Q5: How could these courses have been made more worthwhile for you? (e.g. different content, teaching style, more focus given to current issues- please specify)

1 Differnt teaching stlye, actually any teaching style

2 In general, I'd say that the basic courses in each area should be taught by people with a real interest in TEACHING. The department should get over the pretense that teaching ability is well correlated with research, and let the guys who have shown that they don't teach well off the hook. They can run seminars, or topics classes, and others can teach the core classes.

3 Several courses that I took had a significant number of undergraduates (i.e., remote sensing, ecophysiology, advanced general geology). Remote sensing has already been expanded to include a more advanced course. Ecophysiology has been revamped. I think that if advanced general geology continues to be required of all students, then it should be modified (see next response).

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6 lamont classes tend to be watered down and "simplified"

7 For remote sensing, the problems lie with the instructors: they're not good teachers, and they didn't make the goals of the course clear. A lot of arm waving and struggling students. For tectonophysics seminar, the class should have been structured differently--most of the teaching was done by the students, not the instructors.

8

9 as above

10

11 GRAVITY - I SHOULD HAVE SKIPPED IT TO TAKE SOMETHING ELSE SEISMOLOGY - HAVE WELL DEFINED CURRICULUM TO FOLLOW. THIS IS ESSENTIAL OF INTRO COURSES

12 I have the impression that the professors in remote sensing are reluctant to work with the students at any time other than class time. This is a bit problematic since it requires the students to initiate any kind of "additional" help. It's working out fine so far, but I have some concern once the projects are in full swing.

13 It really comes down to the effort a teacher decides to put into the course in each of the four listed above.

14 More applications for remote sensing, maybe.

15 Courses could be taught by people who want to teach them. Profs are still using their overheads that they made in the 80's! Rind's atmospheric dynamics notes were a joke -- totally illegibile -- and I

still can't conceive of a grand scheme to Gordon's intro to PO notes. The old guys don't want to be teaching. So don't make them teach. Have people like Visbeck who want to teach do the classes. The Climate Change course should have been called "The History of Wally's Professional and Personal Contacts"

16 Better teaching, better organization, more concern for the lectures by the professor.

17 all of the above. id' put teaching style at the top of the list. lots of dees profs, even if they love the material, mumble to the blackboard (or projector) the whole time. when that is the case, the material has to be really gripping to hold one's interest. My advice: talk louder! Act interested in it!

18 Geophysics and Oceanography - in dire need of a more enthusiastic and energetic teaching approach, newer notes (e.g., Gordon's 20 year-old handwritten overheads are simply tiresome), and more focus on current issues/problems.

19 --see above. For Physical Oceanography clearer transparencies and handouts would have helped a lot. For Isotope Geology I, the theoretical backgroung should be covered faster and quickly move into applications.

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22 As mentioned above, most courses should have appeal and worth for the entire Lamont community. Save seminars for advanced topics. Focus should be on building skill sets: ei. math, chemistry, and physics needed for our fields.

23 1)change in teaching style and restructuring of the class material 2)include more physics (or science in general);

24 Geologic Mapping - choice of field trips, geared toward different interests, not nec. for mapping, but requiring some sort of independent work and write-up. Re. teaching style, we were told several times that this was the baby version of what real geology majors did (and that's why we should do it). Not very motivating. Inverse Theory - More practical application.

25 More geological and geodetic applications.

26 The only class I really didn't enjoy much, described above, could have been more useful if it was more broad. The History of Mammals sounds like a broad topic, but mostly the class focused on fossils and classification. Like I said before, not much use to most Lamonters I would think. I would have liked to see the class focus more on the impact of mammals in the environment.

27 too early to say

28 better presentation

29 probably needs to be recast as a full-year course with more substantive treatment of the topics.

30 --it would be useful if some celestial mechanics of the solar system were discussed in the paleoclimate curriculum. it wouldn't have to be much deeper than what Paul Olsen presented at the Earth Science colloquium early this fall, but it would definitely be enlightening in view of the discussion of Milankovitch's theory of astronomical climate change.

31 Well for one why not broaden the definition of being "deficient" to include computer science, statistics and biology? These are arguably as important to the reality of EES as is the current metric of "one college year, with high record, of chemistry, mathematics, and physics." Short of this at least allow students to nullify their deficiencies within the DEES curriculum. For example I would have benefited much more from taking "Principles of geophysics" and "Advanced general geology" than introductory physics and chemistry. It should be the students responsibility to judge their needs--to some extent anyway. For example I choose to learn basic physics on my own rather than waste precious money and time on those college classes. Certainly I would not have elected to take them in graduate school. If on the other hand I was not confident in my basic grasp of these subjects I would have gladly undertaken the introductory classes. I had no such choice however.

32 Not taking either. Colloquium is useful to pre-Masters but not necessarily post-Masters pre-orals folks.

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35 It seems that many of the courses are either too watered down (e.g.,Geophysical Theory) or too specialized (e.g., Tectonophysics I) to be useful. Although this might not be good for everyone, I would appreciate a "core curriculum" for solid earth sciences of, say, four courses to be taken in the first year--and taught every year--so that students could get the basics that they need soon to prepare them for research and more advanced classes. Also, more emphasis needs to be put on hands-on data acquisition and analysis, since this is what we will spend our most of our research time doing. For example,Scripps has such a program.

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38 No hope for Geologic mapping, although making it much shorter and free would help. The other two 'not so useful' courses were mainly useless to me because they werent relevant to my studies. So why register for these courses which are obviously not relevant? 1) DEES has a very large course requirement, 2) There aren't enough advanced, relevant courses to take, and 3) my advisor encouraged me to get my courses out of the way as soon as possible, making it even more likely that I'd end up taking something less than useful.

39 The courses could be made more worthwhile if they had been taught by professors who are interested in teaching. thats obviously not something you can do anything about, but it is important. Second, there are certain courses which should be required, and there are certain courses for which pre-requisites should be required. Learning by doing is the most effective, especially at the graduate level. Hence I think most courses should have a required project or field experience (if relevent).

Alternatively, a given project could satisfy several course requirements for a single semester. This would allow students to focus on doing a thorough job, and it would also encourage them to take related courses together. For instance, chemical oceanography and climate change, or petrology and isotope geology.

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41 --The coordination of introductory phys ocean courses with a lab class, such as Martin Visbeck is now teaching as a seminar, would improve them greatly. Equations in text and on overheads alone doesn't allow nearly as much understanding as hands-on visualization. Rick Fairbanks seems to be doing this quite successfully in his Paleoceanography class-- the concepts really come alive much more vividly in the lab. As Rick says, graduate courses really shouldn't just be reading and regurgitation, but opportunities for students to see (and participate in) how the subject is actually studied.

42 Sed. Geo. is solid. Atmospheric science is highly mathematical and would benefit from more emphasis on larger atmospheric science / climate issues such as global warming, el nino, etc. In other words, it focuses overmuch on mathematical models of microprocesses (at least so far -- I believe the end of the course will broaden.)

43 These are difficult questions to address, because I think that what makes a class useful or not is highly subjective, and depends also on how you define "useful." For example, two of the classes most useful to me were Sed. Facies and Sed. Basins, and least useful to me was Intro to Atmospheric Science, but those were useful or not because of their relevance to what I needed to know for my thesis. I'd imagine that an atmospheric science student would feel differently. Other classes (e.g., Paleoceanography) were not directly relevant to my thesis project, but were "useful" in that they provided background information that helped me think about the broader context of my thesis work.

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48 They can't.. I took them out of pure interest, and they were taught very well.

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50 1) do not attempt quantitative "basic" water chemistry during class- this can be assigned as problem sets or outside reading. Instead focus on the qualitative topics of Chem Ocn.
2) more examples during lecture using real data to illustrate applications for data analysis tools

51 Plate tectonics—definitely more focus given to current issues. A review of the historical contributions is interesting and gives perspective on the current state of research, but should not be the entire emphasis of the course.

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