



Ecological Disturbances in Forests - Silviculture Challenges Under Climate Change

BI1460, 20171.2526

15 Hp
Pace of study = 100%
Education cycle = Basic
Course leader = Marcus Klaus, Wiebke Neumann Sivertsson

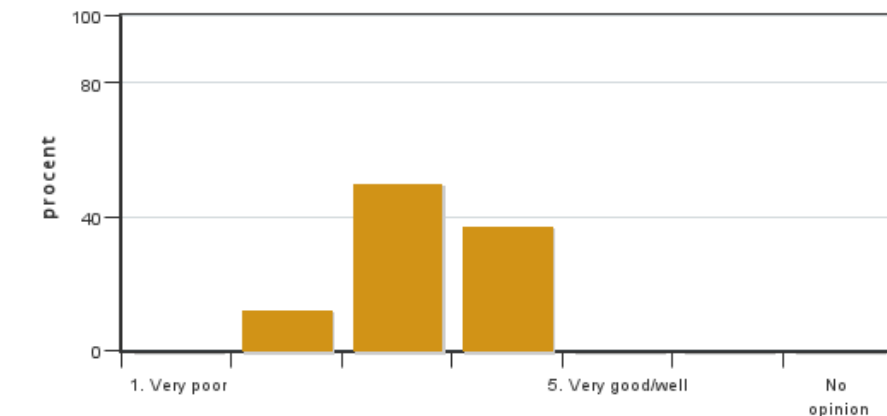
Evaluation report

Evaluation period: 2026-01-11 - 2026-02-01

Answers 8
Number of students 14
Answer frequency 57 %

Mandatory standard questions

1. My overall impression of the course is:

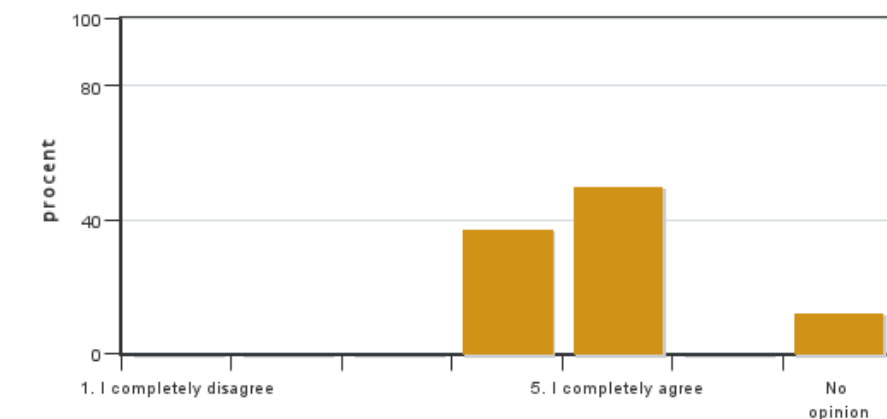


Answers: 8
Medel: 3,3
Median: 3

1: 0
2: 1
3: 4
4: 3
5: 0

No opinion: 0

2. I found the course content to have clear links to the learning objectives of the course.

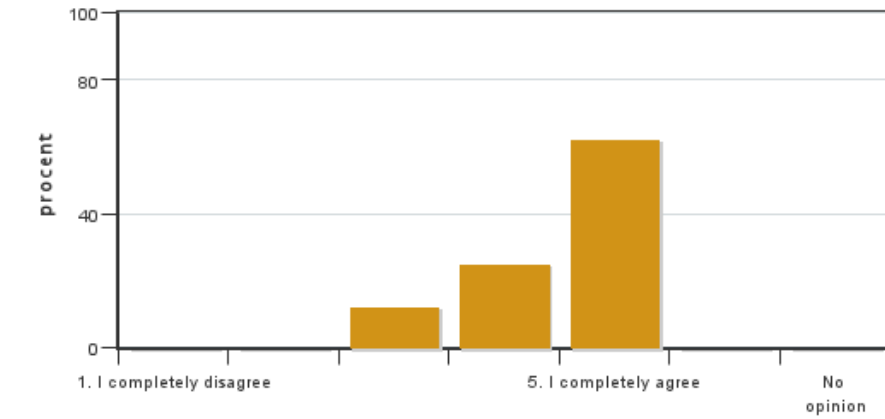


Answers: 8
Medel: 4,6
Median: 5

1: 0
2: 0
3: 0
4: 3
5: 4

No opinion: 1

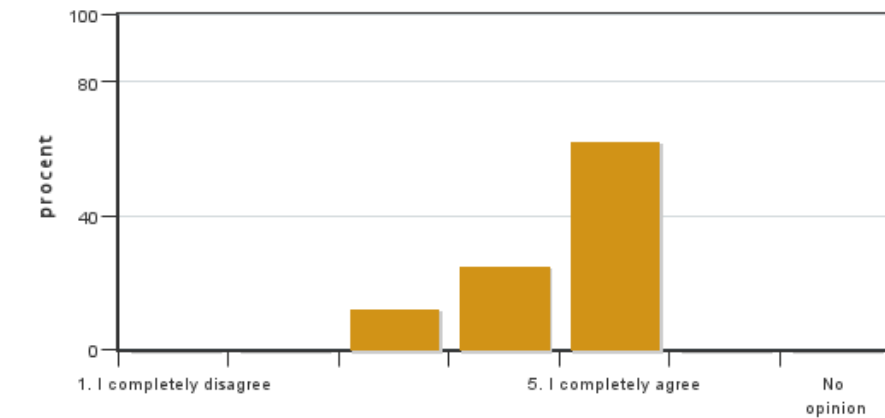
3. My prior knowledge was sufficient for me to benefit from the course.



Answers: 8
 Medel: 4,5
 Median: 5

1: 0
 2: 0
 3: 1
 4: 2
 5: 5
 No opinion: 0

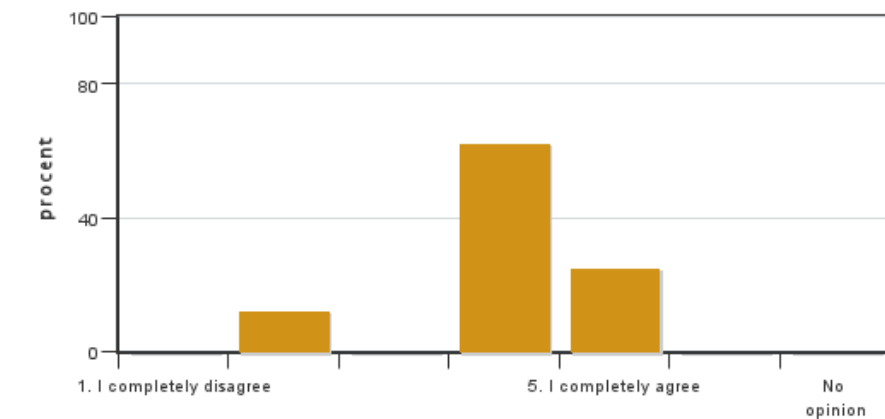
4. The information about the course was easily accessible.



Answers: 8
 Medel: 4,5
 Median: 5

1: 0
 2: 0
 3: 1
 4: 2
 5: 5
 No opinion: 0

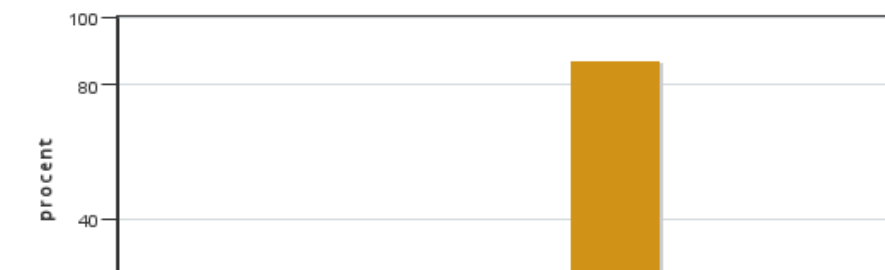
5. The various course components (lectures, course literature, exercises etc.) have supported my learning.



Answers: 8
 Medel: 4,0
 Median: 4

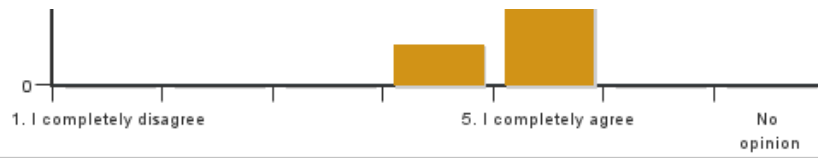
1: 0
 2: 1
 3: 0
 4: 5
 5: 2
 No opinion: 0

6. The social learning environment has been inclusive, respecting differences of opinion.



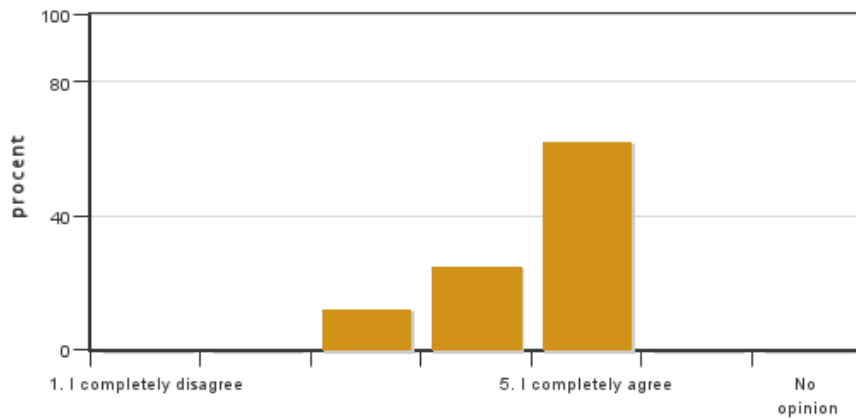
Answers: 8
 Medel: 4,9
 Median: 5

1: 0
 2: 0
 3: 0
 4: 1
 5: 7



No opinion: 0

7. The physical learning environment (facilities, equipment etc.) has been satisfactory.



Answers: 8

Medel: 4,5

Median: 5

1: 0

2: 0

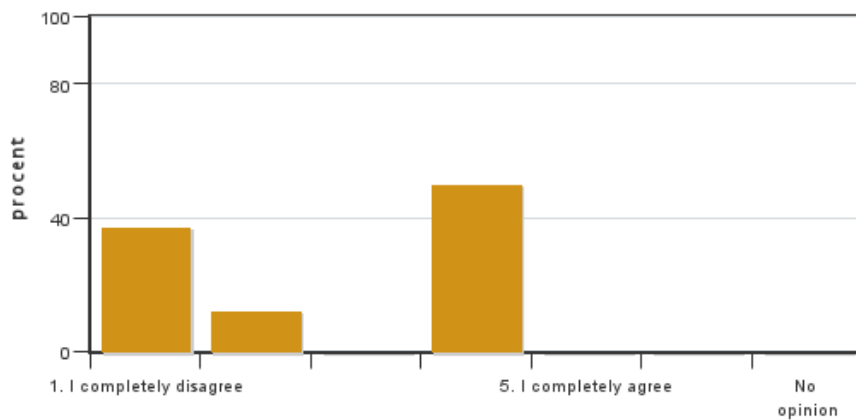
3: 1

4: 2

5: 5

No opinion: 0

8. The examination(s) provided opportunity to demonstrate what I had learnt during the course (see the learning objectives).



Answers: 8

Medel: 2,6

Median: 2

1: 3

2: 1

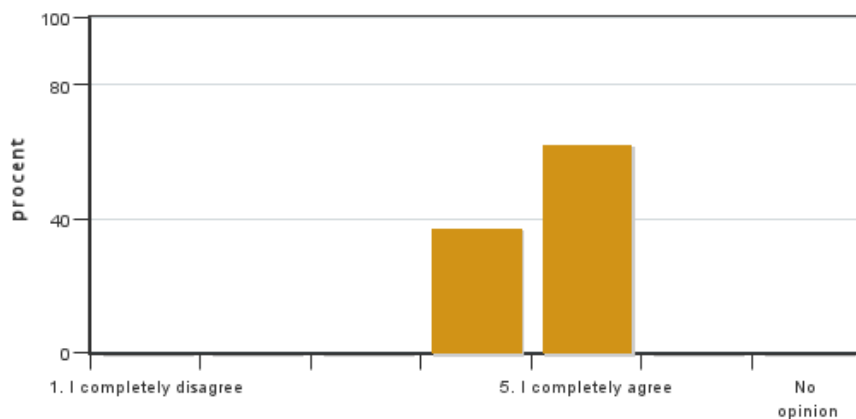
3: 0

4: 4

5: 0

No opinion: 0

9. The course covered the sustainable development aspect (environmental, social and/or financial sustainability).



Answers: 8

Medel: 4,6

Median: 5

1: 0

2: 0

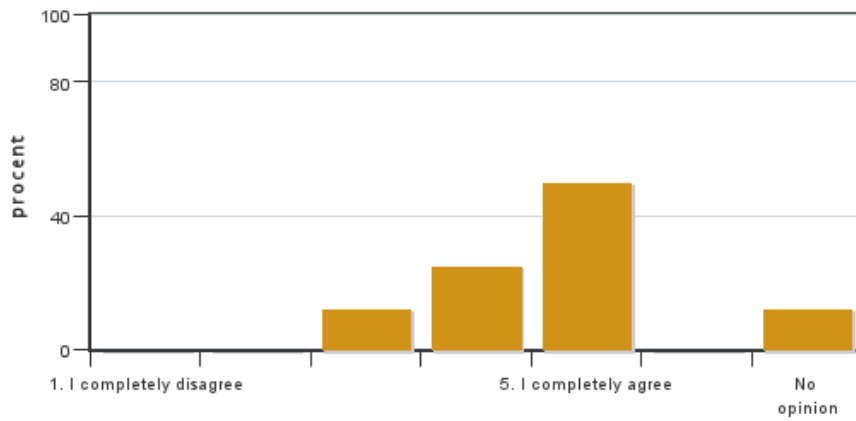
3: 0

4: 3

5: 5

No opinion: 0

10. I believe the course has included a gender and equality aspect, regarding content as well as teaching practices (e.g. perspective on the subject, reading list, allocation of speaking time and the use of master suppression techniques).

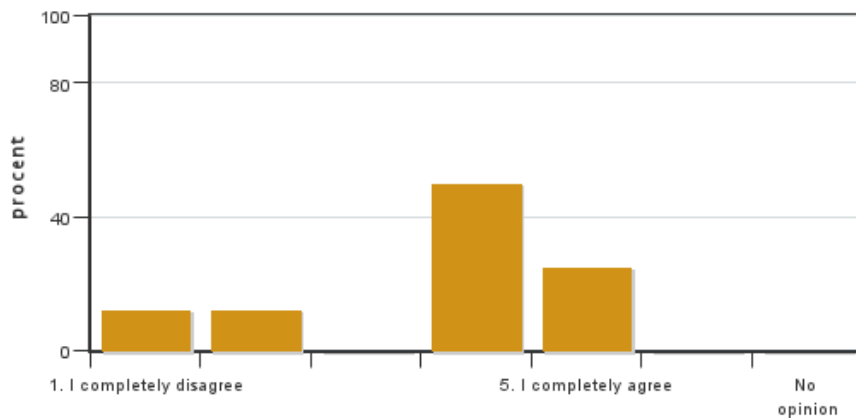


Answers: 8
 Medel: 4,4
 Median: 5

1: 0
 2: 0
 3: 1
 4: 2
 5: 4

No opinion: 1

11. The course covered international perspectives.

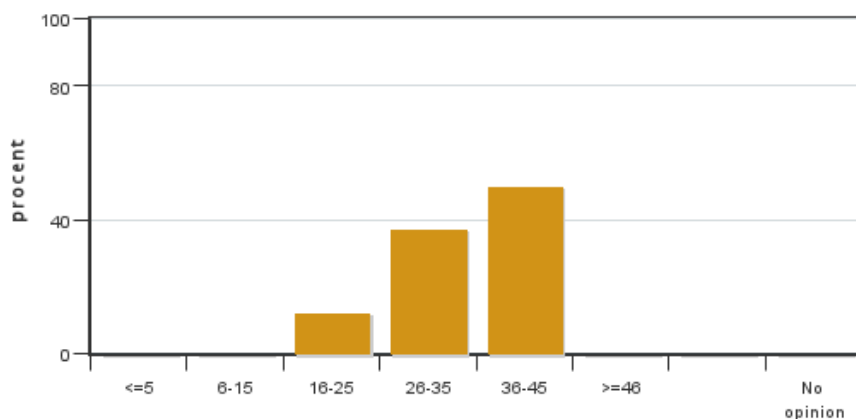


Answers: 8
 Medel: 3,6
 Median: 4

1: 1
 2: 1
 3: 0
 4: 4
 5: 2

No opinion: 0

12. On average, I have spent ... hours/week on the course (including timetabled hours).



Answers: 8
 Medel: 33,8
 Median: 26-35

≤5: 0
 6-15: 0
 16-25: 1
 26-35: 3
 36-45: 4
 ≥46: 0

No opinion: 0

Additional own questions

13. How did you consider the relevance and pedagogical value of the more general / introductory lectures for 'setting the science' in general and in the Swedish context particularly and for getting started with the course's content [Marcus Klaus (drivers of climate change, terminology), Wiebke Neumann Sivertsson (forest damage centre), Jonas Petersson (Bibliography), Peter Högberg (critical reading), Erik Kjellström (regional climate models), Chandra Krishnamurthy (social impacts)]? PLEASE ADD COMMENTS ON THE INDIVIDUAL LECTURES

13. How did you consider the relevance and pedagogical value of the topical lectures by the "damage experts" to get an overview of the different disturbance agents in general and in the Swedish context particularly [Maartje Klapwijk, Kristina Blennow, Fredrik Widemo, Anders Granström, Audrius Menkis]? PLEASE ADD COMMENTS ON THE INDIVIDUAL LECTURES

13. How did you consider the relevance and pedagogical value of the inspirational lectures on adaptation done in practice [Rebecka McCarthy Tune (Sveaskog), Magnus Petersson (SÖDRA), Tomas Staafjord (the County Administrative Board of Västerbotten), Göran Hallsby (the Swedish Forest Agency)], Jonas Vannar (Sirges reindeer community)? PLEASE ADD COMMENTS ON THE INDIVIDUAL LECTURES

13. How did you consider the relevance and pedagogical value of the topical lecture on disturbances in European forests to get a broader overview of the different disturbance agents beyond Sweden [Alba Viana-Soto]?

13. To which degree do you feel that the different assignments helped you and were complementary to improve your learning progress [Bibliography, Quiz, Lecture, Final report]?? PLEASE COMMENT ON INDIVIDUAL ASSIGNMENT

13. To which degree do you consider the Peer-led discussion of Quizz solutions helpful for your learning process?

13. To which degree did you perceived the ordering and timing of the deadlines for the different assignments appropriate and helpful for your learning process? Was the timing of the deadlines appropriate or would you recommend another ordering/timing of a given assignment?

13. To which degree do you consider the final workshop on 'Synergies and Trade-offs' as an important and a critical part to synthesize the course content and for your preparation for final examination?

13. I learned more from this course than from a more conventional course built on more lectures

13. Course leaders and teachers have been responsive and easy to reach throughout the course (i.e. response within 1-2 days).

13. Any other comment on the course? Do you have any critical changes to consider by the course leaders for next years' course?

Course leaders comments

This was the third year the course *Ecological Disturbances in Forests – Silvicultural Challenges under Climate Change* was given, and several issues raised in the first two years had already been addressed prior to this course iteration. Following this year's evaluation (HT2025), we will continue to refine both course content and course set-up based on the student feedback received.

Improvements from last year

A major challenge identified in the course evaluation by HT2024 was a perceived relatively low workload and limited knowledge exchange across working groups, each focusing on one of five disturbance agents. To address this, we introduced peer-review assignments, requiring each group to review other groups' written reports for this year's course (HT2025). This component appears to have been well received by this year's students and contributed positively to cross-group learning. Following comments made the previous year, we also introduced seminars to enable discussions on quiz questions prepared by the groups and thus allowing for more cross-group exchange. However, according to this year's feedback, these quiz seminars were not experienced as particularly helpful for

learning. As a result of this feedback, we therefore plan to remove them or replace them with a single teacher-led synthesis seminar at the end of the quiz period.

Persisting challenges

As in previous years, students expressed a strong wish for more interaction with topic experts, particularly earlier and more concrete feedback on group work. In response, we clarified from the course start that students are encouraged to book meetings with topic experts early in the group work phase. This opportunity was, however, not taken by many students. For the next course iteration, we will more clearly communicate the purpose and benefits of such early feedback meetings. We will also consider options for early written feedback from topic experts on bibliographies and quiz questions to improve quality control and alignment as far as resources in the course budget allow. Here, it is important to acknowledge that the course budget is very tight and that topic experts have multiple other responsibilities, which may limit the extent to which additional teacher involvement can be realized.

Another persisting issue concerns consistency in feedback and expectations across teachers. To address this, we plan to further develop clearer shared templates to teachers for their grading criteria and feedback, particularly for the report. We will ensure as much as possible that these are applied consistently across all groups. We will also ensure that all topic expert lectures clearly include and communicate their associated literature lists.

In response to last year's evaluation (HT2024), we clarified instructions on how to formulate quiz questions, which improved their overall quality during this year's course. However, students still experienced some questions as overly detailed or insufficiently focused on key messages. For future iterations, we will further clarify that quiz questions should focus on the original and central contributions of the papers rather than secondary details.

Course introduction and structure

Several comments pointed to the need for clearer communication at the beginning of the course. In future iterations, the introductory lecture will more explicitly cover:

- Intended learning outcomes
- Expectations regarding student initiative and group work
- How to read and critically assess scientific papers
- Communication routines and handling of late registration/deregistration

Course synthesis

The synergy and trade-offs workshop was highlighted as the strongest part of the course. In response to earlier evaluations, we had already extended this workshop, which appears to have improved its quality. Based on this year's feedback, we will further strengthen this component, introduce home groups earlier, emphasize more strongly landscape-level perspectives, and more explicitly link discussions to multiple management goals and cross-disturbance interactions. We will also consider starting the workshop already before the Christmas break to support cross-disturbance integration right after report submissions when knowledge is still fresh.

Examination

Despite efforts to clarify exam questions following last year's evaluation, exam clarity and extent remained a concern and was perceived as an even more significant issue this year. It appeared to us that the exam rating significantly reduced the overall rating of this year's course. Planned improvements include:

- Providing example questions with model answers prior to the exam
- More clearly define the questions and underlying expectations
- Reducing redundancy
- Structuring the exam around fewer, deeper topic-based questions
- Ensuring that level B questions are clearly distinguished from level A
- Considering the use of multiple-choice questions for some level A components to improve time management

Summary

In summary, the evaluation highlights both clear strengths—particularly the synthesis-oriented components—and areas where clearer communication and better alignment across teachers are needed. The feedback will be actively used to further develop the course for future cohorts.

Student representatives comments

Kursen upplevdes mestadels positivt av studenterna. Den gav goda kunskaper om de huvudsakliga ekologiska störningarna i boreala skogar, samt praktiska metoder för att anpassa skogsbruket till dessa. Många studenter uppskattade det stora projektarbetet, då det gav en djupare inblick i störningarna.

Studenterna hade skilda åsikter kring "flipped classroom" upplägget. Det uppskattades eftersom olika åsikter och

tankesätt lätt kom fram och diskuterades, vilket gav en bättre förståelse kring olika aspekter av störningar och skötselmetoder. Eftersom att upplägget är annorlunda från de flesta kurser studenterna tagit tidigare fanns självklart några aspekter som ansågs negativa. Många önskade fler föreläsningar under kursens gång, i enlighet med en mer "traditionell" kurs. Kursen var dock tänkt att innehålla mer självständigt arbete som en förberedelse inför kandidatarbetet, så ett tydliggörande av detta vid kursstart skulle ge studenterna rätt förväntningar på kursen.

En del studenter skulle ha föredragit om fler av föreläsningarna med ämnesexperter och andra intressenter hölls på plats istället för zoom. Detta skulle dock sänka kvaliteten på kursen, vilket jag inte tror är någon bra idé.

Ämnesexperternas initiala föreläsningar var mycket uppskattade som en introduktion till projektarbetet och de olika störningarna. Det skulle dock vara fördelaktigt om ämnesexperterna involverades mer under arbetets gång, vilket skulle kunna göras genom att uppmuntra studenterna att ta kontakt med dem och boka möten vid behov.

Seminariet i slutet på kursen var mycket uppskattat av studenterna. Ett förslag är därför att utöka detta något, om möjligt. Quizen var också en bra idé för att få studenterna att sätta sig in i samtliga störningar tidigt i kursen. Frågestunderna efter quizen gav dock inte så mycket, så de skulle behöva omstruktureras. Ett förslag är att ha ett lärarlett större seminarium efter quizmomentets slut istället för små frågestunder efter varje quiz.

Tentan är den stora utvecklingspunkten på kursen. Kortsvarsfrågorna behöver tydliggöras så att de faktiskt går att svara kort på. Antalet kortsvarsfrågor kan förmodligen dessutom minskas genom omformuleringar, vilket också skulle minska upprepningarna genom hela tentan som tog mycket tid utan möjlighet att uppvisa någon ny kunskap. De större frågorna för högre betyg i slutet på tentan behöver skilja sig mer från kortsvarsfrågorna, för att också minska repetitionen. Som tentan såg ut vid det här kurstillfället hann flera studenter inte klart med tentan i tid, vilket ledde till mycket frustration.

Överlag var detta en givande och uppskattad kurs som mestadels behöver några mindre justeringar till nästa år.