Table 10: Geosciences Graduate Student Feedback April 21, 2016

About 20 geoscience graduate students in attendance, representing a mix of GI-based and Reichardt-based students.

1. What aspects of your program should remain as they are and NOT be changed? Why?
   - All Rainer courses are well-enjoyed. Please keep these.
   - Remote sensing courses are good, keep these.
   - AIL courses are good, keep these.

2. What aspects of your program should be changed, and how? Why?
   - We want a Geoscience Statistics course.
   - We want a Geophysical Tools for Exploration Geology course – this was a VERY popular idea. This geophysical course would cover seismsics, gravity, magnetic, GPR, etc. techniques with a specific focus on how these are used in mining, oil & gas, other exploration. Why? We’re in AK, a state with a large portion of the economy that is based on resource extraction. This is where we get jobs, internships, and funding. This course would be a great recruitment incentive for new grad students, and would make us more well-rounded geoscientists.
   - Is there ever a visiting professor possibility for the department? This could be one way to help with course availability when a critical course isn’t being offered in a certain year because of the usual professor’s schedule.
   - Geophysics courses need to migrate from Matlab to Python-based computing. Python is the more widely used standard these days. All students using programming for their research agree that we need to learn/use Python, but some people pointed out that some legacy packages/models/etc. are firmly embedded in Matlab and not everyone will be able to migrate over completely. Maintaining familiarly with Matlab is great, but we need things taught in Python.
   - Add more course requirements to the geology program. We don’t mean require more credits, but rather provide a more structured list of courses to take. We’d like something similar to the geophysics program, where each specialty has a list of courses to take (or take 2 from each of the following 3 categories of classes, where each category has several options). Individual committees would still be able to sign off on exceptions, of course. But we think that having a more structured list of courses would counteract the difficulty many students have in enrolling in relevant courses.

COURSE AVAILABILITY

- Many of us are struggling to find relevant courses that are actually being offered. The catalog lists so many interesting and/or critically relevant courses. However, the availability of the courses in the catalog isn’t what the catalog says. For instance, a graduate structural geology class hasn’t been offered in 2 years. The graduate glaciers class wasn’t offered for 4 years. Some things are listed as being offered in springs during even years but then
get offered in a fall semester. **Please update the catalog with actual offering times so students can plan better. Courses that are not ever being taught need to be removed** from the catalog so that students don’t count on them. We look at the catalog as part of our decision to come to this graduate program. It is false advertising for the department to list so many courses that are never even taught (or taught so infrequently, every 3 or 4 years), or listed with misleading recurrence intervals. Courses that are dropped from the catalog because they are never being taught need to be dropped from program requirements (particularly in the geophysics programs).

- **Graduate structural geology and digital time series analysis** were brought up by several people as being particularly hard to take since they are offered so infrequently. Other courses people want: Volcano Seismology, Clastic Stratigraphy.

- **We would like a Google form or other survey that we take every at least once a year, if not every semester.** It would list all the courses in the catalog, and students could check off if they are planning on taking that course for a given semester. Courses that have restricted schedules (like Courses A and B below) could be listed on the form that way. We understand there are contracts and whatnot for faculty, and faculty go on sabbatical. But if the Course B in the example below had 7 students check that they want it in Spring 2017 and the usual faculty member is not teaching that semester, the department needs to find a solution. The form would have all the courses in the catalog listed. There would also be an open response for special courses or seminar topics not listed in the catalog: (i.e. Special topics in volcanology, let’s do a writing workshop class).

We envision a form something like this:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Fall 2016</th>
<th>Spring 2017</th>
<th>Fall 2017</th>
<th>Spring 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(fall semester only)</td>
<td></td>
<td></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Course B</td>
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<td>N/A</td>
<td>N/A</td>
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<tr>
<td>(odd springs only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course C</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**FRIDAY SEMINAR**

- **The department seminar is required for geophysics students (take one time during degree), but strongly recommended for geologists. Make this requirement equal across the board – require geology students to take this one semester during their degree program. Or make it recommended for everyone but not required – though we admit this will probably lead to less attendance.**

- Department seminar: “Talks are not tailored at all to student interests and it seems like write-ups are never read. Is there another way to ‘test’ us that will
actually be beneficial to us? Suggestion – find a wide array of speakers. Poll students about interesting topics.”

- Seminar seems to many students like a waste of time, particularly the write-ups. Could the class just be participation and attendance?
- **Seminar needs to be geared towards a general audience of geoscientists.**
- Many of the seminar talks feel like recycled talks that are only meant for a specific research group or conference.
- **We want a bigger mix of geology/geophysics, more balance every semester.** Having a single faculty member responsible for an entire semester leads to many/most/all of the talks being on too narrow a topic. A recent example provided by some students was the semester that Regine lead the seminar, almost all the talks were about ice. Other students took it in semesters where it was very geology focused and they wanted more geophysics. Could we have multiple faculty responsible for leading seminar in a given semester – or at least multiple people responsible for recruiting speakers? This should lead to better diversity of talks.
- One seminar that was raised as a good example of not too technical or recycled was one given by Vladimir and others about permafrost.

3. What aspects of the department (i.e. clubs, social gatherings, seminars, advising) should not be changed? Why?

- Annual feedback session (with pizza as an incentive) – we like that you listen to us and ask for feedback. This makes us feel included and know that our voices are heard.
- The new student field trip. This gives us a great opportunity to build a community with the other new students, and see a new part of AK.
- End of the year ice cream social, especially the TA and other awards. This makes us feel valued, like our hard work is recognized.
- IBA is great, keep this
- Holiday parties, other parties hosted at professor’s houses are greatly appreciated.
- Weekly pub hour during the school year.

4. What changes should the department make (besides program changes) to enhance your experience? Why?

- **We propose annual feedback forms that are filled out by students and advisors and read by the department head** (or other person if the department head is the advisor). Some of us remember receiving a list of advisor/student responsibilities when we started (but we think this isn’t given to all students). The form would list those responsibilities at the top and then the student has specific bullet points to look at and address if the advisor is doing their job. The advisor has the student responsibilities at the top and has the same opportunity to address the student. There would also
be a section on the form filled out by the advisor that lists the anticipated funding for the student (i.e. 1 summer of RA and 2 more semesters of TA-level support remain on the grant). This form is intended as a positive, safe, and productive way to get feedback from your advisor on how you are doing as a student and to give your advisor specific feedback on how they are doing as an advisor. The graduate school annual report forms do not meet this purpose – they are filled out about the student, and are mostly just a check box of yes the student is making satisfactory progress. We want to address advisor/student issues in a positive way and increase communication and feedback. Department head would receive both forms, and the student and advisor would receive each other's forms. Students can point out where they think the advisor needs to improve without making the advisor think the student is trying to quit or switch advisors, and advisors can point out where they think the student needs to improve without making the student think they are getting kicked out of grad school.

- **We propose an annual “best graduate advisor award”** based on the forms filled out above, chosen by the department head, awarded at the ice cream social event. Many of us are happy with our advisors, or mostly happy and just want a safe, structured opportunity to improve little things. We want to acknowledge the advisors who are doing great jobs.

- Each advisor needs to provide each student, at least yearly, with an estimate of what the remaining support they have for the student, in terms of # of semesters of TA or RA-level funding. Students are willing to write grants to help support themselves, but some people have been caught off guard when they thought there was advisor funding but really there wasn't.

- **We propose a weekly, graduate student brown-bag research talks seminar** that would be “required” for all department grad students. 2 student talks (about 15-20 minutes with 5-10 minutes for questions) per week. At the beginning of the year, all students sign up for talks. An appropriate number of spring semester slots are reserved for new students so no one gives a talk their first semester. (Spring start students could wait until the following school year to give a talk). Each student gives 1 talk per school year. Talks are at Reichardt one semester and at the GI the other, but both semesters have a mix of Reichardt-based and GI-based students. We discussed making this a credit-based class, but recognize the difficulties associated with that. So the course would be “required”/strongly encouraged. All students and faculty are invited to attend all talks, and we suggest graduate students attend at least 6 lunches per semester as a bare minimum. Since this is a department-wide seminar, it will be scheduled to avoid ALL geology/geophysics classes. We would like at least 1 faculty member present per lunch to assist with time management, cutting off questions, etc. We suggest that this position is shared between 3-4 geoscience professors per semester (mix of GI and Reichardt) so that it isn't too much of a burden. No time commitment outside of attendance is
requested from these faculty members. Why? Too much of a disconnect between GI-based and Reichardt-based geoscience grad students. We want to know about each other’s research, have a forum to practice speaking, and build our community.

- **Provide info on mental health services available at UAF to graduate students**, and publicize campus events like the puppy visits that happen on lower campus during finals time. Graduate school is stressful, we should know about ways to obtain help when we need it, and resources/events that are focused on mental health and relieving stress. Some students said that they (or their friends) had discussed how it can be hard to tell what things are imposter syndrome vs. student not doing their job vs. advisor not doing their job. How do you identify what the problem is and how to address it?

- **Shower access in Reichardt.** Many students have dry cabins. Other buildings have showers, we should have shower access in Reichardt.

- **Everyone needs to have a key to their office.** Some of the Reichardt TA’s were told that there were no more keys to their office, so the office is left unlocked all the time (except very occasionally, when someone locks it and then the students without keys are locked out). All the rooms with grad student cubicles should have locking doors that the grad students who work in there have key codes/key cards/keys for.

- **Are advisors getting enough support in their grant writing endeavors?** Students (specifically geology students) are worried that their advisors aren’t getting the support they need in terms of grant editing, writing successful grants etc. to obtain more funding. Geophysics students didn’t think this was a problem in the GI.

- **Software.** The university has software licenses, but many of these only extend to university-owned computers. Since many graduate students (especially in Reichardt) don’t have a work computer owned by UAF, and are using their own personal computer, obtaining the software is difficult. ArcGIS and other platform-specific software was mentioned as particularly difficult to obtain. Students need to have a work computer with the appropriate software. Very expensive specialty software could be on a shared computer, but the appropriate people all need to have access. More basic software (Arc, Matlab, Adobe Illustrator, etc.) should be installed on each person’s work computer as appropriate.

### 5. Other feedback

- There seem to be some serious issues with some advisors in the department. While the issues seem localized, many students who were happy with their advisor do want a more structured way to give and receive feedback as advisor/advisee in a safe way (without fear of retribution, bad recommendation letters, etc.). Some students said that they felt they could (and actively) do this already with their advisor, but most students do not feel they have a good framework to discuss improving the advisor/advisee working relationship.
We agree that the isolated, more serious advisor issues cannot be addressed through simple feedback forms – those students need to talk to Jessica Armstrong and find out who the appropriate person is to talk to. Some people want to switch advisors, but don’t know who to ask about the process or get advice from in a safe, confidential space.

Most of us think the form suggested above would address most of the issues, provided that the advisors and students respond to the feedback from each other. The bigger, isolated issues need to be addressed through a different forum, and we aren’t sure what that is. Advisors need to be held accountable.

- Some students are being caught by surprise with lack of funding by their advisor. All advisors need to be providing their students with realistic information on how many semesters of funding they have for the student, and advise them if that changes. We request some sort of formalized estimate provided by the advisor on the annual form of what funding is available for the student for the future.

- **Students, specifically the Reichardt-based students, need to have proper computer resources.** Students should have a computer at work that is capable of running the software they need (and access to the software they need). The GI recently started ensuring that each student has a work computer (almost always funded by the advisor). This computer could be from surplus, it doesn’t need to be new. But it does need to function for the research and data processing/analysis that the student is doing for their project. Students should not be required to provide their own computers.

- **We are very concerned about the GI/Reichardt divide in the department.** Different listserves means some students receive emails about job postings, scholarships, seminars, guest speakers, etc. that others don’t. We don’t think that the GI people know enough about what research is going on in Reichardt and vice versa. Department cohesion is poor. We propose the weekly grad student brown bag seminar and better listserve communication as a way to bridge this gap.

- **When there are visiting speakers, professors etc.** we want a change to meet with them. Either a group lunch or a few individual meetings times with the visitor. Also, better publicity when there is a visiting person coming to one of the groups. Why? Networking, and learning what career options are out there, what types of research people do outside of the UAF bubble.

- **We want a career board (physical board in Reichardt dedicated to job postings) and/or career section of the webpage that is kept up to date.** Also, better forwarding between the GI/Geoscience listserves so that more students hear about job opportunities. Can Barbara or Jessica be enrolled in the GI list serve and be sure to forward all the job listings that go out on all-gi or gi-students to the geology listserve as well? Same thing for scholarships, etc. All the geoscience graduate students should be on one list serv – the current one mixes undergrad and grad, and we don’t know that all the geo grad students are on it, particularly ones in the GI.