Course Change Request

Date Submitted: 09/10/25 6:43 pm

Viewing: GGS 300 : Quantitative Methods for Geographical Analysis

Last approved: 11/17/21 5:26 am

Last edit: 09/10/25 6:43 pm

Changes proposed by: nburtch

Catalog Pages referencing this course	Applied Computer Science, BS Data Analysis Minor Department of Geography and Geoinformation Science Geographic Information Systems Minor Geographic and Cartographic Sciences, MS

Select modification type:

~~Specialized Course Designation~~

Substantial

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

No

Effective Term: Fall 2026

Subject Code: GGS - Geography & Geoinformation Science **Course Number:** 300

Bundled Courses:

Is this course replacing another course? No

Equivalent Courses:

Catalog Title:

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. 09/10/25 6:50 pm Nathan Burtch (nburtch): Approved for GGS Chair

History

1. Aug 25, 2017 by pchampan
2. Jan 11, 2019 by Nathan Burtch (nburtch)
3. Feb 19, 2020 by Tory Sarro (vsarro)

Quantitative Methods for Geographical Analysis

4. Nov 17, 2021 by Tory Sarro (vsarro)

Banner Title: Quant Methods: Geog Analysis

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 ~~30 credits, including GGS 102 and 103 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: Comprehensive introduction to quantitative methods in spatial analysis, with emphasis on solving geographical research problems. Topics include nature of spatial data; collection of spatial data; preparation of spatial data for mapping, geographic information systems, and statistical analysis; descriptive spatial statistics; areal sampling theory and methods; probability theory and distributions; hypothesis testing; correlation and regression; and areal and point pattern spatial statistics.

Justification: What: updated prereqs

Why: The new language will conform to the way we recommend prereqs for most of our 300-level courses (recommend a sophomore standing minimum)

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?

Attach Syllabus

Additional Attachments

Specialized Course Categories: Mason Impact

Application for Mason Impact

Select the requested Mason Impact designation: Mason Impact (MI)

Mason Impact (MI)

I. Course must meet the following learning outcomes:

Students will understand how knowledge is generated and communicated, and how it can be used to address questions or problems in disciplines and in society.
Students will be able to identify and negotiate multiple perspectives, work collaboratively within and across multiple social and environmental contexts, and engage ethically with their subject and with others.
Students will use inquiry skills to articulate a question; engage in an inquiry process; and situate the concepts, practices, or results within a broader context.

II.

I affirm that I have attached the following using the syllabus and attachment buttons provided above: (see “?” for help with submission)

III.

Syllabus Containing:
Mason Impact Logo
Description of how your course connects with the Mason Impact.
Mason Impact Learning Objectives. Feel free to use our language or write your own. Please make the pertinent objectives bold for ease of review.
How does your course prepare students to make an impact on the world?

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.

Additional Comments: ~~Fixing the MI/MCOR/UWIM/GL sync issue.~~

Reviewer Comments

Key: 7383