



NASHUA COMMUNITY COLLEGE
COURSE OUTLINE FORM

Course Title: ADVANCED AUTOMOTIVE ELECTRICITY AND ELECTRONICS			
Course Prefix & No.: AUTO115N	Lecture Hours: 2	Lab Hours: 3	Credit Hours: 3
Department: Transportation Technology			
Program: Automotive Technology			

Prerequisites/ Co-requisites:

AUTO113N

Required Accuplacer Score:

Entrance Skills:

- A minimum of one year of high school Algebra I is recommended.
- Basic skills in written English are required.
- Basic reading skills are required.
- Basic computer skills are required.
- Students are expected to possess a good work ethic and a strong desire to learn.
- A valid motor vehicle driver's license is required.

Catalog Description:

The course includes operating principles and troubleshooting of various systems, body computers, multiplexing, keyless entry, etc. Testing of sensors and circuits and On-board diagnostics related to these systems will be covered.

Course Competencies:

Course Outline:

Content Topic	Subtopics (a., b., etc.)
Introduction and Shop Safety	<ul style="list-style-type: none">a. Battery safetyb. Electrical safetyc. Hybrid safety
Computer Fundamentals	<ul style="list-style-type: none">a. Computer design and operationb. Input and output testing and operationc. Diagnostic procedures
Test Equipment	<ul style="list-style-type: none">a. Oscilloscopesb.

Performance Evaluation:

Formative Assessments	Summative Assessments
<ol style="list-style-type: none">1. Lab participation grade2. Classroom participation3. Quizzes4. Midterm exam5. Homework assignments, reading6. Electude	<ol style="list-style-type: none">1. Final exam2. Lab practical exam

Method of Instruction:

1. Lecture and discussion
2. Required reading
3. Demonstration
4. Laboratory work