Course Change Request

Date Submitted: 03/08/24 3:07 pm

Viewing: GGS 740 : Hyperspectral Imaging

Systems

Last edit: 03/08/24 3:07 pm

Changes proposed by: nburtch

Catalog Pages referencing this course Department of Geography and Geoinformation Science Geography and Geoinformation Science (GGS)

Select modification type:

Substantial

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

No

Effective Term: Fall 2024

Subject Code:GGS - Geography & Geoinformation ScienceCourse Number:740

Bundled Courses:

Is this course replacing another course? No

Equivalent Courses:

- Catalog Title: Hyperspectral Imaging Systems
- Banner Title: Hyperspectral Image Syst

Will section titlesNovary by semester?XCredits:3

Schedule Type: Lecture

- In Workflow
- 1. GGS Chair
- 2. SC Curriculum Committee
- 3. SC Assistant Dean
- 4. Assoc Provost-Graduate
- 5. Registrar-Courses
- 6. Banner

Approval Path

1. 03/15/24 11:33 am Nathan Burtch (nburtch): Approved for GGS Chair

15/24, 12:22 PM		GGS 740: Hyperspectral Imaging Systems					
Hours of Lecture or week:	Seminar per	3					
Repeatable:	May only be taken once for credit (NR) *GRADUATE ONLY*						
Default Grade Mode:	Graduate Regular						
Recommended Prerequisite(s): <u>GGS 560</u> CSI 660 or	r equivalent, <u>GGS</u>	<u>5579</u> or <u>ec</u>	<u>quivalent, or</u> 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):

3/

Registrar's Office Use Only - Registration Restrictions:

Field(s) of Study:

Class(es):

Level(s):

Include

Enrollment limited to students with a level of Non-Degree (SCRRLVL_ONLY_ND) Limited to graduate level students only. (SCRRLVL_ONLY_GR)

Degree(s):

Exclude

Non-Degree Undergraduate Degree students may not enroll. (SCRRDEG_NO_NDU)

School(s):

Catalog Description:

GGS 740: Hyperspectral Imaging Systems

Provides requisite materials to understand hyperspectral imaging technology and its many civilian and military applications. Emphasizes scientific principles involved and technology application to real-world imaging systems. Topics include hyperspectral concepts and system tradeoffs; data collection systems; calibration techniques; data processing techniques and software; classification methods; and case studies. Data processing techniques include N-dimensional space, scatterplots, spectral angle mapping, spectral mixture analysis, spectral matching, and mixture tuned matched filtering. Discusses ground, airborne, and spaceborne hyperspectral remote sensing systems.

Justification:

What: Updating prerequisites

Why: CSI 660 no longer exists, so this puts a GGS quantitative methods course in as a recommended prerequisite

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

Learning Outcomes:

Will this course be scheduled as a crosslevel cross listed section?

Attach Syllabus

Additional Attachments

Specialized Course Categories:

Additional Comments:

Reviewer Comments

Key: 7488