

BIO341 2012 Comments on course

The first hour of the last session became an overall discussion of the course in specific and university education in general, after I began by asking if the required reading was good for the course. Here is a summary of my notes from the discussion (my notes were incomplete, more or less just key words or concepts). Everyone participated, including a young woman who stutters who contributed three times (she otherwise did not participate more than a couple of times).

There was a general (eager!) discussion about why students are hesitant to ask and answer questions during course discussions, which are in English. I did not write down any notes during this discussion, but basically, students were afraid (1) that they would not be able to remember English words while talking; (2) that they would say something stupid [but one student pointed out that she initially was afraid, but that I was never critical about student answers and that that helped...] How to get students over this 'hump'? – see comments about icebreaking, below.

GENERAL COMMENTS ABOUT THE COURSE

Diversity [of information sources, of activities] is good, good to have term project... Takes time to understand what is required in the course [but I do specify this in the first lecture, may be that the student wasn't there!]

ABOUT THE ARTICLES

Good having specific articles... shorter articles are good... language in the articles is difficult, unknown words/concepts etc, difficult-to-understand writing... learn more from reading articles, forces you to extract the important information... articles complement the book... The Parmesan review paper is very long, repetitive.

ABOUT THE BOOK

Book is good introduction but articles go deeper into specific topics... easy to read... book good for focusing a discussion... book not deep enough [= perhaps I could use larger chapters, such as the Adams book]

ABOUT THE PRESENTATIONS

Good for going into depth of a topic, at least for the presenter!

ABOUT THE TERM PROJECT/PAPER

For many, this is the first (long) term paper, so could use more guidance in how to prepare it [I see the point; I could make available previous papers? Could enforce that they are supposed to talk to me at least once about the term project.]

ABOUT DISCUSSIONS IN CLASS

To get more participation in discussions: could have more time in some sessions by restricting lectures [short presentations by me] to just a few sessions? Often, there was relatively little time left (after student presentations and mine if I held a presentation) for discussion by students. [I am not sure about this, need to think about it.] ...

Get students talking early in the course—need a good icebreaker! (Presentations are an ice-breaker, but they don't come very early in the course as it is now structured) ... [my suggestion: have students come with answer to a question, knowing that I will pick students at random to answer]... A student told about a philosophy seminar in which the participants were given a short article to read during the seminar, followed by a discussion of it...

Could assign students before meeting, to take a given position (for or against X)...

Easy to discuss articles (rather than chapters) because they are more specific (case studies); with general articles/chapters, hard to know what is important [but note, I give them notes for each chapter, with specific questions to think about for the text or figures or tables...]; the book does present the general context.

Sometimes I seem to be trying to lead them in a specific direction, but they are not sure where [this is true, but it usually works, too!]

Summary of evaluations BIO341 NOMA 2012

BIO341, Current Topics in Biodiversity, is a 5 credit course (not a full, 10 ECU course!) which meets in the fall. It is only open to graduate students (MSc, PhD students). Because we first learned after the semester started that there were NOMA students who had planned on taking BIO341, we decided to offer a special session just for them. This was scheduled to start in a period when another course they were taking, BIO300, had a pause, at a time where my regular session was almost finished. Since the students need to have time to write a term paper (semester project), we decided to schedule it as an intensive course with the 8 class meetings taking place over two weeks; this gave the students one month after the last meeting before the semester project is due.

The course format included one double lecture introducing the course and seven meetings with at least some discussion (the last meeting was completely discussion, of readings on climate change and biodiversity). Students were asked to read ahead of time the relevant required reading (a book chapter plus an article, or just articles). On five days there was a half-hour student presentation, and I presented case studies or supplementary material during most of the seven as well. The only full, formal lecture was the first day. Given the non-standard format of this seminar-like course, especially for students coming from what I presume is much more traditional teaching practice, I wanted to know more about how the students felt it had succeeded towards the goal of teaching them about biodiversity, and I devised a short evaluation form.

The nine students who took the course were given 20 min at the end of the last meeting to fill in the evaluation; they were asked (1) about the required readings (five chapters from the book, and supplementary articles), (2) about the overall course format (which is a little lecturing by me, but mainly presentations by the students on topics assigned by me and class discussions of the readings and presentations), and (3) if they had any further comments on the course. The evaluation is necessarily only about the eight double-hours during which the course met. My expectation is that much of their learning actually comes from doing the semester project.

(1) REQUIRED READING. (a) Generally, did you like the book? Why or why not? Strengths and weaknesses of the book?

The students unanimously felt that the book was easy to understand and a good source for the basic facts about biodiversity. In particular, several students pointed out that because of the sentence structure and writing style, the book is easy to understand for students with English as a foreign language. Two students would have liked more depth and detail, and two students would have liked more illustrations.

(b) Same questions, for the articles* which were assigned.

Feelings about the articles were mixed (students felt some were difficult to understand), but there was a consensus that they were useful and

complemented the chapters well, especially when they could be discussed in class. One student would liked to have seen more primary research articles.

*These ranged from short popular science articles to large, advanced review articles, so they were quite heterogeneous in level of difficulty. There was at least one article for six of the eight meetings.

(2) COURSE FORMAT. This course is a mixture of lectures, student presentations, and discussion. Do you feel that you learned well, from this mixture? Do you think the discussion format was useful to you? Would you have preferred another course format?

All students liked the format, and liked the discussions. Those mentioning them also thought the presentations were good, both for learning more about specific examples and for presenting something about Nepal in the context of the specific topic. (I often asked specifically that students relate their assigned topic to Nepal.) With regard to the discussions, their comments suggest that students appreciated the opportunity to actively discuss topics especially where they were unsure or where there was controversy. A few quotes:

“Of course, the interaction with the prof. helped us a lot to understand the subject matter.”

“...a good format for fine learning by interaction.”

“Yes, reading this course was not monotonous because of the mixture of different type of works like lecture, presentation and discussion...it was fruitful for me and I learned a lot...”

“Yes, this new form of learning inspired me a lot. We interact as colleagues and not like teachers and students.”

“The discussion brought up and created new ideas.”

“This type format is very good but lecture days are very short. I learned most of things from discussion as well as provide opportunity to put our own confusion [to rest].”

“The discussion format was appropriate one because we got to express our ideas and news. And for me new things were learned.”

Two students wished there had been more lectures (that the course was longer). One student suggested having a field component to the course (I have often wondered if there was an easy way to do this...). One suggested that the professor provide a brief summary of the topic before each meeting (a good idea!).

3. Do you have any other comments on the course?

The comments here were quite diverse. Many praised the course, but many wished that it was longer (“increase the time period of the course so that more could be learned”), or could have been run over longer time (which would make it easier to prepare for each meeting). The following quote suggests that at least some students felt the teaching was good but the level of the course was a bit too basic (at least, the project provides an opportunity to go much deeper):

“There were little new things on the course but many were already known. But the way we interact was fabulous. I love the way Lawrence taught. He was awesome.” I think all felt was helpful to their studies (“This course seemed to be very helpful for further thesis and term paper work.”). One suggested using videos in class (of case studies, or documentaries), followed by discussion.

MY COMMENTS

The two-week, intensive format (four days each week) was not a deliberate choice, but rather a way to shoe-horn this session into the students' schedules in a way which minimized overlap with other courses (starting when BIO300 was paused) and ending soon enough that they had enough time to do a term project after having had the formal instruction. Such a compact course at UoB can only succeed if there is minimal overlap with other course activities (field work, irregularly scheduled lab sessions, exams). There was one session (meeting 7) where only 5 of 9 students attended, because of an exam in a geography class, but otherwise I don't think there was more than one absence on any given day and, in fact, at most meetings all students attended. It might be better to run a semi-intensive course, over four weeks, but that was not an option in this instance. It should be mentioned that absences are impossible to avoid even in the normal format, which is one meeting per week. The collisions which I can find out about ahead of time (all-day field trips, for example) I can try to plan around but it is not always possible. Every year, there seems to be at least one meeting where only half of the students can attend, and many meeting have less than full attendance.

This year was the best group of NOMA students I have had, in my course. Eight of nine students contributed regularly (and quite intelligently) to discussions (the ninth is shy), and all the presentations were very good. Note that the students' command of English (as you can see from the quotes) is not nearly at the level of that of Norwegians; nonetheless, this did not hinder them at all from participating eagerly in discussions: commonly, I would ask a question, and four or five students would start answering simultaneously!

I find it interesting that (for the first time that I can remember) students are complaining that a course is too short—that they want a longer course, to learn more! A nice thing for a teacher to hear! I developed the course in response to an expressed need for smaller courses which graduate students could cobble together. For awhile, we had 5 credit courses in Biodiversity, Population Genetics, Phylogeography, Biogeography, Alpine Ecology, and Winter Ecology, as offerings in non-marine ecology and evolutionary biology. Of these, only Biodiversity remains (I understand that that Alpine Ecology and Winter Ecology are being discontinued now that Torstein is retiring). The Biodiversity course could be developed into a larger course (perhaps combined with topics from conservation biology or with more quantitative approaches, perhaps with a field component), depending on the willingness of other faculty to collaborate and on the needs of the institute (5- vs 10-credit course offerings).