AUTO 390G: SNAP-ON BATTERY CHARGING

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Co-Contributor(s)

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Justification / Rationale
The Automotive Faculty are creating this course to provide Automotive Program learners with the opportunity to earn industry-recognized certification. This certification will improve their ability to be hired in the automotive industry.

Effective Term
Spring 2023

Credit Status
Noncredit

Subject
AUTO - Automotive Technology

Course Number
390G

Full Course Title
Snap-on Battery Charging

Short Title
BATTERY CHARGING

Discipline

Disciplines List
Automotive Technology

Modality
Face-to-Face
Hybrid

Catalog Description
This course offers intermediate-level knowledge and skills related to an industry standard, automotive battery charging systems. The learner will be shown navigation, interpretation, and application of industry standard battery chargers and proper charging practices. This will enhance one of the required skills for employment and advancement within the automotive service industry.

Schedule Description
This course offers intermediate level knowledge and skills related to an industry standard, automotive battery charging systems.
Advisory: AUTO 301

Non-credit Hours
6

In-class Hours
6

Total Course Units
0

Total Semester Hours
6

Override Description
Noncredit override.

Prerequisite Course(s)
Advisory: AUTO 301

Required Text and Other Instructional Materials

Resource Type
Web/Other
Open Educational Resource
Yes

Year
2021

Description
Snap-on study material for battery charging exam. (No cost to the learner)

Class Size Maximum
21

Entrance Skills
Provide brief descriptions of the components.

Requisite Course Objectives
AUTO 301-Provide a brief description pertaining to major components.

Entrance Skills
Identify major automotive components.

Requisite Course Objectives
AUTO 301-Identify major automotive components.

Course Content

1. Review of basic battery operation and function.
2. Battery charger operation and function.
3. Locating battery specifications in the service information.
4. Diagnosis of battery condition.
5. Taking the Snap-on battery charging exam.

Course Objectives

	Objectives
Objective 1	List safety procedures and required personal protection equipment (PPE) when charging a battery.
Objective 2	Explain the operation and function of modern battery chargers.
Objective 3	Locate automotive diagnostic and service procedures.

Student Learning Outcomes

	Upon satisfactory completion of this course, students will be able to:
Outcome 1	Demonstrate proper charging and diagnosis of an automotive 12 volt battery.

Methods of Instruction

Method	Please provide a description or examples of how each instructional method will be used in this course.
Collaborative/Team	Each learner will work in teams to locate and identify safety procedures and personal protection equipment (PPE) within the service information related to batteries and battery charging.
Lecture	Each learner will give a presentation of automotive battery basics and battery charging principles and practices.
Laboratory	Each learner navigate battery charger procedures from the service information.
Discussion	Learners will participate in classroom discussions.

Methods of Evaluation

Method	Please provide a description or examples of how each evaluation method will be used in this course.	Type of Assignment
Written homework	Readings and home work from the instructor provided materials.	In and Out of Class
Student participation/contribution	The lecture will be a two-way interactive discussion requiring input from each learner.	In and Out of Class
Tests/Quizzes/Examinations	Learners must successfully complete required assessment material.	In and Out of Class

Assignments

Other In-class Assignments

1. List 5 safety procedures including required PPE when charging a battery.
2. Tour of common battery charger operation and features.
3. Directions on how to charge a battery.
4. How to interpret battery charger diagnostic read-outs.
5. Participation in discussion related to lecture.
6. Development of a study-plan for the Snap-on battery charging exam.
7. Quiz and review of battery charging features and functions.

Other Out-of-class Assignments

1. Execution of individual study-plans in preparation for the Snap-on battery charging exam.
2. Taking the Snap-on battery charging exam.

Grade Methods

Pass/No Pass Only

Distance Education Checklist

Include the percentage of online and on-campus instruction you anticipate.

Online %

50

On-campus %

50

Lab Courses

How will the lab component of your course be differentiated from the lecture component of the course?

The lab activities will be locating data from the service information and operating the battery chargers to answer specific questions.

From the COR list, what activities are specified as lab, and how will those be monitored by the instructor?

Service information location and battery charger operation is specified as lab which will be monitored by instructor observation.

How will you assess the online delivery of lab activities?
Laboratory activities will not be delivered in the online setting, only in person.

Instructional Materials and Resources

If you use any other technologies in addition to the college LMS, what other technologies will you use and how are you ensuring student data security?
The learners are responsible for their own login and password information to other sites.

If used, explain how specific materials and resources outside the LMS will be used to enhance student learning.
Each learner will go to the assigned site and follow their personalized study-plan.

Effective Student/Faculty Contact

Which of the following methods of regular, timely, and effective student/faculty contact will be used in this course?

Within Course Management System:
Discussion forums with substantive instructor participation
Online quizzes and examinations
Regular virtual office hours
Timely feedback and return of student work as specified in the syllabus
Weekly announcements

External to Course Management System:
Direct e-mail
Posted audio/video (including YouTube, 3cmediasolutions, etc.)
Synchronous audio/video

For hybrid courses:
Orientation, study, and/or review sessions
Scheduled Face-to-Face group or individual meetings

Briefly discuss how the selected strategies above will be used to maintain Regular Effective Contact in the course.
Regular effective contact will be practiced through online lecture, discussion board postings, email communications, regular announcements, prompt grading and feedback of assignments, and virtual office hours. This contact between the facilitator and learner on a regular basis will enhance learner confidence and understanding and promote critical thinking and analyzation of subject matter.

If interacting with students outside the LMS, explain how additional interactions with students outside the LMS will enhance student learning.
Group discussions, e-mail correspondence, voicemail.

Other Information

Provide any other relevant information that will help the Curriculum Committee assess the viability of offering this course in an online or hybrid modality.
With the uncertainty of the teaching environment, enabling the lecture portion of this course to be delivered in an online setting, while keeping the hands-on portion face-to-face, will ensure learners can access needed training to ensure knowledge and experience is achieved to gain employment in the automotive field.

MIS Course Data

CIP Code
47.0604 - Automobile/Automotive Mechanics Technology/Technician.

TOP Code
094800 - Automotive Technology

SAM Code
C - Clearly Occupational

Basic Skills Status
Not Basic Skills

Prior College Level
Not applicable

Cooperative Work Experience
Not a Coop Course

Course Classification Status
Other Non-credit Enhanced Funding

Approved Special Class
Not special class

Noncredit Category
Short-Term Vocational

Funding Agency Category
Not Applicable

Program Status
Program Applicable

Transfer Status
Not transferable

General Education Status
Y = Not applicable

Support Course Status
N = Course is not a support course

Allow Audit
No

Repeatability
Yes

Repeatability Limit
NC

Repeat Type
Noncredit

Justification
Noncredit courses are repeatable until students achieve the outcomes and objectives of the course.

Materials Fee
No

Additional Fees?
No

Approvals

Curriculum Committee Approval Date
03/17/2022

Academic Senate Approval Date
03/24/2022

Board of Trustees Approval Date
04/22/2022

Chancellor's Office Approval Date
05/07/2022

Course Control Number
CCC000631455