

## Course analysis for Basic Quantum Mechanics, FYSB11 VT 2019

**Course responsible:** Peter Samuelsson, Patrik Eden

**Other teachers:** Smita Chakraborty, Harsh Shah, Athanasios Tsintzis

**Number of students registered:** 51 (in Live@lund)

**Course representative:** Vasil Nokhrin

**Grades:** U - 9, G – 8, VG - 10. Note that this is the result for VT19 ordinary exam. Several students, registered on the course in earlier semesters, used the occasion as a reexam.

### Analysis

#### I. Summary of the course evaluations

Total number of responses: 10

*Short summary of the results:* Overall the students were very satisfied (grade 4.5), however, the answer frequency was very low, only 20% of the registered students participated. As a consequence, it is very hard to tell whether the answers are representative for the course. It should however be mentioned that out of the 51 registered, only roughly 20-25 followed the lectures and labs continuously.

The overall impression of the lectures, the book, the experimental labs, the exercises and the exam was positive. Less positive was, this year as well as earlier years, the impression of the computer lab.

#### II. Comments and reflections from the teachers

The teachers felt that the course went well, the students were interested, active, asked a lot of questions. This is partly a consequence of the smaller number of students and very suitable lecture hall, D, together creating a more open atmosphere.

The lab assistants both appreciated the student feedback. The experimental lab assistant was made aware of the students concerns about the computation aspects. For the computer lab, the assistant shared many of the students concerns about the formulation and scope and also saw opportunities for improving the lab, both the written instructions and the Python coding details.

It is important to note that the student groups taking the course in the spring semester and in the fall semester are partially different, both in amounts and background/character. In the spring, typically one third to one half of the group of 20-25 students participating actively are physics teacher students and most of the remaining students are international, exchange students. In the fall, typically there are 50-60 students following the course, with the overwhelming majority Swedish physics students, not in a physics teacher program.

**III. Evaluation of changes since last time the course was given**

Since last year (but not last time) the course was given we have updated the computer lab, trying to make it better adapted to the course and requests from the students. We can conclude, from the responses of the students, that this did not help much, the overall assessment was still critical. This concerns both the content, the planning in time in the course and the administration/corrections of the lab reports.

**IV. Suggestions for modifications and measures until the next time the course is given**

Until the next time the course is given our ambition is to develop a new computer lab, from scratch. Here the comments from the students will be helpful.

2019-08-27, this course analysis has been put together by Peter Samuelsson and Patrik Edén.

*The course analysis is sent by e-mail to the director of studies: [johan.rathsman@thep.lu.se](mailto:johan.rathsman@thep.lu.se)*