

Course analysis GEON09

Global Environmental Change from a Geological Perspective

Spring term 2022

General:

The course was taught for the first time during the spring term of 2022. Therefore, this course analysis is especially important for our further development of the course. Twelve students completed the course, of which eight responded to the course evaluation (appended below). The course, which replaced GEON07 Quaternary Climate and Glaciation History, was given more generous entry requirements, allowing students from a broad range of natural science disciplines to attend. Although this was challenging to some extent regarding the level of some of the learning activities, the variety of backgrounds of the students certainly contributed to fruitful discussions and a favourable setting for addressing the learning objectives, particularly the ones focussing on sustainability issues. The evaluation results are generally favourable, and it seems that the learning outcomes have been well fulfilled to a large extent. In the following, some specific comments and concerns brought forward by the respondents are summarised, and modifications intended to generate improved learning during next year's course are outlined.

Summarised comments and potential improvements:

1. At least one respondent complained about repetition of content from previous courses. I was aware of this risk, which was addressed explicitly in my project report within a pedagogical course, focussing on the development of GEON09. The report, entitled Subject Knowledge versus Broadening the Scope, addressed among other things the challenges of providing subject progression to geology students while also introducing new concepts to students from other disciplines. Interestingly, one respondent (probably another) was disappointed about the insufficient coverage of past glaciations and climate, which was the focus of GEON07. But given that nine of the 12 students had taken at least one MSc. course in Quaternary geology prior to this one, I consider this as a rather favourable outcome. Some repetition of key concepts, e.g., Global climate evolution and climate forcing mechanisms, is unavoidable for some students in the diverse groups that are likely to characterize this course also during coming years.
2. The general structure of the course and the balance of some of its components were the subject of some comments. ***We will try to expand the content of learning activities focussed on pre-Quaternary climatic and environmental changes next year. We will also try to focus more on climate modelling and numerical data handling.*** Unfortunately, the latter aspects were given insufficient attention this year due to extended leave of absence of one of the teachers.
3. At least one respondent would have liked us to tie the learning activities more systematically to specific learning objectives in the course syllabus, thereby providing increased motivation. It is interesting that this key aspect of constructive alignment is brought up, a phenomenon that likely applies to all our courses. ***We will pay attention to this by bringing up the course syllabus more frequently in our teaching, perhaps even***

by labelling specific learning activities in the schedule with numbers relating to the learning objectives.

4. The seminars were appreciated but considered as too closely scheduled by some. *We will try to take this into account by offering more time for reading and preparations in next year's schedule.*
5. At least one comment addressed confusion regarding reading instructions. *While the main textbook (Lowe & Walker, 2015) will be kept as a general methods reference, we will make a thorough revision of the more subject-specific literature and try to provide more detailed reading instructions.*
6. The learning platform Canvas seems to have worked generally well but one respondent suggested some potential improvements. *We will try to structure the Canvas content into additional categories next year, thereby facilitating searching for and access to specific content.*
7. Although the part about geosystem services was generally appreciated, some comments reveal a certain degree of confusion and lack of details regarding the current rate and degree of resource utilization and other aspects of human impact on the Earth system. *We will try to revise the literature and seminar instructions that relate to geosystem services so that the concept is better clarified, and more examples are provided.*
8. The written exam was considered as insufficiently challenging and based on partly irrelevant questions by some. This was to some extent caused by lack of time and insufficient planning during this first year. *The format of the written exam will be retained but a shortening of the exam time to two days will be considered, and we will make a thorough revision of the questions next year.*
9. The fieldtrip generated several comments, although it was generally highly appreciated. Some thought it was too long and with too much focus on mountain ecosystems, allowing insufficient time for other environmental processes. *Based on this year's experiences, we will try to broaden the subject coverage of the fieldtrip slightly while still maintaining some time for individual project work in case of bad weather in the mountains.*
10. The individual written report was given generally favourable ratings but its inclusion of analytical work after the fieldtrip generated some comments. *We will aim at scheduling the fieldtrip slightly earlier next year, allowing a little more time for laboratory work afterwards at the expense of the preparation time beforehand. We will also consider introducing student peer review of report drafts at some stage. The list of project suggestions will be updated and better adjusted to the fieldtrip.*
11. Some confusion was caused by a question about "lecture handouts" in the course evaluation. This was a mistake based on an old version of the questionnaire and I meant "lecture documentation" (we usually do not provide lecture handouts). *I will make a thorough revision of the course evaluation questionnaire next year.*



Dan Hammarlund
Course coordinator



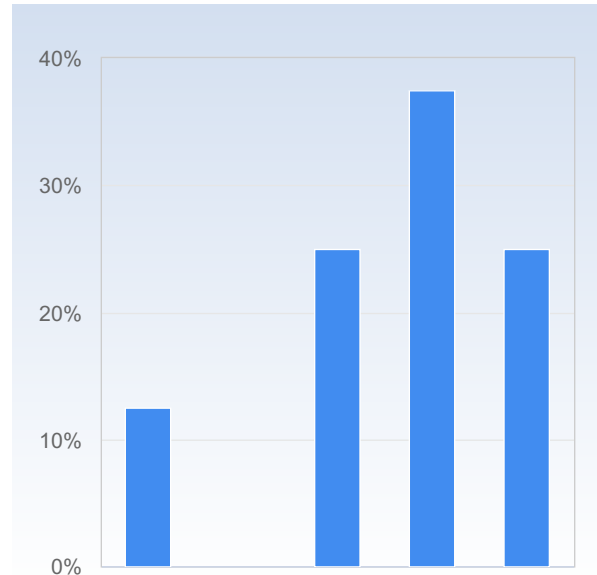
Simon Eng
Student representative

Course evaluation GEON09 2022

Respondents: 13
 Answer Count: 8
 Answer Frequency: 61,54 %

GENERAL: Did the course fulfil your expectations?

GENERAL: Did the course fulfil your expectations?	Number of responses
	1 (12,5%)
	0 (0,0%)
	2 (25,0%)
	3 (37,5%)
	2 (25,0%)
Total	8 (100,0%)



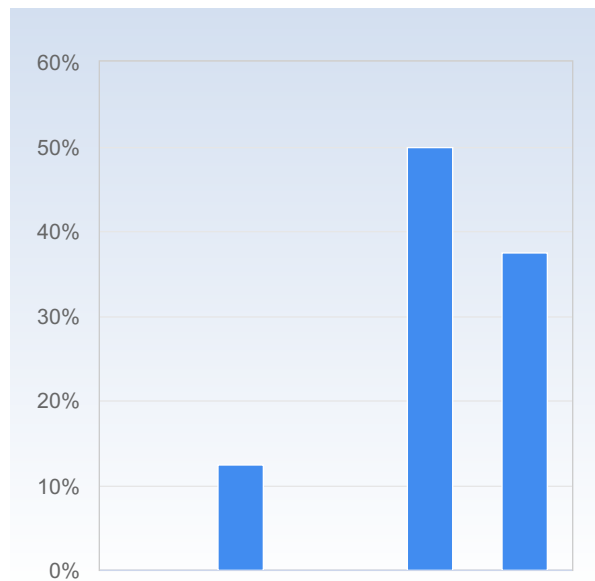
	Mean	Standard Deviation
GENERAL: Did the course fulfil your expectations?	3,6	1,3

Comment

- I really feel like the course delivered on my expectations.
- I expected some more new knowledge to me. The lecture about the past glaciations throughout the Earth's history was really good.
- No.
- Yes i found it tied in nicely with past quaternary courses
- For the most part yes, I did think that the course would have more elements of present anthropogenic effects on the Earth, like more about present day mining, conversion of land usage, maybe some rates of human consumption of geological supplies and such.
- As the course is still pretty new, it needs some ironing out but if was a good refresher from the conventional bedrock geology courses.
- Too much repetition.

GENERAL: Did the course increase your interest in the subject?

GENERAL: Did the course increase your interest in the subject?	Number of responses
	0 (0,0%)
	1 (12,5%)
	0 (0,0%)
	4 (50,0%)
	3 (37,5%)
Total	8 (100,0%)



	Mean	Standard Deviation
GENERAL: Did the course increase your interest in the subject?	4,1	1,0

Comment

Not really

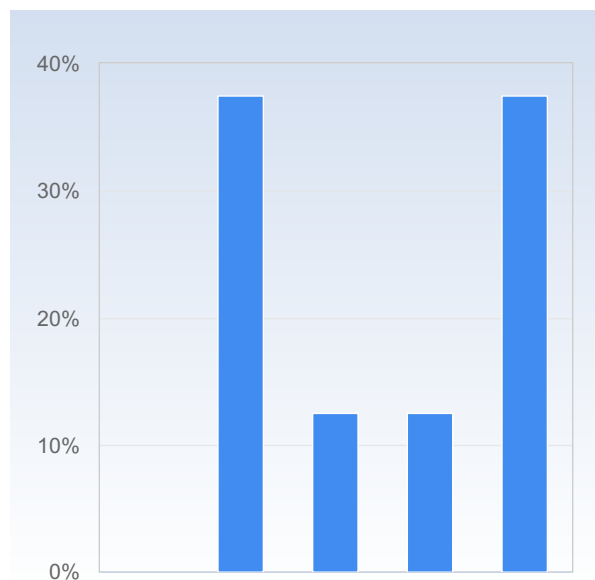
Would find it more beneficial to do some more insight into how the prequaternary environments were in terms of difference

Yes. I am actually considering a master thesis in quaternary geology.

A tiny bit - we explored some parts which have not been covered in previous courses, such as the IPCC, and geosystem services.

GENERAL: Did the course give you valuable knowledge and skills for your continued studies and working life.

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	0 (0,0%)
	3 (37,5%)
	1 (12,5%)
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	3 (37,5%)
Total	8 (100,0%)



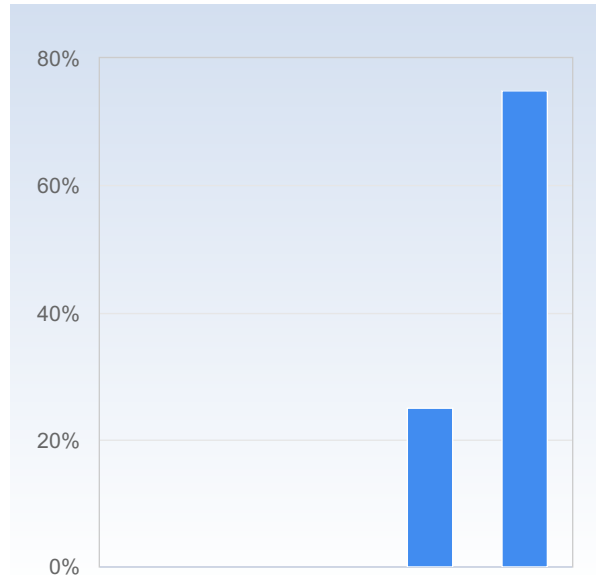
	Mean	Standard Deviation
GENERAL: Did the course give you valuable knowledge and skills for your continued studies and working life.	3,5	1,4

Comment

Thanks to the field project I managed to gain skills that helped to get me into an internship.
 Well, of course practicing writing, and reading scientific papers is always good, however I dont think I learned anything specific.
 I think it touched on many important bases and helped me choose my rthesis direction
 It's hard to tell
 I personally do not plan on pursuing a career in the environmental sector so honestly, no. It might come in handy if I plan on doing a Ph.D but that is a far fetched idea.
 Hard to see the application of what we learned - maybe within academia but not much more.

GENERAL: Was your basic knowledge of the subject sufficient for the course?

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	0 (0,0%)
	0 (0,0%)
	0 (0,0%)
	2 (25,0%)
	6 (75,0%)
Total	8 (100,0%)



	Mean	Standard Deviation
GENERAL: Was your basic knowledge of the subject sufficient for the course?	4,8	0,5

Comment

Yes, but I had taken the recommended master courses before, so my opinion is biased.
 100%. Especially since all content from the lectures has already been covered by other courses.
 I had done the other quaternary which helped
 Yes, having a BS in geology was definitely enough.
 Yes, since I have a geology major in my bachelors and masters.

GENERAL: Overall positive criticism:

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There are a lot of things to see and learn.
 Excellent field work and seminars. The final project was fun too!
 I liked how the course embraced all of the methods to study the environmental change and attempted to give us a practical skill in many different scientific pathways. I loved the independency of the field project and the excursion in general! Field practice is always the most precious learning component, because it teaches us a lot in a short time and the knowledge is more long-lasting. The seminars were also a nice part of the course.
 Fun excursion!
 I rthink the fieldtrips were beneficial and that the course tied off nicely. Maybe some more trips sround skåne could help.
 I liked that we had both an exam and a report as a basis for evaluation. And the many presentations we did also created opportunities to make us more used to present regardless of how used to present one was before the coarse.
 The teachers were very cooperative and readily available. The course was structured in such a way that it kept my interest engaged. Seminars on paper reviews were really nice as they kept us up to date with the research trends as well as helped us form our own opinions on the research as well. The seminars were informal and discussion based which encouraged learning. I thoroughly enjoyed the field trips as well because they gave a practical approach to our theoretical learning and presented an opportunity to practically undertake the research we had studied about (lake sediment cores, peat cores, peatland restoration, dendrochronology etc).
 The field trip was nice. Some interesting subjects covered such as geosystem services, solar influences, etc.

GENERAL: Overall negative criticism:

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However, limited of time makes we learn a bit of everything.

Some lectures felt out of place.

There was a bit of a lack of structure in the content delivered, so that no clear end-message was present at the end of the lecture period. Also, many topics for the field project could be less theoretical and more integrated into the excursion. I guess that's because the course is new and experimental, though.

The purpose of the course is very unclear. Every other course pretty much covers environmental change from a geological perspective already, and I would rather learn about past glaciations and climate.

Also the workload too low.

The course seems rushed when discussing previous periods i.e. prequaternary. More time improved the topic relevance.

I would have preferred to have the seminars a bit further apart, as it was felt very stressful and hectic. A bit more time between the seminars would allow one to better absorb the material instead of just doing the task/presentations with a limited amount of information sinking in.

Some lectures were rushed through and some were a little too vast for the scope of the course. Two seminars in the same week was a bit no. The field week should have been a little more concise as well.

Too many seminars. No data in the last report which is sad in regard to the time we had for it.

GENERAL: What would you suggest us to change?

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I know it is first time of this course so maybe the time management for field excursion and lab works.

Making the thread connecting the different lectures more clear (climate/anthropogenic processes/geoservices)

The lab work was not spread equally, so arranging the topics in such a way that everyone knows their purpose in the lab.

More in-depth lectures that make me feel like I am taking a masters course and not a first-year-of-bachelors course. Or just more seminars so we can learn stuff that way.

More excursions along with a refining of what to do in Dalarna.

I would put the lectures closer to each other. Like that lecture we had right before the big excursion, I would have preferred to have that one right after the rest of the lectures. Now it just felt like it came out of nowhere when we were busy preparing the reports.

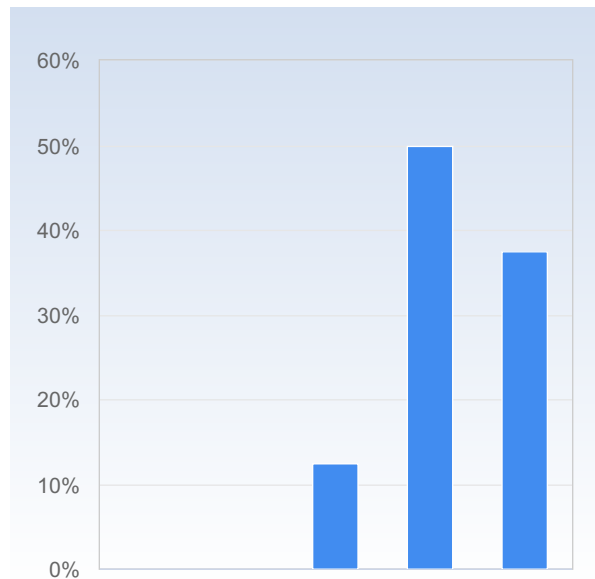
Make the course more concise - some lectures seemed a little too expansive. The fieldwork should be a little more concise too. Some topics should have more time allocated to them e.g. climate modeling.

Fewer seminars and more research methodology. Data handling and application would have been nice to have learned.

GENERAL: Was the introductory information correct and satisfactory (aims, structure, content etc.)?

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	Number of responses
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Total	8 (100,0%)



	Mean	Standard Deviation
GENERAL: Was the introductory information correct and satisfactory (aims, structure, content etc.)?	4,2	0,7

Comment

No clue, I've forgotten all about that. It would be nice to have the aims and such be a more active part of the course. Maybe to have it included at the end of lectures just to give the students a better grasp of where we are regarding the goals. That way it would be easier to remember the aims/goals and you would be more aware of what goal you're heading towards. Now it mostly feels like these goals are presented at the beginning of a course and then not brought up again until the course evaluation, at which point most of them (if not all) have been forgotten.

GENERAL: I have attained all the learning outcomes (please comment below if needed):

Following active participation in the course, the student shall:

=> account for the fundamental features of and causes behind Earth's long-term climate and glaciation development, with an emphasis on changes during the Cenozoic (the last 66 million years)

=> account for the glaciation dynamics during the Quaternary (the last 2.6 million years) and its consequences in the form of environmental changes, with an emphasis on Scandinavia during the last glacial cycle

=> describe the most important geological resources (geosystem services) for humanity, with an emphasis on previously glaciated regions, explain their formation and development in a geological perspective, and account for how they are influenced by human activity and today's global environmental changes

=> prepare a basic field study of subject-relevant environmental changes in a selected region based on literature and existing monitoring series, and select and adapt field and laboratory methods to the assignment

=> independently and in a reflecting way acquire, analyse and interpret field-based data related to the ongoing climate change in the perspective of past glacial dynamics and environmental changes since the last deglaciation

=> draw conclusions about local and regional glaciation dynamics based on Quaternary stratigraphies, sediments and landforms

=> apply fundamental quantitative methods to achieve advanced understanding of the most important processes that lead to changes in climate and

related
environmental responses

=> critically assess and discuss scientific primary publications within the subject area,
and based on such material summarise a given current research issue

=> communicate scientifically in writing and speaking in English and in a balanced way utilize scientific terminology associated with the topic

=> evaluate ongoing global and regional environmental and climatic changes as well as future scenarios in the perspective of natural variations during geological time

=> identify geosystem services in glacially influenced landscapes and critically discuss societal adaptations in relation to past, ongoing and future changes in climate and glaciation patterns

=> evaluate the dependency and use of geosystem services in modern society in relation to the limitations of the planet

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=> apply fundamental quantitative methods to achieve advanced understanding of the most important processes that lead to changes in climate and related environmental responses

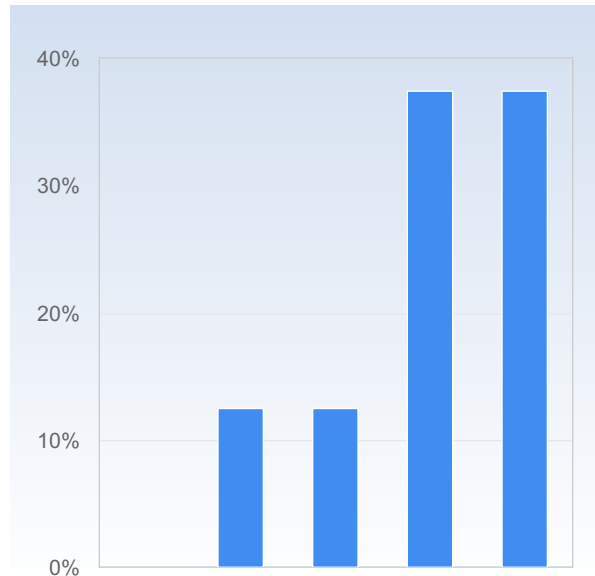
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	3 (37,5%)
	3 (37,5%)
Total	8 (100,0%)

	Mean	Standard Deviation
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Comment

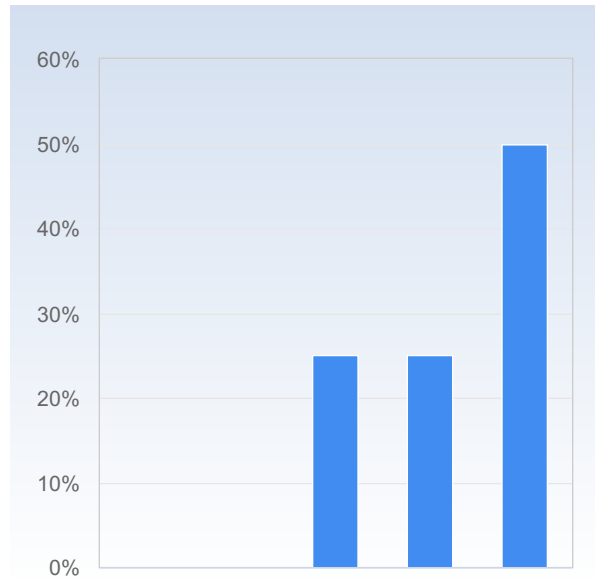
In my opinion, balancing the time slot is required because for example some topics offer a lot of information within only 2 hours but some others got 3 hours.

I feel like I still have just a vague grasp on climate change during the Cenozoic and what forces have 'created' these changes. also a bit vague about geosystem services still.

"apply fundamental quantitative methods to achieve an advanced understanding of the most important processes that lead to changes in climate" - This is what the course should focus on more.

GENERAL: Was there clear coherence between learning outcomes, learning activities and examination.

GENERAL: Was there clear coherence between learning outcomes, learning activities and examination.	Number of responses
	0 (0,0%)
	0 (0,0%)
	2 (25,0%)
	2 (25,0%)
	4 (50,0%)
Total	8 (100,0%)



	Mean	Standard Deviation
GENERAL: Was there clear coherence between learning outcomes, learning activities and examination.	4,2	0,9

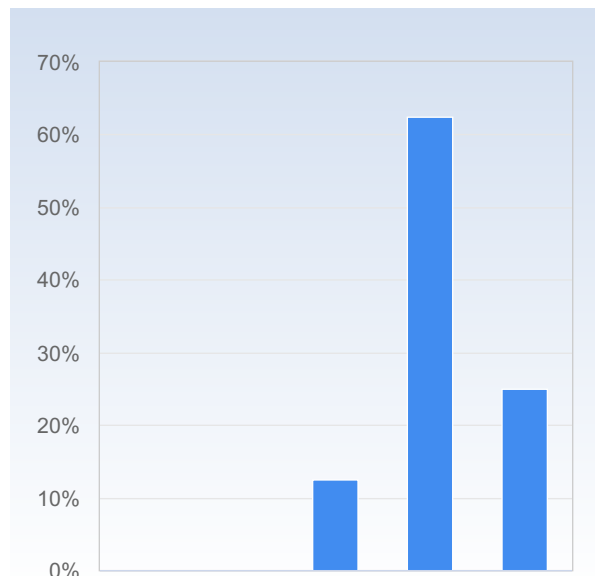
Comment

The first part of the home exam (Dans questions) felt unrelated to the lectures and they were quite confusing. Its also been quite unclear what we were supposed to read.

I think so

GENERAL: Were the teachers engaged and helpful, and did they provide relevant feedback during the course when suggestions and ideas were brought forward?

GENERAL: Were the teachers engaged and helpful, and did they provide relevant feedback during the course when suggestions and ideas were brought forward?	Number of responses
	0 (0,0%)
	0 (0,0%)
	1 (12,5%)
	5 (62,5%)
	2 (25,0%)
Total	8 (100,0%)



	Mean	Standard Deviation
GENERAL: Were the teachers engaged and helpful, and did they provide relevant feedback during the course when suggestions and ideas were brought forward?	4,1	0,6

Comment

Some lecturers seemed quite uncertain on how relevant their subject was to the course.

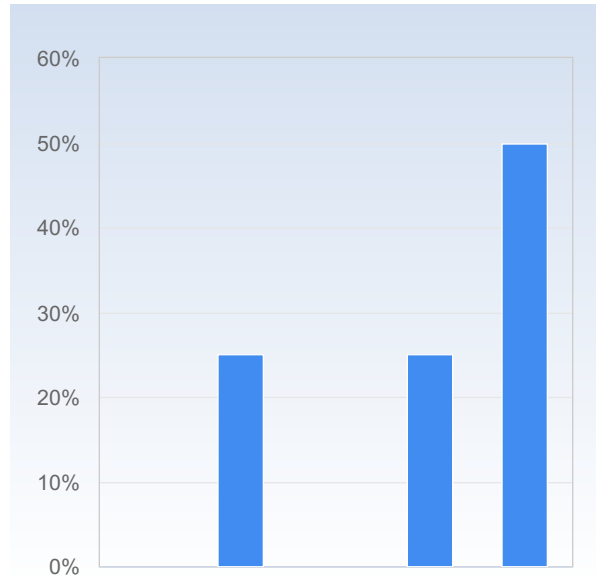
Yes

Most of them did. Some of them were not so concerned.

I did not get as much feedback on my report as I would have wanted.

GENERAL: Was the information on Canvas useful? How can it be improved?

GENERAL: Was the information on Canvas useful? How can it be improved?	Number of responses
	0 (0,0%)
	2 (25,0%)
	0 (0,0%)
	2 (25,0%)
	4 (50,0%)
Total	8 (100,0%)



	Mean	Standard Deviation
GENERAL: Was the information on Canvas useful? How can it be improved?	4,0	1,3

Comment

Too many different categories. It would be better to divide it by type rather than by week. Aka lectures, seminars, project work

Easy to navigate!

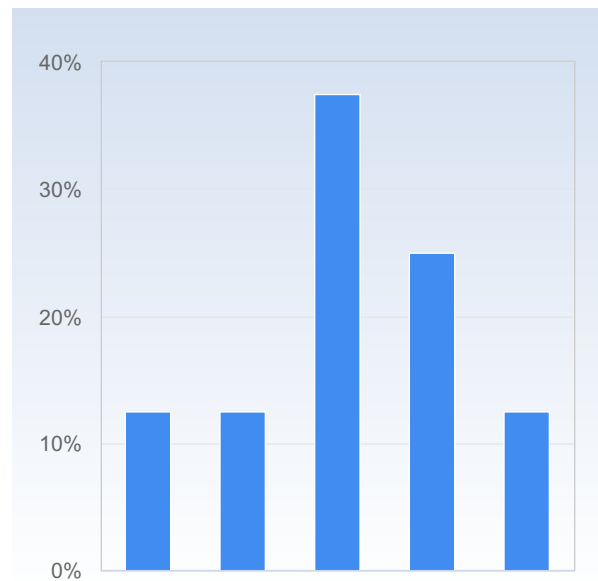
The structure was a bit messy. It would be more clear to have the lectures ordered after the weeks they are presented in (as they are now) and seminars to be under another 5 "titles"/"sections" or whatever those flikar are called in English. And for the project work, I personally would have preferred to have placed the tips for presentation, writing and the instructions in different subsections. It makes it more 'clean & neat' and you don't get overwhelmed by information at once.

This was actually one of the better implementations of canvas, everything was well organised and easy to find.

Good Canvas structure.

THEORETICAL PART: Was the text book appropriate for the course?

THEORETICAL PART: Was the text book appropriate for the course?	Number of responses
	1 (12,5%)
	1 (12,5%)
	3 (37,5%)
	2 (25,0%)
	1 (12,5%)
Total	8 (100,0%)



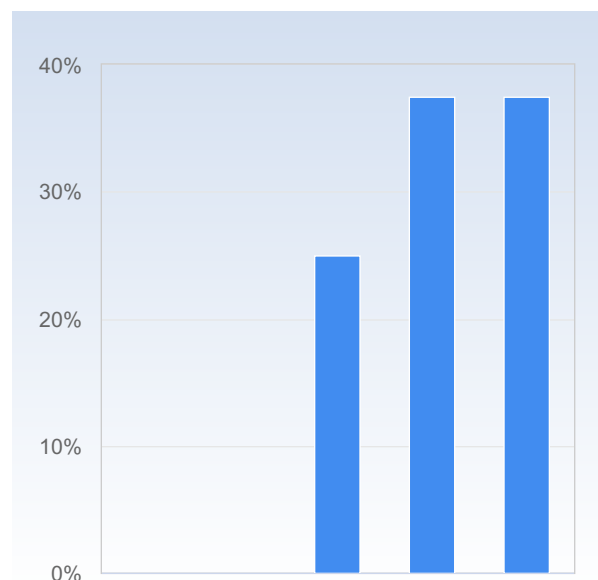
THEORETICAL PART: Was the text book appropriate for the course?	Mean	Standard Deviation
	3,1	1,2

Comment

I didn't read the textbook, so I am not sure.
 I did not read it
 I haven't used it much sadly.

THEORETICAL PART: Was the additional literature (list of articles) appropriate for the course?

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	0 (0,0%)
	0 (0,0%)
	2 (25,0%)
	3 (37,5%)
	3 (37,5%)
Total	8 (100,0%)



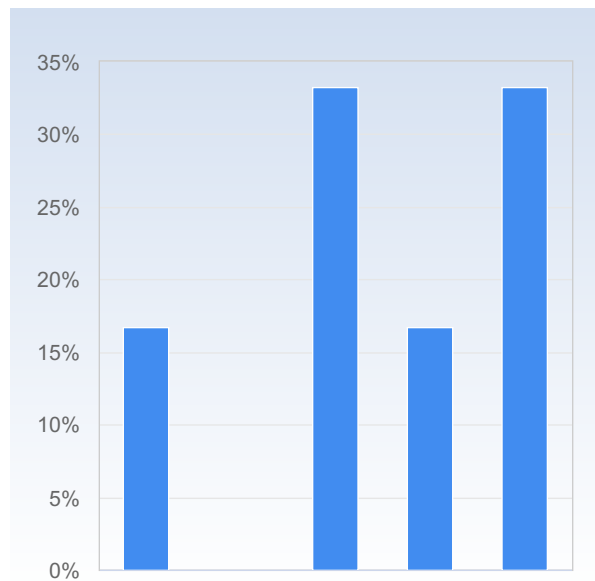
THEORETICAL PART: Was the additional literature (list of articles) appropriate for the course?	Mean	Standard Deviation
	4,1	0,8

Comment

There are many interesting papers.
 I dont really remember, but think so.
 yes

THEORETICAL PART: Were the lecture hand-outs useful?

THEORETICAL PART: Were the lecture hand-outs useful?	Number of responses
	1 (16,7%)
	0 (0,0%)
	2 (33,3%)
	1 (16,7%)
	2 (33,3%)
Total	6 (100,0%)



	Mean	Standard Deviation
THEORETICAL PART: Were the lecture hand-outs useful?	3,5	1,5

Comment

Were there any lecture hand-outs?
 what handouts????
 We got hand-outs???
 Some of them were, some were too lengthy and rushed through.
 I don't remember getting any hand-outs. Maybe one or two times?

THEORETICAL PART: General comments on the lectures:

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Good lecturers and and information
 Lectures were good! Very diverse topics, from the Earth's history to human history.
 They would have been more useful if it was new information
 Some where a bit fast paced so it was hard to both take notes and listen while at the same time trying to understand the subject as well
 Quite well structured.
 Good structure. Some powerpoints were all over the place and bad, such as the climate history of the earth.

THEORETICAL PART: Was the seminar on Pre-Quaternary climate history useful?

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Yes because there are opposite site of the publish, which can initiate our discussions.
 Yes, although quite hard to grasp at first.
 Yes!
 Kind of.
 More indepth would help. But good
 Yes, it was very interesting. It was nice to review papers that represent how our understanding of climate change and what causes these changes have changed with time. I hadn't really come across this before so It was a nice experience and it also reminded me to not be a bit more critical in my thinking when I'm reading articles.
 Absolutely.
 This part of the course should be canceled to focus more on methodology.

THEORETICAL PART: Was the seminar on Geosystem services useful?

THEORETICAL PART: Was the seminar on Geosystem services useful?

Yes, this topic is quite new for me and I found it very interesting

Yes, and not hard to digest. Complemented very well by the seminar.

Yes, it sprouted some very interesting discussions! After it, it was still unclear what exactly geosystem services were.

It was quite interesting at least.

Yes but seemed abstracted and didnt tie in with other areas as well

Did not attend so I don't know.

I found this one the most interesting and we also had an excursion on this. It was an interesting perspective.

Yes, interesting!

THEORETICAL PART: Was the exercise on Climate sensitivity useful?

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Yes because the paper quite fit today's situation.

No, the program was useless for us.

The programe/website used for the exercise was very contra-intuitive, so in the end it was more frustrating than useful.

Do not remember.

It was qs it showed the modelling systems

Not really, I found the instructions for the site very confusing so I never understood how to use it properly, which is a shame since that website can be used to much fun I imagine.

This was another interesting exercise.

Yes, very interesting!

THEORETICAL PART: Was the seminar on Glabal change case studies useful?

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Number of responses

1 (12,5%)

0 (0,0%)

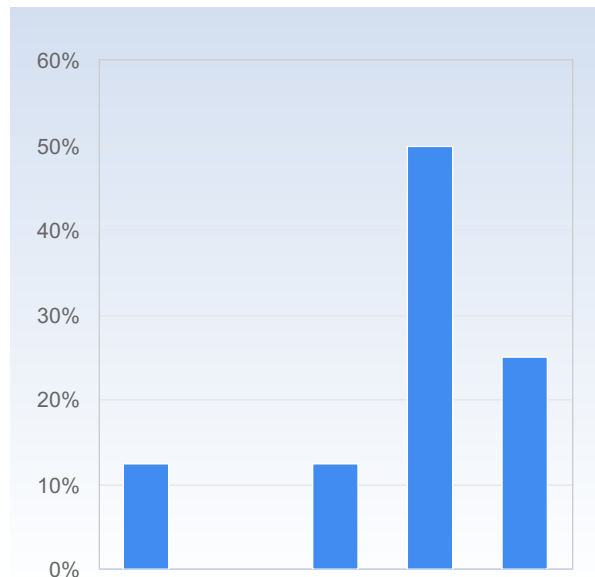
1 (12,5%)

4 (50,0%)

2 (25,0%)

Total

8 (100,0%)



THEORETICAL PART: Was the seminar on Glabal change case studies useful?

Mean

3,8

Standard Deviation

1,3

Comment

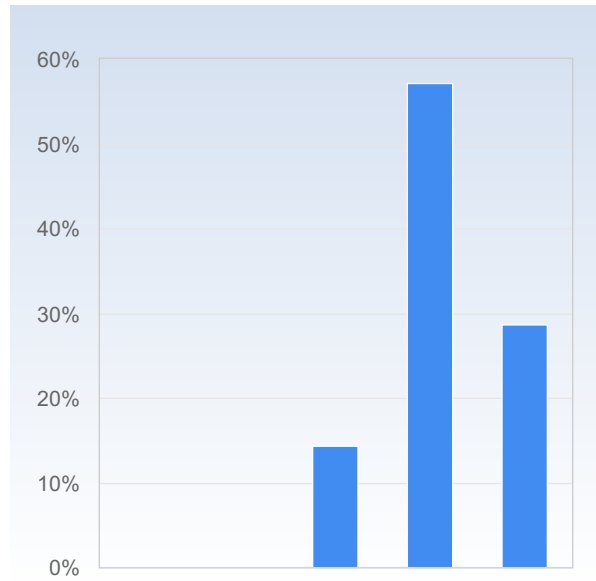
Yes.

Yes

Well the most interesting part was to lear how glaciers and ice sheets have been studied throughout the years and how long back we have data for different glaciers. I don't really recall much besides that and that the mathematical equations and correlations analyses was veeeeeeeeery difficult to understand.

THEORETICAL PART: Was the excursion (A glaciated landscape and its uses) useful?

THEORETICAL PART: Was the excursion (A glaciated landscape and its uses) useful?	Number of responses
	0 (0,0%)
	0 (0,0%)
	1 (14,3%)
	4 (57,1%)
	2 (28,6%)
Total	7 (100,0%)



	Mean	Standard Deviation
THEORETICAL PART: Was the excursion (A glaciated landscape and its uses) useful?	4,1	0,7

Comment

Excellent choice of papers.

Yes.

Yes. Nice weather!

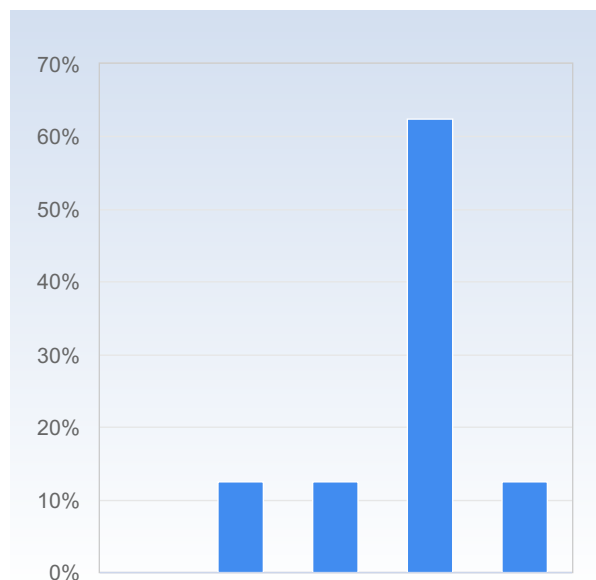
I did not go so I don't know.

From what others have told me, it was quite useful.

Too much repetition.

THEORETICAL PART: Was the home-based examination satisfactory?

THEORETICAL PART: Was the home-based examination satisfactory?	Number of responses
	0 (0,0%)
	1 (12,5%)
	1 (12,5%)
	5 (62,5%)
	1 (12,5%)
Total	8 (100,0%)



	Mean	Standard Deviation
THEORETICAL PART: Was the home-based examination satisfactory?	3,8	0,9

Comment

Yes, it was a good amount of work for the time given. Some questions were a little unclear though, eg. about the periods in the Earth's history when the climate got hot and the reasons it didn't run away like on Venus.

It could just as well be an in-situ exam. Most of the questions didnt need very long answers or lots of reading, and I did not feel like it was necessary to spend three whole days on it.

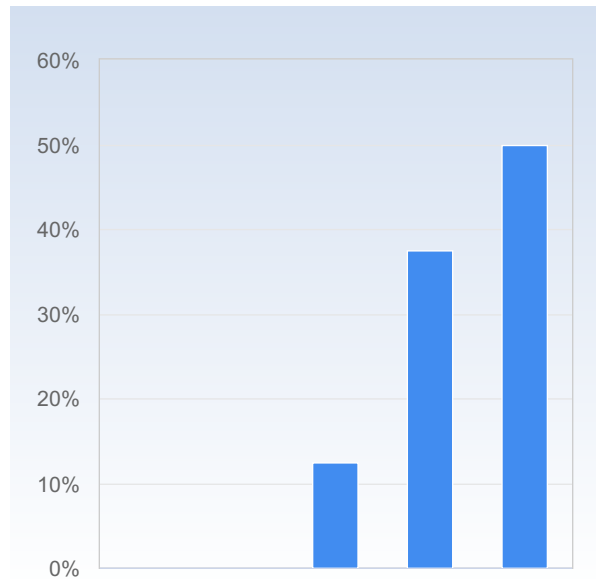
I liked the time allotted to the exam, I just wished I was better at organising my time/schedule so I did not have to stress a lot to finish the exam in time the last day.

Enjoyed it, was stress free and got us really thinking on what we had learnt.

It was ok, nothing more nothing less. Way too easy for an advanced course.

PROJECT PART: Were the instructions for the project work appropriate and the pre-fieldtrip period well spent for the literature review?

PROJECT PART: Were the instructions for the project work appropriate and the pre-fieldtrip period well spent for the literature review?	Number of responses
	0 (0,0%)
	0 (0,0%)
	1 (12,5%)
	3 (37,5%)
	4 (50,0%)
Total	8 (100,0%)



PROJECT PART: Were the instructions for the project work appropriate and the pre-fieldtrip period well spent for the literature review?	Mean	Standard Deviation
	4,4	0,7

Comment

It was a good way to be prepared for when we hit the field.

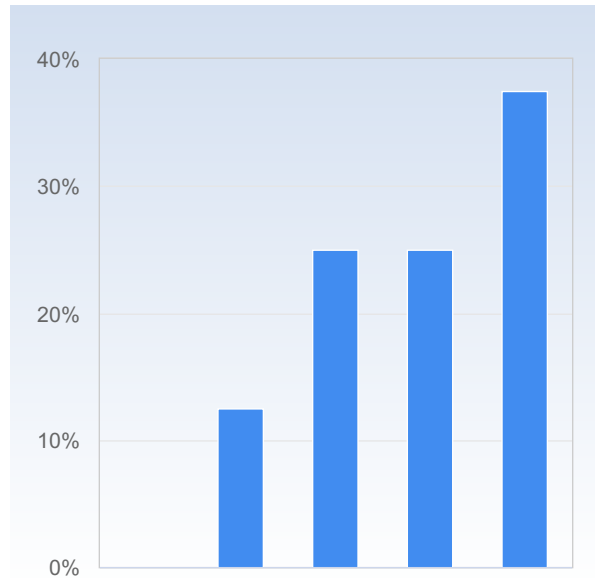
Yes! Not too much or too little time to write!

The instructions was good but I was not able to spend the pre-field trip period wisely (again because of me being bad at planning my time and my depression). I spent most of that time really stressed with lead me to getting more depressed and the depression lead me to being more stressed. So in the end I just felt bad over my deteriorating mental health and my lack of progress in writing.... sigh...

Yes, good amount of time set aside.

PROJECT PART: Was the fieldtrip relevant and the time well utilized?

PROJECT PART: Was the fieldtrip relevant and the time well utilized?	Number of responses
	0 (0,0%)
	1 (12,5%)
	2 (25,0%)
	2 (25,0%)
	3 (37,5%)
Total	8 (100,0%)



	Mean	Standard Deviation
PROJECT PART: Was the fieldtrip relevant and the time well utilized?	3,9	1,1

Comment

I think low relevant project can cause low interested in some people and maybe it's a place for teacher as well so some day we have a lot of free time, which i think it's a bit bored personally.

Some days felt like the time could have been utilized better, but it was the first time so that's to be expected.

Relevant to some I guess? But we could have looked at more things/places up there.

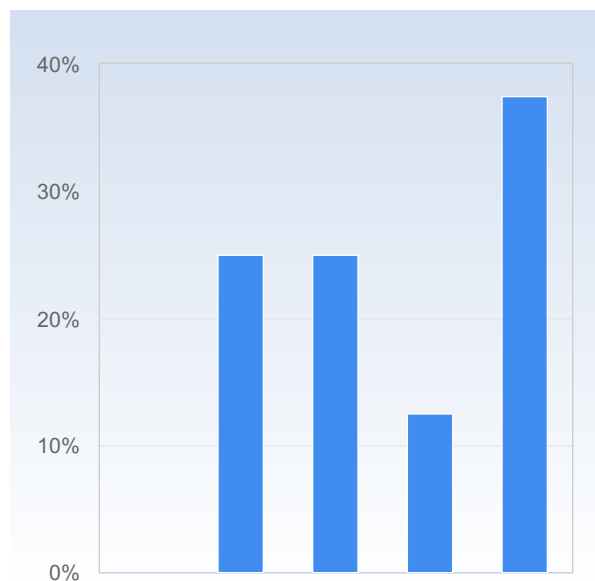
Well, only the first day was relevant for coastal erosion but as a whole for the course it was relevant. Since we spent two half days being able to work on our project maybe we could have added another stop along the coast to get more material relevant for coastal erosion?

The course and the field is still in its infancy but it was quite useful and interesting.

We learned a lot about field methodology.

PROJECT PART: Were the post-fieldtrip laboratory work and the following group-based presentations useful?

PROJECT PART: Were the post-fieldtrip laboratory work and the following group-based presentations useful?	Number of responses
	0 (0,0%)
	2 (25,0%)
	2 (25,0%)
	1 (12,5%)
	3 (37,5%)
Total	8 (100,0%)



	Mean	Standard Deviation
PROJECT PART: Were the post-fieldtrip laboratory work and the following group-based presentations useful?	3,6	1,3

Comment

We learnt a lot of methods and the expected results.

Not useful but pretty interesting. The work was not challenging enough to broaden our knowledge.

They were certainly interesting! I liked being updated about the lab work from the other groups.

Would be more interesting to try all the methods.

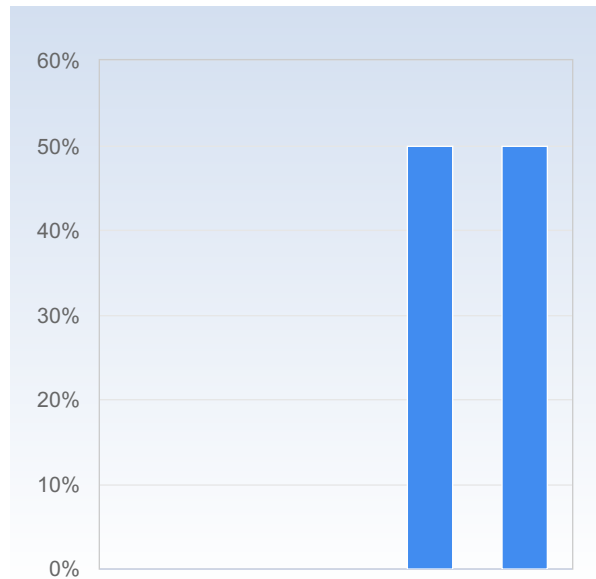
Not really, there was nothing new except that I got to look at plastic in a microscope. It would have been more meaningful for us that have done their BSs in Lund to use a analysing method that we had not used as much before. I would have personally liked to look a bit more at the dendrochronology methodology since I've not. done that before.

Absolutely. This was most interesting because it turned out interesting results and we got to work on actual samples that we collected.

The best part of the course - but more focus on data and time are needed.

PROJECT PART: Was the individual written report relevant and useful?

PROJECT PART: Was the individual written report relevant and useful?	Number of responses
	0 (0,0%)
	0 (0,0%)
	0 (0,0%)
	4 (50,0%)
	4 (50,0%)
Total	8 (100,0%)



	Mean	Standard Deviation
PROJECT PART: Was the individual written report relevant and useful?	4,5	0,5

Comment

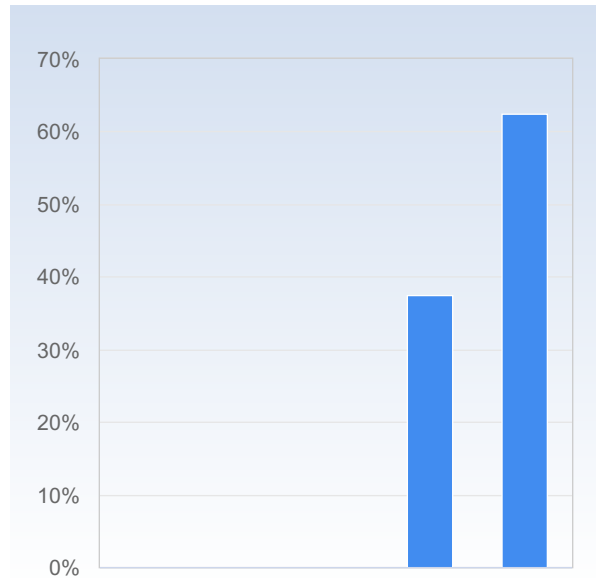
I think it's a good learning activities.

Very fun and interesting due to us being able to choose subjects we care about.

yes

TRANSFERABLE SKILLS: Did the course increase your ability to critically assess, summarize, and discuss scientific articles?

TRANSFERABLE SKILLS: Did the course increase your ability to critically assess, summarize, and discuss scientific articles?	Number of responses
	0 (0,0%)
	0 (0,0%)
	0 (0,0%)
	3 (37,5%)
	5 (62,5%)
Total	8 (100,0%)

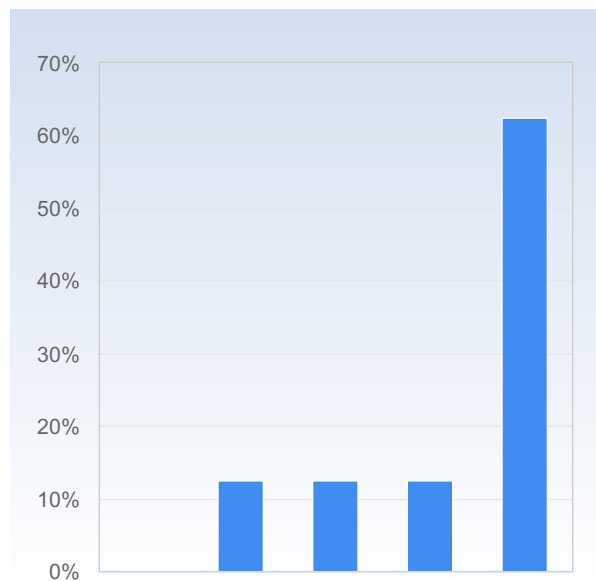


	Mean	Standard Deviation
TRANSFERABLE SKILLS: Did the course increase your ability to critically assess, summarize, and discuss scientific articles?	4,6	0,5

Comment
I think our teachers help a lot in this case.
Especially during the seminars.
Probably
Yes
Absolutely. All the seminars were based on literature reviews and I feel like this was most useful.

TRANSFERABLE SKILLS: Did you get appropriate training in, and feedback on, written communication in English?

TRANSFERABLE SKILLS: Did you get appropriate training in, and feedback on, written communication in English?	Number of responses
	0 (0,0%)
	1 (12,5%)
	1 (12,5%)
	1 (12,5%)
	5 (62,5%)
Total	8 (100,0%)



	Mean	Standard Deviation
TRANSFERABLE SKILLS: Did you get appropriate training in, and feedback on, written communication in English?	4,2	1,2

Comment

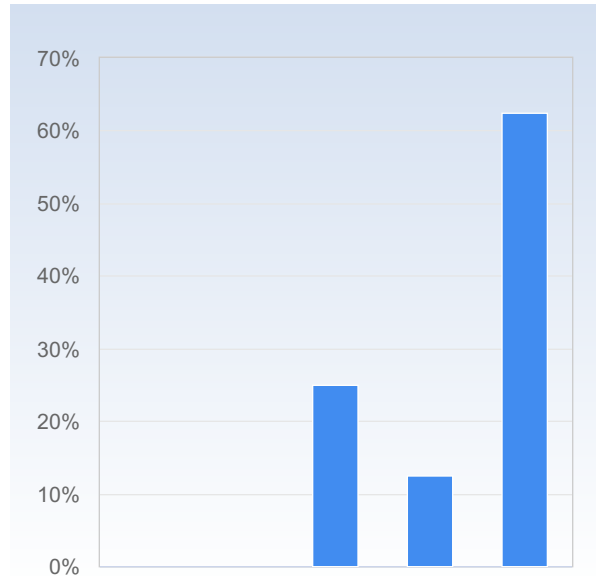
Yes, during the written report.

Well, since I was late at handing in my paper it did not leave that much room for feedback from professors.

The final report should have more focus on student peer-review, now it was just commented during the final presentation.

TRANSFERABLE SKILLS: Did you get appropriate training in, and feedback on, oral communication in English?

TRANSFERABLE SKILLS: Did you get appropriate training in, and feedback on, oral communication in English?	Number of responses
	0 (0,0%)
	0 (0,0%)
	2 (25,0%)
	1 (12,5%)
	5 (62,5%)
Total	8 (100,0%)



	Mean	Standard Deviation
TRANSFERABLE SKILLS: Did you get appropriate training in, and feedback on, oral communication in English?	4,4	0,9

Comment

Presentations helped

I did not really learn anything new, I've just been too stressed to prepare better for the presentations. But it was nice to get the feedback, non the less, to get reminded of what I've previously learned about rhetoric.

Please provide any other comments on the course that you may have.

Please provide any other comments on the course that you may have.

I think this course overall is a good new course because it provide a lot of lectures in many perspective and practical work as well, but improved management in time table should be done.

Overall a very good course, which was interesting and achieved its learning outcomes well. The teachers and peers were really cooperative and helpful. I would recommend this course 10/10.

The excursion took place too late in spring, I know it's because of the snow cover.