



COLLEGE OF
COMPUTER, MATHEMATICAL,
& NATURAL SCIENCES
DEPARTMENT OF GEOLOGY

Geology Senior Thesis

GEOL 393 – Proposal*

GEOL 394 - Research

**Wednesday 4-6 p.m.
Room PLS 1158**

COURSE DIRECTOR: Dr. Philip M. Piccoli (Office: 1109 Geology Building)

OFFICE HOURS: by appointment or Wednesdays 2-3:30 PM; best to email me if you want to talk.

CONTACT INFORMATION: For questions, e-mail: piccoli@umd.edu

SAFETY: The class will adhere to all COVID-19 rules put in place by the University. **MASK POLICY:** The University's policy is that masks will no longer be required while indoors in most situations, including classrooms. However, the University also reminds us that masks are a significant defense against the spread of COVID-19 and other respiratory viruses (including the cold and flu). Therefore, they recommend wearing a KN95 mask while indoors for added protection. So please feel free to mask up if you feel safer, and I **STRONGLY** encourage masking if the cold or flu is spreading on campus.

EXPECTED LEARNING OUTCOMES:

1. Identify a geologic problem and design experiments to properly test it
2. Produce a clear and concise written proposal and research paper
3. Make clear and effective oral presentations appropriate for the general public and specialists in the discipline
4. Apply material from prior courses and the literature to the solution of a scientific problem
5. Learn to self-critique scientific, oral and written communications, and those of others

August 31:

Topics: Orientation- Selecting and Refining a Project; getting started.
Discussion of grading policy (see below).

Note: 394 students should be sure to consult the new syllabus for important dates.

Note: First presentation for both 393 and 394, in front of the full department, is approximately six(6) weeks from today.

September 7:

Topic: Scientific Method I, including how it applies to the Senior Thesis.

September 14:

Topic: English Skills: Written and Spoken English (on Canvas).

Due (393): **PROJECT DESCRIPTION** due by email to me (by the time class starts). Please put PROJECT DESCRIPTION in the subject line, and your name and 393 in the file name. Submit both Word and PDF versions.

September 21:

Topic: Preparing a Presentation

Due (393): **PROJECT APPROVAL SHEETS** due (submit in paper form: place in my mailbox, or give to me at the beginning of class).

September 28:

Topic: Scientific Method II: data collection, numbers, digits, uncertainty.

October 3 (Monday): Not a class!

Due (393): **Project Paragraph + Outline Due (electronic, to Todd)** (*see note below*). For 393: A hard copy of your Outline must be signed by your advisor, and placed in my mailbox by the due date of the electronic version. This is an indication of your advisor's approval of your Outline! Submit both Word and PDF versions.

Due (394): **Written Progress Report Due** (electronic: 500 word minimum (not including name, title, and other heading information) updated abstract indicating your progress to date - electronic, to Todd). Submit both Word and PDF versions.

October 5 (Wednesday): No class.

Note: Work on your presentation

October 7 (Friday): Presentations (1:00 p.m.: JMZ 0220)

Details to be provided in class.

Presentation (393): Oral Presentation of Topic for 393

Presentation (394): Oral Progress Report for 394

October 12: Required for both GEOL 393 and 394 Students.

Topic: Preparing for the future (jobs, graduate school). This *open forum* has been inserted in part as a response to feedback from former students. A Career Center guest will attend along with several Geology Faculty.

October 19:

Note: Optional class – check with instructor.
Informal Individual Meetings with Students

October 26: Required for both GEOL 393 and 394 Students.

Topics: Discussion of Research Progress
Preparing the Final Paper and Final Presentation

November 2: Writing Day (1215 CHEM)

November 9 (Wednesday): (1215 CHEM)

Note: *Optional.* Work on your papers. I will answer any questions you have about completing your drafts, and your upcoming presentation.

November 11 (Friday):

Due at Noon (393, 394): **Rough Drafts** are due at noon. Rough Drafts should be double spaced. Send electronic versions (Word and PDF) to me by email. Ask your advisor(s) for their preference (email, paper). **You must deliver your rough draft to your advisor(s).**

November 16 (Wednesday):

Note: No class. Work on your research and your presentation.

November 18 (Friday):

Returned (393, 394): Rough Drafts Returned to Student from Advisor(s) 393 and 394 **(Please make arrangements for when you will get the rough draft back from the appropriate parties).** I will send you my corrections and comments sometime.

November 23: Thanksgiving Break

November 28 (Monday):

Note: Final proposals and final reports should be single spaced.

Due at 9:00 a.m. (393): Final Proposal Due (electronic (to Todd)*)

Due at 9:00 a.m. (394): Final Report Due (electronic (to Todd)*)

(Electronic copies must be sent to Todd Karwoski; No paper copy is required to me).
(Check with your advisor to see if they would like one).

December 9 (Friday): 1:00 p.m. (JMZ 0220)

Presentation (393): Oral Presentation of Proposal

Presentation (394): Oral Presentation of Thesis

GEOL 394 Papers are accessible on the web for all to see. Given the importance of having a clean and well-edited version available for others to see, students will have the opportunity to submit an edited copy of their final papers for inclusion on the Senior Thesis web page. You will have two weeks beyond the current semester CMNS graduation date for submission of the revised document. To do so, submit the document to P.Piccoli in both Word and PDF formats. The purpose of this is to fix minor problems with grammar, formatting, etc. This will not be graded, and can't be (scientifically) substantively different than the graded version, but rather provides an opportunity to present your best product to the public.

Other Information

Academic Accommodations:

If any GEOL 393-394 students have a documented disability that may affect their work in Geology 393 or 394 they should discuss this with me by no later than the second week of class. You should contact Disability Support Services: <http://counseling.umd.edu/DSS/>

Academic Integrity:

The University of Maryland has a nationally recognized [Code of Academic Integrity](#), administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. Students are prohibited from cheating on exams, plagiarizing papers, having another person write their paper, submitting the same paper for credit in two courses without authorization, buying papers, submitting fraudulent documents, and forging signatures.

Please place this as an appendix in your 393 and 394 final papers, and sign it in the paper copy of the 394 Thesis paper:

"I pledge on my honor that I have not given or received any unauthorized assistance or plagiarized on this assignment."

Computing Guide for Senior Thesis Work:

Monday before the first talk of the semester: (talk to Todd (karwoski@umd.edu) about his availability, and for his preferred method of file transfer)

Project Paragraph+Outlines or *Progress Reports* (for 393 and 394, respectively): Supply file to Todd Karwoski by the date and time specified; you must be sure that Todd gets it directly from you.

Week of both Friday presentations: PowerPoint Files for Oral Presentations, or poster files (Spring semester), must be delivered, by a method to be determined by you and Todd, to Todd by 11 a.m. Friday, *or at another time, as indicated by Todd*. It is your responsibility to be sure that he receives the PowerPoint file or other appropriate file, and that it is in working order.

Electronic copies of Final Papers (393, 394): Electronic copies of final papers are due in Microsoft Word and PDF formats. Please do not leave blank pages in your presentation; please single space the document; and, wrap text around figures. Please have a separate title page. Pages should be numbered, but no number should be on the cover page. E-mail the file if appropriate, or present a disk to Todd, or follow Todd's instructions if he presents you with an alternative.

Course Evaluations and Policies:

CourseEvalUM will be open for students to complete their evaluations for the Fall semester. Students can go directly to the [website](#) to complete their evaluations.

Relevant undergraduate student/course policies and procedures:

<http://www.ugst.umd.edu/courserelatedpolicies.html>

Course Organization:

One meeting per week, unless otherwise noted, at the beginning of the semester. Students are expected to meet weekly with their main research advisor, and maintain communication with me and their advisor on at least a weekly basis. You can email me 24/7. I will get back to you as soon as I can.

COVID-19 (subject to change):

We will follow all guidelines the University has in place for the safe implementation of this course. A summary of the policies in effect, and general guidelines, can be found at: <https://umd.edu/4Maryland>.

Grading:

(More detail is on ELMS): The rough draft of your 393 or 394 paper will account for 10% of the final course grade, the final paper will account for 60%, and the final presentation will account for 30%. Note however, that failure to make either of the two required presentations without an approved excuse (e.g., a medical excuse backed by a formal medical document), or failure to submit the final paper on time, can result in failure of the course. The grade for the rough draft will be based on the rough draft rubric, which will be on ELMS.

Senior Thesis Grants:

Some funds may be available to support your research. Ask me if interested.

Writing Guides:

Suggested Alternate Writing Guides:

- 1) (Primary Guide) Irvine, T.N., Rumble, Douglas, and Irvine, L.M., 1992, A writing guide for petrological (and other geological) manuscripts: *Journal of Petrology*, p. 1- 46. Can be found online [here](#).
- 2) Fogarty, M. (2011) *Grammar Girl Presents: The Ultimate Writing Guide for Students*. St. Martin's Griffin, New York. (most of this information is available online: free)

If you feel you are having difficulty writing please be sure to utilize the Writing Center resource available to you.