

Clackamas Community College

Online Course/Outline Submission System

 Show changes since last approval in red

Section #1 General Course Information

Department: Manufacturing: GIS

Submitter

First Name: Carel

Last Name: Kotze

Phone: 3728

Email: carelk

Course Prefix and Number: GIS - 282

Credits: 3

Contact hours

Lecture (# of hours):

Lec/lab (# of hours): 66

Lab (# of hours):

Total course hours: 66

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: ArcGIS II

Course Description:

This class is an advanced study of the ArcGIS software, including working with geodatabases, feature datasets, feature classes, subtypes, domains and relationship classes. Additional topics include: establishing topological relationships, geometric networks, network analysis and advance editing. Students also learn 3D analysis of data and the use of ModelBuilder to automate tasks.

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)?

No

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

Yes

Name of degree(s) and/or certificate(s): GIS Certificate

Are there prerequisites to this course?

Yes

Pre-reqs: GIS-281

Have you consulted with the appropriate chair if the pre-req is in another program?

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?

✓ **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?

Yes

Will this course appear in the schedule?

Yes

Student Learning Outcomes:

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

1. manage geographic data,
2. create subtypes and domains in a geodatabase,
3. create and edit data topology,
4. use a geometric network,
5. place labels using advanced labeling properties,
6. create annotation,
7. create and utilize 3D data,
8. use ModelBuilder to create and execute models,
9. perform spatial analysis,
10. complete a comprehensive real world GIS project,
11. produce high-quality maps and graphs.

This course does not include assessable General Education outcomes.

Major Topic Outline:

1. Domains and subtypes in a geodatabase.
2. Design and create a geodatabase schema.
3. Automating GIS processes in ModelBuilder.
4. Analyzing networks.
5. Understand topology.
6. Explore advanced cartographic methods and techniques.
7. Understand and use 3D data in the GIS environment.
8. Spatial extraction.
9. Proximity analysis.
10. Completing a GIS project
11. Presenting results.

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 | Yes |

Percent of course: 30%

First term to be offered:

Next available term after approval

:
