

SOUTH DAKOTA BOARD OF REGENTS ACADEMIC AFFAIRS FORMS

New Course Request

SDSU	Arts & Sciences / Geography	
Institution	Division/Department	
Dennis D. Hedge	_	3/28/2018
Institutional Approval Sign	ature	Date

Section 1.	Course	Title	and	Descri	ption	

Prefix & No.	Course Title	Credits
GEOG 476-576	Web GIS	3
GEOG 476L-576L	Web GIS Lab	0

GEOG 476-576 Course Description

This course covers the basic theories, principles, and protocols of Web GIS. Students will learn how to acquire, manage, and publish GIS data in a web-based environment.

GEOG 476L-576L Course Description

Develop relevant skills to design and implement a Web GIS application.

GEOG 476-576 Pre-requisites or Co-requisites

Prefix & No.	Course Title	Pre-Req/Co-Req?
GEOG 372	Introduction to Geographic Information Systems	Pre-Req

Registration Restrictions

None

Section 2. Review of Course

2.1. Was the course first offered as an experimental course?

Yes (*if yes, provide the course information below*)

2.2. Will this be a unique or common course?

⊠ Unique Course

Prefix & No.	Course Title	Credits
GEOG 473-573	GIS Data Creation & Integration	3
GEOG 474-574	GIS: Vector & Raster Modeling	3

 \square No

Provide explanation of differences between proposed course and existing system catalog courses below:

GEOG 474-574 GIS: Vector & Raster Modeling primarily focuses on advanced GIS modeling methods and how to use them in real-world GIS applications. GEOG 473-573 focuses on how to compile, manage, and analyze GIS data for a specific application. These two courses both concern the use of GIS on a desktop computer, while the proposed new course concerns the use of GIS in a web-based environment.

Cor	nmon Cou	rse	Indic	ate un	iversitie	s that ar	e proposing	g this co	mmon co	urse:	
	BHSU		DSU		NSU		SDSMT		SDSU		USD

Section 3. Other Course Information

3.1.	 Are there instructional staffing impacts? No. Schedule Management, explain below: This course is an area of specialty for a new faculty member and will fit into his normal teaching rotation. It will be taught once a year or every three semesters.
3.2.	Existing program(s) in which course will be offered : Geography (B.S./M.S.), Geographic Information Sciences (B.S.)
3.3.	Proposed instructional method by university : GEOG 476-576: R – Lecture; GEOG 476L- 576L: L - Laboratory
3.4.	Proposed delivery method by university: 001 – Face to Face Term Based Instruction
3.5.	Term change will be effective: Fall 2018
3.6.	Can students repeat the course for additional credit? □ Yes, total credit limit: ⊠ No
3.7.	Will grade for this course be limited to S/U (pass/fail)?Image: YesImage: YesImage: No
3.8.	Will section enrollment be capped? \boxtimes Yes, max per section:25 \square No
3.9.	Will this course equate (i.e., be considered the same course for degree completion) with any other unique or common courses in the common course system database in Colleague and the Course Inventory Report?
3.10	Is this prefix approved for your university? ⊠ Yes □ No
<u>Affa</u> 4.1.	tion 4. Department and Course Codes (Completed by University Academic airs) University Department Code: SGEOG
4.2.	Proposed <u>CIP Code</u> : 45.0702

Is this a new CIP code for the university? \Box Yes \Box No

NEW COURSE REQUEST Supporting Justification for On-Campus Review

Dapeng Li	Dapeng Li	2/2/2018
Request Originator	Signature	Date
Robert Watrel	Robert Watrel	2/2/2018
Department Chair	Signature	Date
Jason McEntee	Jason McEntee	2/2/2018
School/College Dean	Signature	Date

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum.

Web GIS is a new and developing area within Geographic Information Sciences. It is more than just maps on the internet. It is about providing GIS applications through different web

services to various clients. The simplest architecture of a Web GIS must have at least one client and one server that client is a desktop application or web browser application that allows users to communicate with server, and the server is a web server application. The demand for Web GIS skills in the workforce is growing rapidly and it will make our graduates more marketable.

- 2. Note whether this course is: □ Required X Elective
- 3. In addition to the major/program in which this course is offered, what other majors/programs will be affected by this course? None
- 4. If this will be a dual listed course, indicate how the distinction between the two levels will be made. Requirements for graduate students will entail higher rigor in exams, exercises and longer final project.
- 5. Desired section size 25
- 6. Provide qualifications of faculty who will teach this course. List name(s), rank(s), and degree(s).

Dapeng Li, Assistant Professor, Ph.D.

7. Note whether adequate facilities are available and list any special equipment needed for the course.

Resources are adequate.

- 8. Note whether adequate library and media support are available for the course. Resources are adequate.
- 9. Will the new course duplicate courses currently being offered on this campus?

 \Box Yes X No If yes, provide justification.

- 10. If this course may be offered for variable credit, explain how the amount of credit at each offering is to be determined.