

Clackamas Community College
Online Course/Outline Submission System

GIS-238 GIS Web Mapping and Services

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: WAFE

Submitter

First Name: Jeff
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Email: jeff.ennenga

Course Prefix and Number: GIS - 238

Credits: 2

Contact hours

Lecture (# of hours):
Lec/lab (# of hours): 44
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: GIS Web Mapping and Services

Course Description:

This course presents the basic practices involved with GIS Web development. Gain an understanding of web GIS fundamentals. Introduces building GIS web maps, services, and applications. Focuses on developing and publishing

on the web using the ESRI suite of web GIS technologies.

Type of Course: Career Technical Preparatory

Reason for the new course:

To broaden knowledge and skills in GIS

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?

Yes

Name of degree(s) and/or certificate(s): CC:GISTECHNOLOGY

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?

Yes

Recommendations: Familiarity with GIS software and applications

Requirements:

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: No

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. demonstrate how GIS web services, applications, and basic development works;
2. create sharable web maps online;
3. develop and publish map and geoprocessing web services;
4. apply basic javascript to customize GIS web apps;
5. build a web app to tell a story, perform analysis, or solve a GIS problem.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Fundamentals of web services, development, and applications
2. Creating web maps
 - a. Preparing data
 - b. Publishing layers
 - c. Editing symbology

- d. Configuring map and web app
- 3. Map services and time animation
- 4. Cached map services
- 5. Feature services and user editing functionality
- 6. Spatial analytics online and geoprocessing services
- 7. Web app development with ArcGIS API for JavaScript
- 8. Building web applications
 - a. Developing with and without templates
 - b. Configuration
 - c. Administration

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

:
