GEOL 11: DIGITAL METHODS IN GEOSCIENCE

In Workflow

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Approval Path

1. Fri, 11 Oct 2019 19:17:51 GMT
   Brian Hausback (hausback): Approved for GEOL Committee Chair
2. Fri, 11 Oct 2019 19:21:11 GMT
   Kevin Cornwell (cornwell): Approved for GEOL Chair
3. Mon, 21 Oct 2019 22:24:54 GMT
   Thomas Krabacher (tsk): Approved for NSM College Committee Chair
4. Wed, 23 Oct 2019 18:01:02 GMT
   Shannon Datwyler (datwyler): Approved for NSM Dean

Date Submitted:Fri, 11 Oct 2019 17:48:13 GMT

Viewing:GEOL 11 : Digital Methods in Geoscience

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Changes proposed by: Amy Wagner (216313696)

Contact(s):

Name (First Last)	Email	Phone 999-999-9999
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Catalog Title:
Digital Methods in Geoscience

Class Schedule Title:
Digital Methods in Geoscience

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

Academic Organization: (Department)
Geology

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

Catalog Year Effective:
Fall 2020 (2020/2021 Catalog)

Subject Area: (prefix)
GEOL - Geology

Catalog Number: (course number)
11

Course ID: (For administrative use only.)
134986

Units:
1

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:
As with all STEM fields, jobs in geology and the geosciences are becoming more reliant on computer technology. Students entering the geology program come from a wide variety of backgrounds with very different levels of computer literacy. This has made it difficult to incorporate using such technologies in the upper-division core classes. We propose reworking this deactivated field course to an entry level course that all new students would take so once they reach the upper-division courses, the instructors can assume a certain level of mastery and spend class and laboratory time using technology to teach geologic concepts rather than how to use the software.

Course Description: (Not to exceed 80 words and language should conform to catalog copy.)
Introductory course to the basic computing needs to be successful in the geosciences. Topics include Microsoft Office, Adobe Suite and reference software.

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:
GEOL 5 or GEOL 10/10L. GEOL 10L can be taken concurrently.

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

Laboratory Classification

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

Laboratory Units

1

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."

At the end of the course students will be able to:
1. Use Microsoft Excel for basic data analysis and plotting.
2. Create a presentation in Microsoft Powerpoint.
3. Use reviewing features to modify documents in Microsoft Word.
4. Use Adobe Suite to create scientific figures.
5. Build a reference database (i.e. Endnote or Mendeley).

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.

Lab assignments (ELO 1-5)
Final paper (ELO 3, 5)
Final presentation (ELO 1, 2, 4, 5)

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

Yes

Has a corresponding Program Change been submitted to Workflow?

Yes

Identify the program(s) in which this course is required:

Programs:
BS in Geology
BS in Geology (Hydrogeology)

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:

Geology 11 Syllabus-v2.docx

Key: 9187