

Course Evaluation, FYTN10, Introduction to Quantum Field Theory, Spring 12, Department of Astronomy and Theoretical Physics

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Summary

Total number of answers 9

Filter no

Group by question no

Give your opinion in the scale 1-5.

1 = very negative

2 = negative

3 = neutral

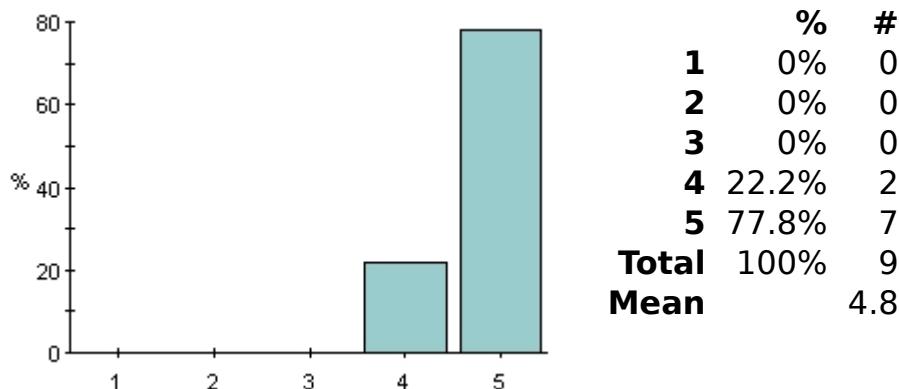
4 = positive

5 = very positive

Personal comments will be appreciated!

A. General

What is your general opinion of the course?



Comment

4 have commented on this question

Grade = 4 (2 comments)

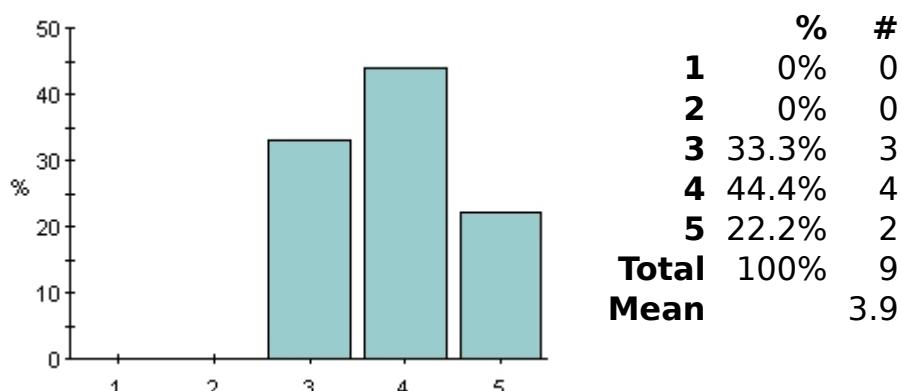
- A good introduction to the QED and its calculations and some processes beyond that.
- It was a lot of fun. It would have been nice to have had more on the connection between field theory and "classical" quantum mechanics (eg. as a (0+1)D field theory) and mechanics/electromagnetics (classical potentials & scattering, energy flow &c.) as to make the fields less abstract.

Grade = 5 (2 comments)

- An excellent course!
- An amazing course, a must-have for anyone who's interested in theoretical or experimental HEP.

B. Literature

What is your general opinion of Peskin and Schroeder's book?



Comment

4 have commented on this question

Grade = 3 (2 comments)

- Get's a bit lost in calculation and sometimes gives an impression that things are more difficult than they are.
- At times, there is too heavy an emphasis on calculation. From a mathematical standpoint the book is often quite horrible (depending on one's definition of horrible, trying to do things more formally might not necessarily have been better, only more, well, formal...). We only used a very small part of the book but it might prove to be useful later.

Grade = 4 (one comment)

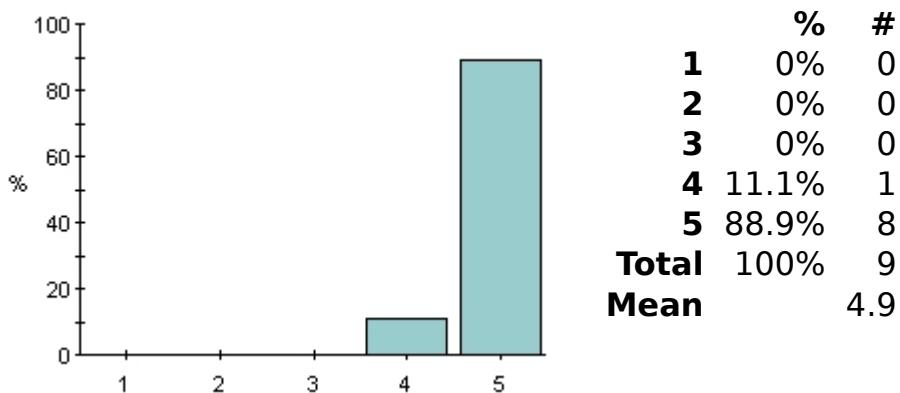
— A good book, though at places lacks some explanations. Didn't read much though, as I found lecture notes much better.

Grade = 5 (one comment)

— A good and extensive book. Clear for the most part even though some sections are a bit confusing and it is sometimes hard to get an overview on the specific subject. There are also a lot of errors, so make sure to check out the erratum.

C. Lectures and problem solving sessions

What is your general opinion of the lectures with Johan Rathsman?



Comment

6 have commented on this question

Grade = 4 (one comment)

— Interesting lectures and the methods that are taught are useful.

Grade = 5 (5 comments)

— I think Johan gave really good lectures. He put accents and summarized from time to time what we've done in the lecture. The balance between derivations done on the board and those left to be done at home was well chosen, to my mind. Johan was always open to questions, his way of leading the lecture is very calm, well organized, student-friendly.

— Very good. Try to remind the audience a bit more about the general idea of the topic, it's sometimes easy to loose track during all the derivations.

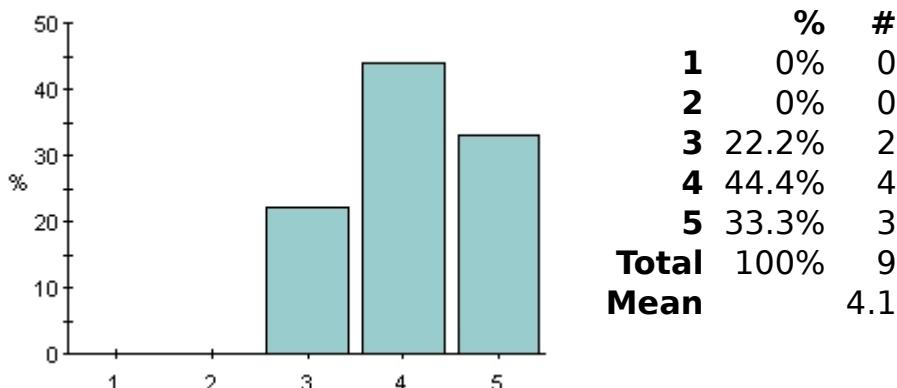
— The lectures were overall well-structured and Johan has excellent blackboard skills — something whose importance

shouldn't be underestimated. If the lectures had a fault it would be that they at times felt to closely knit to the book.

— Very informative. At first, it was quite hard to follow everything and understand, but just at the very beginning!

— I like when lecture notes are handed out, preferably in advance. It is then easy to study ahead and one can add comments during the lecture.

What is your general opinion of the problem solving sessions with Konrad Tywoniuk?



Comment

4 have commented on this question

Grade = 3 (one comment)

— There is a good correlation between the exercises and the course. The solutions however do leave some open questions.

Grade = 4 (2 comments)

— Good, but maybe try to do some more things than just having students solving problems. For example one could maybe have some more hands-on tips and tricks of QFT calculations.

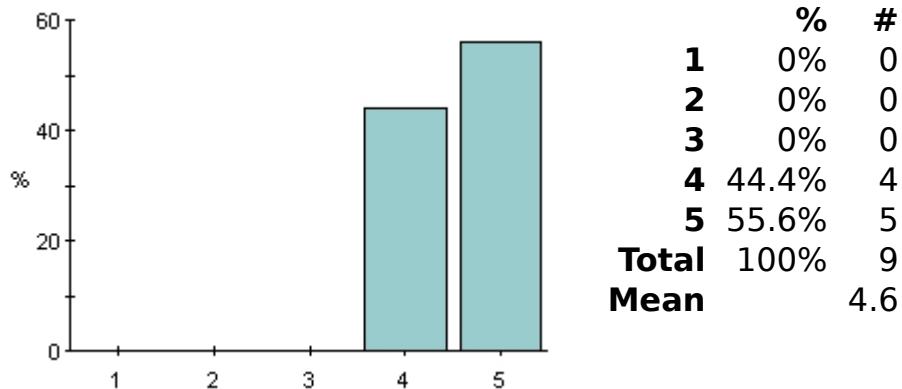
— The first two get 5 but then the quality declined. Having someone who hasn't solved a problem solving it on the board was not a good idea in my opinion; it takes too long. During the first two sessions he would simply choose among the people who had stated that they could present the problem. Later it was more who wants to... This led to a waste of time. During the first two he really added understanding whereas he seemed a bit unprepared for the last two.

Grade = 5 (one comment)

— Konrad was very approachable and helpful, I really liked the sessions with him. I liked the organization of the sessions, when

you send an e-mail of stating the problems you've solved and those you want to see solved, and then Konrad makes a summary of all the mails and in the end we solve the exercises that are most needed for students. This system should be kept!

What is your general opinion of the balance between lectures and problem solving sessions?



Comment

4 have commented on this question

Grade = 4 (2 comments)

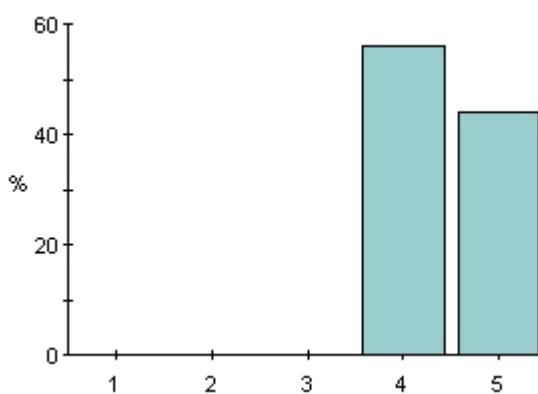
- It might have been better to have them a weekly occurrence, perhaps integrating them with the hand-ins.
- Tricky question, I'm not sure what this means. If it's the number of lectures vs the number of problem sessions, I think it was fine. If it is the degree of difficulty that is meant, I think it was perfectly fine too.

Grade = 5 (2 comments)

- I think that it would be nice with some more problems to solve but not necessarily for the sessions, especially on the later chapters.
- At first it seemed that there's too much of problems to handle (ones for problem solving sessions and also the hand-ins), but one gets used to that. And it's not THAT much, after all :)

D. Exam

What is your general opinion of the hand-in exercises?



	%	#
1	0%	0
2	0%	0
3	0%	0
4	55.6%	5
5	44.4%	4
Total	100%	9
Mean		4.4

Comment

3 have commented on this question

Grade = 4 (one comment)

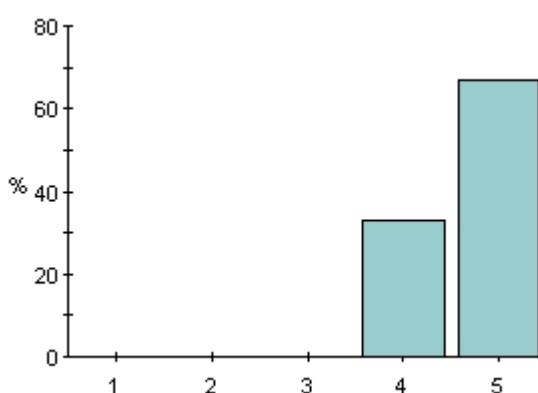
— Interesting topics but technical.

Grade = 5 (2 comments)

— Very pedagogical, helped a lot to understand the lecture material. Very well chosen problems, that led to the result step by step.

— Hand-ins played a major role in understanding things. And the euphoria once you finish them! :) I just wished the 1st hand-in would be replaced by a hand-in from 6th chapter. The 1st hand-in, I believe, could be covered in problem solving sessions.

What is your general opinion of the oral exam?



	%	#
1	0%	0
2	0%	0
3	0%	0
4	33.3%	3
5	66.7%	6
Total	100%	9
Mean		4.7

Comment

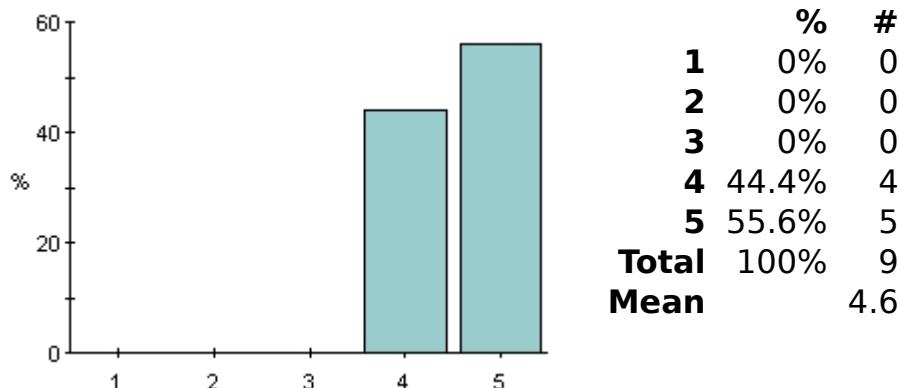
2 have commented on this question

Grade = 4 (one comment)

— I feared that it would mainly be about esoteric details not yet covered in hand-ins or exercises, instead, it focused on the major topics so if you had followed the lectures and done the exercises and so on, it was rather straight-forward.

Grade = 5 (one comment)

— It was more of a discussion, which took the stress out of it. I learned some things during the exam as well.

Did you have enough prior knowledge for this course?**Comment**

3 have commented on this question

Grade = 4 (one comment)

— I lacked some things from complex analysis and Lorentz-covariant formulation, and overall felt underqualified for this course before taking it, but actually I learned the things along the way and it was alright in the end.

Grade = 5 (2 comments)

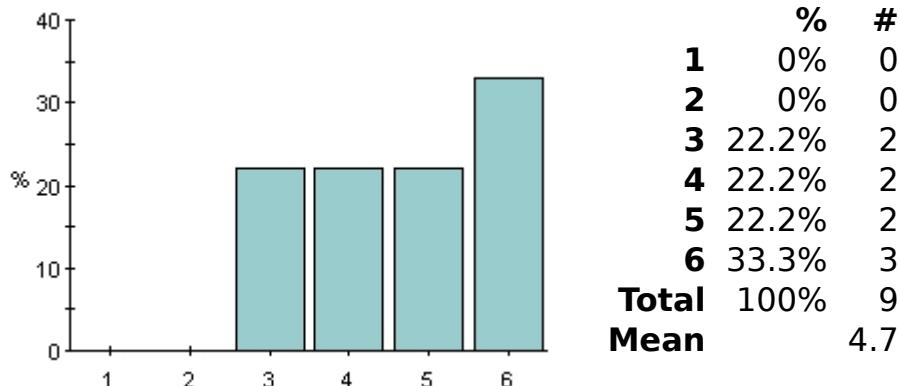
— I was told that a good understanding of classical mechanics is needed for this course, but I find it not true. If you pay attention during the lectures, there's nothing unclear there. Of course, I did regret at times for not taking math seriously enough back when I was supposed to, however, there's nothing unmanageable.
— The course is pretty much self-contained so one could probably do it with far less, although you might miss out on some of the connections to QM, EM, and other branches of physics.

E. Your efforts

In this part you are asked to estimate how much work you have committed to this course. In each case you should estimate a percentage with 1 meaning 0-20% up

to 5 meaning 80-100%. If applicable, 6 means more than 100%.

How much time have you spent on this course (for a 7.5 point course 100% means five weeks, 40 hours per week)?



Comment

2 have commented on this question

Grade = 3 (one comment)

— I have no idea how to relate the number with the time I spent on the course, as first of all I did not measure the time :) Anyway, I spent a lot of time. Especially for the hand-ins. They get quite tricky (or I get quite stupid) at times, especially when one does them wrong. Still, if one can plan the time, there's plenty of time for other things as well (I even had Friday evenings off! :)). After all, all the time spent on the course was worth it.

Grade = 6 (one comment)

— The workload was quite high.

F. General comments

Other comments (both positive and negative) on the course?

2 have answered this question

— Since calculations really follow a recipe it is sometimes difficult to know whether one has understood or just learned how to apply something. It seems to be inherent to the subject and I think the course did a descent job to disentangle things.

— I just wished a little more time would have been spent on UV divergences and renormalization to give a student a deeper understanding of what and why - I think these subjects are also of

interest and wished some better understanding of them. But then again, I guess the time is a limiting factor. On the other hand, one is always able to read books for further knowledge :) On general - a very, very nice course!

Thank you for your participation!

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