GEOG 150: PROGRAMMING FOR GIS

In Workflow

1. GEOG Chair (jwanket@csus.edu)
2. NSM College Committee Chair (tsk@csus.edu)
3. NSM Dean (datwyler@csus.edu)
4. Academic Services (torsetj@csus.edu;%20cnewsome@skymail.csus.edu)
5. Senate Curriculum Subcommittee Chair (curriculum@csus.edu)
6. Dean of Undergraduate (james.german@csus.edu;%20celena.showers@csus.edu)
7. Dean of Graduate (cnewsome@skymail.csus.edu)
8. Catalog Editor (torsetj@csus.edu)
9. Registrar's Office (wlindsey@csus.edu)
10. PeopleSoft (PeopleSoft@csus.edu)

Approval Path

1. Fri, 19 Feb 2021 17:38:34 GMT
   James Wanket (jwanket): Rollback to Initiator
2. Fri, 19 Feb 2021 18:56:17 GMT
   James Wanket (jwanket): Approved for GEOG Chair
3. Wed, 03 Mar 2021 23:19:23 GMT
   Thomas Krabacher (tsk): Approved for NSM College Committee Chair
4. Wed, 03 Mar 2021 23:27:03 GMT
   Shannon Datwyler (datwyler): Approved for NSM Dean

Date Submitted: Fri, 19 Feb 2021 18:26:56 GMT

Viewing: GEOG 150 : Programming for GIS

Last edit: Fri, 19 Feb 2021 18:26:55 GMT

Changes proposed by: Anna Patterson (219679266)

Contact(s):

Name (First Last)	Email	Phone 999-999-9999
Anna Patterson	anna.kp@csus.edu	858-663-2955

Catalog Title:
Programming for GIS

Class Schedule Title:
Programming for GIS

Academic Group: (College)
NSM - Natural Sciences & Mathematics

Academic Organization: (Department)
Geography

Will this course be offered through the College of Continuing Education (CCE)?
No

Catalog Year Effective:
Fall 2021 (2021/2022 Catalog)

Subject Area: (prefix)
GEOG - Geography

Catalog Number: (course number)
150

Course ID: (For administrative use only.)
202854

Units:
3

In what term(s) will this course typically be offered?
Fall, Spring

Does this course require a room for its final exam?
Yes, final exam requires a room

Does this course replace an existing experimental course?
No

This course complies with the credit hour policy:
Yes

Justification for course proposal:
updating WTU assignment. Course already exists

Course Description: (Not to exceed 80 words and language should conform to catalog copy.)
This course is an introduction to programming and scripting for intermediate GIS users, using an object-oriented programming approach. You will develop and write clearly documented and structured geoprocessing programs using the Python programming language and ArcPy, a site package (library) for ArcGIS geoprocessing tools.

Are one or more field trips required with this course?
No

Fee Course?
No

Is this course designated as Service Learning?
No

Does this course require safety training?
No

Does this course require personal protective equipment (PPE)?
No

Does this course have prerequisites?
Yes

Prerequisite:
GEOG 109

Prerequisites Enforced at Registration?
Yes

Does this course have corequisites?
No

Graded:
Letter

Approval required for enrollment?
No Approval Required

Course Component(s) and Classification(s):
Laboratory
Lecture

Laboratory Classification
CS#16 - Science Laboratory (K-factor=2 WTU per unit)

Laboratory Units

1

Lecture Classification

CS#02 - Lecture/Discussion (K-factor=1WTU per unit)

Lecture Units

2

Is this a paired course?

No

Is this course crosslisted?

No

Can this course be repeated for credit?

No

Can the course be taken for credit more than once during the same term?

No

Description of the Expected Learning Outcomes: Describe outcomes using the following format: 'Students will be able to: 1), 2), etc.'

By the end of this course, you will be able to:
1. Demonstrate programmatic thinking and problem-solving skills through construction of algorithms and Python code
2. Write clearly structured, documented, reproducible, and distributable Python programs to solve a given problem set
3. Create and debug original and actionable solutions for their own applications
4. Be able to import, manipulate, analyze, and export data
5. Be able to identify, define, and use key programming terms and concepts

Assessment Strategies: A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above.

Reading quiz (pre-assessment; LO 5), laboratory assignment (assessment; LOs 1, 2, 3, 4), programming quiz (post-assessment; LOs 1, 3, 5), final programming project (LOs 1, 2, 3, 4, 5)

Is this course required in a degree program (major, minor, graduate degree, certificate?)

No

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer)?

No

Will there be any departments affected by this proposed course?

No

I/we as the author(s) of this course proposal agree to provide a new or updated accessibility checklist to the Dean's office prior to the semester when this course is taught utilizing the changes proposed here.

I/we agree

University Learning Goals

Undergraduate Learning Goals:

Competence in the disciplines
Integrative learning
Intellectual and practical skills

Is this course required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?

No

GE Course and GE Goal(s)

Is this a General Education (GE) course or is it being considered for GE?

No

Please attach any additional files not requested above:
Syllabus_GEOG150_F2020.docx

Reviewer Comments:
Anna Patterson (anna.kp) (Fri, 19 Feb 2021 00:03:04 GMT): The proposal only changes the lecture/laboratory units assignment. No impact to student credit units
James Wanket (jwanket) (Fri, 19 Feb 2021 17:38:34 GMT): Rollback: Link the assessments directly to learning outcomes.

Key: 2327