

Course analysis for *Advanced Astrophysics for PhD students*

Course design and results

Course code	FSH3130
Credits	7.5
Course offering	Autumn 2021
Teachers	Felix Ryde (course coordinator, examiner, responsible for lectures+assignments on radiation and relativity) & Josefin Larsson (responsible for projects and lectures+assignments on accretion)
Teaching	Lectures and exercise classes
Examination	Project (5.5hp), Home assignments (2hp)
Number of registered students	3
Number of students who passed the course	3

Changes since the previous course offering

The main change is that the requirement for the length of the project report has been increased by about 30%. This was based on comments from the PhD students who took the course last time (in 2015), who thought the project could be more challenging.

Summary of the course evaluation

The students were invited to give their feedback on the course either by sending an email or by having a discussion with one of the teachers (Josefin Larsson). One student sent an email and the other two students gave their comments orally. The students were asked to give feedback on all aspects of the course and to especially consider the PhD-level skills. The main comments are summarised below.

Projects

All students thought the projects were a good form of examination and that they learnt a lot by doing them. They found the instructions clear and the length of the written report appropriate (following up on the change from last time).

In terms of developing PhD-level skills, they particularly appreciated having to choose their own topics for the projects and doing a peer review of each other's reports.

There were two main suggestions for future improvements:

- Extend the peer review to also include giving comments on the talks. It was also suggested to have more time for questions and discussions after the talks.
- Make it possible to read the reports of all the students, not just the one report that is being peer-reviewed. This could include the shorter reports done by MSc students taking the related course SH2403. The reports are seen a useful resource for learning about other research areas.

Other aspects of the course

The students were satisfied with the other aspects of the course, including scope, difficulty level, lectures and home assignments. The main suggested improvement was to make the scheduling information more visible on the Canvas page (the course moved between different class rooms and students did not always know who would be teaching).

Conclusions and plans for the future development of the course

The course works well and the students are especially satisfied with the project. The teacher responsible for the projects also notes that the reports were of very high quality.

The small changes suggested by the students will be implemented in the next course offering:

- the peer review will include the talk, and the time for discussion after the talks will be extended. The teachers think this will be a very useful change in terms of improving learning outcomes.
- all students will be encouraged to make their reports available to each other.
- scheduling information will be improved.