

Clackamas Community College
Online Course/Outline Submission System

Show changes since last approval in red

AM-118 Small Engine Repair

General education certified: Yes No

- Writing
- Oral Communication
- Arts and Letters
- Science & Computer Science
- Mathematics
- Social Science
- Cultural Literacy
- Health & Physical Education

Approved Date (mm/dd/yyyy): / /

Section #1 General Course Information

Department: Automotive

Submitter

First Name: Dave
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Phone: 3051
Email: bradleyd

Course Prefix and Number: AM - 118

Credits: 3

Contact hours

Lecture (# of hours):
Lec/lab (# of hours): 120
Lab (# of hours):
Total course hours: 120

For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Small Engine Repair

Course Description:

This course is designed to provide an overview of basic small engine maintenance, operation and repair. It covers safety, small engine theory, electrical systems, and troubleshooting. Classroom instruction covering theory of operation, 2 cycle and 4 cycle designs and applications, combined with hands-on live projects provides the student the opportunity to learn basic principles of small engine operation, including outdoor equipment, motorcycles, and A.T.V.'s.

Type of Course: Career Technical Preparatory

Is this class challengeable?

No

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?

No

Does this course map to any general education outcome(s)?

No

Is this course part of an AAS or related certificate of completion?

No

Are there prerequisites to this course?

No

Are there corequisites to this course?

No

Are there any requirements or recommendations for students taken this course?

No

Are there similar courses existing in other programs or disciplines at CCC?

No

Will this class use library resources?

Yes

Have you talked with a librarian regarding that impact?

No

Is there any other potential impact on another department?

No

Does this course belong on the Related Instruction list?

No

GRADING METHOD:

A-F or Pass/No Pass

Audit: Yes

When do you plan to offer this course?

Fall

Winter

Spring

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

No

Will this course appear in the college catalog?

No

Will this course appear in the schedule?

No

Student Learning Outcomes:

Upon successful completion of this course, students should be able to:

1. explain small engine theory, as it applies to both 2 cycle and 4 cycle engines;
2. choose and utilize correct specialty tools needed for specific models,
3. measure and compare component specifications,
4. repair and adjust most types of ignition systems,
5. diagnose starting and operating problems relating to starting, ignition systems, and carburetors;
6. apply appropriate safety procedures and environmental practices during diagnosis and repair of small engines,
7. troubleshoot spark related and fuel related issues and repair accordingly.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Safety.
 - a. Personal.
 - b. Shop.
 - c. Environmental.
2. Tool Identification.
 - a. Basic.
 - b. Specialized.

3. Theory of Small Engine Operation.

- a. 2 cycle.
- b. 4 cycle.

4. Ignition Systems.

- a. Types.
- b. Operation.

5. Carburetion.

- a. Types.
- b. Operation.

6. Governors.

- a. Types.
- b. Operation.

7. Starters.

- a. Types.
- b. Operation.

8. Electrical systems.

- a. Types.
- b. Operation.

9. Lubrication.

- a. Types.
- b. Operation.

10. Fuel systems.

- a. Types.
- b. Operation.

11. Small engine troubleshooting.

- a. Spark.
 - b. Fuel.
 - c. Compression.
 - d. Noises.
 - e. Wear patterns on parts.
 - f. Precision measuring of parts.
 - g. Repair manuals.
12. Engine performance and repair
- a. Maintenance.
 - b. Diagnosis.
 - c. Repair procedures.

Does the content of this class relate to job skills in any of the following areas:

- | | |
|--------------------------------------|-----------|
| 1. Increased energy efficiency | No |
| 2. Produce renewable energy | No |
| 3. Prevent environmental degradation | No |
| 4. Clean up natural environment | No |
| 5. Supports green services | No |

Percent of course: 0%

First term to be offered:

Next available term after approval

:
