SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS

New Course Request

SDSU	**College of Natural Sciences / Geography & Geospatial Sciences**
Institution	**Division/Department**
Dennis D. Hedge	4/27/2022
Institutional Approval Signature	**Date**

Section 1. Course Title and Description

Prefix & No.	Course Title	Credits
GEOG 480 580	Satellite Remote Sensing	2
GEOG 480L 580L	Satellite Remote Sensing Lab	1

GEOG 480-580 Course Description

This course provides an introduction to basic principles and comm14 (ou)10 (r)13 (se)13 ( )]TJETQ

GEOG/BIOL 484-484L/GEOG 584-584L focuses on general remote sensing principles and applications using airplane-borne, UAS and satellite remote sensing and thus is too broad in its content area for an upper division course in our program, which has a specialization in remote sensing. GEOG 480-480L/580-580L is different than GEOG 484-484L/584-584L, because it will focus solely on satellite remote sensing and the application, processing, and interpretation of satellite data. This course is designed to work in tandem with GEOG 483-483L/583-583L UAS Remote Sensing. However, GEOG 480-480L/580-580L is different from GEOG 483-483L/583-583L with its focus on UAS principles and applications of data acquisition and interpretation.

Section 3. Other Course Information

3.1. Are there instructional staffing impacts?

No. Schedule Management, explain below: This course will be offered every fall at the undergraduate and graduate level and every spring online at the undergraduate level. It will be part of the normal course rotation of the instructors below.

3.2. Existing program(s) in which course will be offered (i.e., any current or pending majors, minors, certificates, etc.): Geographic Information Sciences (B.S.), Geography (B.S.), Geography (M.S.) Geographic Information Sciences Specialization, Geographic Information Sciences

1. Provide specific reasons for the proposal of this course and explain how the changes enhance the curriculum.
   Adding this course allows the department to enhance the areas of remote sensing expertise in the department and to provide better focused courses to their students. They are the only department in the Regental system that has a program that specializes in remote sensing at the undergraduate and graduate levels. This will allow the department to have a course that specializes on satellite remote sensing and another (GEOG 483-483L/583-583L) that focuses on UAS remote sensing. This will better prepare graduates to succeed in the workforce, conducting research and graduate school.
2. Note whether this course is: Required Elective
   Required: Geographic Information Sciences (B.S.)
   Elective: Geography (B.S.), Geography (M.S.) Geographic Information Sciences Specialization, Geographic Information Sciences Minor, Geographic Information Sciences Certificate, and Unmanned Aircraft Systems Certificate
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.
   Graduate and undergraduate sections of the class are evaluated separately. Students enrolled in the graduate section of the course will be required to answer additional exam questions and complete a more difficult 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).
   Hankui Zhang, Assistant Professor, Ph.D.
   Patrick Danielson, Instructor, M.S.
7. Note whether adequate facilities are available and list any special equipment needed for the course.
   Adequate facilities are available and no additional equipment is needed to teach the course.
8. Note whether adequate library and media support are available for the course.
   Adequate library and media support are available.
9. Will the new course duplicate courses currently being offered on this campus? Yes No
10. If this course may be offered for variable credit, explain how the amount of credit at each offering is to be determined.
    N/A