Course Change Request

A deleted record may not be edited and the course number may not be re-used until 5 years have passed since the course's inactivation.

Course Deactivation Proposal

Date Submitted: 08/30/20 11:39 pm

Viewing: GGS 410 : Introduction to Hyperspectral Imaging

Last approved: 12/20/18 4:27 am

Last edit: 08/30/20 11:39 pm

Changes proposed by: nburtch

Catalog Pages referencing this course

Department of Geography and Geoinformation Science

Geography and Geoinformation Science (GGS)

Justification for deactivation

This course has not been offered in the last decade.

In Workflow

1. **Registrar-Courses:Inactivate**
2. **GGS Chair**
3. **SC Curriculum Committee**
4. SC Associate Dean
5. Assoc Provost-Undergraduate
6. Registrar-Courses
7. Banner

Approval Path

1. 08/31/20 8:22 am Tory Sarro (vsarro): Approved for Registrar-Courses:Inactivate
2. 09/02/21 1:20 pm Nathan Burtch (nburtch): Approved for GGS Chair

History

1. Dec 20, 2018 by Nathan Burtch (nburtch)

Are you completing this form on someone else's behalf?

~~No~~

Effective Term: Spring 2021

Subject Code: GGS - Geography & Geoinformation Science **Course Number:** 410

Bundled Courses:

Is this course replacing another course? No

Please specify Old Course Number:

Equivalent Courses:

Catalog Title: Introduction to Hyperspectral Imaging

Banner Title: Intro to Hyperspectral Imaging

Will section titles vary by semester? No

Credits: 3

Schedule Type: Lecture

Hours of Lecture or Seminar per week: 3

Repeatable: May be only taken once for credit, limited to 3 attempts (N3)

Max Allowable Credits: 9

Default Grade Mode: Undergraduate Regular

Recommended Prerequisite(s):

PHYS 243-244, 245-246, MATH 113 and 114, GGS 353, GGS 416 or permission of instructor.

Recommended Corequisite(s):

Required Prerequisite(s) / Corequisite(s) (Updates only):

Registrar's Office Use Only - Required Prerequisite(s)/Corequisite(s):

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?

Registration Restrictions (Updates only):

Registrar's Office Use Only - Registration Restrictions:

Field(s) of Study:

Class(es):

Level(s):

Degree(s):

School(s):

Catalog Description:

Introduction to quantitative measurements by remote-sensing methods covering quantitative spectroscopy, spectral and thermal signatures, atmospheric physics, and the electromagnetic spectrum. Emphasis on the scientific principles involved and the transition of the technology to real-world applications. The requisite materials to begin to understand hyperspectral imaging (HSI) technology and its many civil and military applications are presented. Covers necessary mathematics used in the analysis of n-dimensional data. Topics include hyperspectral concepts, data collection systems, data processing techniques, case studies, and U.S. national policy issues. Data processing techniques include N-dimensional space, scatterplots, spectral angle mapping, spectral mixture analysis, spectral matching, and other techniques. Applications and case studies include environmental, medical, agricultural, and military. Includes ground, airborne, and spaceborne hyperspectral systems.

Justification:

Does this course cover material which crosses into another department? No

Learning Outcomes:

Attach Syllabus

Additional Attachments

Additional Comments:

~~N3 update~~

Reviewer Comments

Key: 7417