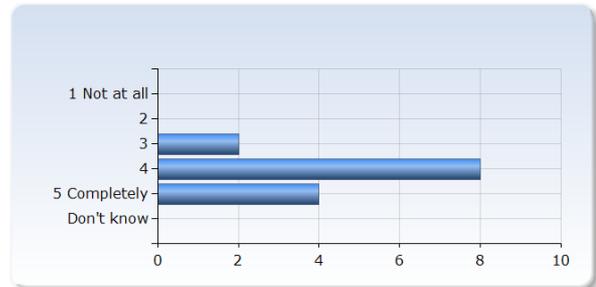


FK7048 - Mathematical Methods in Physics - HT18

Respondents: 33
Answer Count: 17
Answer Frequency: 51.52 %

5. Overall impression

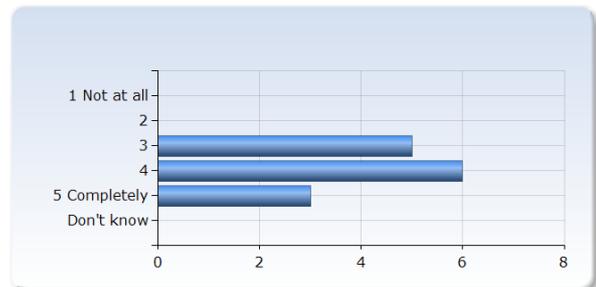
Overall I am satisfied with this course	Number of Responses
1 Not at all	0 (0.0%)
2	0 (0.0%)
3	2 (14.3%)
4	8 (57.1%)
5 Completely	4 (28.6%)
Don't know	0 (0.0%)
Total	14 (100.0%)



6. Student contribution

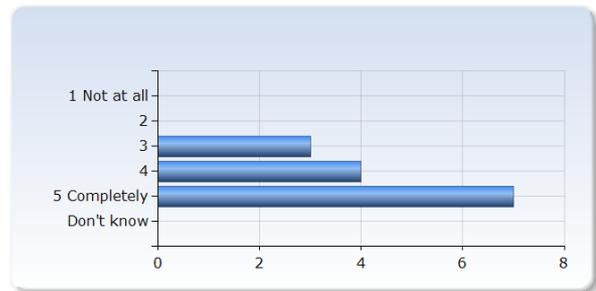
I am satisfied with my own effort in the course

I am satisfied with my own effort in the course	Number of Responses
1 Not at all	0 (0.0%)
2	0 (0.0%)
3	5 (35.7%)
4	6 (42.9%)
5 Completely	3 (21.4%)
Don't know	0 (0.0%)
Total	14 (100.0%)



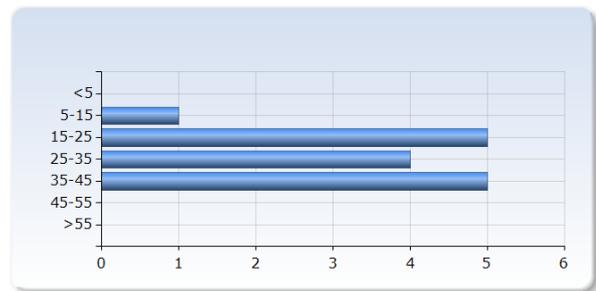
I took responsibility for my own learning in the course

I took responsibility for my own learning in the course	Number of Responses
1 Not at all	0 (0.0%)
2	0 (0.0%)
3	3 (21.4%)
4	4 (28.6%)
5 Completely	7 (50.0%)
Don't know	0 (0.0%)
Total	14 (100.0%)



7. Work load

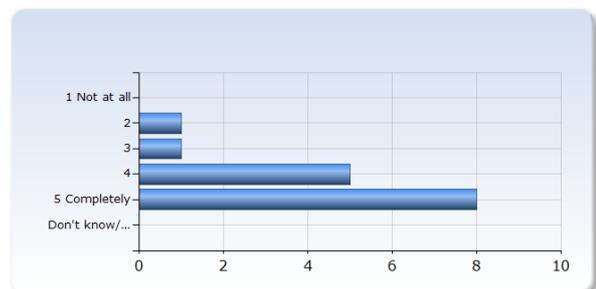
Indicate how many hours per week on average you have spent on the course, including self-studies and scheduled study time	Number of Responses
<5	0 (0.0%)
5-15	1 (6.7%)
15-25	5 (33.3%)
25-35	4 (26.7%)
35-45	5 (33.3%)
45-55	0 (0.0%)
>55	0 (0.0%)
Total	15 (100.0%)



8. Clear aims

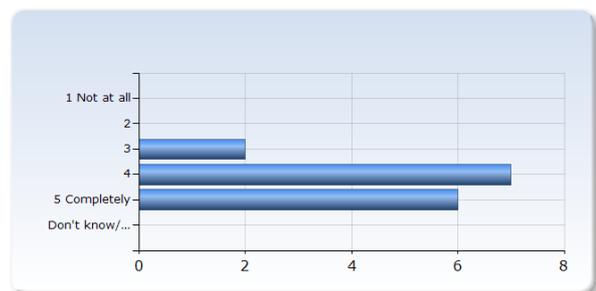
It was clear to me what I was expected to learn

It was clear to me what I was expected to learn	Number of Responses
1 Not at all	0 (0.0%)
2	1 (6.7%)
3	1 (6.7%)
4	5 (33.3%)
5 Completely	8 (53.3%)
Don't know/ Not relevant	0 (0.0%)
Total	15 (100.0%)



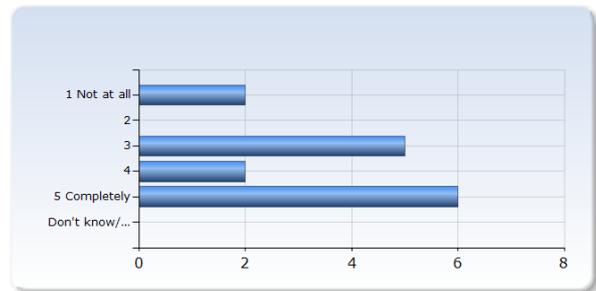
I felt that the course content and teaching methods were relevant to the learning outcomes

I felt that the course content and teaching methods were relevant to the learning outcomes	Number of Responses
1 Not at all	0 (0.0%)
2	0 (0.0%)
3	2 (13.3%)
4	7 (46.7%)
5 Completely	6 (40.0%)
Don't know/ Not relevant	0 (0.0%)
Total	15 (100.0%)



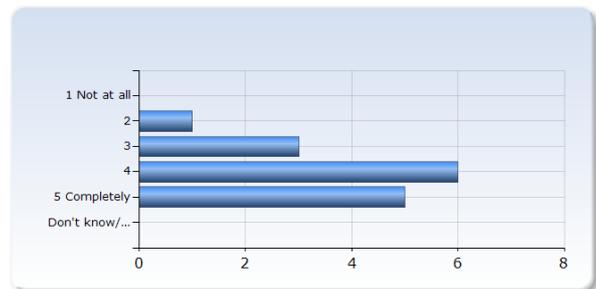
The examination tested how well I had achieved the learning outcomes

The examination tested how well I had achieved the learning outcomes	Number of Responses
1 Not at all	2 (13.3%)
2	0 (0.0%)
3	5 (33.3%)
4	2 (13.3%)
5 Completely	6 (40.0%)
Don't know/ Not relevant	0 (0.0%)
Total	15 (100.0%)



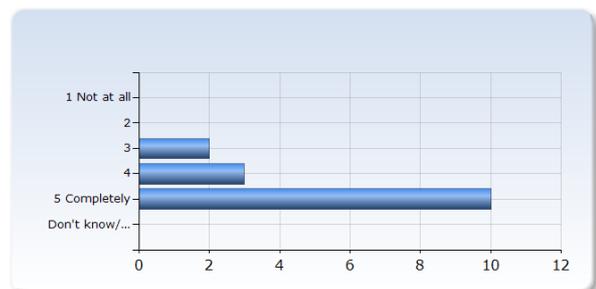
The course corresponded to my expectations

The course corresponded to my expectations	Number of Responses
1 Not at all	0 (0.0%)
2	1 (6.7%)
3	3 (20.0%)
4	6 (40.0%)
5 Completely	5 (33.3%)
Don't know/ Not relevant	0 (0.0%)
Total	15 (100.0%)



I feel that I will have use of what I have learnt after my studies

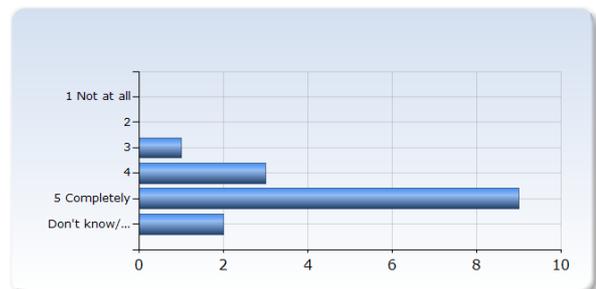
I feel that I will have use of what I have learnt after my studies	Number of Responses
1 Not at all	0 (0.0%)
2	0 (0.0%)
3	2 (13.3%)
4	3 (20.0%)
5 Completely	10 (66.7%)
Don't know/ Not relevant	0 (0.0%)
Total	15 (100.0%)



9. Good teaching

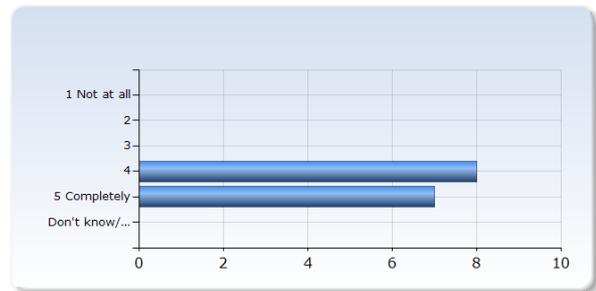
The course prerequisites were sufficient to follow the course

The course prerequisites were sufficient to follow the course	Number of Responses
1 Not at all	0 (0.0%)
2	0 (0.0%)
3	1 (6.7%)
4	3 (20.0%)
5 Completely	9 (60.0%)
Don't know/ Not relevant	2 (13.3%)
Total	15 (100.0%)



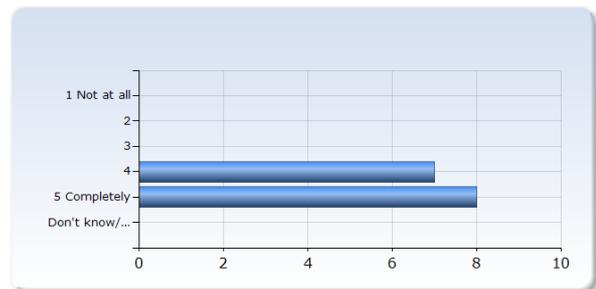
I felt that the course was well structured

I felt that the course was well structured	Number of Responses
1 Not at all	0 (0.0%)
2	0 (0.0%)
3	0 (0.0%)
4	8 (53.3%)
5 Completely	7 (46.7%)
Don't know/ Not relevant	0 (0.0%)
Total	15 (100.0%)



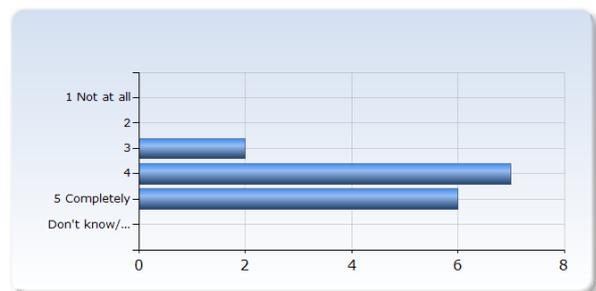
I felt that the teachers have helped me to reach the learning outcomes

I felt that the teachers have helped me to reach the learning outcomes	Number of Responses
1 Not at all	0 (0.0%)
2	0 (0.0%)
3	0 (0.0%)
4	7 (46.7%)
5 Completely	8 (53.3%)
Don't know/ Not relevant	0 (0.0%)
Total	15 (100.0%)



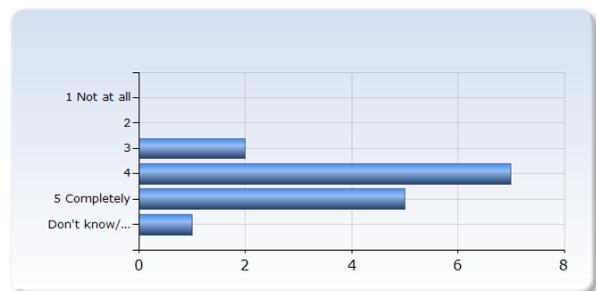
I could understand what was being taught

I could understand what was being taught	Number of Responses
1 Not at all	0 (0.0%)
2	0 (0.0%)
3	2 (13.3%)
4	7 (46.7%)
5 Completely	6 (40.0%)
Don't know/ Not relevant	0 (0.0%)
Total	15 (100.0%)



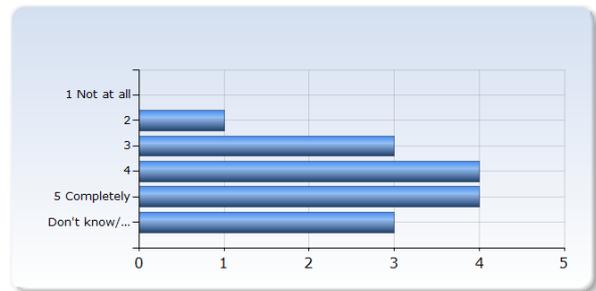
I have received constructive feedback on my performance

I have received constructive feedback on my performance	Number of Responses
1 Not at all	0 (0.0%)
2	0 (0.0%)
3	2 (13.3%)
4	7 (46.7%)
5 Completely	5 (33.3%)
Don't know/ Not relevant	1 (6.7%)
Total	15 (100.0%)



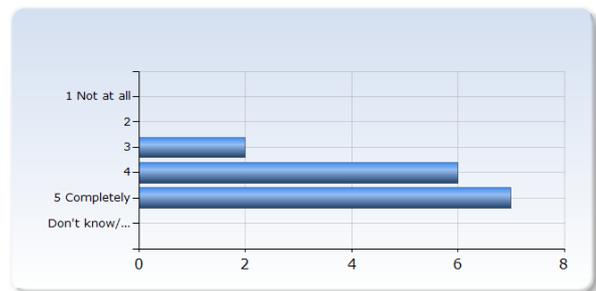
I was encouraged to reflect on my learning during the course

I was encouraged to reflect on my learning during the course	Number of Responses
1 Not at all	0 (0.0%)
2	1 (6.7%)
3	3 (20.0%)
4	4 (26.7%)
5 Completely	4 (26.7%)
Don't know/ Not relevant	3 (20.0%)
Total	15 (100.0%)



The course material helped me in my work to achieve the learning outcomes (literature, e-resources etc.)

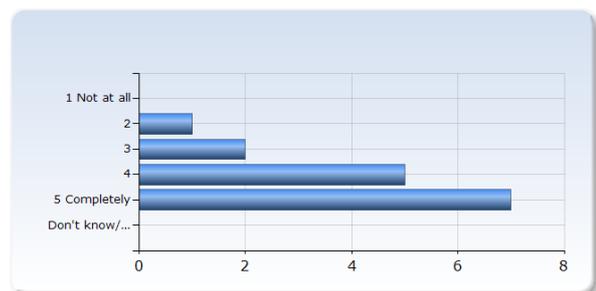
The course material helped me in my work to achieve the learning outcomes (literature, e-resources etc.)	Number of Responses
1 Not at all	0 (0.0%)
2	0 (0.0%)
3	2 (13.3%)
4	6 (40.0%)
5 Completely	7 (46.7%)
Don't know/ Not relevant	0 (0.0%)
Total	15 (100.0%)



10. Administration and study environment

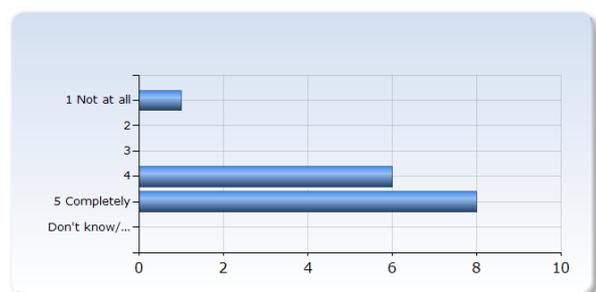
I felt that the course was well organized

I felt that the course was well organized	Number of Responses
1 Not at all	0 (0.0%)
2	1 (6.7%)
3	2 (13.3%)
4	5 (33.3%)
5 Completely	7 (46.7%)
Don't know/ Not relevant	0 (0.0%)
Total	15 (100.0%)



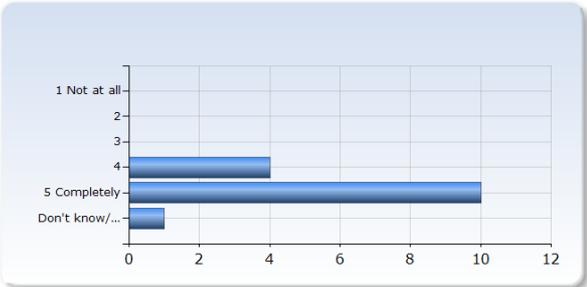
I have been able to find the information I felt I needed before and during the course

I have been able to find the information I felt I needed before and during the course	Number of Responses
1 Not at all	1 (6.7%)
2	0 (0.0%)
3	0 (0.0%)
4	6 (40.0%)
5 Completely	8 (53.3%)
Don't know/ Not relevant	0 (0.0%)
Total	15 (100.0%)



I was able to get support when I needed it

I was able to get support when I needed it	Number of Responses
1 Not at all	0 (0.0%)
2	0 (0.0%)
3	0 (0.0%)
4	4 (26.7%)
5 Completely	10 (66.7%)
Don't know/ Not relevant	1 (6.7%)
Total	15 (100.0%)



Course reflection for Mathematical Methods in Physics, FK7048, HT18.
Eddy Ardonne.

About the course.

This was the first time I gave the course. When one first looks at the course, the first thing that one notices is the amount of material that is covered by this 7,5 credit course: differential equations (both ordinary as well as partial), complex analysis with applications, special functions and Fourier analysis. Most of these topics can easily fill a 7,5 credit course on their own. This has consequences for the way the course is thought. One simply does not have the time to derive all the results in a rigorous way. This means that sometimes, the course gets a bit of a toolbox character. This is not necessarily a problem, but one has to be aware of this, and make sure that the students are aware of it. So, the approach I took was to try to give the students the skills necessary to both use the material, and to be able to dig deeper themselves when necessary.

The course this time.

From Lars Pettersson, from whom I took over the course, I heard that the course was functioning well. Because I also had limited time myself, I used Lars' material for a very large extend, and made only minor changes to the course. As an example, I did not have time to discuss the contour integral representation of special functions (such as the gamma and bessel functions), but I did briefly cover fourier series. The course consisted of lectures, tutorials and hand-in exercises, the latter making up 0.3 of the grade, with the exam taking the remaining 0.7. Previously, the course had compulsory hand-in exercises, as well as two somewhat larger project that the students had to do. These were dropped this year, but the hand-in exercises (one sheet per week, eight in total), where made more complicated, and used many physical examples on which the students had to apply the methods covered in class. These exercises were compiled more or less from scratch by Anthony Bonfils. During the tutorial sessions, the students were solving problems, mainly using old exams. These were led by Carl Niblaeus.

Because the students had to hand in an exercise sheet every week, they were forced to start working with the material from the beginning, which they all did. In general, I got the impression that the students were interested in the material offered in the course, and that they worked hard. Also during class, the group was interactive, requesting clarifications and asking lots of good questions. This left me with the impression that the students were making good progress along the way, which was also reflected by the grades obtained for the hand-in exercises.

The exam followed a similar style as the previous exams. The students were allowed to use the book, as well as their own notes. It turned out that the exam was quite a bit too long (everybody stayed the full five hours), so I already announced during the exam that I would rescale the results for the exam in an appropriate way. In total, the results were as follows.

A: 2x
B: 5x
C: 8x
D: 3x
E: 3x

For me, this is the first time that the distribution of grades has a single peak 'in the middle', usually, the distribution has two peaks, one at higher and one at the lower grades. I think this reflects the fact that the students worked hard, and that it was not easy to obtain full marks on both the exercises and the exam.

About the survey results.

Some of the impressions I sketched above also came out of the survey. In addition, agree that it would be good to do more examples in class, putting everything in context better. This would mean one has to drop some material, perhaps covering either Legendre or Bessel functions less extensively. It will presumably be hard to have more lectures. It was suggested to change how the hand-in exercises and the exam are weighted, I will think about this, and perhaps make a change next time around. I will certainly make a shorter exam. Now that I gave the course once, I will update the course schedule, with more accurate information on which sections from the book are covered during which lecture. Making this clear in class should of course not be a problem.

Overall, I myself got the impression that the course functioned well, which also is reflected in the survey results. I will of course use the suggestions given in the survey, to improve the course next time.