

## Senior Seminar/Capstone



***Instructor:***

Todd Lookingbill (he/him/his)

How to Reach Me:

Office hours: Tues. 1:00-2:00, Thur. 11:00-noon at

<https://urichmond.zoom.us/my/geography>

pop in or if you know ahead of time you'd like to chat at a specific time, email me first

Email: [tlooking@richmond.edu](mailto:tlooking@richmond.edu)

I have also set up a course Slack site for communication: <http://spidercapstone.slack.com/>

Feel free to post any questions about class content or logistics there at any time.

If it is personal, you can also direct message me through Slack.

***Course schedule and attendance:***

Day and Time: (Mon or Fri)/Wed 4:30-5:45

Location: Boatwright Memorial Library B2-20

Zoom (if can not make it in person): <https://urichmond.zoom.us/my/geography>

In general, Monday and Friday will consist of guided discussions and readings from the literature. You are expected to attend only one of these sessions. On Wednesdays, we will all meet together to develop your project work and start preparing for your next steps following graduation.

We are facing a challenging situation in which all of us are called on to make a good faith effort to be flexible and to make decisions in the best interest of the community, including staying home when sick. If you are sick, you should not attend class. You will not be required to provide formal documentation from a health care provider, and will not be penalized for absences.

However, you should:

- Notify instructors in advance of the absence if possible.
- Contact the Student Health Center if sick.
- Keep up with classwork and attend class online if they are able to do so
- Submit assignments digitally on time whenever possible
- Work with your instructors to try to reschedule any missed assignments
- Stay in close communication with your instructors

This attendance policy puts everyone on their honor. It requires that faculty and instructors trust the word of their students when they say they are ill, and it requires that students report the reason for their absence truthfully. Falsely reporting a reason for an absence is an honor code violation.

### ***Now, what is this course about?***

This course is the culmination of the Environmental Studies and Geography majors. The primary objective is to further develop students' ability to conduct interdisciplinary research through the practical application of disciplinary specific methods and theory. Students will synthesize their knowledge through the close study of a current environmental problem, culminating in an individual thesis conducted within the framework of a group project.

### **Objectives**

- 1) To experiment with applied and theoretical scholarly pursuits bridging the natural sciences, social sciences, and humanities
- 2) To create a supportive and engaged learning community and communicate our insights to the broader UR community
- 3) To create high-quality, scholarly projects that demonstrate advanced research and analytical skills as well as organized project management
- 4) To utilize the knowledge and concepts gained from earlier coursework in the major to enrich our understanding and analysis of our surrounding environments and geographies
- 5) To effectively document and reflect on individual and collective learning processes as well as constructively review the work of peers

Students will be expected to (1) work independently and collaboratively, (2) document your progress and meet with me regularly to discuss your progress and plan next steps, (3) honestly and thoroughly assess your efforts and those of your classmates, and (4) be flexible and open to change as we work together and with university and community partners. The timing of activities may be modified to accommodate collaboration and to enrich learning. You are invited and encouraged to bring in knowledge, ideas, critiques, and suggestions to make this a rich and fulfilling experience for all.

You are free to select any theme you would like for your final projects. The Friday/Monday reflection readings can be used to catalyze theme ideas. We will also host several virtual speakers conducting environmental work in the local community during the first few

Wednesdays; these provide possible provocations and resources for the development of your ideas. I will also post potential research themes in our Slack project-ideas channel.

Because the course objectives explicitly involve developing a sense of community, you need to have at least one other partner interested in a related idea to become an official course theme. Though everyone will be working on their own research topics, the topics within a theme should be related. Themes will be closed once they reach four members, but others in the class are free to join your group if it has not yet reached four members.

The first half of the semester will be focused on Research Planning: selecting a topic and theme, creating a research question and accompanying hypotheses, and proposing a research design. The second half of the semester will focus on conducting your study and presenting your results.

### ***How can you earn the points that make up your final grade?***

#### *15 pts Weekly Discussions*

Complex challenges require interdisciplinary thinking and skills. Never have these attributes been more relevant than today during the twin pandemics of covid-19 and the 400 years of systematic racism confronting our country. In the environmental field, we can lump these challenges with a third catastrophe, the existential crisis of climate change. You have learned a lot over your four years at UR to position yourselves to be leaders in confronting these challenges. Each week, we will look back at something you have previously learned in a favorite class and consider how it can be applied to at least one of these three crises.

Responsibility for leading the Friday/Monday discussions will be rotated sequentially from week to week. Although you are normally required to attend only one of these sessions, on the week that you are Discussion leader, you need attend both. Discussion leaders should become familiar with background materials, be prepared with an evaluation of the significant contributions of the readings and its implications for one of these global challenges, and facilitate discussion among the group. Leaders should post the bibliographic information (or post the article(s) in the weekly\_discussion\_readings on Slack) and discussion questions on Blackboard by 5:00 pm on Wednesday to help facilitate the discussions. Discussions will happen on that Friday first and then on the next Monday.

Everyone else should respond to at least one of the discussion prompts on the Blackboard Discussion Board by 10:00 pm of the night before their discussion. A good written response will be approximately 200 words, free of grammatical and spelling errors, have a clear thesis statement articulating an original idea or claim stimulated by the prompt. Your argument should be supported by evidence from the reading, your experiences, or other sources. The writing style should be formal. The purpose of these exercises is to provide an opportunity to critically examine what you have learned in your classes here. A secondary goal is to practice generating and articulating new ideas in writing. These exercises will help develop higher level analytical, critical thinking, and communication skills. These skills

will be required for your final project. By reading your classmates posts, it will also help you to get to know each other and hear multiple points of view on our readings.

Facilitators should review all responses and use them to actively engage the class during the discussion periods. I encourage discussion leaders to meet with me during office hours prior to the discussion of their papers.

### *5 pts Reflection Journals*

The benefits to health and well-being of simply being outdoors are clear and irrefutable. After being trapped in your home for months, you may be struggling with the new physical distancing guidelines that seem to isolate you in your dorm room. For this course, I ask that you find some outdoor space on campus and take at least one hour each week to visit that space. Spend the first half hour in silent observation and reflection. During the second half hour document your thoughts in whatever way suits your mood. You can bring along your laptop, but I encourage you instead to use a notebook and break away from technology for the hour. Sketches, poems, prose or some combination of elements are all fine. Take a picture of your notebook page after each session (name the file by the date) and upload it to a folder called Reflection\_Journal in your Box folder. If you miss a week or two, that's OK. To get full credit for the assignment you need to complete 10 reflection sessions with a limit of one per week.

These observations are designed to help you reflect on the concept of place, a central tenet of Geography. You might ask yourself, for example, how has the site and its surroundings changed with the change in the seasons? What environmental processes are responsible for these changes? What human influences are at work in providing meaning to the place? How is this place governed? How could this place be made more equitable and inclusive? How resilient and sustainable is the place?

### *10 pts Oral Project Pitch*

Each of you will envision a capstone project of your interest and prepare a short oral summation of the context for the idea and the research activity it would entail. Projects will be grouped into broad themes and it should be clear how your project fits into the overall theme. Project pitches will be approximately six minutes in length and include the motivation for your work, some initial background literature review, a statement of your overarching research question or axiom, and some statements of specific postulates or hypotheses and how you plan to address each. Project pitches will occur the week of September 23.

### *15 pts Written Proposal*

Individually, students will prepare a three-page project proposal following an organized process of research planning. They should include a fully explanatory title, background literature review that provides motivation for the study and demonstrates thorough and current understanding of the peer-reviewed literature related to the topic, a clearly stated purpose statement and hypotheses, and description of the research design and methods proposed to address the hypotheses. Written proposals are due by the week of October 7.

The proposal will be evaluated based on content but also the quality of writing: Is the proposal well organized? Is there an overall coherency in the proposal? Is there a logical flow between clearly labeled sections? Are there transitional sentences between different parts? Is the proposal cleanly edited (e.g., grammar) and easy to understand?

#### *12.5 pts Final Oral Presentation*

We will spend the last few weeks of the semester learning more about communicating in geography and environmental studies. Using these lessons and skills, students will each have 10 minutes to present the context of their research and the final outcomes to the Environmental Studies Program and Geography Department during the final week of classes. This will be done remotely through zoom.

#### *25 pts Final Paper*

The culmination of the capstone projects, final papers will be completed in lieu of a final exam. The final individual papers should include a meaningful title, abstract, introduction that sets the theoretical context, detailed methods and results, discussion of the implications of your finds, and a vision for future work. Geography majors must include a map as part of your paper. Environmental Study majors must include a map or other visual element representing the concept of place. Papers should be approximately 15-20 pages in length and are due to Box at noon on December 14.

#### *10 pts Ancillary Final Product*

Each capstone project group must collaborate to prepare one additional means of presenting your research. For example, this could be a series of new signs describing campus trees, a storymap comparing environmental justice issues in Richmond to some other city of interest, a submission to include the new eco-corridor in the library of biophilic places, a poster presentation for a scientific meeting, a video, or other creative way of communicating your findings. These projects should be completed as group projects with all individuals working within the same theme collaborating and receiving the same grade. These projects are also due by noon on December 14.

Finally, this class is a place for you to “try out” positions and ideas. Allow yourselves and your peers intellectual space to explore a controversial stand. All conversations and debate shall be conducted with respect.

#### **In summary, your grade will be calculated based on:**

- 15% Weekly Discussions
- 5% Reflection Journals
- 10% Oral Project Pitch
- 15% Written Proposal
- 12.5% Oral Final Presentation
- 25% Final Paper
- 10% Ancillary Final Product
- 7.5% Additional Class Assignments

- The grading scheme will follow standard University of Richmond guidelines (<http://registrar.richmond.edu/services/policies/grading.html>).

A > 93 pts	B 87-83	C 77-73	D 67-63
A- 93-90	B- 83-80	C- 73-70	D- 63-60
B+ 90-87	C+ 80-77	D+ 70-67	F < 60 pts

***Note: Required class readings will be organized in Blackboard (Course Documents). The weekly schedule also can be found on Blackboard (Syllabus and Schedule); this schedule will be regularly updated.***

### ***Academic Honesty:***

The strength of the university depends on academic and personal integrity. In this course, you must be honest and truthful. Ethical violations include cheating on exams, plagiarism, reuse of assignments, improper use of the Internet and electronic devices, unauthorized collaboration, alteration of graded assignments, forgery and falsification, lying, facilitating academic dishonesty, and unfair competition. Report any violations you witness to the instructor.

<https://studentdevelopment.richmond.edu/student-handbook/honor/guide.pdf>

Many of our classes and my lectures will be recorded. Recordings of any type will be made available only to students registered for the course and should be used only for personal study by students enrolled in the course. Students are not permitted to:

- Disclose, share, trade, or sell class recordings with/to any other person, organization, business, or institution; and/or
- Post/store these recordings in a location accessible by anyone other than the student, including but not limited to social media accounts.

Students must comply with any instructions or directions from their faculty regarding the use of such recordings. Students are required to destroy any recordings that were made when they are no longer needed for the student's academic work. Failure to abide by this policy will also be a violation of the Standards of Student Conduct; such issues will be sent to the appropriate University Conduct Officer.

### ***Time-on-Task Expectations:***

To be successful in this course, you should expect to devote an average of 10-14 hours each week reading for class and preparing for the Monday/Friday discussions (2-3 hours), participating in scheduled class time (3 hours), journaling from reflection spot (1 hour), and conducting research on your own towards your final projects (4-7 hours). Keep in mind, these are averages for the entire semester. So if you find that you are not working much on your project in the beginning of the semester, expect the workload to pick up near the end. Alternatively, if you make a point of dedicating 4-7 hours every week to your project work, you should be in good shape in December.

This is a challenging time, if you experience difficulties in this course, do not hesitate to consult with me. There are also other resources provided below that can support you in your efforts to meet course requirements. Many additional support services are available at the Blackboard site [Smart Spiders Seek Support](#).

**Academic Skills Center** ([asc.richmond.edu](http://asc.richmond.edu)): Assists students in assessing their academic strengths and weaknesses; honing their academic skills through teaching effective test preparation, critical reading and thinking, information conceptualization, concentration, and related techniques; working on specific subject areas (e.g., calculus, chemistry, accounting, etc.); and encouraging campus and community involvement. Tutors will be available virtually. The on-call peer-tutors available for these appointments are listed in the Box file: [On-Call Online Tutors](#) (<https://richmond.box.com/s/dpe37chr2zodr3o1amtj8omjk72v2ktb>). Email [Roger Mancastroppa](mailto:Rmancast@richmond.edu) ([rmancast@richmond.edu](mailto:Rmancast@richmond.edu)) and [Hope Walton](mailto:hw Walton@richmond.edu) ([hw Walton@richmond.edu](mailto:hw Walton@richmond.edu)) for appointments in academic and life skills to request a Zoom conference.

**Boatwright Library Research Librarians:** ([library.richmond.edu/help/ask/](http://library.richmond.edu/help/ask/) or 289-8876): Research librarians help students with all steps of their research, from identifying or narrowing a topic, to locating, accessing, evaluating, and citing information resources. Librarians support students in their classes across the curriculum and provide library instruction, tutorials, research guides, and individual help. All research support will be provided online or by appointment and students can contact a librarian for help via email ([library@richmond.edu](mailto:library@richmond.edu)), text (804-277-9ASK), chat, or Zoom (by appointment).

**Career Services:** ([careerservices.richmond.edu](http://careerservices.richmond.edu) or 289-8547): Can assist you in exploring your interests and abilities, choosing a major or course of study, connecting with internships and jobs, and investigating graduate and professional school options. We encourage you to schedule an appointment with a career advisor early in your time at UR.

**Counseling and Psychological Services** ([caps.richmond.edu](http://caps.richmond.edu) or 289-8119): Assists currently enrolled, full-time, degree-seeking students in improving their mental health and well-being, and in handling challenges that may impede their growth and development. Services include brief consultations, short-term counseling and psychotherapy, skills-building classes, crisis intervention, psychiatric consultation, and related services.

**Disability Services** ([disability.richmond.edu](http://disability.richmond.edu)) The Office of Disability Services works to ensure that qualified students with a disability (whether incoming or current) are provided with reasonable accommodations that enable students to participate fully in activities, programs, services and benefits provided to all students. Please let your professors know as soon as possible if you have an accommodation that requires academic coordination and planning.

**Speech Center** ([speech.richmond.edu](http://speech.richmond.edu) or 289-6409): Assists with preparation and practice in the pursuit of excellence in public expression. Recording, playback, coaching and critique sessions offered by teams of student consultants trained to assist in developing ideas, arranging key points for more effective organization, improving style and delivery, and handling multimedia aids for individual and group presentations. Remote practice sessions can be arranged; we look forward to meeting your public speaking needs.

**Writing Center** ([writing.richmond.edu](http://writing.richmond.edu) or 289-8263): Assists writers at all levels of experience, across all majors. Students can schedule appointments with trained writing consultants who offer friendly critiques of written work.

## Schedule

**Homeworks should ideally be completed before Wednesday's class but are absolutely due by Sunday midnight.**

<u>Semester Week</u>	<u>Date</u>	<u>Topic</u>
Research Planning		
01	8/26	Course overview and introduction: <a href="#">Sustainability at UR</a> with Rob Andrejewski Hmwk: post comment and question for Rob
02	9/2	Selection of a research approach: <a href="#">Chapter 1</a> (Preliminary Considerations) in Creswell Hmwk: take <a href="#">quiz</a>
03	9/9	Review of the literature: <a href="#">Chapter 2</a> (lit review) in Creswell, <a href="#">Chapter 2</a> (literature searches) in Healey and Healey, and <a href="#">Chapter 3</a> (writing an annotated bibliography) in Hay Hmwk: view <a href="#">Library Skills with Samantha Guss</a> ; create a literature map and upload to Box
04	9/16	<b>Project team selection</b> Development of project ideas; <a href="#">Chapter 2</a> (five processes of research planning) in Ford and <a href="#">Chapter 5</a> (the introduction) in Creswell
05	9/23	<b>Oral proposal presentations</b> ; Readings on refining research purpose and hypotheses: <a href="#">Chapter 6</a> (purpose statement) and <a href="#">Chapter 7</a> (hypotheses) in Creswell Hmwk: take <a href="#">quiz 6</a> and <a href="#">quiz 7</a>
06	9/30	<b>Oral proposal presentations (cont)</b> ; Additional readings on defining research problems and research plan: <a href="#">Chapter 3</a> (axioms, postulates, and data statements) <a href="#">Chapter 4</a> (developing a research plan, an example) in Ford Hmwk: upload your completed <a href="#">purpose statement</a> docs for other presenters to Box
07	10/7	Zoom with Devin Jefferson, Community Science Catalyst, Science Museum of Virginia, and Brianne Mullen and Kendra Norrell, City of Richmond Office of Sustainability Hmwk: review NYT <a href="#">article</a> about Richmond heat islands & RVAgreen 2050 climate equity index <a href="#">dashboard</a> ; then <a href="#">post</a>



on Slack one question for Devin and one question for Brianne and Kendra about Env Justice in the City

### Written Proposals Due October 14

#### Research Execution

08	10/14	Strengths Assessment Workshop Hmwk: complete Clifton Strengths assessment by 10/7
09	10/21	Reintroduction to Career Services Proposal Feedback
10	10/28	Mapping and Cartography; <a href="#">Chapter 7</a> (making a map) in Hay and <a href="#">Making maps people want to look at: Five primary design principles for cartography</a> by Buckley <a href="#">Geography Map Rubric</a> Proposal Feedback Hmwk: Add your reflection point location and photo to the Reflection Spot Web Map in Collector by 10/28 (see Instructions in Blackboard Assignment folder)
11	11/4	Science Communication; <a href="#">Chapter 6</a> (communicating with figures and tables) in Hay and <a href="#">Chapter 2</a> (visual explanations) and <a href="#">Chapter 9</a> (visual display of quantitative information) in Tufte Project check-ins
12	11/11	Presentation tips; <a href="#">Chapter 8</a> (preparing and delivering a talk) in Hay Project check-ins Hmwk: meet with Samantha Guss to review your sourcing
13	11/18	<a href="#">Chapter 10</a> in Hay (plagiarism, academic dishonesty, sexist and racist language) Project check-ins
14	11/26	Thanksgiving – work on projects
15	12/2	<b>Final presentations</b>

**Final papers and alternative products** are due at our university assigned final exam time (12/14 at noon).