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ACADEMIC AFFAIRS FORMS

New Course Request

SDSU	College of Natural Sciences / Geography & Geospatial Sciences
Institution	**Division/Department**
Dennis D. Hedge	12/6/2022
Institutional Approval Signature	**Date**

Section 1. Course Title and Description

Prefix & No.	Course Title	Credits
GEOG 750	Agricultural Remote Sensing	3

Course Description
This course provides an overview of theories and concepts relating to various remote sensing platforms (satellite, aerial and drone), sensors (multispectral, hyperspectral, LiDAR and thermal) and datasets, and their applications in broad agriculture domains. It covers remote sensing applications in crop, horticulture and livestock system analysis, crop growth and health monitoring and stress detection, disease control and pest management, precision agriculture and plant breeding, water resource and soil management and risk assessment.

Pre-requisites or Co-requisites

Prefix & No.	Course Title	Pre-Req/Co-Req?
None		

Registration Restrictions

None

Section 2. Review of Course

2.1. Will this be a unique or common course?

Unique Course

Prefix & No.	Course Title	Credits
GEOG 483/L-583/L	UAS Remote Sensing & Lab	3
GEOG 484/L-584/L	Satellite Remote Sensing & Lab	3

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

The existing courses are more generic and basic remote sensing courses that focus more on fundamentals, theories, and image processing. This course is being created to meet the growing demand for geospatial technique courses. The proposed course, GEOG 750, is a thematic course that is designed specifically for the applications of cutting-edge remote sensing technologies, platforms, and sensors in a variety of agriculture areas. This will help students gain the knowledge and skills for implementing various remote sensing technologies in different agriculture related areas.