

## Challenges Recent Graduates Overcame to Complete Degree

Recent geoscience graduates were asked to describe their greatest challenge to completing their degree. The table highlights the most cited challenges by students, along with the percentage of graduates that faced the challenge and example comments from students. Thirteen percent of graduates either did not respond to the question or did not feel they faced a major obstacle while working towards their degree.

The majority of graduates had trouble with specific classes. The classes most often cited were Calculus I, Calculus II, and Physics; even students that completed a graduate degree mentioned difficulty in these courses as an undergraduate. However, a few students mentioned their capstone or thesis work as challenging. Financial issues were also mentioned frequently, and were coupled with other challenges, specifically related to balancing school and work and time management. Personal issues were often cited by students relation to motivation. Interestingly, 5 percent of graduates mentioned issues with the faculty in the department, such as disrespect, poor teaching skills, and lack of advisement. Other challenges cited by multiple graduates include choosing their major too late (4%), issues with advisors and/or committee (3%), and issues with the administration at the university level (3%).

These responses are enlightening and raise two major questions. What can be easily changed within departments to mitigate these obstacles? How many potential geoscience majors have been lost due to these obstacles?

Identified Challenges	%	Sample Comments: BA/BS Graduate	Sample Comments: MA/MS Graduate	Sample Comments: Phd Graduate
Trouble with a Specific Course	25%	"Having to take non-geology related coursework such as Calculus, Chemistry, and Physics. I feel I would have done better in those courses if they were offered with respect to geology."	"Lack of prior academic experience in geology as an earth science, so the learning curve on the fundamentals was steep. The engineering part was much easier for me."	"I was not used to do research, it was hard to see the big implications."
Financial Issues	15%	"Passing environmental geochemistry and maxing out my student loans so not being able to afford field camp."	"The amount of money required to complete an additional degree was a large consideration before deciding to pursue this degree. Student loan debt almost caused me not to enroll."	"Financial. I've worked full time out of school during the majority of my college career including the majority of my Ph.D."
Personal Issue/ Concern	15%	"Entering my junior year of college, I began to suffer from academic burn-out. I also wasn't sure where I wanted to go with my degree(s) and what kind of work I wanted to do. I felt like I wasn't as smart or capable of doing things as I'd used to be."	"Currently in my MS program, it is being away from family with a 6 year old, lack of enthusiasm about my thesis, and lack of motivation from my advisor so it's taking more time to write than it should."	"Frustration and isolation when research wasn't going well."
Time Management	12%	"The greatest obstacle to completing my degree was getting classes to meet my schedule. I am a married father of three that worked full time the first half of my college career. Balancing my home life with a family with school demands has been difficult."	"Balancing my life with school. As an adult that did not go straight to college, it was difficult to balance my life and my relationship with the rigors of pursuing an advanced degree."	"Personal time management"
Issues with Course Availability	7%	"I was frustrated by the limited course offerings, since our department is so small. I spent two semesters taking courses outside of the department. By the time senior year started, none of our course offerings thrilled me."	"The greatest obstacle was not having a wide variety of classes to pick from and only having 2 graduate faculty to teach those classes."	N/A
Balancing Employment and Studies	6%	"Time and Money. Geology labs and field classes are very time consuming and often require expensive equipment and time off work. For students that don't receive money from family, this is difficult to manage."	"The greatest obstacle was working through college while also trying to find internships, which are crucial in this field."	"I had a child and went to work full time to support my family. Working and finishing a graduate degree is really, really hard."
Issues with the Professoriate	5%	"Sometimes teacher was very disrespectful and insulting; made me feel very inadequate and unimportant."	"Sometimes feel lacking of good professor."	"Graduate level courses in seismology were poorly taught by reluctant faculty that under-valued providing the fundamentals in course material."

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