertain to Automotive Technology requirements of working safely in the auto shop which included the proper use of hand tools and power tools.

Though most of the students (73%) passed with an 100%, a few (26%) students had to review and correct their answers to attain an 100% understanding of the safety procedures in the auto shop. (10/08/2015)

Faculty Assessment Leader: Mike

Anderson

**Faculty Contributing to Assessment:** 

**Reviewer's Comments:** 

#### **Actions**

null.courseAction: Use updated and interactive media for presentation and testing which would include graphics and/or video, and review The Automotive Safety test questions, to possibly make changes to the current Safety exam which may be more beneficial in greater student success in achieving better understanding of safety protocols.

Purchase or develop updated Automotive Safety media covering the safety practices used in the automotive industry today. (10/08/2016)

**Action Category:** Teaching

Strategies

# **ECC: ATEC 25:Automotive Electrical Systems**

#### Course SLO

SLO #1 Safety Exam - Given an in class exam, based on readings, classroom discussions and demonstrations, the student will be able to work in the Automotive Shop safely and pass the Automotive Safety

Exam With 100% accuracy.

Exam/Test/Quiz - The assessm a Safety Exam that contains information that specifically tar the concepts and rational of wo safely in the Automotive Shop of the Exam with 100% accuracy.

Exam/Test/Quiz - The assessm a Safety Exam that contains information that specifically target the concepts and rational of wo safely in the Automotive Shop of the Exam with 100% accuracy.

Course SLO Status: Active
Course SLO Assessment Cycle: 2014-

15 (Spring 2015)

**Input Date:** 11/12/2013

# Assessment Method Description

Exam/Test/Quiz - The assessment is a Safety Exam that contains information that specifically targets the concepts and rational of working safely in the Automotive Shop Area. The exam contains 66 multiple choice questions which specifically targets the use of equipment and working safely with tools and one another in the automotive shop area. Students are given the test on the second day of class after the instructor has given them detailed safety instructions.

#### **Standard and Target for Success:**

Since safety is a key element in all shop classes and in the workplace, this multiple choice exam must be passed with 100% accuracy before students are allowed to work in the shop. In some cases, this requires multiple tries.

Reviewer's Comments: The current data and safety record in the El Camino College Automotive Shop confirms that the students are receiving good safety instructions and the students are working safely in the automotive shop.

Use updated and interactive media for presentation and testing which would include graphics and/or video.

Review The Automotive Safety test questions, to possibly make changes to the current Safety exam which may be more beneficial in greater student success in achieving better

# Assessment Data & Analysis

Semester and Year Assessment Conducted: 2014-15 (Spring 2015)

Standard Met?: Standard Met

N = 23

18 students passed with 100% accuracy on their first attempt.

5 students passed with 100% accuracy on their subsequent attempt.

The students were able to understand and apply the safety rules and principles which pertain to Automotive Technology requirements of working safely in the auto shop which included the proper use of hand tools and power tools.

Though most of the students (18) passed with an A, a few students (5) had to review and correct their answers to attain an 100% understanding of the safety procedures in the auto shop.

(06/17/2015)

Faculty Assessment Leader: Harry

Stockwell

Reviewer's Comments: The current data and safety record in the El Camino College Automotive Shop confirms that the students are receiving good safety instructions and the students are working safely in the automotive shop.

Use updated and interactive media for presentation and testing which would include graphics and/or video.

#### **Actions**

null.courseAction: Use updated and interactive media for presentation and testing which would include graphics and/or video, and review The Automotive Safety test questions, to possibly make changes to the current Safety exam which may be more beneficial in greater student success in achieving better understanding of safety protocols.

Purchase or develop updated Automotive Safety media covering the safety practices used in the automotive industry today. (06/18/2016)

**Action Category:** Teaching Strategies

# Course SLO Assessment Method Description understanding of safety protocols. Purchase or develop updated Automotive Safety media covering the safety practices used in the Assessment Data & Analysis Actions Review The Automotive Safety test questions, to possibly make changes to the current Safety exam which may be more beneficial in greater student success in achieving better

**SLO #2 Battery System Test** - The student will be able to test the performance of the automotive battery charging and starting systems using the Automotive Battery/ Charging/ Starting Systems Testing lab worksheet and manufacturer specifications.

Course SLO Status: Active
Course SLO Assessment Cycle: 2014-

15 (Spring 2015)

Input Date: 11/12/2013

#### Presentation/Skill Demonstration -

automotive industry today.

Using a Battery, Altenator, Starter system Diagnosis Lab Work sheet, the students will be able to test the capacity and charege of an automotive battery, test and evaluate the charging system, test and evaluate the starting systems and associated wiring to these systems. using the Automotive Battery/ Charging/ Starting Systems Testing lab worksheet and manufacturer specifications. Students will perform testing following manufacturers specifications and procedures, the students will be able to evaluate. diagnose and provide information of recommended repairs.

Standard and Target for Success: |

estimate the 70% to 75% of the students should be able to complete the lab sheet with a Mastery Level 3. Mastery Level 3: Students could do the assignment with limited assisstance.

Semester and Year Assessment Conducted: 2014-15 (Spring 2015)

Standard Met?: Standard Met

understanding of safety protocols.

Purchase or develop updated Automotive Safety media covering the safety practices used in the automotive industry today.

60% appeared to have a mastery of the information, level 4, 90% or higher.

15%showed a strong understanding; level 3, 80% - 89% 25% had an basic understanding; level 2, 70% - 79% none fell short of understanding; level 1, below 70% (10/15/2016)

**Faculty Assessment Leader:** 

Updated equipment will help the 25% that needed help setting up

Faculty Contributing to Assessment:

Harry Stockwell

**Reviewer's Comments:** 

**null.courseAction:** I will work with the students on the Diagnosis & repair work sheet more in depth to solidify the learning process (10/15/2016)

**Action Category:** Teaching

Strategies

Partial Mastery Level 2: Students could almost do this assignment, but required a minor amount of help to set-up or solve the problem.

Non-Mastery Level 3: Students required a major amount of help to do the assignment.

**Reviewer's Comments:** This will be repeated when this class is offered in 2017.

# **ECC: ATEC 35:Manual Transmission, Drive Train and Drive Axles**

#### Course SLO

# Assessment Method Description

# Assessment Data & Analysis

#### **Actions**

SLO #1 Safety Exam - Given an in class exam, based on readings, classroom discussions and demonstrations, the student will be able to work in the Automotive Shop safely and pass the Automotive Safety dangers and safe shop practices, Exam with 100% accuracy.

**Course SLO Status:** Active Course SLO Assessment Cycle: 2014-

15 (Spring 2015)

Input Date: 11/12/2013

Exam/Test/Quiz - Students will take a multiple choice written safety examination after an introduction and extensive review of personal protective equipment, shop safety proper use of hand tools, power tools, shop equipment and safety requirements for the course and shop lab exercises/work.

#### **Standard and Target for Success:**

75% of students will achieve a 100% on the safety examination on the first attempt and, after further review, class discussion, demonstrations and instruction. 100% of students will achieve a 100% on the safety examination. A 100% on the safety examination will be required prior to working in the automotive shop/lab.

Semester and Year Assessment Conducted: 2014-15 (Spring 2015)

Standard Met?: Standard Met

The students were able to understand and apply the safety rules and principles which pertain to Automotive Technology requirements of working safely in the auto shop which included the proper use of hand tools and power tools.

Though most of the students (90%) passed with an A, some (10%) students had to review and correct their answers to attain an A understanding of the safety procedures in the auto shop. (10/08/2015)

Faculty Assessment Leader: Mike

Anderson

**Faculty Contributing to Assessment:** 

**Reviewer's Comments:** 

null.courseAction: 1. Use updated and interactive media for presentation and testing which would include graphics and/or video.

2. Purchase or develop updated Automotive Safety media covering the safety practices used in the automotive industry today (10/08/2016)

**Action Category: Teaching** Strategies

null.courseFollowUp: The instructors feel that the competency is foundational and should remain as a key SLO for the course while continuing to reinforce constantly updated safety concepts relating to automotive tool and equipment design, usage, safety and testing. Purchase of updated Automotive Safety media covering the safety practices used in the automotive industry today is still pending. 10/15/2015 (10/15/2015)

#### **SLO #2 Manual Transmission**

**Inspection -** The student will inspect, test and evaluate operation of a manual transmission using manufacturer testing procedures and specifications.

Course SLO Status: Active Course SLO Assessment Cycle: 2014-15 (Spring 2015)

#### Presentation/Skill Demonstration -

Using a Manual Transmissions Diagnosis and Repair Lab/Work sheet; students will test the performance of the automotive battery charging and starting systems using the Automotive Battery/ Charging/ Starting Systems Testing lab worksheet and

**Semester and Year Assessment Conducted: 2014-15** 

(Spring 2015)

Standard Met?: Standard Met

50% appeared to have a mastery of the information with a score 90% or higher.

35% showed a strong understanding with a score 80% 15% had an basic understanding with a score 70% - 79% none fell short of understanding; below 70% (10/15/2015)

null.courseAction: Having more demonstration models would have helped the students that did not attain the 80% level (10/15/2016)

Action Category: Program/College Support

Course SLO	Assessment Method Description	Assessment Data & Analysis	Actions
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**Input Date:** 11/12/2013

manufacturer specifications..
Students will perform testing
following manufacturers
specifications and make evaluations
and diagnostic conclusions as to
repair requirements needed.

Standard and Target for Success: I estimate the 70% of the class should be able to do this at Mastery Level 3. Mastery Level 3: Students could do the assignment without asking for help.

Partial Mastery Level 2: Students could almost do this assignment, but required a minor amount of help to set-up or solve the problem.

Non-Mastery Level 3: Students required a major amount of help to do the assignment.

Faculty Assessment Leader: Mike

Anderson

**Faculty Contributing to Assessment:** 

**Reviewer's Comments:** 

# **ECC: ATEC 42:Engine Repair**

#### Course SLO

SLO #1 Safety Exam - Given an in class exam, based on readings, classroom discussions and demonstrations, the student will be able to work in the Automotive Shop safely and pass the Automotive Safety

Exam With 100% accuracy.

Exam/Test/Quiz - The assessm is a Safety Exam that contains information that specifically tart the concepts and rational of wo safely in the Automotive Shop of the Exam with 100% accuracy.

Course SLO Status: Active
Course SLO Assessment Cycle: 2014-

15 (Spring 2015)

**Input Date:** 11/12/2013

# Assessment Method Description

Exam/Test/Quiz - The assessments is a Safety Exam that contains information that specifically targets the concepts and rational of working safely in the Automotive Shop Area. The exam contains 66 multiple choice questions which specifically targets the use of equipment and working safely with tools and one another in the automotive shop area. Students are given the test on the second day of class after the instructor has given them detailed safety instructions.

#### **Standard and Target for Success:**

Since safety is a key element in all shop classes and in the workplace, this multiple choice exam must be passed with 100% accuracy before students are allowed to work in the shop. In some cases, this requires multiple tries.

#### Reviewer's Comments: REPORTING

Assessment Data

Provide the survey or assessment data.

N = 26

19 students passed with 100% accuracy on their first attempt.

# Assessment Data & Analysis

Semester and Year Assessment Conducted: 2014-15 (Spring 2015)

Standard Met?: Standard Met

N = 26

19 students passed with 100% accuracy on their first attempt.

7 students passed with 100% accuracy on their subsequent attempt.

The students were able to understand and apply the safety rules and principles which pertain to Automotive Technology requirements of working safely in the auto shop which included the proper use of hand tools and power tools.

Though most of the students (19) passed with an 100%, a few (7) students had to review and correct their answers to attain an 100% understanding of the safety procedures in the auto shop. (06/16/2015)

Faculty Assessment Leader: Harry

Stockwell

#### **Actions**

null.courseAction: Use updated and interactive media for presentation and testing which would include graphics and/or video, and review The Automotive Safety test questions, to possibly make changes to the current Safety exam which may be more beneficial in greater student success in achieving better understanding of safety protocols.

Purchase or develop updated Automotive Safety media covering the safety practices used in the automotive industry today. 06/18/2016 (10/08/2016)

Action Category: Program/College Support

10/27/2015

7 students passed with 100% accuracy on their subsequent attempt.

Observable Patterns

Summarize the patterns observed in the data.

The students were able to understand and apply the safety rules and principles which pertain to Automotive Technology requirements of working safely in the auto shop which included the proper use of hand tools and power tools.

Though most of the students (19) passed with an 100%, a few (7) students had to review and correct their answers to attain an 100% understanding of the safety procedures in the auto shop.

# **ECC: ATEC 81:Automotive Air Conditioning**

#### Course SLO

SLO #1 Safety Exam - Given an in class exam, based on readings, classroom discussions and demonstrations, the student will be able to work in the Automotive Shop safely and pass the Automotive Safety

Exam With 100% accuracy.

Exam/Test/Quiz - The assessm a Safety Exam that contains information that specifically target the concepts and rational of wo safely in the Automotive Shop of the Exam with 100% accuracy.

Course SLO Status: Active
Course SLO Assessment Cycle: 2014-

15 (Summer 2015) Input Date: 11/12/2013

# Assessment Method Description

Exam/Test/Quiz - The assessment is a Safety Exam that contains information that specifically targets the concepts and rational of working safely in the Automotive Shop Area. The exam contains 66 multiple choice questions which specifically targets the use of equipment and working safely with tools and one another in the automotive shop area. Students are given the test on the second day of class after the instructor has given them detailed safety instructions.

#### **Standard and Target for Success:**

Since safety is a key element in all shop classes and in the workplace, this multiple choice exam must be passed with 100% accuracy before students are allowed to work in the shop. In some cases, this requires multiple tries.

**Reviewer's Comments:** N = 14

10 students passed with an A on their first attempt.

4 other students passed with an A on their review and subsequent attempt.

The students were able to understand and apply the safety rules and principles which pertain to Automotive Technology requirements of working safely in the auto shop which included the proper use of hand tools and power

# Assessment Data & Analysis

#### Standard Met?: Standard Met

The students were able to understand and apply the safety rules and principles which pertain to Automotive Technology requirements of working safely in the auto shop which included the proper use of hand tools and power tools.

Though most of the students (10) passed with an A, some (4) students had to review and correct their answers to attain an A understanding of the safety procedures in the auto shop. (07/02/2015)

Faculty Assessment Leader: HARRY STOCKWELL

Reviewer's Comments: The students were able to understand and apply the safety rules and principles which pertain to Automotive Technology requirements of working safely in the auto shop which included the proper use of hand tools and power tools.

Though most of the students (10) passed with an A, some (4) students had to review and correct their answers to attain an A understanding of the safety procedures in the auto shop.

1. The current data and safety record in the El Camino College Automotive Shop confirms that the students are receiving good safety instructions and the students are working safely in the automotive shop.

#### Actions

**null.courseAction:** 1. Use updated and interactive media for presentation and testing which would include graphics and/or video.

2. Purchase or develop updated Automotive Safety media covering the safety practices used in the automotive industry today. (10/08/2016)

Action Category: Program/College Support

Course SLO	Assessment Method Description	Assessment Data & Analysis	Actions
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tools.

Though most of the students (10) passed with an A, some (4) students had to review and correct their answers to attain an A understanding of the safety procedures in the auto shop.

- 2. Use updated and interactive media for presentation and testing which would include graphics and/or video.
- 3. No changes to curriculum are needed at this time.
- 4. Purchase or develop updated Automotive Safety media covering the safety practices used in the automotive industry today.