

# GGG 900: Colloquium in Earth Systems Sciences

## Fall 2018 Course Syllabus

Wednesdays 4:30-6:20 p.m.

Exploratory Hall 3301

**Text:** No Text, Readings may be supplied throughout the semester.

### Instructor:

Paul Houser

[phouser@gmu.edu](mailto:phouser@gmu.edu)

Office: Exploratory 2209

Office Hours: Wednesday 2-4pm, or by appt

**Course Structure:** In this course students prepare for, attend, and reflect on topics (varying from week to week) in Geography and Geoinformation Science. The purpose of this course is to help your professional development as a researcher. Contemporary scholars will present students with material designed to engage their critical thinking and further their professional development. Students will either write short reflections or meet with the instructor for postcolloquium discussions. I expect all students to participate actively in our class discussions and to contribute their thoughts, ideas, and questions to our collective exploration. I especially encourage you to bring your questions to class.

**Attendance:** Your presence is the essence of this class. Attendance is mandatory, and students are expected to be on time regardless of outside circumstances. Coming in late (after the speaker has begun) will result in half credit for that sessions. Students are expected to be engaged with the speaker, and not to check their email, text, or tweet unnecessarily.

**Reflections:** I am a proponent of writing as a means to develop critical thinking skills. After each course you will write a 1.5 to 2-page essay expressing your reaction to the presentation. In these reflections you will discuss the content and delivery of the presenter. Besides the information in class, you will incorporate one of two other sets of content into your reflection:

1. Aspects of your personal research profile or goals. Here, it is a personal observation, experience, activity, or event that stimulates a response. Feel free to draw upon your outside experiences in crafting your reaction essays.
2. Aspects of the domain field the speaker's talk draws from. In other situations, you can place the presentation within the speaker's field to producing finely polished products regularly is less important than expressing *your* thoughts and ideas (this is NOT a cliff notes / book report of what you saw). I am looking for agility, flexibility, and creativity in expression. You should seek interesting ways to express ideas through word choices, analogies and metaphors, phrasing, and varying sentence structure.

**Evaluation:** Students will be graded in the following manner:

Attendance 10%

Reflections / Discussion 90%

Grades generally follow 90/80/70 with plus/minus being at the discretion of the instructor. I reserve the right to alter the exact boundaries at the end of the semester. Reflection assignments are due at the **beginning of the following class**. Late assignments will be marked off 20% per complete weekday they are late, starting at the beginning of class on the day they are due.

**Honor Code:** GMU is an Honor Code university; please see the University Catalog for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated gravely. What does academic integrity mean in this course? Essentially this: when you are responsible for a task, you will perform that task. When you rely on someone else's work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. *Reflections are to be done individually.* When in doubt (of any kind) please ask for guidance and clarification.

*Tentative Course Schedule (several speakers are TBD):*

**29-AUG: Paul Houser, GGS Professor. Course overview and Global Water Cycle.**

**5-SEP:** Dr. Andreas Zuefle (GGS) - Mining Big Spatial Data

**12-SEP:** Dr. Andrew Crooks (CDS) - Disasters and Diseases

**19-SEP:** Climate Change and Water Energy and Food Nexus      John Qu

**26-SEP:** Environmental Health **Viviana Maggioni**, Dept of Civil, Env, and Infr. Engineering, GMU

**3-OCT:** Urbanization and LUCC in S Africa **Julie A Silva**, Department of Geography, U. Maryland

**10-OCT:** Health Disparities **Cara Frankenfeld**, Dept of Global and Community Health, GMU

**17-OCT:** Misha Belkindas ([Opendatawatch](https://opendatawatch.org/)) - Open Data to Support the Sustainable Development Goals

**24-OCT:** Yuan Xue (CEIE), Using a support vector machine and satellite-based passive microwave

**31-OCT:** Yiwen Mei (CEIE), Downscaling Atmospheric Variables

**7-NOV:** Enegis

**14-NOV:** Enegis