

Course analysis SI1336, 2019 HT

COURSE ORGANISATION

Course responsible and teacher: Berk Hess

Assistants: Cathrine Bergh and Oliver Fleetwood

6 lectures, whole class, 2 hours each (in English)

4 presentation meetings, 4 groups, 2 hours each (3 groups Swedish, 1 English)

5 räknestugor, each 2 hours

Final project submission online, deadline December 18 2019 or January 20 2020

RESULTS

110 students registered

PRO1: 90 students submitted at least 1 report out of 4, 84 students passed

PRO2: A: 30, B: 20, C: 29, D: 2, E: 3, Fx: 4

Course: A: 28, B: 18, C: 28, D: 2, E: 3, Fx: 4

WORKLOAD

No complaints about overall workload. In the kursenkät only 3 students reported more than 20 hours per week. In 2018 there were major workload issues due to bad coordination between 4 courses with projects in the same period. This year the workload was quite well distributed, as there were 3 courses and much better coordination between the courses. Details of the scheduling can still be improved: there was one presentation meeting scheduled too close after the corresponding lecture and the workload of the last two weekly projects could be balanced better.

WEEKLY PROJECTS

Instead of last years 6 weekly projects, there were now 4 “weekly” projects. This change has addressed a lot of complaints from the students last year. Now the weekly projects are larger and go deeper, which is clearly an improvement. The only disadvantage is that there are fewer topics. No significant issues here, except that expectations for the reports and presentations can be made clearer. Also the schedule for the whole period should be announced and put on the course page at/before the first lecture.

PROGRAMMING ASPECTS

Usually technical issues pop up in a course that contains programming. This year things ran quite smoothly and the only technical issues were related to animations in Matplotlib. The background of the students is now rather uniform with most coming from the engineering physics program and the few who were not had sufficient programming knowledge. Thus for next year it has been decided to make the provided Python templates more object oriented so the students need to spend less time on repetitive work for generating plots for different parameter values or reorganising code. The time gained can then be spent on more physics and simulation related topics.

FINAL PROJECT

This year there were more topics to choose from for the final project. The balance of prescription and freedom in the projects seemed exactly right. In general the level of the final projects was higher than last year. In particular the increased emphasis on statistical accuracy this year resulted in, on average, much better statistical analysis in the reports compared to last year. But there is still room for improvement on the important topic of error estimation.