Course Change Request

New Course Proposal

Date Submitted: 02/26/23 10:28 pm

Viewing: **GGS 485 : Capstone in Geography and Geoinformation Science**

Last edit: 03/02/23 1:47 pm

Changes proposed by: nburtch

Programs referencing this course

[SC-BA-GEOG: Geography, BA](#)

[SC-BS-GEOG: Geography, BS](#)

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

In Workflow

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

Approval Path

1. 11/28/17 9:54 pm Sven Fuhrmann (sfuhrman): Approved for GGS Chair
2. 11/29/17 1:19 pm Jennifer Bazaz Gettys (jbazaz): Rollback to Initiator
3. 11/29/17 2:48 pm Sven Fuhrmann (sfuhrman): Approved for GGS Chair
4. 12/05/17 1:33 pm Gregory Craft (gcraft): Approved for SC Curriculum Committee
5. 12/05/17 2:24 pm Jennifer Bazaz Gettys (jbazaz): Approved for SC Associate Dean

6. 02/15/18 12:21 pm Krista Shires (kshires): Rollback to SC Associate Dean for Assoc Provost-Undergraduate

7. 02/28/18 4:54 pm Padhu Seshaiyer (pseshaiy): Rollback to Initiator

8. 12/19/18 9:41 am Nathan Burtch (nburtch): Approved for GGS Chair

9. 01/31/19 4:31 pm Jennifer Bazaz Gettys (jbazaz): Rollback to Initiator

10. 03/02/23 1:48 pm Nathan Burtch (nburtch): Approved for GGS Chair

No

Effective Term: Fall 2023

Subject Code: GGS - Geography & Geoinformation Science   **Course Number:** 485

Bundled Courses:

Is this course replacing another course? No

Equivalent Courses:

Catalog Title: Capstone in Geography and Geoinformation Science

Banner Title: Capstone Geog & Geoinf Sci

Will section titles vary by semester? No

Credits: 3

Schedule Type: Seminar

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):

Recommended Corequisite(s):

GGS 415

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

Prereq: GGS 300, GGS 311 or GGS L311

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):

Senior or Senior Plus status only

Registrar's Office Use Only - Registration Restrictions:

     Field(s) of Study:

     Class(es):

     Level(s):

     Degree(s):

     School(s):

Catalog Description:

Provides students with project-based culminating experience that integrates geographic problem solving with real-world data and questions. Students work in teams on client-based projects and present project deliverables. This course requires analytical, collaborative, communication, organizational, and research skills, with students demonstrating mastery of geographic thought and practice.

Justification:

What: Creation of a capstone course in GGS.

Why: This course will provide students with a culminating experience in Geography and Geoinformation Science. It will enhance current offerings such as GGS 415 by focusing on project-based learning applied to client-based projects. The instructor will work with 2-3 clients that will bring a real-world problem or project for students to apply geographic thought and practice.

The intent is for this course to seek Mason Core status in the new culminating experience category (likely named Apex or Zenith, replacing the Synthesis/Capstone). GGS currently has two Synthesis courses that are in the 300-level and are not appropriate to rise to the necessary 400-level culminating experience.

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

Learning Outcomes:

• Demonstrate core skill set found in the Geography major;

• Integrate skills, abilities, theories, and methodologies gained throughout the undergraduate curriculum;

• Demonstrate and implement integrative multi-disciplinary problem-solving skills;

• Apply critical thinking, including the ability to critically examine existing works and established methods, and develop innovative approaches;

• Enhance and develop rigorous writing and presentation skills;

• Enhance students' ability to work and manage a project collaboratively.

Attach Syllabus

GGS485_syllabus.pdf

**Additional
Attachments**

Staffing:

A rotation among all full time faculty in the GGS department.

**Relationship to
Existing Programs:**

This will be a required course in the BA and BS GEOG programs

**Relationship to
Existing Courses:**

GGS 415 is our Writing Intensive course, which has a focus on geographic thought and methodology. This GGS 485 capstone is intended as a recommended corequisite in which students are applying geographic thought and practice with community stakeholders and clients, providing a project-based culminating experience.

**Additional
Comments:**

**Reviewer
Comments**

Jennifer Bazaz Gettys (jbazaz) (11/29/17 1:19 pm): Rollback: Hi Dr. Pfoser: On the syllabus you have the prereqs as: "Graduate Students: GGS 300 or 301 or 311." 1. Perhaps you mean "undergraduate"? 2. The CIM form only lists GGS 300 or 311- please correct the syllabus and/or CIM form so they match to avoid confusion. Thanks!

Krista Shires (kshires) (02/15/18 12:21 pm): Rollback: Rollback requested by council-Tim Leslie asked for clarification as to how this differs from GIS 415 Capstone. Justification is requested before this can be officially approved. Thank you

Padhu Seshaiyer (pseshaiy) (02/28/18 4:54 pm): Rollback: Hi Dieter, Rolling this back to you. Please see comments from Tim Leslie for clarification.

Jennifer Bazaz Gettys (jbazaz) (01/31/19 4:31 pm): Rollback: Per email conversation.

Key: 15745

Department of Geography and Geoinformation Science

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GGS 485
Capstone in Geography and Geoinformation Science

1. ## General Information

   Instructor: TBD (Rotating)
   Where: EXPL 2312
   When: Spring 2024
   Course website: Blackboard
   Credits: 3

2. ## Course Description

   Provides students with project-based culminating experience that integrates geographic problem solving with real-world data and questions. Students work in teams on client-based projects and present project deliverables. This course requires analytical, collaborative, communication, organizational, and research skills, with students demonstrating mastery of geographic thought and practice.

3. ## Course Overview

   The capstone course aims to provide students an opportunity to integrate and apply core knowledge and skill components in Geography and Geoinformation Science that were acquired both within the program and through Mason Core curriculum. These skill competencies are tested in a complex real-world project-driven setting, in which students will work to provide distinct deliverables to clients from various work sectors. The problems addressed in this course will include extensive use of various geospatial data sources and analysis methods and tools. In this environment students will be required to define possible scenarios, identify key challenges, explore possible solutions and deliver an effective solution. Given its nature, projects in a capstone course often goes beyond a single discipline and require the application of multidisciplinary thinking to solve real-world problems.

   GGS 485 is designed as a project-based learning (PBL) environment. Project-based learning is an active learning pedagogy in which students work on projects that involve real-world problems or situations. Through this method, students will develop skills in problem solving, critical thinking, creativity, and both written and oral communication. As a 3-credit course, there will be 150 minutes of contact hours per week, where students are expected to participate in discussions and activities with a goal towards project completion. During the semester, students will be presented with 2 – 3 different clients. The class will focus on the needs of one client at a time, culminating with a presentation and report.

4. ## Applicable learning outcomes

   Successful completion of this course will enable students to:
   - Demonstrate core skill set found in the Geography major;
   - Integrate skills, abilities, theories, and methodologies gained throughout the undergraduate curriculum;
   - Demonstrate and implement integrative multi-disciplinary problem-solving skills;

- Apply critical thinking, including the ability to critically examine existing works and established methods, and develop innovative approaches;
- Enhance and develop rigorous writing and presentation skills;
- Enhance students' ability to work and manage a project collaboratively.

5. Course Prerequisites and Corequisites

GGS 485 requires that students complete GGS 300 and GGS 311. GGS 415 is a recommended (not required) corequisite. Only students in Senior or Senior-Plus status are eligible to enroll.

6. Textbook and readings

No textbook is required. Necessary readings will be posted to Blackboard. Students will be expected to independently find and assess literature from research journals, technical reports, and other sources.

7. Course schedule

We follow a problem-driven approach, and proceed in steps by identifying issues, solutions and their integrative analysis.

Week	Topic
1	Course Introduction, introduction to Project 1 / Client 1, team formation
2	Formulating research questions
3	Case study examples
4	Integration of team sections
5	Presentation of Project 1 results
6	Introduction to Project 2 / Client 2, team formation
7	Formulating research questions
8	Case study examples
9	Integration of team sections
10	Presentation of Project 2 results
11	Introduction to Project 3 / Client 3, team formation
12	Formulating research questions
13	Case study examples
14	Integration of team sections
Finals	Presentation of Project 3 results

8. Grades

The grade will reflect the student performance the following categories (with grade weight in parentheses):
- Class participation (20%)
- Final sections of each project (60%)
- Peer team reports (10%)
- Presentations (10%)

The regular undergraduate grading scale will be used:

Grade	Percent Required	Grade	Percent Required
A+	96 to 100	C+	76 to 79.9
A	93 to 95.9	C	73 to 75.9
A-	90 to 92.9	C-	70 to 72.9
B+	86 to 89.9	D	60 to 69.9
B	83 to 85.9	F	<60
B-	80 to 82.9		

9. **Attendance**

Regular attendance is an expectation. Your active participation in the class is essential to the success of this course. Students that must miss class due to religious observances or participation in University activities should provide documentation to the professor within the first two weeks of the course.

10. **Course Website**

The course has a Blackboard website. This website will provide you a single portal through which you may obtain course materials, retrieve assignment data and, review links to additional materials, and receive special announcements. Please notify IT (and, if necessary, the instructor) if you encounter any problems accessing this website.

11. **Academic integrity**

The following statement is adapted from the Stearns Center for Teaching and Learning. No grade is important enough to justify academic misconduct. The integrity of the University community is affected by the individual choices made by each of us. Mason has an Honor Code, which you can read fully at the Office for Academic Integrity (https://oai.gmu.edu/mason-honor-code/). The Honor Code Pledge reads as follows:

> To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University Community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set for this Honor Code: Student Members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.

The Mason Honor Code defines cheating, plagiarism, stealing, and lying. It is expected that you understand these definitions. If you have any doubts about what constitutes cheating, plagiarism, stealing, or lying in the academic context, please see your professor. **Acts of academic dishonesty in this course may be penalized with failure of either the work in question or the entire course.**

While collaboration and group learning is encouraged in this course, each student **absolutely must** turn in their own work, from their own computer, and any discussion must be theirs alone, and not attributable to another person or group, except where noted (for example, quoting authors as a small portion of your scholarly work). This also applies to online sources; you cannot copy the words of anyone else for any graded part of this course. It is not enough to exchange a few synonyms within a sentence! You must write, summarize, and analyze with your own words and ideas.

12. **Course materials and student privacy**

All course materials posted to Blackboard or other course sites are private; by federal law, any materials that identify specific students (via their name, voice, or image) **must not be shared** with anyone not enrolled in this class. Video recordings of class meetings that include audio or visual information from other students are private and must not be shared. Live video conference meetings (e.g. Collaborate or Zoom) that include audio or visual information from other students must be viewed privately and not shared with others in your household. Some or all of our synchronous meetings in this class may be recorded to provide necessary information for students in this class. Recordings will be stored on Blackboard and will only be accessible to students taking this course during this semester**. Sharing of instructor-created materials** (lectures, notes, videos, assignments, exams, etc.) to others not currently enrolled in this specific section of this class, **including to public or private online "study" sites, is considered a violation of Mason's Honor Code.**

13. **Disability statement**

This course complies with Mason policies for students with disabilities. Students with disabilities are encouraged to register with Disability Services (DS). DS can be contacted by phone at (703) 993-2474, or in person at SUB I Suite 2500, or online by the link at the end of this section. Students who suspect that they have a disability, temporary or permanent, but do not have documentation are encouraged to contact DS for advice on how to obtain appropriate evaluation. A memo from DS authorizing your accommodation is needed before any accommodation can be made. The memo should be furnished to the professor preferably within the first two weeks of class or as soon as an accommodation is made. Please visit https://ds.gmu.edu/ for more information.

14. **Diversity, non-discrimination, and anti-racism**

Mason President Gregory Washington has created the President's Task Force on Anti-Racism and Inclusive Excellence. Through a broad focus, the task force will help Mason become "a local, regional, and national beacon for the advancement of anti-racism, reconciliation, and healing." For President Washington's full statement, visit https://www2.gmu.edu/news/587381. Members of this classroom community must uphold Mason's core values of diversity and inclusion, and help maintain a learning environment of respect across identity, status, origin, and ability. Being inclusive and anti-racist is an active, conscious practice involving self-reflection.

Mason's non-discrimination policy can be read at https://universitypolicy.gmu.edu/policies/non-discrimination-policy/. Please utilize the office of Compliance, Diversity, and Ethics (https://diversity.gmu.edu/) for training, resources, and to submit grievances. The following is a short portion of the Mason Diversity Statement; visit https://stearnscenter.gmu.edu/knowledge-center/general-teaching-resources/mason-diversity-statement/ to read the full statement:

> George Mason University promotes a living and learning environment for outstanding growth and productivity among its students, faculty and staff. Through its curriculum, programs, policies, procedures, services and resources, Mason strives to maintain a quality environment for work, study and personal growth.
> An emphasis upon diversity and inclusion throughout the campus community is essential to achieve these goals. Diversity is broadly defined to include such characteristics as, but not limited to, race, ethnicity, gender, religion, age, disability, and sexual orientation. Diversity also entails different viewpoints, philosophies, and perspectives. Attention to these aspects of diversity will help promote a culture of inclusion and belonging, and an environment where diverse opinions, backgrounds and practices have the opportunity to be voiced, heard and respected.

15. **Gender identity, pronoun use, and proper address**

Students are welcome to share their chosen name and gender pronouns with the instructor and discuss how the instructor can best address you in class and via email. As well, students should be aware that they can use Mason-provided tools to update their chosen name and pronouns; these changes will appear in Blackboard class sites among other places. See https://registrar.gmu.edu/updating-chosen-name-pronouns/ for more information. Your instructor uses he/him/his pronouns. When addressing your instructor in writing or verbally, please use "Dr." or "Prof."

16. **Instructor availability:**

Please do not hesitate to contact your instructor if you have questions about course topics or assignments. Your instructor will do his best to answer all weekday emails within 24 hours, and weekend emails within 48 hours. Should you not receive a response within that time frame, you may send a gentle

reminder via email. Do try to avoid last-minute emails, as your instructor may not have email accessible immediately before deadlines. It is generally a good practice to avoid sending an email at the first sign of trouble with an assignment; often you will find the proper solution by giving yourself an hour or two to problem solve! Please make use of the office hours listed at the top of this document. Generally, issues can be clarified quickly in person or in a live online chat.

17. **Sexual harassment, sexual misconduct, and interpersonal violence**

The following statement is adapted from the Stearns Center for Teaching and Learning. As a faculty member and designated "Responsible Employee," I am required to report all disclosures of sexual assault, interpersonal violence, stalking, sexual exploitation, and retaliation to Mason's Title IX Coordinator per university policy 1412. If you wish to speak with someone confidentially, please contact one of Mason's confidential resources, such as the Student Support and Advocacy Center at 703-380-1434, Counseling and Psychological Services at 703-993-2380, Student Health Services, or Mason's Title IX Coordinator at 703-993-8730 or via email at titleix@gmu.edu).

18. **University-wide closures and class cancellations/delays**

There may be times during the semester in which George Mason University announces university-wide closures or delays. Should inclement weather or another emergency force Mason to close, causing our class to cancel meeting times, we will not meet. Check the Mason website and our own Blackboard site for updates. Other cancellations or delays to class will be announced via Blackboard by your professor. In the event that this course has missed meeting times, the course schedule, assignment deadlines, and other course alterations will be decided upon and announced via Blackboard and email by the professor. You are expected to stay abreast of any changes.

19. **Use of electronic devices**

Your professor encourages the use of devices that both aid your learning ability and do not distract from the learning of others. Except for mobile phones and audio/video recorders, you are free to use any electronic device that fulfills both of those conditions. All electronic devices should be muted or silenced. Please be respectful of the class and avoid use of social media during class which can distract both you and your classmates. You are expected to adhere to Mason's student code of conduct; disruptive behavior will result in classroom removal. Audio/video recording requires the consent of the professor.

Students are responsible for the content of university communications sent to their George Mason University email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students solely through their Mason email account. [See https://masonlivelogin.gmu.edu].

20. **Student Services:**
- **University Libraries:** University Libraries provides resources for distance students. [See http://library.gmu.edu/distance and http://infoguides.gmu.edu/distance_students].
- **Writing Center:** The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing. [See http://writingcenter.gmu.edu]. You can now sign up for an Online Writing Lab (OWL) session just like you sign up for a face-to-face session in the Writing Center, which means YOU set the date and time of the appointment! Learn more about the Online Writing Lab (OWL).
- **Counseling and Psychological Services:** The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See http://caps.gmu.edu].
- **Family Educational Rights and Privacy Act (FERPA):** The Family Educational Rights and Privacy Act of 1974 (FERPA), also known as the "Buckley Amendment," is a federal law that gives protection to

student educational records and provides students with certain rights. [See
http://registrar.gmu.edu/privacy].

Disclaimer: Any typographical errors in this Course Outline are subject to change and will be announced in class. The date of the final examination is set by the Registrar and takes precedence over the final examination date reported by the instructor.