

Clackamas Community College
Online Course/Outline Submission System

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Section #1 General Course Information

Department: Horticulture

Submitter

First Name: Renee

Last Name: Harber

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Course Prefix and Number: HOR - 223

Credits: 4

Contact hours

Lecture (# of hours): 44

Lec/lab (# of hours):

Lab (# of hours):

Total course hours: 44

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: Applied Plant Science

Course Description:

An overview of the practical aspects of plant growth and development, classification systems, plant breeding and environmental factors that impact plant growth.

Type of Course: Career Technical Preparatory

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)?

Yes

Check which General Education requirement:

✓ Writing

✓ Arts and Letters

✓ Science & Computer Science

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

Yes

Name of degree(s) and/or certificate(s): Horticulture AAS, Landscape AAS

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

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.appropriately use terminology associated with plant anatomy, physiology and development to communicate with horticulture workers;
 - 2.identify the various parts of a plant and their functions,
 - 3.describe the factors that contribute to microclimates and their possible impacts on plant growth,
 - 4.describe the influence of plant hormones on plant growth and development,
 - 5.explain the potential ramifications of climate change on horticulture in the pacific northwest, and how industry professionals could prepare for these changes;
 - 6.apply knowledge of how environmental factors influence plant growth and development in a greenhouse, nursery, landscape or farm setting.
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- a. Hardiness zones.
 - b. Microclimates.
 - c. Climate change.
5. Environmental factors.
- a. Light.
 - b. Temperature.
 - c. Atmospheric Gases.
 - d. Water.
 - e. Nutrients.
 - f. Soil.
6. Pollination and genetics.
- a. Hybrids.
 - b. Genetically modified organisms.
 - c. Self-pollinated.
 - d. Open-pollinated.
 - e. Self-sterile.

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 | Yes |
| 4. Clean up natural environment | No |
| 5. Supports green services | No |

Percent of course: 10%

First term to be offered:

Specify term: Fall 2015
