GEON05 Glacial sedimentology HT 2018

Course evaluation

Part I: Original responses to questionnaire

1. What was the most exciting/fun part of the course? Why did you enjoy this part in particular?

The three field trips. I learned a lot.

The great Aha moment when I realised what the glaciotectonic structure at Ven site was; the lectures were great and really laid the foundation to interpreting sediments in the field. Maybe a little more glaciotectonic structures would have been good.

The discussions and interactive teaching; I find it easier to remember when you have discussed a matter instead of just hearing it

Finse; Really great way to start the course and get to know everyone + seeing glaciers & geomorphology is always great.

Fieldtrips, specially Finse; To be able to apply in the fieldtrips the concepts learned in the lectures.

Finse trip; putting breathtaking vistas of Mitalsbreen Ice Cap area into scientific context was an opportunity to learn a lot in a pleasant way.

Finse field trip; amazing landscape, the hike on the glacier was an exceptional experience. It was a really good way to get to know all my new classmates and the things we will talk about in the course. I’ve never before done anything like this before and thus it was a really special field trip (also the Uno evenings, the food and the hikes were amazing!) 

Field trips, laboratory work, lectures; The field trips were the most exciting and enjoyable parts of this course because along with the lectures and assigned reading provided a backbone to my understanding of the course’s topics. Furthermore, learning the laboratory processes and using and interpreting our own samples was an amazing motivation. Field trips and laboratory work helped to unite the class, engage the students and create a social environment.

Field Trips (esp. Finse); great atmosphere in the group, getting to know different landscapes in Scandinavia, very informative and interactive (+ Glacier experience), good food + fun evening

2. What was the most interesting aspect of the course? Why?

The possibility of visiting a modern glacial environment; because it allowed us to see many of the processes that gave place to many of the records and landforms we studied.
Getting the interpretation of the glacial morphology and sedimentology in Finse; the interactive show and tell was such an eye-opener and very informative.

A new criticism on some topics and not jumping to interpretation; a more criticising way of taking in the information also the way of not jumping into interpretation directly which I found changes the outcome when you have considered everything before making something of it.

Learning about sedimentology in a glacial context; it was the first time I had done glacial sedimentology so it was great to approach glaciology from another angle.

Learning about glaciers and applying it in fieldtrips; I really haven’t worked with glaciers before.

Consistent combination of field trips and lectures; it was easy to follow and thanks to it I could better comprehend new knowledge.

Field trips in general (especially Finse and Ven); It is very interesting to see the features that you have learned about in the lecture in the field and you are then able to connect the theoretical knowledge with practical experience. Furthermore, it is very cool to collect your own data and then try to make something out of it and in the end you see that it actually all makes sense!

Field work; Field work broke the theoretical barrier and gave an actual impression of how the different elements look like. Laboratory work; It would be hard to understand the full spectrum of sedimentology without an actual impression of the processes in the lab.

See below; learning about glacial sedimentology in different settings (high mountains, ice sheets, etc.). High level of the course, good + interesting case studies + field trips

3. What was the most interesting aspect of the course? Why?

NB: Annoyingly, this had a typographical error in the title – it should have read “least interesting”; hardly anyone answered as a result! (one response was “look at question nr. 2 😥”, others included a small drawing of the glacier walk, while a few referred to “see above”); see also my assessment in part II.

4. Which parts of the course worked well and would not need an update/revision, and why?

The field trips I think worked well in general.

The lab work and Finse; Finse was just amazing, just to see all the traces of glaciation and the morphology.
the whole time. Maybe there is a better way to arrange lectures and include more exercises for the students were they actually have to work and discuss?

Småland fieldtrip, some exercises; Connect Småland fieldtrip better to lectures, digging in the basement was a bit weird (include this to Ven)

6. How did the course textbook work for you?

Worked well (8)
Ok (1)
Not so well (0)

Comments:

I would have liked some more glaciotectonics though

Love the bible

Very comprehensive source of all information we were needing (Benn and Evans)

The “bible” is really a good book whenever you want to check something or look something up. It explains everything very well and the structure is also very nice

Very informative and well written for students, but too long to cover it all (maybe further linkage between lectures and special chapters/subchapters would be helpful)

7. Please rank the lecture documentation (pdfs posted on Live@Lund), with 5 being the highest and 1 being the lowest mark)

5 (3)
4 (6)
3 (0)
2 (0)
1 (0)

Comments:

Maybe some comment on the handouts, when I went through the material later it was hard to see what some of the slides was about

Some definitions were very usefull

They were easily accessible and quickly updated in Live@Lund
The lectures; interesting and giving enough although I still would like to see some more examples of interpretations and how to make them, since a lot of the course revolved around that

The trips + bulk of the lectures; The Finse trip was great as already mentioned + Ven was good. The lectures were great

The lectures content; It was well explained and all the questions were answered.

Sediment lab activities; It was clear what had to be done and it doesn’t to be changed. Explanation was also comprehensive.

Content of the lectures and structure; Discussion; everything was really well structured and explained and there was always time and room for discussion. Maybe there were some confusions in the beginning (what is till?) but that was descriptively explained in due time!

Most of the parts worked well in my opinion. Some deadlines were strict but manageable.

Finse trip, lab work, report + home exam, lectures

5. Which part or parts of the course did not work for you? Why and how can they be improved?

Aerial photographs; I think it is moment to focus on the applications of GIS.

The field trip to Småland/Blekinge; please remake it: lectures should be in the classroom, not in the freezing cold forest accompanied with the words “there is nothing to see here any longer” and then dragging out some worn-out poster. First time I have been bored on a field trip! So much ineffective and wasted time.

The Ven repport; I really wished I had more time to indulge in the rapport after the data was worked and (logs) made presentable since it took a lot of time. The rapport had a lot of expectations for the time given for it to be well written...

The GIS element could be improved; The use of the stereoscopes could be removed or switched to google earth. The GIS exercises could be more directly linked to the trips/coursework.

Maybe it is a bit too dense, lectures were a bit long; Having lectures until 4 or 5pm everyday is a bit tiring, receiving a lot a bit fast.

The way we were collecting data on Ven; I think it could be more emphasized what we are going to do with data (more aware sample choosing and description of the site). One day could be given for data analysis on Ven (one additional day of fieldtrip).

Maybe too many lectures in one day; It was hard to listen to lectures all day long from 9am-3/4pm. Especially in the afternoon it was sometimes hard to stay focused and pay attention
Everything was provided

I think a little bit more text on the slides regarding photos/figures would have been helpful because sometimes when I went through the files again, I couldn’t figure out, what some photos should tell me.

The articles were really good, but we could have had some more relevant material.

Everything thee and complete but would have been good to have some pdfs few days earlier than the day of the lecture

8. Please indicate your workload during the course (8 h/day corresponds to the intended 100%)

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Comments:

It’s a master course. It’s not supposed to be a walk in the park. The topic is so interesting it’s hard to work less.

I can’t really choose truthfully here because at the beginning of the course it was maybe 100% and overgoing to 200% at the end which would maybe be accommodate more evenly although I understand it’s hard when the beginning is to build up to the exams and so on...

Especially the self study weeks were exhaustive long workdays during the course.

Sometimes quite long lectures (hard to concentrate esp. in the afternoon), intense during report and home exam, but in general ok!

9. How efficient has the time being used for teaching on the course? (5 being the highest and 1 being the lowest score)

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Comments: Sven’s lectures were very good, well planned and gave a very good overview of the field. Good time planning

The Småland/Blekinge excursion should have been introduced as lectures. It was a complete waste of time to have them in the field especially as there was nothing to see on many locations

There was a lot of ground covered over the course which was great.

I could focus more and study more.

A lot of the material was well-covered and in very short time.

Not really sure what this question means...

10. Please rate the following: Finse introduction and exercises (Per) (5 being the highest and 1 the lowest score)

5  (4)
4  (5)
3  (0)
2  (0)
1  (0)

Comments: Would be nice to have had more practical exercises in Finse.

It was a well made handout lecture and climbing exercise

Very informative and giving, good to have before Finse

Climbing the tree outside was a unique way to start the course

Maybe the fieldtrip should wait for a week of lectures instead of going on the 3rd day.

Could be more theoretical information. I appreciate exercise with a rope which introduced people to “cours atmosphere”

The introduction was kind of long but still interesting. The climbing exercise was not really necessary, I guess, but it was really fun!

Climbing exercise was fun, but not really necessary. More info on different landforms would be helpful before going to Finse. Huge thanks to Per for providing crampons + thermoses!
11. Please rate the lectures glaciology (Sven) (5 being the highest and 1 the lowest score)

5  (6)
4  (3)
3  (0)
2  (0)
1  (0)

Comments:

This is a comment for the course as a whole: I missed methodology lectures on rose diagrams as well as other methods used for interpretation of the results. They have not been covered by the graduate courses. Very good overview of the different glacier types, the accumulation processes, flow mechanisms ablation processes hydrology and mass balance etc Very nice handouts too

Very informative, good rhythm, although sometimes some things could be left out because of the confusing of at the end as for what is “right” and “wrong” at the end.

The lectures were great and really liked the interactiveness.

They were well explained

Huge load of information presented in quite simple way. It could be a bit more organized though, but overall I think it was very interesting and “listener-friendly”. Great question sessions

12. Please rate the Finse field course (Sven) (5 being the highest and 1 the lowest score)

5  (6)
4  (3)
3  (0)
2  (0)
1  (0)

Comments:

I would have liked a lecture on possible modern analogues to the Scandinavian ice sheet (no high mountains). Island?

Amazing fieldtrip, very interesting to see the landscape and try to interpret it.

The travel was long in the minibuses but Finse itself was great

It was both very interesting and allowed the classmates to get to know each other
The best field course I’ve had. Finding landforms and interpreting them with Sven’s help (what was cool, that we had a chance of guessing ourselfs at first) was exciting.

Such a great and interesting field trip!

A lot of things were covered but we could have been taught more field examples and processes.

Super interesting (esp. with the glacier walk!)! Liked the very interactive way of teaching and the stops in general. Also well planned and good price for the quality of accommodation and food. Keep Finse!

13. Please rate the lectures on glacial sedimentology/modern analogues/glacial geomorphology (Sven) (5 being the highest and 1 the lowest score)

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Comments:

14. Please rate the Ven field course (Sven and Thorbjörg) (5 being the highest and 1 the lowest score)

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Comments: Might help a more detailed explanation about how to build up a section step by step before each group work independently.

I can’t decide (3 or 5). I really think it would be a good idea to focus on site 1, since site 2 was a bit rushed through. At the same time there was some really interesting structures at site 2.

The workload was big although I don’t mind that but some more info regarding the data sampling and “how to go” would be appreciated because of the time pressures in field where making mistakes and confusing instructions would have been avoided

Would have been useful to do a day trip before Ven to have a quick look at sediments in the field before being thrown in at the deep end, but overall the trip was good.
The second site should not be done and I think it would be better to focus on site 1 only.

I commented previously. It was very good but few things like length might be changed.

In the end it was a little bit stressed (and steep -> second site). Some instructions could have been clearer or were a little bit confusing maybe, but it was really interesting overall (and fun as well!)

Everything was well but I would expect a little bit more help and guidance regarding interpretations.

Nice to work in groups on our own project. Sometimes a little more instructions on how to describe the sedimentology would have been helpful. One more day at site 1 would have been better. Site 2 was more confusing than revealing.

15. Please rate the Ven laboratory exercises (Thorbjörg) (5 being the highest and 1 the lowest score)

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Comments:

Really well organized however it would have been good to have lectures of the theoretic background and interpretation of the method.

I thought it went pretty well and was organised.

They helped understand the process and were instructive.

It was very easy to follow the instruction.

It was very nice to study our own samples, the lab work was very interesting.

Well organized, covering several aspects of lab analysis, good balance between getting routine and not being bored + Amazing teamwork!

16. Please rate the landsystems lectures (Sven) (5 being the highest and 1 the lowest score)

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Comments: Sven is an awesome lecturer with experience from different settings. Really good information regarding the different landsystems and the processes behind them; tying together the modern analogues, sedimentology, morphology and giving a total view of the field.

Well organized block of lectures. I remember most of the knowledge presented in this one.

I couldn't follow these lectures as focused as before but maybe that was just because it was at the end of the course and I was already thinking about the home exam or still "exhausted" by the Ven report.

17. Please rate the Blekinge/Småland fieldtrip (Per) (5 being the highest and 1 the lowest score)

5  (1)
4  (1)
3  (4)
2  (1)
1  (1)
Not answered: 1

Comments:

Already been commented

It was very informative but I was missing the actual landforms (they were gone) in some places.

Maybe needs some changes but its already been discussed. Th airport delta deposits were a highlight.

Sometimes the explanations were hard to follow because the were too long.

Maybe some sites were not that descriptive and sometimes it was more like a "lecture" in the field (the explanations were very long sometimes and it was a little bit hard to pay attention the whole time...but also I wasn't feeling that well physically during the whole field trip so that may have contributed to not paying attention sometimes)

It was really interesting and we saw many examples but in some cases the visits were short in time.

Good to see some more regional aspects of glaciation, but not well connected to lectures (more global aspect). Good stops when involving sedimentology but somewhat difficult to make sense of purely morphological stops.

18. Please rate the Ven report (5 being the highest and 1 the lowest score)
Not answered: 1

Comments:

Really good assignment, this is a very good exercise for the upcoming master thesis

It was a good task and very giving but not enough time for it considering the amount of data that need to be prepared, described and interpreted wit references.

Enjoyed the Ven report, nice to do a project from fieldwork to labwork, then report.

It was interesting to apply the work done previously but, maybe some guidance will help with the time management.

More a 4.5 -> I really liked collecting and interpreting our own data! -> the only thing was the time but I managed to finish in the end quite well in time (Probably it would always be stressful in the end because most students tend to start at the last moment 😊)

Amazing opportunity to gather what we learned. It was challenging to make actual interpretations of the last area of interest due to lack of time in the field.

Somewhat difficult from time to time to make sense of our data but very rewarding to produce a good piece of work from the beginning to the end. Some time issues due to personal missplanning

19. Please rate the home exam (5 being the highest and 1 being the lowest score)

Not answered: 1

Comments:

Really interesting have an exam of that type.

Very interesting very good assignment and (my guess) very good exercise for future work
Enjoyed the challenge of interpreting the log

Maybe have a little more time because we didn’t know anything before the day we got the indications

I felt a little bit lost in the beginning and maybe the instructions could have been clearer for what exactly we had to do (regarding which diagrams we need to include or which data exactly we should use). But maybe it is also a feature of the home exam to decide those things for yourself! It was just that I felt a little bit lost in the beginning...😊

Limited time to work the exam a bit better is my only complaint.

Very interesting approach for an exam, liked it a lot! Well linked to what we learned during the course and manageable I difficulty although 4 days was maybe 1 too less to not make it a little stressful. Good feedback + fair grading (same goes for Ven report)

20. Please rate the LiDAR and GIS exercises (Martin) (5 being the highest and 1 the lowest score)

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Not answered: 1

Comments:

It was good, but I think more exercises in this are needed.

It was very hard to get the program to work properly

Enjoyed the GIS work, though it could be made a bigger part of the course and linked to some of the fieldwork/assessments perhaps

They were easy to follow and the questions answered when needed

It was cool to work with the PC and GIS (maybe there could be more exercises about this?) Step by step instructions are a little bit “too easy” sometimes, because you don’t have to think about how the program works but just follow more or less blindly the instructions... Also there were very very many steps included, maybe it would be nice to distribute those onto more exercises so you can learn more about one feature of the program and you therefore remember it better.

Would have been good to have a little more time for working with GIS to better understand the program and being able to do the analyses without a step-for-step guideline
21. Please rate the aerial photograph exercises (Martin) (5 being the highest and 1 the lowest score)

5 (1)
4 (0)
3 (7)
2 (1)
1 (0)

Comments:

Not really useful

Please update put more GIS in

I understand the reason for them, though it was a bit unnecessary to have two exercises with the older aerial instruments where 1 would be enough to get acquainted with the method. GIS is a more efficient method.

Using the stereoscopes was more of a novelty and could perhaps be switched to google earth or ArcGIS with ERDAS.

They were good to understand but they could be updated.

Martin was really helpful and we could learn a lot, but I would expect to work in software as well, not only stereoscopes

Was a little bit “chewy” and I didn’t feel really sure about the stuff I did regarding the exercises. Explanations of Martin were good though and he really tried to explain it clearly but still it was hard for me to see the things on the photograph

Good to get a general overview over different landforms (esp. helpful for Finse as a preparation) but somewhat exhausting to look into a stereoscope for several hours

“General comment
The department of Geology has a thorough reputation among it’s students for it’s excellent teachers. Sven fit very well into this tradition even pushing it upwards a notch with his interactive lectures and his ability to get everyone to participate. The strong bonds within the course is no coincidence. Great thanks for a truly amazing course”

(feedback sheet 2)
Part II: Analysis of course evaluation and response to critical comments

Summary
Overall, the evaluations of GEON05 2018 were returned by 9 out of the 15 registered students (of which two dropped out over the duration of the course due to other commitments), resulting in an overall return rate of 69.2%. The evaluations are dominantly positive throughout, which is reassuring and a sign that most of the elements already established in the course worked well or could be adapted by the incoming course leader to suit his teaching style and philosophy. However, there are also several areas that were highlighted in the feedback (some of which also correspond closely to that received during the 2017 course evaluations) which require a more detailed response by way of highlighting areas that will be adapted further in future years. I have split this response into the three main recurring parts of the feedback: course lectures, fieldtrips and practical components.

Course lectures
Several responses highlight both the facts that the lecture content is well balanced and inspiring (which is wonderful to read!), but that long days of lectures did not work as effectively for them due to a loss of concentration. I am very grateful for this feedback and have already looked into making the course content more interactive (along the lines of including even more interactive elements, highlighted as very positive in the evaluations). From next year, some of the lecture content will be moved to interactive group discussions of key publications, similar to those used for the Ven fieldtrip preparation already, but more focused on specific problems of glacial landsystems etc. – this will also increase the component of conveying and developing further critical thinking skills. There will also be more theoretical concept lectures prior to the Finse fieldtrip (see below) and more targeted topical lectures on individual processes (to continue the new lectures from 2018 that got very positive feedback from the students). The lecture content will continue to be updated to reflect current developments in glacial sedimentology, glaciology and geomorphology.

Fieldtrips
To reflect the feedback from the evaluations, there will be more thematic, theoretical lectures before the Finse fieldtrip as this has been moved back by a few days to take into account new travel and accommodation arrangements: from 2019, the Finse course will be based out of the scientific research station run by Oslo and Bergen universities. Additionally, travel will be by train throughout to make the course more climate-friendly and less taxing on the drivers.

The Ven fieldtrip will focus on site 1 for the project work in future, with site 2 being used during a final tour of the overall stratigraphy, but not for additional measurements. I will consider adding an extra day to extend the practical training and include more individual discussions with the groups in the field (which were too little for my liking this year) as well as leaving more options in case of bad weather. The laboratory component will remain unchanged.

The Blekinge/Småland fieldtrip will be adapted considerably to remove those sites criticised for ‘showing’ content that had been quarried away and by focusing on those sites (gravel pits, clear geomorphological evidence) that can be embedded within the theoretical framework of
the lectures (for example, the esker sites will be kept as a dedicated day trip to match the content of the subaqueous landsystems lectures). Additionally, a few new sites will be added to cover some of the other content not currently treated in the course by way of a field component.

Practical components

The course already contains a good number of practical components (such as the Ven laboratory work, which will be kept), but some of the content will be moved to more interactive group discussions to encourage more critical reflection and independent thinking. In addition, the aerial photograph components will be and large be replaced by tailored GIS and Google Earth Engine exercises that clearly correspond to both fieldtrip preparation and coursework (e.g. the home exam). I am very happy that this trend, which has begun a few years back, is continuing and being appreciated by the students and am hopeful that these developments will continue to improve an already-exciting course even further.

Reflection

As the course leader I am grateful for all the feedback on the course, in particular since it will help shape the course in future. Bearing in mind that it was the first time I taught it and relied to some extent on established practices that had grown over the years, there were elements where it was easier to create a package that reflects my own style of teaching as well as the current understanding of glacial sedimentology etc. In some aspects – and the comments reflect this well – there were areas where a clear offset between the existing course material/structure and what I feel is required to update this (e.g. Google Earth, GIS, aspects of field teaching and the amount of lecture delivery). Overall, teaching this course and interacting with the students and colleagues on it has been a wonderful and enriching experience, and I look forward to the next course in 2019 already.

Declaration

We, the course leader and course representative, have discussed the contents of this document and agree on the comments and actions to be taken.

Lund, 29th May 2019

Place, date

Course representative (signature)  
Course leader (signature)

Cumiló Ceballos Gutiérrez  
Course representative (printed name)

Suat Lükeş  
Course leader (printed name)