

Introduction to Research Program Development

GEOS 601, Fall 2021

Meets Wednesdays, 1:30 - 2:45 in ERB-2100

Instructor: Karen Viskupic, PhD

Office Hours: Wednesdays, 4:15 - 5:00; <https://karenaviskupic.youcanbook.me/> for appointments

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Welcome

Welcome to GEOS 601 Introduction to Research Program Development and to the start of your graduate career at Boise State. I am excited to be teaching this course, and to help you have a strong start in your graduate program. I'm looking forward to working with all of you and to and to watching your development from now until I attend your thesis defense!

Course goal and description

The goal of this course is to help you get started in your research program, and to help you develop skills that will lead to your success in your graduate program and beyond. Activities in this course are designed for you to develop and practice skills, and to reflect upon your habits, productivity, and growth as a scientist.

Course learning outcomes

After successful completion of this course, you will be able to:

1. Identify key resources for completing your degree
2. Use the scientific literature to provide context for your own research
3. Create a plan for managing your time and space that will allow you to work and learn efficiently and effectively
4. Write a career development plan
5. Create a plan for how you will contribute to an inclusive, equitable, and collegial work environment
6. Develop a research proposal
7. Communicate with data

Degree program learning outcomes

This course is designed to contribute to the following graduate degree learning outcomes:

- Formulate novel geoscientific/geophysics research questions, hypotheses, and experimental designs informed by the scientific literature (PhD Geos & Geoph, MS Geos)
- Master the skills of oral and written communication to diverse audiences (PhD Geos & Geoph, MS Geos)
- Practice effective leadership, project management, and teamwork (PhD Geos & Geoph, MS Geos)
- Develop competencies and credentials defined by your professional goals (PhD Geos & Geoph, MS Geos)
- Establish a professional identity that engages the geoscience community (PhD Geos & Geoph, MS Geos)
- Design and carry out a research project that addresses an identified knowledge gap... (MS Hydro & Geoph)
- Create products to effectively communicate outcomes of research in the hydrologic sciences... (MS Hydro)

Course format

This course will be taught in person. We will meet once per week on Wednesdays from 1:30 -2:45. Your participation is expected.

All course materials will be available through the Canvas course site. Materials in Canvas are organized by week. Each week will include pre-class activities that should be completed before we meet, in-class activities that we will work on together during class time, and homework assignments.

You should expect to spend approximately 4-5 hours per week on class activities outside of our class meeting time.

Course materials

You are not required to purchase a textbook or any other materials for this course. All course materials will be provided in Canvas.

Assessments (how you will demonstrate your learning)

An overview of the course learning outcomes and aligned assessments is provided at the end of the syllabus.

Grading

You will receive a letter grade for this course. Every assignment will have points associated with it, and your final grade will be determined by the percentage of the total points you have earned. Criteria used to grade each assignment will be included in the assignment instructions.

Late work policy

We will be moving from one topic to another almost every week of the class, and deadlines for all assignments are given so that work from one unit is completed before moving on to the next. While keeping up with assignments is in your best interest, I understand that sometimes life gets busy. If you need additional time to complete an assignment, please talk with me. Late work may not receive full credit.

Participation and behavioral expectations

Your participation in class is expected. While materials from each class period will be posted in Canvas, almost all class periods will involve discussions and activities that are intended for us to work through together. You will not experience the same degree of learning if you miss class and look at the materials on your own. Our learning is enhanced when we work together and share ideas. If you need to miss a class, please let me know in advance.

All students have the right to a respectful learning environment. Showing respect for classmates and instructors can happen in many ways. For example, showing up on time, putting away cell phones, listening to others' ideas and questions, and working together on class activities are all ways to contribute to a productive and respectful class environment. Please think about your behavior and how it may impact others in the class. We are all responsible for creating a positive learning environment that reflects Boise State's [Statement of Shared Values](#).

Students are also expected to uphold the standards outlined in the Boise State University [Student Code of Conduct](#).

What you can expect of me

The activities and assignments in this course have been carefully designed to meet specific learning goals. I use a standard assignment structure to make the purpose and expectations for each assignment transparent, and to make connections to how the skills and knowledge you develop will be useful to you outside of this course. I strive to keep course materials organized and to make my expectations clear. If they are ever not clear, please ask questions! I am very open to receiving feedback-- if I can make something in the course better, let's talk about it!

It is my goal to make everyone in class feel welcome, included, and heard. If this is not your experience, or you encounter barriers in this course, please bring them to my attention so that I may work to address them.

I will typically respond to emails within 24 hours, and often within a few hours. There are times when I am away from email; immediate responses should not be expected during evenings and/or weekends.

It is my goal to provide feedback on assignments within one week of receiving them.

Our class community

This class's community is inclusive.

Students in this class represent a rich variety of backgrounds and perspectives. The Department of Geosciences is committed to providing an atmosphere for learning that respects diversity and creates inclusive environments in our courses. While working together to build this community, we ask all members to:

- share their unique experiences, values, and beliefs, if comfortable doing so.
- listen deeply to one another.
- honor the uniqueness of their peers.
- appreciate the opportunity we have to learn from each other in this community.
- keep confidential any discussions that the community has of a personal (or professional) nature, unless the speaker has given explicit permission to share what they have said.
- respect the right of students to be addressed and referred to by the names and pronouns that correspond to their gender identities, including the use of non-binary pronouns.

We use each other's preferred names and pronouns.

Please let me know of your preferred or adopted name and gender pronoun(s), and I will make those changes to my own records and address you that way in all cases.

To change to a preferred name so that it displays on all Boise State sites, including Canvas and my course roster, contact the Registrar's Office at (208) 426-4249. Note that only a legal name change can alter your name on Boise State official and legal documents (e.g., your transcript).

This course is accessible to students with disabilities.

I recognize that navigating your education and life can often be more difficult if you have disabilities. I want you to achieve at your highest capacity in this class. If you have a disability, I need to know if you encounter inequitable opportunities in my course related to:

- accessing and understanding course materials
- engaging with course materials and other students in the course
- demonstrating your skills and knowledge on assignments

If you have a documented disability, you may be eligible for accommodations in all of your courses. To learn more, make an appointment with the university's [Educational Access Center](#).

Student well-being

If you are struggling for any reason (COVID, relationship, family, or life's stresses) and believe these may impact your performance in the course, I encourage you to contact the Dean of Students at (208) 426-1527 or email deanofstudents@boisestate.edu for support. Additionally, if

you are comfortable doing so, please reach out to me and I will provide any resources or accommodations that I can. If you notice a significant change in your mood, sleep, feelings of hopelessness or a lack of self worth, consider connecting immediately with Counseling Services (1529 Belmont Street, Norco Building) at (208) 426-1459 or email healthservices@boisestate.edu

COVID 19 Notice (required for in-person courses)

Many Boise State classes have resumed face-to-face meetings in the midst of a global pandemic and a recent local surge of infections. Our goal is to have a successful academic year while keeping our students, faculty, and local community healthy and safe. Public health requirements are in place to achieve that goal, the primary mechanism for which includes the mandatory use of facial coverings that protect all of us.

We have taken health precautions on campus so that you can have the option of a face-to-face course. However, there is still inherent risk associated with face-to-face courses during a pandemic because of proximity to others and length of potential exposure to the virus. Therefore, as members of this learning community, it is imperative that we all engage in behaviors that protect the overall public health.

You have enrolled in a face-to-face course, and this format offers a number of benefits that appeal to many students. **In order to preserve your access to this face-to-face option you are required to**

- 1) **sit in the same seat all semester (for purposes of contact tracing) and**
- 2) **wear facial coverings in all face-to-face learning environments.** You must keep your mouth and nose covered at all times throughout class — facial coverings cannot be pulled up or down. **As a health precaution, eating and drinking are NOT permitted in the classroom.**

By enrolling in an in-person course, you agree to comply with Boise State's rules and precautions which include, but are not limited to, facial coverings, frequent hand washing, hand sanitizing, and sitting in the same seat all semester (for details, see [Health Guidelines](#)). Failing to comply with these rules and precautions is a violation of Boise State's [Student Code of Conduct](#) and will subject you to university sanctions and discipline.

University policy states that I am not allowed to begin/continue with instruction unless and until everyone present has a facial covering in place.

This course is designed to be accessible to all students. A very small percentage of people cannot wear facial coverings for reasons related to medical conditions or disabilities. If this is your experience, please contact the [Educational Access Center](#) to document your condition so that we may determine the best accommodation for you. Until an accommodation is in place, you will need to participate remotely. If you need to read lips or facial expressions to understand what people are saying, please let the [Educational Access Center](#) and me know via email.

If you are unwilling to wear a facial covering, you cannot participate in person. If this is the case, please dismiss yourself and either inquire whether you may participate in the class fully remotely, or contact the [Registrar's Office](#) (208-426-4249) to pursue your learning experience in a different remote or online section. Should you refuse to cover your mouth and nose and also refuse to leave the classroom, I have been directed to dismiss the class and you will be reported to and contacted by the Dean of Students Office.

Mutual Guidelines for Safe Learning Environments

While these public health measures are essential to protecting our individual and communal health, they also complicate how we engage in teaching and learning. The following guidelines should ease our comfort and communication with one another:

- In the classroom, we must wear a facial covering that covers our mouth and nose at all times. If you or I let our facial coverings slip, we will politely remind one another to secure our masks.
- Facial coverings muffle voices. I will use the classroom microphone to amplify my voice through my mask. In addition, I will repeat your questions and summarize comments to ensure we all can follow any discussion.

Course schedule

Below is an overview of our course schedule, including goals and assessments. **Note that these assessments are not the only assignments associated with the course!** You can find more detailed assignment information in Canvas. **The schedule is subject to change depending on our progress.**

Course Outcomes	Week	Date	Unit Outcomes	Summative Assessments*
Identify key resources for completing your degree	1	8/25	Identify the graduate program coordinator for your degree program; Summarize the learning outcomes for your degree program; Use your myBoiseState account to find and keep track of your degree requirements	Evaluation of Academic Advisement Report (AAR)
Use the scientific literature to provide context for your own research	2	9/1	Summarize the important points of a scientific paper; Relate the work of others in the scientific literature to your own research interests; Organize your library of scientific papers to promote efficient work	Finding and organizing papers journal reflection; Weekly paper summaries (due throughout the semester)
Create a plan for managing your time and space that will allow you to work and learn efficiently and effectively	3	9/8	Analyze your study and time management habits; Reflect on strategies you use to learn	Work productivity plan
	4	9/15	Evaluate tools and strategies for managing your work and identify those that will suit your needs	
	5	9/22	Identify campus resources related to wellness; Articulate when and how you will communicate with your research advisor and thesis committee	
Write a career development plan	6	9/29	Reflect on personal values, skills, and interests; Investigate potential careers including titles, duties, locations, and desired skills	Career development plan (due at end of semester)
	7	10/6	Articulate desired workforce skills and reflect on how you will attain them; Investigate department, campus, and professional resources and identify which can help you achieve your goals	
Create a plan for	8	10/13	Reflect on implicit biases and how they	Reflection on own

how you will contribute to an inclusive, equitable, and collegial work environment			impact your work environment; Reflect on inequities in STEM and describe how you will help reverse the problem	behaviours and strategies for contributing to a healthy work environment
	9	10/20	Describe strategies for responding to harassment	
Develop a research proposal	10	10/27	Articulate a relevant research question	Completed Geological Society of America (GSA) student research grant proposal
	11	11/3	Explain the relevance of your research question to the scientific community using appropriate references to the scientific literature	
	12	11/10	Revision of research question and importance of work	
	13	11/17	Design a study to address your research question including objectives, timeline, resources, etc.	
NO CLASS	14	11/24	Thanksgiving: NO CLASS	
Communicate with data	15	12/1	Describe attributes of effective and ineffective figures; Create effective figures to communicate with data	Create a figure to submit with your GSA proposal
Write a career development plan	16	12/8	Discuss your career development plan with your advisor and revise as needed	Career development plan

*Note that summative assessments are not the only course assignments