



FALL 2025
Wednesday 4-6 p.m.
HBK 0108

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: This class will adhere to any public health policy as put forth by the University.

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

September 3:

- Topics:* Orientation- Selecting and Refining a Project; getting started.
Discussion of grading policy.
- 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 five (5) weeks from today.

September 10:

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

September 17:

- Topic:* English Skills: Written and Spoken English (on ELMS).
- Due (393):* **PROJECT DESCRIPTION** due. Submit via email to P.Piccoli by the time class starts. Submit both Word and PDF versions.

September 24:

Topic: Preparing a Presentation

Due (393): **PROJECT APPROVAL SHEETS** due. Submit in paper form or by email to me by the beginning of class.

September 25-26: Campus Career Fair (STEM)

This is unrelated to the class, and not required, but is useful to consider participating in if you are interested in transitioning to the workforce immediately upon graduation. Details to follow.

October 1:

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

October 6 (Monday): Not a class!

Due (393): **Project Paragraph + Outline Due** (details provided in class)

Due (394): **Written Progress Report Due** (500 word minimum, not including name, title, and other heading information). This is an updated abstract indicating your progress to date.

NOTE: These will be made available to all faculty. Submit both Word and PDF files to T.Karwoski and copy to P.Piccoli.

October 8 (Wednesday):

Note: Practice presentations. Work on your presentation.

October 10 (Friday): Presentations (1:30 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

**** Electronic copies of presentations are due at 11:00 a.m. to Todd.**

October 13-14: Fall Break

October 15:

Note: Optional class – check with the instructor.
Informal One-on-One Meetings with Students

October 22: 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.
One-on-one meetings with students if requested

October 29: Required for both GEOL 393 and 394 Students.

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

November 5: Writing Day (1215 CHEM)

Topics: New topics as they arise.

November 12 (Wednesday): (1215 CHEM)

Note: *Optional.* Work on your papers. I will answer any questions you have about completing your draft.

November 14 (Friday):

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

November 19 (Wednesday):

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

November 21 (Friday):

Returned (393, 394): Rough drafts returned from me. (Please make arrangements for when you will get the rough draft back from your advisor(s)).

November 26 (Wednesday):

Thanksgiving Holiday (University Closed)

December 2 (Tuesday):

Due at 9:00 a.m. (393): Final Proposal

Due at 9:00 a.m. (394): Final Report Due

Electronic copies must be sent to T.Karwoski (cc: to P.Piccoli), and your advisor(s).

December 3 (Wednesday):

Optional Class: Discussion of Progress/Individual Meetings (if requested).

December 10 (Wednesday):

Optional Class: Discussion of Progress/Individual Meetings (if requested).

December 12 (Friday): 1:00 p.m. (0220 JMZ (tentative))

Presentation (393): Oral Presentation of Proposal

Presentation (394): Oral Presentation of Thesis

**** Electronic copies of presentations are due to Todd at 11 a.m..**

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 also 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."

Artificial Intelligence (AI) in Assignments:

Any use of AI tools in completing class assignments must be disclosed. Upon submission of assignments, the original document (prior to modification by AI software) and the final product must be submitted. Prior to using any AI software, your primary advisor must be aware that you intend to do so, as any information submitted through AI software could/will become publicly available. Examples of AI software include Grammarly, QuillBot, ChatGPT, Dall-E, Adobe Firefly, Microsoft Bing AI, Synthesia, [elicit.org](#), etc.).

Computing Guide for Senior Thesis Work:

Monday before the first talk of the semester: (submit to ELMS, and a copy to Todd: karwoski@umd.edu)

Project Paragraph+Outlines or *Progress Reports* (for 393 and 394, respectively): Supply files 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 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; 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. The majority of the work necessary to successfully complete the Senior Thesis experience will occur outside of class, and your meetings with your primary advisor.

Grading:

(More details are 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.

Notice of Mandatory Reporting:

As a faculty member, I am designated as a “Responsible University Employee,” and I must report all disclosures of sexual assault, sexual harassment, interpersonal violence, and stalking to UMD’s Title IX Coordinator per University Policy on Sexual Harassment and Other Sexual Misconduct. If you wish to speak with someone confidentially, please contact one of UMD’s confidential resources, such as [CARE to Stop Violence](#) (located on the Ground Floor of the Health Center) at 301-741-3442 or the [Counseling Center](#) (located at the Shoemaker Building) at 301-314-7651. You may also seek assistance or supportive measures from UMD’s Title IX Coordinator, Angela Nastase, by calling 301-405-1142, or emailing titleIXcoordinator@umd.edu.

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.