Course Change Request

New Course Proposal

Date Submitted: 01/29/26 4:19 pm

Viewing: **GGS 484 : Geospatial Intelligence Process & Information**

Last edit: 02/04/26 10:23 am

Changes proposed by: nburtch

Programs referencing this course

SC-BS-GEOG: Geography, BS

In Workflow

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

Approval Path

1. 02/05/26 10:50 am Nathan Burtch (nburtch): Approved for GGS Chair

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

No

Effective Term: Spring 2026

Subject Code: GGS - Geography & Geoinformation Science

Course Number: 484

Bundled Courses:

Is this course replacing another course? No

Equivalent Courses:

Catalog Title: Geospatial Intelligence Process & Information

Banner Title: Geospatial Intelligence

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):
30 credits

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:
Covers topics relevant to geospatial intelligence, especially addressing emerging trends, focused intelligence applications, and relevant technological advances. Investigates geospatial intelligence as an organization and a dynamic process with associated outcomes.

Justification:
What: Creation of a new geospatial intelligence course.

Why: We are currently using GGS 384 as our undergraduate geospatial course. We want to create this new 400-level course so that we can properly cross level list it with GGS 684.

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

Learning Outcomes:

Will this course be scheduled as a cross-level cross listed section? Yes

Please use the Additional Attachments button to attach two syllabi for review, one undergraduate and one graduate, preferably as separate documents. These should be provided in order to demonstrate the difference in expectations and assessments for undergraduates and graduates taking the course.

Attach Syllabus

ggs484_syllabus.pdf

ggs684_syllabus.pdf

Additional Attachments

Staffing:

Dr. Bryan Weaver is an adjunct with tremendous experience with geospatial intelligence, and regularly teaches our GGS 384 and GGS 684 courses. We have other full time faculty that can teach in instances of Dr. Weaver being unavailable

Relationship to Existing Programs:

We will use this course for the Geospatial Intelligence concentration

Relationship to Existing Courses:

Intended to cross-level list with GGS 684

Have you reached out to the Libraries to determine whether there are adequate resources to support your course? If not, please email Meg Meiman, Associate University Librarian for Learning, Research, and Engagement at mmeiman2@gmu.edu.

No

Additional Comments:

Reviewer Comments

Key: 19230

George Mason University
Geography and Geoinformation Science 484
Geospatial Intelligence Process & Information – Fall 2026

Bryan Weaver, PhD
Office Hours: By appointment. Contact bweaver5@gmu.edu

Class Time and location: Tuesday 7:20 – 8:45pm (start TUE August 27) ***Exploratory Hall Room 2312***

Course Purpose: We will expand our understanding of geospatial intelligence and associated geographic information science research areas through lecture, reading, reflection, and discussion. We will focus on GEOINT in the context of US National Security intelligence. Emphasis will be placed on the continuous evolution and future state of the intelligence process and information design patterns.

Catalog description: Covers topics relevant to geospatial intelligence, especially addressing emerging trends, focused intelligence applications, and relevant technological advances. Investigates geospatial intelligence as an organization and a dynamic process with associated outcomes.

Course Description: We examine intelligence as an organization and as a dynamic process. We will do this through independent research that is guided by instruction and student research. The first three weeks we examine intelligence as an organization. We look at intelligence as a team activity at many scales. Then we examine geospatial intelligence as a process and the associated information outcomes. We look at unique information considerations not generally relevant in other spatial analysis problem domains. Throughout the course, we learn about significant events, collaboration challenges, and advancements in intelligence process and information.

Required Material: There are no assigned textbooks. Reading lists that consist of research publications, trade articles, and government publications will be provided each week.

Assignments and Grading Policy: All assignments will be posted to Canvas in the appropriate module. Students will be graded based on the quality of their participation (20%), the quality of their written assignments (20% each), the quality of their independent research paper, presentation artifact, and presentation delivery (20%), and the quality of their team intelligence project presentation and delivery (20%). **All assignments are due submitted on Canvas by 11:59pm the date it is due**. Students will lose one letter grade for every day an assignment is late. Attendance is expected every week, on time. Absence or late arrival to class (either virtual or in person class) will impact one's class participation score. Overall, high scores will result from student demonstrated mastery of the course material in written assignments and class-time discussion.

Class Schedule (subject to change):

Part I – Intelligence as an organization

August 27 Course Overview and Classmate Introductions

September 3 Overview of U.S. Intelligence Community and Geospatial Intelligence

September 10 ***Zoom***. GEOINT Organization: INTs, Workroles, and Organization

Part II – Intelligence as Process and information

September 17 A GEOINT Process and Information Outcomes

- **Due Sep 20: Assignment 1.**

September 24 ***Zoom***. Assignments Discussion - Independent Research & Project Assignment

October 1 Intelligence Problem Deconstruction and Plans

October 8 ***Zoom***. Collection and Primary Source Data

October 15 Observation, Analysis and Judgments

October 22 ***Zoom.*** Production and Products, Use and Feedback

Part III – Trends and Research

October 29 Guest Lecture – Dr. John Wall, Data Scientist

- **Due Nov 1: Assignment 2.**

November 5 Guest Lecture – Advanced Analytics

November 12 No Class – Work on Independent Research

November 19 ***Zoom***. **Independent Research Lightning Talks**

- **Due Nov 22: Independent Research Paper**

November 26 No Class. Happy Thanksgiving!

December 3 Class Summary and Capstone Discussion

December 10 ***Zoom***. **Team Presentations**

- **Due Dec 13: Team Project**

Common Policies Addendum:

Please visit https://stearnscenter.gmu.edu/home/gmu-common-course-policies/ for the Common Policies Addendum. This addendum covers University policies about academic standards, accommodations for students with disabilities, FERPA, and Title IX.

Technology Requirements:

Activities and assignments in this course will regularly use web-conferencing software (Blackboard Collaborate / Zoom). In addition to the requirements above, students are required to have a device with a functional camera and microphone. In an emergency, students can connect through a telephone call, but video connection is the expected norm.

Honor System and Code:

The Honor System and Code adopted by George Mason University will be enforced for this class: http://oai.gmu.edu/the-mason-honor-code/. In all written assignments, keep in mind that you may not present as your own the words the work or the opinions of someone else without proper acknowledgement. You also may not borrow the sequence of ideas, the arrangement of material, or the pattern of thought of someone else without proper acknowledgement. Please note: Faculty are obligated, without exception, to submit any Honor Code violations or suspected violations to the Honor Committee. COPYING AND PASTING FROM THE INTERNET IS AN HONOR CODE VIOLATION AND SUBJECT TO THE SANCTIONS OUTLINED BELOW. THIS RULE WILL BE STRICTLY ENFORCED FOR BOTH INDIVIDUAL AND GROUP WORK.

Summary of Course Grade Weightings:

Assignments = 20% each (400 pts)
Independent Research Project = 20% (200 pts)
Team Presentation = 20% (200 pts)
Class Participation (Live and Canvas Discussions) = 20% (200 pts)

Grading Scale:

98-100% = A+
92-97.99% = A
90-91.99% = A-
88-89.99% = B+
82-88.99% = B
80-81.99% = B-
78-79.99% = C+
72-77.99% = C
70-71.99% = C-
68-69.99% = D+
62-67.99% = D
60-61.99% = D-
< 60% = F