



## SLO Assessment Cycle for AUTO 60E

*Automotive Fuel Injection*

Assessment Initiated by: John Walton (8508) in AUTO

### Outcomes:

#### Outcome 1: Statement

Student will describe the principles of electronic fuel injection.  
 Student will explain common designs of fuel injection systems.  
 Student will distinguish specific fuel injection diagnostic equipment. Student will analyze a fuel injection system based on diagnostic test data. Student will solve a drivability scenario as related to a fuel injection system failure. Student will determine the applicable service procedure based on a given circumstance.

### Assessment Cycle Records:

#### Outcome 1: Assessment Planning Modified: [03/16/2011]

#### Assessment Strategy Used:

Quarter: Fall 2010

Assessors: John Walton

Assessment Tools: Exams

Sections being assessed: 225

#### Outcome 1: Reflect & Enhance Modified: [03/16/2011]

**Number of people involved in Reflection and Enhancement: 2**

#### Changes:

#### Methods:

The assessment method for Auto 60E is the final exam.

#### Summary:

60E assessment summary:

1. Student will describe the principles of electronic fuel injection.  
 Exam Questions: 1,2,7,8,9,10,13,15,25,41,

39 missed out of possible 190. 20% missed

Student average 20% missed

2. Student will explain common designs of fuel injection systems.  
 Exam Questions: 3,4,5,6,12,20,21,22,23,24,39,40,  
 53 missed out of possible 228 . 23% missed

Student average 23% missed

3. Student will distinguish specific fuel injection diagnostic equipment.  
 Exam Questions: 11,30  
 8 missed out of possible 38 . 26% missed

Student average 26%

4. Student will analyze a fuel injection system based on diagnostic test data.  
 Exam Questions: 26,27,28,36,37,38,42,43  
 31 missed out of possible 152. missed 20%

Student average 20%

5. Student will solve a drivability scenario as related to a fuel injection system failure.  
 Exam Questions: 14,29  
 15 missed out of possible 38. 39% missed

Student average 39% missed

6. Student will determine the applicable service procedure based on a given circumstance.  
 Exam Questions: 16,17,18,19,  
 25 missed out of possible 76. missed 32%

Student average 32%

60E SLO Total Average 26%

**Enhancement (Part I):**

## Enhancement

Part I: Describe how the assessment results will be applied to enhance or improve student learning: content, teaching methods, assignments, course evaluation procedures, the SLO.

The overall results of this assessment are indicating that the majority of instruction has been affective. As a result of the 26% total, I plan to increase the amount of time spent on diagnostics interpretation of the fuel injection system. By increasing the lecture time devoted to this topic I will be able to bolster the critical thinking needed to assess a symptom or drivability complaint. This allows the students to vicariously experience real life diagnostics, which are marketable job skills. I will also increase the amount of time dedicated to the usage of fuel injection diagnostic equipment. Understanding the purpose or function of this equipment is an essential part of diagnostics. I plan to add various lessons regarding each of the most popular diagnostic machines available.

**Enhancement (Part II):**

As the automotive industry continues to evolve, the De Anza Automotive technology department continues to expand. In regards to Auto 60E I plan to continually revise the course as needed to focus on vehicles and systems that are relevant and will likely need repairs in today's market.

---

[ Number of Outcomes for AUTO 60E: 1 ]