

Clackamas Community College

Online Course/Outline Submission System

IMT-104 Reading Schematics and Symbols

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: Manufacturing

Submitter

First Name: William (Doug)

Last Name: Miller

Phone: 5132

Email: dougm

Course Prefix and Number: IMT - 104

Credits: 2

Contact hours

Lecture (# of hours): 22

Lec/lab (# of hours):

Lab (# of hours):

Total course hours: 22

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: Reading Schematics and Symbols

Course Description:

A basic course of study that will develop the student's understanding of reading schematics and symbols through lectures and hands-on examples.

Type of Course: Career Technical Preparatory

Reason for the new course:

Industry demand

Is this class challengeable?

Yes

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?

Not every term

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?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

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

1. identify the definition and characteristics of schematics,
2. demonstrate various types of lines and symbols on schematics, including electrical, hydraulic and pneumatic;
3. diagram and understand electrical schematics and wiring diagrams,
4. summarize the purpose of the main parts of a hydraulic and pneumatic system,
5. diagram hydraulic and pneumatic systems using components and diagrams,
6. demonstrate troubleshooting techniques for electrical, hydraulic and pneumatic systems.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Identifying schematics.
2. Identifying symbols used in electrical, pneumatic and hydraulic systems.
3. Wiring and troubleshooting electric circuits.
4. Drawing and recognizing electrical, hydraulic and pneumatic circuits.
5. Troubleshooting skills in repairing and maintaining electrical, hydraulic and pneumatic systems.

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:

Specify term: 2016 Winter
