AUTO 304: AUTOMOTIVE CALCULATION

Originator

dredman

Co-Contributor(s)

Name(s)
Anderson, Dorothy

Justification / Rationale

The Automotive Faculty are reviewing and/or updating this course to assure compliance with local, State, and Federal regulations; support consistency within the curriculum; practice relevance regarding automotive industry and community; and to make improvements that will strengthen the learning environment this course creates thus benefiting the learners.

Effective Term

Fall 2022

Credit Status

Noncredit

Subject

AUTO - Automotive Technology

Course Number

304

Full Course Title

Automotive Calculation

Short Title

AUTO CALCULATION

Discipline

Disciplines List
Automotive Technology

Modality

Face-to-Face
100% Online

Catalog Description

This contextualized automotive math course provides Career and Technical Education specific applications of basic math skills. Topics include adding, subtracting, multiplying, dividing, percentages, ratios and proportions measurement, and career applications. This course will also provide students with hands on activities with automotive measurement tools and equipment used in the automotive diagnosis and repair fields.

Schedule Description

This contextualized automotive math course provides Career and Technical Education specific applications of basic math skills. Topics include adding, subtracting, multiplying, dividing rational numbers, percentages, ratios and proportions, measurement, and automotive measurement equipment procedure. Advisory: ESLN 310D

Non-credit Hours

16

Lecture Units

0

Lab Units

0

In-class Hours
12

Out-of-class Hours
4

Total Course Units
0

Total Semester Hours
0

Override Description
non-credit course

Prerequisite Course(s)
Advisory: ESLN 310D

Class Size Maximum
26

Entrance Skills
Basic English writing skills.

Requisite Course Objectives
ESLN 310D-Organize, write, revise, and edit an academic paragraph with a specific focus.

Entrance Skills
Basic English language skills.

Requisite Course Objectives
ESLN 310D-Demonstrate the ability to ask and answer questions about familiar topics.

Course Content
During the duration of this course, students study common mathematical situation practiced in the automotive field regularly including:

1. Measurement tools.
2. Manufacturers service specification.
3. Automotive math skills required in determining proper service limits.

Course Objectives

	Objectives
Objective 1	Compare measurement specification, analyze actual measurements compared to manufacture specification.
Objective 2	Differentiate proper procedures to acquire measurements.
Objective 3	Determine if measurements are within manufacturers specifications.

Student Learning Outcomes

	Upon satisfactory completion of this course, students will be able to:
Outcome 1	Measure key automotive system components.
Outcome 2	Locate manufacturer service specifications in order to rationalize if actual reading are within service limits.

Methods of Instruction

Method	Please provide a description or examples of how each instructional method will be used in this course.
Discussion	Demonstrate respect when contributing and asking questions during discussions.

Demonstration, Repetition/Practice	Demonstrate proficiency of given calculations.
Participation	Actively participate during discussions and assignments.

Methods of Evaluation

Method	Please provide a description or examples of how each evaluation method will be used in this course.	Type of Assignment
Oral and practical examination	Demonstrate proficiency during oral exams.	In Class Only
Student participation/contribution	Explain respectful, active interaction in activities.	In Class Only
Group activity participation/observation	Respectful, active interaction in group activities.	In Class Only
Written homework	Analyze and complete assignments given after each session (both in and out of class).	In and Out of Class

Assignments

Other In-class Assignments

Assignments may include:

1. End of class notebook including notes, handout, projects.
2. Presentation.
3. Role play and interaction between fellow learners and or facilitator.
4. Participation in discussion related to topic of lecture.

Other Out-of-class Assignments

Out of class assignments:

1. Assigned readings and written summaries from selected instructor handouts.
2. Written summaries and analysis of assigned websites/research information.

Grade Methods

Pass/No Pass Only

Distance Education Checklist

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?

Outside the LMS correspondence will only be through College email and Zoom.

If used, explain how specific materials and resources outside the LMS will be used to enhance student learning.

Interaction between instructor and learner will help to enhance learning and understanding of subject material.

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
Synchronous audio/video

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.

Interaction between instructor and learner will help to enhance learning and understanding of subject material.

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

47.0614 - Alternative Fuel Vehicle Technology/Technician.

TOP Code

094800 - Automotive Technology

SAM Code

D - Possibly Occupational

Basic Skills Status

Not Basic Skills

Prior College Level

Not applicable

Cooperative Work Experience

Not a Coop Course

Course Classification Status

Workforce Prep Enhanced Funding

Approved Special Class

Not special class

Noncredit Category

Workforce Preparation

Program Status

Program Applicable

Transfer Status

Not transferable

Allow Audit

No

Repeatability

Yes

Repeatability Limit

NC

Repeat Type

Noncredit

Justification
Non-credit

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
03/23/2017

Course Control Number
CCC000581668

Programs referencing this course
Automotive Quick Service Certificate of Completion (http://catalog.collegeofthedesert.eduundefined/?key=173)