



BB2570 - System- och livscykelanalys 2023

Examinationsgrad: 37/37

Undervisande lärare:

ABE { Léa Braud (4 F, föreläsning), Rajib Sinha (1 F), Göran Finnveden (1 F),
Björn Frostell (2 F)

BIO { Ines Ezcurra (1 F, PRO, kursansvar), Lauren McKee (PRO), Vaibhav
Srivastava (PRO), Veronique Choteau (PRO)

TAs Léa Braud (TA, LAB&PRO), Simon Jernselius (TA, LAB&PRO)

Kursen inkluderar undervisning inom: livscykelanalys, systemtänkande, bioteknik, hållbarhet och hållbarutveckling, projektledning och projektplanering

Övning/träning ges inom: livscykelanalys, systemtänkande, bioteknik, hållbarhet och hållbarutveckling, projektledning och projektplanering

Examinerade lärandemål inkluderar: livscykelanalys, systemtänkande, bioteknik, hållbarhet och hållbarutveckling, projektledning och projektplanering

TEN1, PRO1



Kursanalys

Allmänt om kursen: Kursen syftar till att ge studenter kunskaper om systemtänkande och livscykelanalys och dess användning för att prioritera, rangordna och välja hållbara lösningar. Kunskaper om hur man utvärderar bioteknologiska processer ur ett hållbarhetsperspektiv lärs ut genom praktisk användning av matematiska och statistiska modeller.

Vad var bra: Rolig, intressant, relevant & användbar i framtidens yrkesroll, bra föreläsningar, intressanta koncept & idéer, bra designad mot lärandemål, LCA Activity Browser programmet, blandning av sal- och för-inspelade föreläsningar, projektet, diskussioner, reflektioner.

Vad behöver förbättras: Datorlabbets instruktioner och frågor; ge info om varför olika deadlines för uppgifter (reflektioner); diskutera med lärarna om flervalsfrågor för föreläsningar; utveckla en metod för att undvika ojämna bidrag, typ signerad kontrakt mellan studenter plus log-fil med studenters bidrag; diskutera med lärarna om flera projekt; be programmet om en doktorand som kan vara assistent.



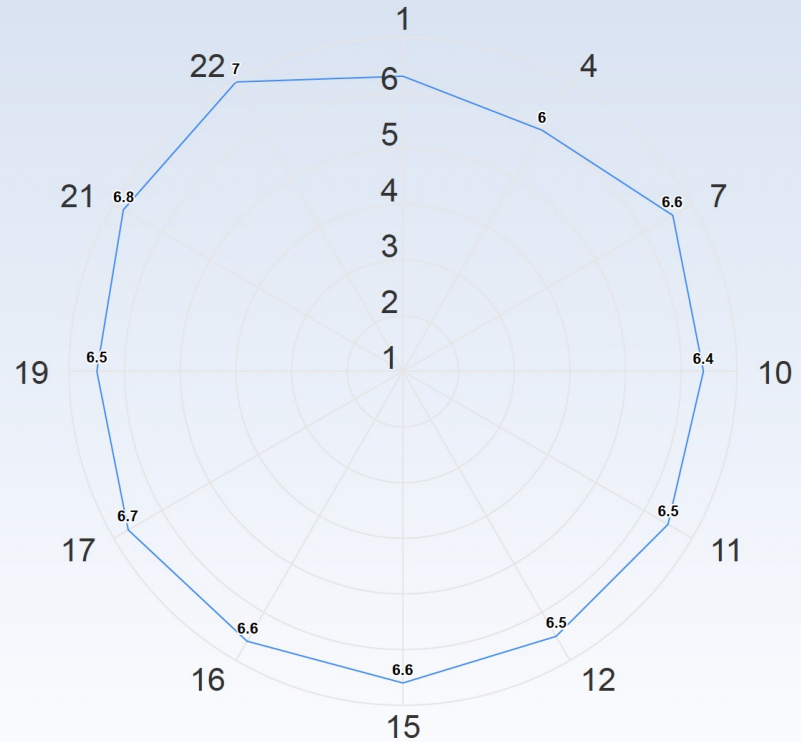
Kursanalys

BB2570 - 2024-01-12
Antal respondenter: 37
Antal svar: 6
Svarsfrekvens: 16 %

Low response rate in spite of multiple “kind reminders”

LEARNING EXPERIENCE

Average response to LEQ statements - all respondents



— Medelvärde



Vidareutveckling för nästa kursomgång

Förslag på åtgärder:

- 1) Undersöka möjligheter att spela in föreläsningar;
- 2) Diskutera i början av kursen problem med ojämna bidrag, möjligen utveckla en metod för att undvika ojämna bidrag under projektarbete, typ signerad kontrakt mellan studenter plus log-fil med studenters bidrag;

Dessa förslag kommer att diskuteras under möte med alla lärare under vår 2023 (mars eller april). Alla uppkomna problem kommer att diskuteras och åtgärdas.



Further development for the next course round

Suggestions for measures:

- 1) Investigate possibilities of recording lectures;
- 2) Discuss at the beginning of the course problems with unequal contributions, possibly develop a method to avoid unequal contributions during project work, such as a signed contract between students plus a log file with students' contributions;

These suggestions will be discussed during a meeting with all teachers in spring 2022 (March or April). All problems that have arisen will be discussed and solved.



Studenters kommentarer

Workload:

On average, how many hours/week did you work with the course (including scheduled hours)?

The project required quite a lot of time for being graded P/F

The workload of the course was reasonable in relation to the hp of the course.



Studenters kommentarer

What was the best aspect of the course?

- **The discussion** sessions held during lectures
- It was a new topic for me so I felt like **I learned a lot**. The **classes were interactive and useful**. The **teachers were very supportive and helpful**.
- It was very interesting to learn how to do a proper LCA but also to learn more and discuss more about sustainability.
- The **interactive and collaborative nature of many lectures, the exercises and project**
- The project was my favorite part of the course because it was interesting to tackle a real issue.
- It was **interesting** to see how each step in an industrial process has some form of environmental impact and the **use** of such **data to improve** or
- implement **new technology** in industries.



Studenters kommentarer

What would you suggest to improve?

- If possible, **make recorded videos of the lectures**
- It would be great to get **more support during the computer labs** as in the case of the second one it was difficult to understand what we were asked for and I felt quite lost. I think that it would require a **longer time in the schedule** and it should be on site with support from LT.
- Perhaps **concentrate the LCA lectures and labs towards the beginning of the course**. Them finishing late, and being important in order to do the project.
- International students (at least in the group I was working) did not do the labs until the very last minute, delaying the project and being unable to provide to the group work until the end.
- It would be beneficial to have the **scheduled exercises** with a teacher where the activity browser is used be held in one of the schools **computer rooms** instead of a lecture/exercise room



Studenters kommentarer

What advice would you like to give to future participants?

It'll be tough initially but you'll get the hang of it, given that enough effort is put in

Start with the project early

Do the labs as quick as possible, then the LCA lectures will make more sense.

Actively participate in group discussions

Is there anything else you would like to add?

No

Thank you for the course! (:

Thank you for a great course



Studenters kommentarer

I was able to learn from concrete examples that I could relate to

It was great when Lea explained the concepts in parallel to her own work during her thesis

I was able to learn by collaborating and discussing with others

The discussions during class were quite interesting and helped also to apply the theoretical knowledge of the lectures to the project



Studenters kommentarer, med svar

Teacher's answers to students comments

- If possible, **make recorded videos of the lectures** **ANSWER: will look into it**
- It would be great to get **more support during the computer labs** as in the case of the second one it was difficult to understand what we were asked for and I felt quite lost. I think that it would require a **longer time in the schedule** and it should be on site with support from LT. **ANSWER: LT? I assume it's TA. And TA Léa B did offer and gave on-site support, besides to scheduled online computer lab time. Both TAs were accessible and addressing issues through Canvas Announcements and Discussions.**
- Perhaps **concentrate the LCA lectures and labs towards the beginning of the course**. Them finishing late, and being important in order to do the project. **ANSWER: All LCA lectures were before midterm LCA exam, as should.**



Studenters kommentarer, med svar

Teacher's answers to students comments

- International students (at least in the group I was working) **did not do the labs until the very last minute**, delaying the project and being unable to provide to the group work until the end. **ANSWER: Unequal contribution was an issue also last year during project work. Regarding computer labs, student's have an option of working individually. We didn't carry out last year's suggestion of written contract to avoid this issue, reasoning it might feel awkward/cumbersome.**
- It would be beneficial to have the **scheduled exercises** with a teacher where the activity browser is used be held in one of the schools **computer rooms** instead of a lecture/exercise room **ANSWER: Computer labs are held online via zoom, and students have the option to sit in a KTH booked computer room. TA Lea B offered an additional on-site support, which was held in a lecture room.**
- The **project** required quite **a lot of time** for being graded **P/F**. **ANSWER: Agree, but it's difficult to assess and grade invested time.**