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Course analysis SF1633/SF1676, VT21, P4

Course analysis carried out by:

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Course analysis based on:

- Midterm survey, course survey after regular exam.
- Final course meeting with CSAMH2 representatives and CSAMH PA.
- Meeting with CMAST2 representatives and CMAST PA under week three of the course.
- Regular online meetings with with teaching assistants.
- Results of regular exam.

All registered students were invited in weeks 2-3 of the course to actively take part in the kursnamnd. Students chose not to actively participate.

Course design:

Due to SARS-CoV 2, the course was offered in a blended approach:

- Lectures were replaced by prerecorded videos. The videos were of varying length 15 to 45minutes, typically 5 to 8 videos per week.
- The course was organized by topics in 'Modules' in Canvas.
- Exercises sessions were offered in four groups via zoom.
- Online computer graded exercises using the platform WeBWork of the Mathematical Association of America, <https://webwork.maa.org/>
- Weekly office hours on zoom.
- Only SF1676: Group project (PRO1, 1.5hp) in civil engineering towards the end of the course. Some project are suitable for students in datateknik.
- Examination concept: Written exam (4h) on campus under additional measures due to SARS-CoV 2. Re-exam will also use zoomproctoring. Bonuspoint system: Up to 10% bonus based on results for online computer graded exercises.

Course results after regular exam:

SF1633:

- A: 26%
- B: 12%
- C: 31%
- D: 12%
- E: 7%
- Fx: 2
- F: 8%

SF1633 tentander: 87

SF1676:

- A: 21%
- B: 8%
- C: 25%
- D: 22%
- E: 8%
- Fx: 2%
- F: 10%

SF1676 tentander: 89

Number of registered and re-registered students: 246. Students writing the regular exam: 176. Passing rate is slightly higher than in previous years.

Summary of student's opinions:

-Average response to LEQ statements does not indicate significant problems with the course.

-Students emphasized the following: They work with interesting issues. Differential equations are important for their studies, they show up in many places. The assessment was considered fair. Students acknowledge the work of the teaching assistants and find the exercise sessions helpful. Students appear to like the course literature.

-Related to the current situation students emphasized the following: The course was very well structured, content-wise but also in Canvas. Students seem to favor prerecorded video over live zoom lectures, some students expressed the wish for recorded lectures and recorded exercise sessions. Few students expressed issues with organizing their working time, in particular, when to watch videos.

-Some CDATE3 students stated that the course can be difficult for them as they are reading it in AK3 and they did not have mathematics courses under AK2.

Examiners assessment and recommendations:

Under the circumstances I believe the course went rather well, in particular the passing rate after the regular exam was not lower than under normal circumstances rather the opposite. Project work in SF1676 went rather well this term. The current format seems to be very well adapted to distance teaching. Yet, it may be useful to help students more with blended/hybrid teaching, e.g. propose some ways to organize their study activities. One concern is an increased amount of emails, I believe this is due to the lasting situation and increasing insecurity of some students. Should the situation continue, find ways to support students to build more confidence and help progress them in academic maturity.

Another issue is, as with many other courses, that not many students use the opportunity to take the course surveys. I presume is also partly caused by the fact that student chapters organize their own course surveys. This issue should be addressed via PA/SR/GA. On course level find ways to motivate students to take part in kursnamd.

Course developments: Refine and review the current grading criteria, some students have problems understanding the continuous grading scale used. Review examination concept for written exam and reconsider examination time. Long term development: Which part of blended/hybrid teaching activities could be useful in the future?

Technical developments: The WebWork online homework system is going to be updated under summer 2021 and receive a new GUI, this will require some adaptations on our side before HT21.

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