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## Report - AK2036 - 2019-06-27

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

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**Please note that there is only one respondent to this form: the person that performs the course analysis.**

**Course analysis carried out by (name, e-mail):**

Johan Berg jgberg@kth.se

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**COURSE DESIGN**

**Briefly describe the course design (learning activities, examinations) and any changes that have been implemented since the last course offering.**

Note: In this course analysis answers from all connected course rounds (AK2030, AK2036) have been taken in to account due to the high similarity between the courses. The courses share the same or almost the same lectures, seminars and exam and in reviewing the answers we have found no reason to believe that the answers are not valid for the other course rounds, except when it comes to those seminars and lectures not shared.

The 4,5 credits version of the course consists of lectures, seminars (1,5 credits) and an exam (3 credits). The longer versions on a master level also complete a "Project part" assignment related to articles in their field (3 credits). Two lectures have been changed to video lectures, with associated bonus point quizzes. Exam preparation quiz was added at the end of the period to make it clearer what is expected in an answer, with regards to the ILOs.

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**THE STUDENT'S WORKLOAD**

**Does the students' workload correspond to the expected level (40 hours/1.5 credits)? If there is a significant deviation from the expected, what can be the reason?**

The expected workload for the AK2030 is 12 hours per week. 40% of the respondents (2/5) reported working this much, 20 % (1/5) more, and 40 % reported working less than this (2/5). The expected workload for AK2036 is 20 hours per week. 18 % (4/22) reported working this much, 14 % reported working more (3/22) and 68 % reported working less (15/22). In the course evaluation, a specific question regarding this was added, but none of the text answers allowed for any particular explanation or analysis, other than that some students are working simultaneously or studying more than 100 %, which is something we cannot control. We will continue on improving our information to students about: the expected workload, that students are supposed to study even when there is no scheduled course activity, and that few of the course activities are mandatory requirements for passing the course.

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### THE STUDENTS' RESULTS

**How well have the students succeeded on the course? If there are significant differences compared to previous course offerings, what can be the reason?**

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P4 2017-2018 - P3 2018-2019 grades in percent, rounded to nearest full percentage point (n=1071)

A: 11  
B: 12  
C: 15  
D: 13  
E: 11  
Fx: 15  
F: 21

2018-2019 Period 3 grades in percent, rounded to nearest full percentage point (n=73)

A: 33  
B: 18  
C: 8  
D: 8  
E: 8  
Fx: 11  
F: 14

75 % of students received a passing grade, which is higher than the year average for these courses of 64 %. Significantly more students received the highest grades, A and B, than the year average. This might be due to the new video quizzes or the exam preparation questions, but there are no clear conclusions at this point. It should be noted, that a number of students took the period 3 re-exam in June due to exam collisions, instead of the regular exam which the results are based on.

### OVERALL IMPRESSION OF THE LEARNING ENVIRONMENT

**What is your overall impression of the learning environment in the polar diagrams, for example in terms of the students' experience of meaningfulness, comprehensibility and manageability? If there are significant differences between different groups of students, what can be the reason?**

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Students' assessment of the learning environment is between +1 and +3 (maximum) for all aspects of the learning environment on average. The overall impression is that students experience the learning environment as conducive to learning. There are no clear differences between Swedish and international students. Women rate the courses higher than men for all questions, but no clear explanation offers itself.

### ANALYSIS OF THE LEARNING ENVIRONMENT

**Can you identify some stronger or weaker areas of the learning environment in the polar diagram - or in the response to each statement - respectively? Do they have an explanation?**

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No aspect stood out as significantly more positive or negative than other - all answers for AK2036 varied between 4,9 to 5,9 (out of 7, where 4 is neutral). For AK2030 the low number of respondents (5) made it hard to draw any certain conclusions. The text comments do not provide any additional insights.

### ANSWERS TO OPEN QUESTIONS

**What emerges in the students' answers to the open questions? Is there any good advice to future course participants that you want to pass on?**

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One student said that the seminars during some sessions had felt too much like a test, which created fear even when the student was prepared. While this is very different from the feedback the seminars usually get, this is something we should take very seriously. We will re-instate more clear questions to be asked during the seminars, so the students know what to be prepared to do.

In general, the text answers in the course evaluation was scattered, where some individuals disliked the course and did not believe it to be useful in the future, while others liked it and reported that in particular appreciated the variation in teaching styles. A lot of comments reappeared in several text fields, presumably from the same students. A point brought up in several answers is that there is a lot of content, that the level of English is high and that there is a focus on definitions. These points are recurring, and should presumably be interpreted as something that is hard with the course, if not negative. However, there are no clear cut remedies to this - the course is centred on definitions by its very nature, and there are a lot of content a course like this should contain. The level of English that is not course content is something we can consider changing, however at this stage in a student's education one is supposed to be able to understand academic English.



**PRIORITY COURSE DEVELOPMENT**

**What aspects of the course should primarily be developed? How could these aspects be developed in the short or long term?**

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For period 1 we will create course literature related to the lectures, featuring further reading recommendations and references for interested students. We are re-making the course memo and the course page to improve the information flow, and include information on information to the students on self-study techniques (such as note-taking while reading and different styles of reading) and improving the information regarding the ILOs, and the different skills that they represent and how these are evaluated.

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# Course data 2019-06-27

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## AK2036 - Theory and Methodology of Science with Applications (Natural and Technological Science), VT 2019 Period 4

### Course facts

|                |   |
|----------------|---|
| Course start:  | 2019 w.12   |
| Course end:    | 2019 w.23   |
| Credits:       | 7,5   |
| Examination:   | PRO1 - Project, 3.0, Grading scale: P, F<br>SEM1 - Seminars, 1.5, Grading scale: P, F<br>TENA - Examination, 3.0, Grading scale: A, B, C, D, E, FX, F |
| Grading scale: | A, B, C, D, E, FX, F  |

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### Staff

|                             |                                  |
|-----------------------------|----------------------------------|
| Examiner:                   | Till Grüne-Yanoff <gryne@kth.se> |
| Course responsible teacher: | Johan Berg <jgberg@kth.se>       |

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Teachers:

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Assistants:

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### Number of students on the course offering

|            |   |
|------------|---|
| Registered | 0 |
|------------|---|

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### Achievements (only registered students)

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|---|---|
| Pass rate <sup>1</sup> [%]                  | <i>There are no course results reported</i> |
| Performance rate <sup>2</sup> [%]           | <i>There are no course results reported</i> |
| Grade distribution <sup>3</sup> [%, number] | <i>There are no course results reported</i> |

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1 Percentage approved students

2 Percentage achieved credits

3 Distribution of grades among the approved students