Kursanalys

Kurstitel: Cultivation Technology					
Kurskod: BB1300	Högskolepoäng: 7.5				
Kursen ingår i programmet: Biotechnoloy					
Termin: H2020	Läsperiod: 1				
Kursansvarig: Antonius van Maris	Examinator: Antonius van Maris				
Antal registrerade studenter: ?	Antal godkända vid sista kursdatum: ?				
Svarsfrekvens kursvärderingsenkät (%):	95% (61 of 64 who wrote the exam)				

1. Beskrivning av genomförda förändringar till detta kurstillfälle

- The course was adapted as required during the Covid-19 pandemic (online lectures, lectures made available as video and workshop, workshop time used as question hour, lab and written exam at AlbaNova).
- The chemostat modelling workshop was adjusted to better fit the available time.
- Parts of the book were updated and made freely available as PDF.

2. Sammanfattning av studenternas kursvärderingar

See attachments for the questions and outcome of the course evaluation questionnaire.

The overall course (8.5 out of 10), the teachers (4.35 out of 5) and the course lab (4.5 out of 5) were evaluated very positively by the students. This year, the exam difficult was rated high both concerning quantity (4.3 out of 5) and quality (4.4 out of 5).

Although looking forward to lectures with physical attendance, both students and teachers considered this a very successful instance of the BB1300 course.

3. Reflektioner kring kursens genomförande och resultat

a. Kursens styrkor:

- Well established course with appropriate format and diverse opportunities to study
 the material. The combination of lectures on theory (live or recorded), workshops,
 mid-term exam and lab course enables the students multiple opportunities to master
 and contextualise the course material.
- The availability of the recorded lectures seems to have had a positive impact on the
 course. Although it decreases the 'live' attendence, it enabled many students to catch
 up through self study (75% passed the regular exam) and also enabled students that
 had difficulty with the speed of the lectures to follow them at their own speed (see
 student comments).
- The exam is selective for those students that have achieved the course objectives.
 75% of the students that took the exam (including students from previous years) passed the course. A large fraction of these students (33%) achieved very high grades (A-B).

b. Kursens svagheter:

The lack of retention of basic information from high school or previous courses (e.g. basic mathematics and mass balances) by a sub population of the students necessitates repetition of that material and slows down the learning experience of other students. I think the students would benefit from more courses in the first two years that demand active use of basic mathematics and/or engineering skills in a biotechnological context. That should activate and maintain the engineering skills that are in line with a Bsc level engineering education and prepare for the MSc level education.

4. Förslag till förändringar för kommande kurstillfälle

None needed, aside from hopefully returning to non-Covid-19 version.

5. Övriga synpunkter

N.A.

Bilagor:

- 1. Course evaluation outcome (excel file)
- 2. Course evaluation questionnaire (below)
- 3. Grade distribution 2020-2021 main examination (below).





Course Evaluation Questionnaire Cultivation Technology BB1300

Instructions: Encircle the most appropriate answer. Leave empty if not applicable to you in 2020-2021.

General

1. Which percentage of the lectures did you attend?

0-10% 20-30% 30-70% 70-90% 90-100%

2. Which percentage of the workshops did you attend?:

0-10% 20-30% 30-70% 70-90% 90-100%

3. The course organisation was good:

Totally disagree Disagree Neutral Agree Totally agree

Teacher: Lectures

4. The teacher clearly explained the subject material:

Totally disagree Disagree Neutral Agree Totally agree

5. The teacher presents the subject material in a stimulating and instructive way:

Totally disagree Disagree Neutral Agree Totally agree

6. The teacher speaks clearly and at an appropriate speed:

Totally disagree Disagree Neutral Agree Totally agree

7. The teacher was available for questions outside lecture/workshop hours:

Totally disagree Disagree Neutral Agree Totally agree

Teacher: Lab course and chemostat workshop

8. The teacher clearly explained the subject material:

Totally disagree Disagree Neutral Agree Totally agree

9. The teacher presents the subject material in a stimulating and instructive way:

Totally disagree Disagree Neutral Agree Totally agree

10. The teacher speaks clearly and at an appropriate speed:

Totally disagree Disagree Neutral Agree Totally agree

(See other side for questions 11-20)

Course speci	ITIC							
11. Compared to the number of credits (7.5) the study load of the course is:								
Too l	ow Lo	w Correc	ct Hig	h	Too hi	gh		
12. The study material (book, lectures, exercises, canvas) is appropriate for the course:								
Total	ly disagree	Disagr	ee Neı	ıtral	Agree		Totally agree	
13. The workshops contributed to my understanding of cultivation technology:								
Total	ly disagree	Disagr	ee Neu	ıtral	Agree		Totally agree	
Lab course								
14. The organisation of the lab course was good:								
Total	ly disagree	Disagr	ee Neu	utral	Agree		Totally agree	
15. There was a good connection between lectures, lab course and learning objectives:								
Total	ly disagree	Disagr	ee Neu	ıtral	Agree		Totally agree	
16. The lab course contributed to my understanding of cultivation technology:								
Total	ly disagree	Disagr	ee Neu	ıtral	Agree		Totally agree	
Exam								
17. I knew what was expected of me for the exam:								
Total	Totally disagree		ee Neı	Neutral A			Totally agree	
18. The exam was representative of the study material:								
Total	ly disagree	Disagr	ee Neu	ıtral	Agree		Totally agree	
19. There was sufficient time to write the exam:								
Total	ly disagree	Disagr	ee Neu	ıtral	Agree		Totally agree	
Conclusion								
20. What is the overall score you give this course? Rated from 1 (bad) to excellent (10).								
1	2 3	4	5 6	7	8	9	10	
Comments:								

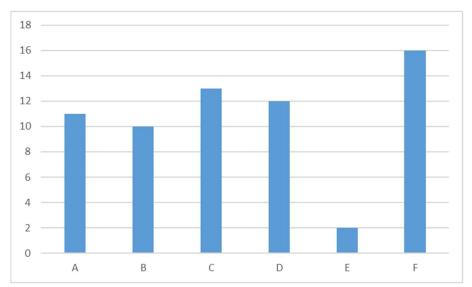


Figure A3.1 Number of students with a certain grade for the regular exam of BB1300 in the 2020-2021 instance after completion of FX.