Course Change Request

A deleted record may not be edited and the course number may not be re-used until 5 years have passed since the course's inactivation.

Course Deactivation Proposal

Date Submitted: 02/15/21 11:09 am

Viewing: GGS 210 : Introduction to Spatial Computing

Last approved: 12/20/18 4:24 am

Last edit: 02/15/21 11:09 am

Changes proposed by: tleslie

Catalog Pages referencing this course

[Department of Geography and Geoinformation Science](#)

[Geography and Geoinformation Science (GGS)](#)

Justification for deactivation

Replaced by GGS 366

Are you completing this form on someone else's behalf?

~~No~~

Effective Term: Fall 2022

Subject Code: GGS - Geography & Geoinformation Science   **Course Number:**   210

Bundled Courses:

In Workflow

1. **GGS Chair**
2. **SC Curriculum Committee**
3. SC Associate Dean
4. Assoc Provost-Undergraduate
5. Registrar-Courses
6. Banner

Approval Path

1. 09/02/21 1:13 pm Nathan Burtch (nburtch): Approved for GGS Chair

History

1. Feb 13, 2018 by Sven Fuhrmann (sfuhrman)
2. Dec 20, 2018 by Nathan Burtch (nburtch)

Is this course replacing another course?   No

   Please specify Old Course Number:

Equivalent Courses:

Catalog Title: Introduction to Spatial Computing

Banner Title: Intro Spatial Computing

Will section titles   No
vary by semester?

Credits: 3

Schedule Type: Lecture

Hours of Lecture or Seminar per   3
week:

Repeatable: May be only taken once for credit, limited to 3   **Max Allowable**
                         attempts (N3)   **Credits:**
                                                                                    9

Default Grade   Undergraduate Regular
Mode:

Recommended
Prerequisite(s):

Recommended
Corequisite(s):

Required
Prerequisite(s) /
Corequisite(s)
(Updates only):

Registrar's Office Use Only - Required Prerequisite(s)/Corequisite(s):

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?

Registration
Restrictions
(Updates only):

Registrar's Office Use Only - Registration Restrictions:

          Field(s) of Study:

Class(es):

Level(s):

Degree(s):

School(s):

**Catalog
Description:**

This course introduces students to Geo-Spatial Data Analysis. Students will learn the basic techniques for data collection and storage, data processing and data mining using location data. Students will work with geospatial objects, such as points, lines and polygons and get hands-on experience in processing spatial data. Basic geometric algorithms for point-in-polygon tests and line-segment intersection tests will be presented. Techniques for spatial navigation, such as shortest path algorithm in free space and in spatial networks will be discussed. Technical challenges such as storing, reading and parsing geospatial will be highlighted and students will conduct geo-spatial data analysis in teams. To analyze data, this course will give an introduction to data analysis concepts including regression, clustering and classification of data. In addition, awareness will be raised for spatial privacy threats, and possible risks associated with uncontrolled publishing of location based data.

Justification:

Does this course cover material which crosses into another department?   No

Learning Outcomes:

Attach Syllabus
  GGS 210 - Syllabus.pdf

**Additional
Attachments**

**Additional
Comments:**

**Reviewer
Comments**

Key: 15663