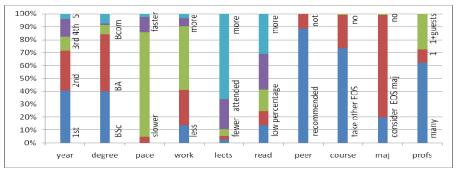
EOSC114 Spring 2008 End of Term Survey Results

A total of 203 students out of 320 registered in this term's single section of the course completed the EOT survey. Questions themselves are summarized on the next page.

The following bar graphs show demographics and preferences data and the bullets below summarize.



- Year: Over to 70 % of students are in first and second year.
- **Degree:** The B.Sc. / B.A. distribution is ~ 40% / 45%. Remaining students are in a wide range of programs. Implications for this B.Sc. / B.A. split are wide ranging.
- Work: The pace of learning was "average", amount of work was generally less than most courses, most attended the majority of lectures and over 60% of the students read more than half of the readings.
- **Subject:** 90% of the students would recommend the course to others, over 70% would consider taking another EOS course and 20% would consider a degree in EOS. NOTE: Only 2 students claimed to already be EOS students.
- **Professors:** 60% like multiple professors, 30% would prefer 1 instructor with guests (agrees with q1c).

Data from Likert scale preference questions are summarized in the full-page bar graph. Each bar shows 0-100% of respondents for one question. The five point scale was compressed into high / moderat / low, with N.A. indicating "not applicable" responses. Pertinent comments follow:

Q1d: Fragile earth is liked by 52% (neutral are 27%). But is it effective use of time?

Q1e: Clickers are liked (neutral) by ~48% (~29%), but ~20% do NOT like them, and '08 is the same as '07.

Q1f,g,h,i: In-class <u>activities</u> were generally less well appreciated, implying students want to be passive. However, this is an example of a mismatch between students' likes and research-proven pedagogy, and/or ineffective implementation of pedagogic strategies.

Q2a: Review sessions not attended by 30%, but almost none of those who did attend disliked them.

Q2b: Grading (tests) much better liked in Spring 08 than in Fall 07; see right-most pair of bars in the figure below.

Q2c,d: Deciding what to study, and correspondence between tests and content is "approved" by only 50%.

Q3: <u>Text</u> is disliked or neutral by 70%, <u>notes</u> on web are LIKED or neutral by 90%, <u>optional package</u> is LIKED by only 40%. Pattern is not different in Fall and Spring terms.

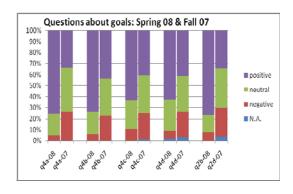
Q4: <u>Learning goals</u>, relations between modules & logistics are much clearer in spring 08 compared to fall 07; **see figure right**.

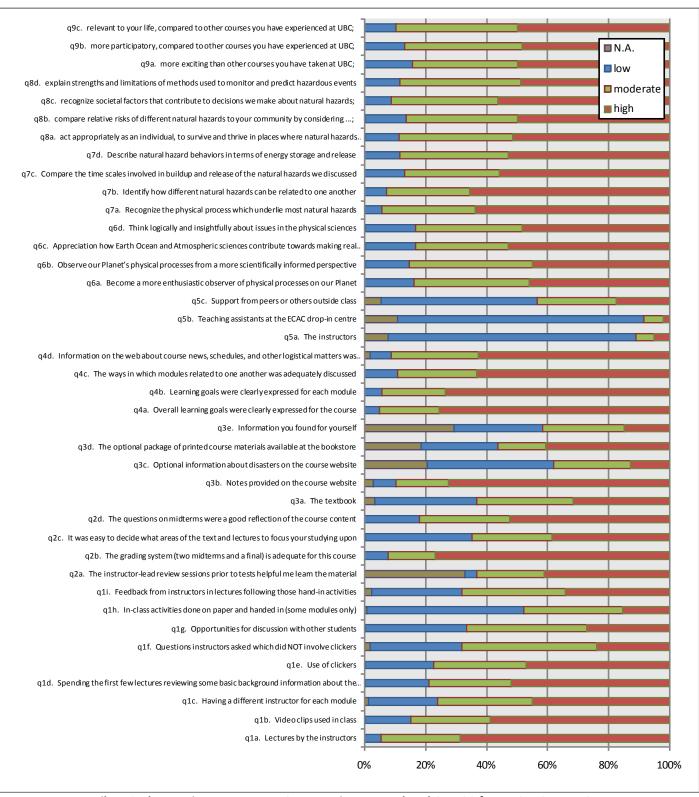
Q5: Individual support is rarely or never used or experienced.

Q6: <u>Improvement</u> in all 4 course level goals is considered to be "Somewhat, a lot, or a great deal" by over 80%.

Q7, Q8: These are opinions about improvements in general skills or understanding – over 80% respond positively.

Q9: comparing exciting, relevant and participatory to other classes: all have about 50% "better" or "the best". Roughly 10% feel it was "worse" in these three questions.





Likert Scale question responses. NOTE questions are ordered Q1 - Q9 from BOTTOM to TOP.

Likert Scale Question list:

These are complete questions; in the full page figure above, some questions are abbreviated.

1. How much did these aspects of class time help your learning?

- a. Lectures by the instructors.
- b. Video clips used in class.
- c. Having a different instructor for each module.
- d. Spending the first few lectures reviewing some basic background information about the sciences.
- e. Use of clickers.
- f. Questions instructors asked which did NOT involve clickers.
- g. Opportunities for discussion with other students.
- h. In-class activities done on paper and handed in.
- i. Feedback from instructors in lectures following those hand-in activities.

2. Do you agree or disagree with the following aspects of testing and grading?

- a. The instructor-lead review sessions prior to tests helpful me learn the material.
- b. The grading system (2 midterms + final) is adequate for this course.
- c. It was easy to decide what areas of the text and lectures to focus your studying upon.
- d. The questions on midterms were a good reflection of the course content.

3. How much did resources help your learning?

- a. The textbook.
- b. Notes provided on the course website.
- c. Optional information about disasters on the course website.
- d. The optional package of printed course materials available at the bookstore.
- e. Information you found for yourself.

4. Do you agree or disagree with the following statements about information given to you?

- a. Overall learning goals were clearly expressed for the course.
- b. Learning goals were clearly expressed for each module.
- c. The ways in which modules related to one another was adequately discussed.
- d. Information on the web about course news, schedules, and other logistical matters was useful.

5. How often did you get useful individual help from these people?

- a. The instructors.
- b. Teaching assistants at the ECAC drop-in centre.
- c. Support from peers or others outside class.

6. To what extent has this course helped you to \dots

- a. Become a more enthusiastic observer of physical processes on our Planet.
- b. Observe our Planet's physical processes from a more scientifically informed perspective.
- c. Appreciation how Earth Ocean and Atmospheric sciences contribute towards making real world decisions.
- $\mbox{\it d.}$ Think logically and insightfully about issues in the physical sciences.

7. How much has this course helped you improve your ability to ...

a. Recognize the physical process which underlie most natural hazards.

- b. Identify how different natural hazards can be related to one another.
- c. Compare the time scales involved in buildup and release of the natural hazards we discussed.
- d. Describe natural hazard behaviors in terms of energy storage and release.

8. How much has this course helped you learn how to ...

- a. act appropriately as an individual, to survive and thrive in places where natural hazards may be a threat.
- compare relative risks of different natural hazards to your community by considering (i) return rates, (ii) severity of effects and (iii) costs of mitigation options;
- c. recognize societal factors that contribute to decisions we make about natural hazards;
- d. explain strengths and limitations of methods used to monitor and predict hazardous events.

9. To what extent is the current course ...

- a. more exciting than other courses you have taken at UBC;
- b. more participatory, compared to other courses you have experienced at UBC;
- c. relevant to your life, compared to other courses you have experienced at UBC;

10. Additional Questions:

1. In what year are you at university?

1st yr 2nd yr 3rd yr 4th yr 5th yr or more Grad / other

2. In what degree program are you?

B.Sc. B.A. B.Com. Unclassifed/Exchange Other

3. The pace at which we worked in this course was...

much too slow / slow / OK / fast / much too slow

4. Compared to other courses you took this term, the amount of work you put into this course was...

much less a little less similar a little more much more

5. The percentage of lectures you attended was roughly. 0 - 20 % 21 - 40 % 41 - 60 % 61 - 80 % 81 - 100 %

- 6. The percentage of the assigned readings you read was roughly.
- 7. Would you recommend this course to fellow students? Yes/No
- 8. Has this course increased your interest in the disciplines of Earth, Ocean or Atmospheric sciences? Yes/no/already EOS
- 9. Has this course increased the likelihood that you will major in Earth, Ocean or Atmospheric sciences? Yes/no/already EOS

10. I believe students would gain the most from this course if... $% \label{eq:course} % A = \{ (x,y) \in \mathbb{R}^{n} \mid (x,y) \in \mathbb{R}^{n} : (x,y) \in \mathbb{R}$

A different instructor teaches each module.

One instructor teaches the whole course.

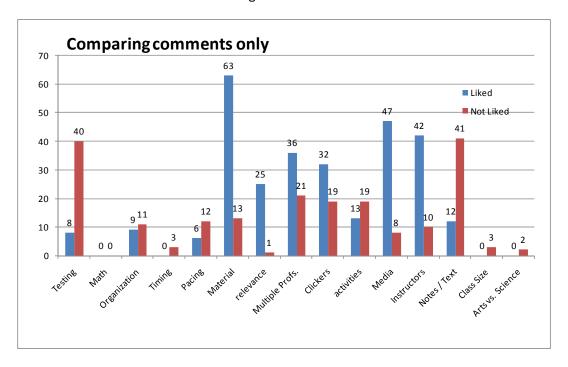
One instructor teaches most of the course, but brings in periodic guest lecturers on specific topic

Open ended questions:

Three open ended questions were asked:

- 11. What are one or two things you really like about this course?
- 12. What are one or two things about this course that you would improve if you could? (For example, based upon another course you have found valuable.)
- 13. Any other comments ...

The first two make it easy to compare positive and negative comments about aspects students raise. The graph below summarizes the number of comments in several categories:



Details about how to summarize comments have yet to be worked out.