Course Report AS7016 HT20

Respondents: 1 Answer Count: 1 Answer Frequency: 100.00%

. Teacher

Teacher

Anders Jerkstrand

. Number of students who took the exam

Number of students who took the exam	Number of Responses
7	0 (0.0%)
8	0 (0.0%)
9	0 (0.0%)
10	0 (0.0%)
11	1 (100.0%)
12	0 (0.0%)
13	0 (0.0%)
14	0 (0.0%)
15	0 (0.0%)
16	0 (0.0%)
Total	1 (100.0%)

. Number of students who passed the course



. Description of changes since the previous time the course was given.

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Lecturing material, exercises, and the lab were all remade. The stellar evolution part of the course was expanded, and the supernova part somewhat reduced. A reading compendium for the theory of supernova light curve and spectral formation was created (the other lecturing material were slide-format). The course was given in remote format due to the Covid restrictions.

. What are the course's strong points according to the students (summary based on the numerical results as well as their free text answers)

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The things that stood out in the survey as the students being particularly satisfied with were : the overall course structure and format, the project component of the course, the general structure of the examination with hand-in exercises as a significant part, and the feedback and support provided by the teaching team.

. What are the course's weak points according to the students (summary based on the numerical results as well as their free text answers)

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While the exercises were highly appreciated per se, the scope of these were too extensive and it took too long to complete them. Discernable in the survey is also a request for a clearer link between the lectures and the exercises, with yet more examples and demonstrations. Provision of further reading material.

. The teacher's analysis of the course

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Overall I was happy with how the course went - we had a very good group of students and in general a positive and interactive learning atmosphere. There were many changes this year - significantly revised course material, new lecturer and teaching assistant, and unusual lecture format (Zoom) - but despite these challenges things went well and the students were overall satisfied.

This course is challenging in many ways, both for teachers and students, as it covers a very large and diverse range of topics. Bridging three different areas of astrophysics - stellar evolution, supernovae, and gamma-ray bursts - we must stop long enough at each station to learn something at a meaningful depth, yet move on fast enough to be able to cover these three areas. Gaining experience on which components to spend less/more/similar amount of time on was very useful to tune the structure for next time.

With the goal to create an active learning environment, the students are set to work on hand-in exercises and lab preparations quite early and then continue with hands-on work until the end (the course has no final exam). I assessed during the course that this format was working quite well and was appreciated, and the survey responses also confirm this.

. Conclusions as well as suggestions for improvements

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The most important change for next year regards the scope of the exercise sets, and how the exercises are linked to the lectures. I think we also need to communicate more clearly that the exercises take quite some time to do - several students seemed to have been surprised by this.

Also, it is desirable to get the students started yet earlier with active work, either by putting the lab earlier on or the exercise set 1 deadline earlier.

Another improvement would be development of a reading compendium for the whole course (for this year a compendium covering only part of the course could be completed, with the rest of the material being as slides).

Relevant would also be further clarification of learning outcomes and a clearer link between these and the course activities, perhaps where we at intervals return to learning outcomes to put the activities into context.