

NOTE TO STUDENTS AND POSTDOCS: THE FOLLOWING ARE ANSWERS TO THE GUIDING QUESTIONS PROVIDED BY VPGE. THE VPGE QUESTIONS ARE WRITTEN WITH RESPECT TO GRADUATE STUDENT ADVISING, BUT MANY OF THE QUESTIONS (AND ANSWERS) ARE EQUALLY RELEVANT FOR POSTDOC ADVISING AS WELL.

IN ADDITION, PLEASE SEE THE FOLLOWING LINKS FOR ADDITIONAL INFORMATION:

Stanford policy on graduate advising [link](#)

ESS graduate program in the Stanford Bulletin [link](#)

VPGE student gateway [link](#)

VPGE professional development resources [link](#)

VPGE events and programs [link](#)

VPGE advising and mentoring resources [link](#)

FROM STANFORD VPGE: “These questions may be useful to guide advising discussions within departments, programs, and Schools, and perhaps serve as a template for the creation of advising expectations.”

What is the overall purpose of faculty advising in this program?

The advisor is an academic and professional advisor. They are not a boss or supervisor, and the graduate students/postdocs do not work for the advisor. The advisor is committed to providing advice and mentorship about research, the academic plan of study, and professional development. The advisor is committed to leading the effort to ensure that funding is secured for graduate students, in conjunction with the graduate students, and is ultimately the person responsible for ensuring that the Department’s funding commitment to each graduate student in the group is met. The advisor is also committed to helping graduate students to navigate campus resources, and to prepare for and pursue career opportunities.

What is the process by which students can change advisors and when should this happen?

As indicated in the admissions letter, admission into the ESS graduate program is linked with an advisor, who is responsible for ensuring that the Department’s funding commitments to the graduate student are met. (This is common for geoscience programs in the US, but is in contrast to the recent recommendations of the NAS.) As a result, changing advisors has been relatively uncommon during the program’s first decade. However, graduate students who are interested in changing advisors should contact the Director of Graduate Studies and/or the Department Chair.

How frequently should students meet with their advisor and how are those meetings set up? How will you meet (in person, phone, Skype), and how will meetings be scheduled?

All students should feel that a weekly meeting with the advisor at a regularly scheduled time is available to them. In this group, the advisor checks-in in person each week, and students

request meetings when needed or desired (with the advisor responding within the following few days).

How does meeting frequency change as the student progresses?

Historically, most students have begun with a weekly meeting at a regularly scheduled time, and have subsequently requested/suggested to transition to a more flexible meeting schedule.

What topics might be discussed at advising or committee meetings? Are there any forms to complete or “deliverables” associated with any of those meetings?

Throughout the year, the advisor and the student discuss research progress, research ideas, upcoming academic and publication deadlines, and student questions (see subsequent question about non-academic advising topics). These meetings will often end with an agreement about what action the student should take prior to the next meeting, and then the advisor and student will subsequently discuss the results that are generated.

Near the quarterly course enrollment deadline, the advisor and the student discuss student plans for course enrollment. At the end of the academic year, the advisor and student discuss the Annual Review (required by the Department), as well as plans for the summer.

At committee meetings, the student and the committee discuss research progress, research plans, coursework, and professional/career goals. The ESS Department requires that the committee sign a form, and the advisor is responsible for communicating feedback from the committee to the student (including in writing, with the form signed by the advisor and the student, in addition to the committee).

How is degree progress monitored, for example through a departmental annual review process or regular meetings with advisor or thesis committees?

Degree progress is monitored by the advisor-student discussions, and by the annual thesis committee meetings (see previous question for further details).

How and when does a student select and convene their dissertation reading or “thesis” committee, what is the purpose of the committee, and how often should it meet?

The thesis committee should be convened prior to the Winter Quarter of the PhD student’s second year. The student is expected to consult closely with the advisor about the composition of the committee. The student is encouraged to keep in mind that the advisor has considerable experience with the committee process, and with the individual faculty in the Department.

The thesis committee conducts the Qualifying Exam; meets annually with the student to discuss research progress, research plans, coursework, and professional/career goals; and conducts the Oral Exam (i.e., “dissertation defense”) and the evaluation of the written dissertation. Members of the thesis committee may in some cases also be research collaborators, and may also serve as mentors and/or letter writers for applications.

How does the department or program, advisor, and student decide when a student is ready to graduate?

The PhD degree signifies the capability to independently initiate, conduct, document, and defend original scholarship. PhD graduation is thus determined primarily by maturity of research, along with preparation for professional goals. Funding constraints and availability of employment can also be important factors shaping the discussion about graduation.

Dissertations vary, but in ESS dissertations are typically 3-4 chapters of original research that are each at some point in the journal publication process, along with overarching Introduction and Conclusions chapters. Given that the PhD signifies capability to independently conduct independent research, it is expected that students have completed the full paper publication process prior to graduation. (All students from this research group have had at least one chapter in print and at least one more submitted at the time of the dissertation defense, and more than half have had at least three chapters in print.)

The final decision about when a student is ready to graduate is determined by the dissertation committee.

Who else might a student consult for help or guidance, e.g., department chair, DGS, student services staff?

It is critical that students have multiple mentors, intellectual influences and professional communities. Students are thus enthusiastically encouraged to form additional mentoring relationships independent of the advisor. These can include (but are not limited to) members of the thesis committee, other faculty in the Department or the School (or on campus), collaborators at other institutions, postdocs within and outside of the research group, and members of the broader scientific community (for example through networks such as ESWN).

Students are also encouraged to consult institutional resources such as the Department Chair, the DGS, and the Department and School student services staff, as well as campus resources such as VPGE, the Office of Graduate Life, CAPS, and the campus Ombudsperson.

What are students expected to participate in: lab or research group meetings, department symposia, etc.?

Graduate students are independent adults who are responsible for allocating their own time. And, as part of their graduate education, students are expected to attend the weekly ESS Department seminar, the Stanford Climate-Atmosphere-Ocean-Dynamics ("CLAOD") seminar, and research group meetings. There are other institutional symposia, etc, that are also beneficial, both intellectually and for participating in the scholarly community at Stanford (e.g., Woods Conversations and seminars, Hard Earth seminars, etc). All of these are important learning opportunities that provide critical supplements to the relatively light course load in the ESS graduate curriculum.

What are the expectations about time off, vacation, holidays, etc.- are students expected to request time away and if so, how far in advance?

Graduate students are independent adults who are responsible for allocating their own time. Students are expected to commit the time and effort that is necessary to make progress on their research, including the research progress required by the source of their funding. Within that expectation, students should feel empowered to find the schedule and routine that provides the balance of degree progress and personal life that best works for them. This includes holidays and vacation. It is polite to inform the advisor of planned absences. Further, coordination of availability becomes important once the student reaches the stage of having manuscripts under review at journals, because journal deadlines can appear "out of the blue". But, ultimately, each student should decide their own vacation schedule (while respecting their own degree progress and funding commitments).

Are students expected to consult with the advisor about the courses they take?

Yes. Given the heterogeneity of backgrounds prior to beginning the graduate program and the heterogeneity of professional goals, the courses that will best support each students' graduate education will vary. In addition, there is a lot of institutional memory about individual courses and instructors that will be valuable for students to consider. Further, thesis committees will often recommend or require particular courses, and the advisor is entrusted with representing the committee in ensuring that those course recommendations/requirements are met. Although the courses that any student chooses are ultimately up to the that student to decide, consultation with the advisor is an important part of the course selection process.

How do students and advisors write together? How polished should drafts be before the advisor sees them? How much time should the advisor be provided to review drafts and how should students request input?

Students are encouraged to send multiple drafts to the advisor throughout the writing process, beginning at the very early stages and continuing through submission to the journal. The advisor will typically provide "high level" structural feedback on early drafts (i.e., at the level of sections and paragraphs, but not individual sentences), and will provide detailed comments after that structural feedback is incorporated. Students should be aware that providing detailed feedback is very time intensive (at least 15 minutes per manuscript page, or at least 8 hours for a full-length manuscript). Students should thus devote attention to refining the prose with each iteration.

Students should wait to send drafts to co-authors until there is mutual agreement with the advisor.

How long in advance should your student make a request for a letter of recommendation (or similar) and what information is needed in advance?

For the first letter request at a given career stage (e.g., graduate fellowship, postdoctoral fellowship, faculty position), it would be ideal to have 4 weeks notice (but definitely ask if something arises on a shorter timeline). For subsequent requests at a respective career stage, one week notice is sufficient (although more is appreciated).

What fellowships or research funds are students expected to apply for and how will the advisor support their efforts?

The advisor is responsible for ensuring that the Department's commitment of providing funding via a combination of fellowship, research assistantship and teaching assistantship is met. Because the average time to PhD (5.5 years) is longer than the average grant (3 years), the exact mix of funding sources for any student is not certain at the time that the student is admitted to the graduate program. This means that the advisor will be working to secure funding for the student during the student's PhD. The student should expect to be asked to participate in that process, through graduate fellowship applications and/or grant preparation. (In some cases, the student may also need to TA more than the minimum Department requirement, per the offer of funding via a combination of fellowship, research assistantship and teaching assistantship.)

The fellowship application process also provides a number of academic and professional development benefits to the student. As a result, fellowship applications are likely to prove beneficial even if not required by funding constraints.

What additional funding might the advisor be able to support (conference travel funds, research funds, etc.)?

Graduate students should expect the advisor to be able to fund one conference per year, with the possibility of additional funds depending on the circumstances (with additional funds prioritized later in the PhD when preparing to apply for post-PhD employment). Students should apply for travel funds when available.

Are students expected to present their work, e.g. in the research group meetings or department, on campus, at conferences, etc.?

Yes. Presentation is a critical part of the scientific process, and plays an important role in professional development. Students should expect to present their work in research group meetings, at the CLAOD seminar, and at the annual School "Graduate Research Review" symposium. In addition, it will also be important to present at international society meetings such as the annual AGU Fall Meeting, as well as at more specialized conferences and workshops (the specifics of which vary by research area).

Are students expected to publish their work and if so, will the advisor and/or others co-author with them?

Yes. Students are expected to submit their dissertation chapters for publication in peer-reviewed journals as each chapter is completed. (Dissertations vary, but in ESS dissertations typically consist of overarching Introduction and Conclusions chapters, along with 3-4 chapters of original research that are each at some point in the journal publication process.) As is typical in the geosciences, the default expectation is that the advisor acts as a highly engaged collaborator on each of the dissertation chapters, and is a co-author on the journal publications. Others who collaborate on a study will also be co-authors, per the authorship practices/guidelines of the geosciences. These co-authors may be from within and/or outside the research group. When engaging these co-authors, it is critical to seek research feedback and discuss co-authorship early in the collaborative process (see next question about co-authorship).

How and when is co-authorship discussed?

The co-authorship discussion is active and on-going, and requires attentiveness and flexibility. Co-authorship is best discussed early rather than late. Ideally, this includes before analysis begins, and if not then certainly before writing begins. And, it is important to be aware that additional contributions may be necessary in order to thoroughly and convincingly answer the scientific questions that are asked, meaning that in some cases it may be necessary to seek out collaborators later in the process (including, in some instances, at the journal revision stage). However, whenever possible, students and advisors should seek to communicate early and often about co-authorship - when in doubt, discuss.

On what topics beyond their courses and dissertation might students seek advice from the advisor: i.e., teaching opportunities, career guidance, work-life balance?

Students are welcome to seek advice on any topic that they find appropriate. All previous graduate students in this research group have sought advice on teaching opportunities and career guidance, and many have sought advice on work-life balance, as well as how to best find support for dealing with personal issues (e.g., Counseling and Psychological Services ("CAPS"), visa issues, etc).