

FYTN02, ht14

Respondents: 29
Answer Count: 21
Answer Frequency: 72,41 %

General opinion

Give your opinion in the scale 1-5.

1 = very negative

2 = negative

3 = neutral

4 = positive

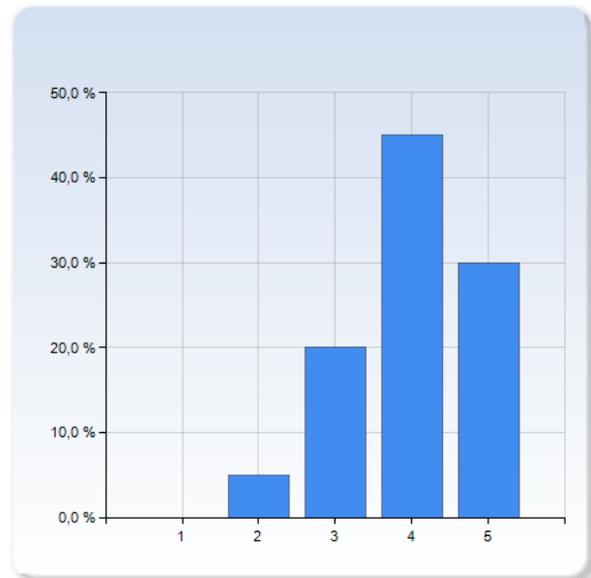
5 = very positive

The comment field in the end is very important! It will help us understand what is to be kept when the grade is good, and what to change when the grade is poor.

What is your general opinion of...

the course overall?

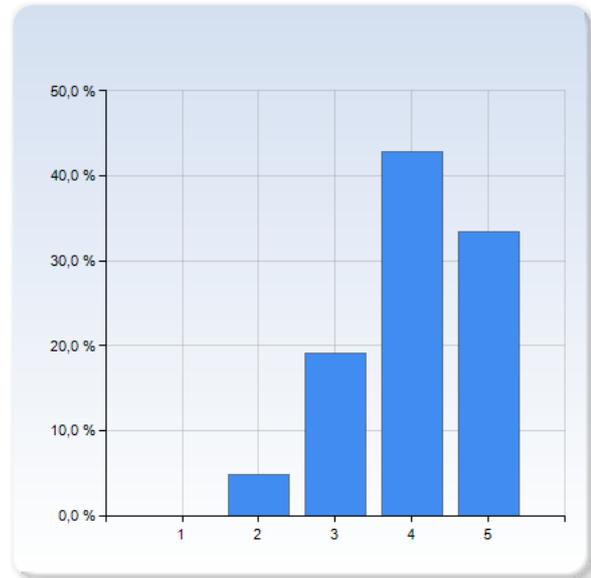
the course overall?	Number of Responses
1	0 (0,0%)
2	1 (5,0%)
3	4 (20,0%)
4	9 (45,0%)
5	6 (30,0%)
Total	20 (100,0%)



the course overall?	Mean	Standard Deviation
	4,0	0,9

the information about the course when it started?

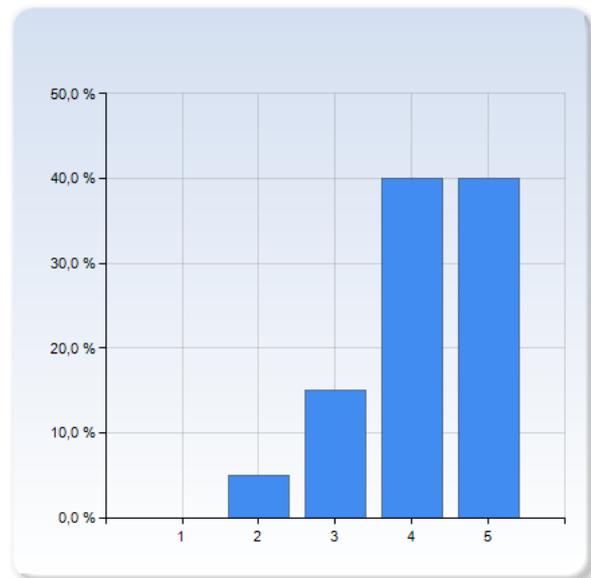
the information about the course when it started?	Number of Responses
1	0 (0,0%)
2	1 (4,8%)
3	4 (19,0%)
4	9 (42,9%)
5	7 (33,3%)
Total	21 (100,0%)



the information about the course when it started?	Mean	Standard Deviation
	4,0	0,9

the information about what was expected of you?

the information about what was expected of you?	Number of Responses
1	0 (0,0%)
2	1 (5,0%)
3	3 (15,0%)
4	8 (40,0%)
5	8 (40,0%)
Total	20 (100,0%)



the information about what was expected of you?	Mean	Standard Deviation
	4,2	0,9

Comment (*help us interpret your grades!*)

The course was overall of very high standard.

I feel the course has been somewhat pointless, but maybe I'm wrong I guess the future will tell. :P I have done my bachelor's this semester, so I have neglected the course. This will probably reflect in my grading here, as I have been very confused about things at times. The course is of course not to blame for this.

I am not a huge fan of statistical mechanics in general, and I took the theoretical particle physics course at the same time, so I did not have a lot of time to spend on it. But in the end I am happy that I took this course.

I think the course overall had a good structure and I liked that there was a mix of homework assignments, seminar presentation and oral exam which determined ones grade. I think information on how the grading of the course is done needs to be told the first day and be up on the webpage (i.e. that the homework assignments were 12.5% each etc). It would also be nice with a more detailed reading schedule, so one knows approximately what sections are treated in each lectures.

The course did not quite touch the topics I was interested in -- would like to see more actual physics.

Teaching and examination

Give your opinion in the scale 1-5.

1 = very negative

2 = negative

3 = neutral

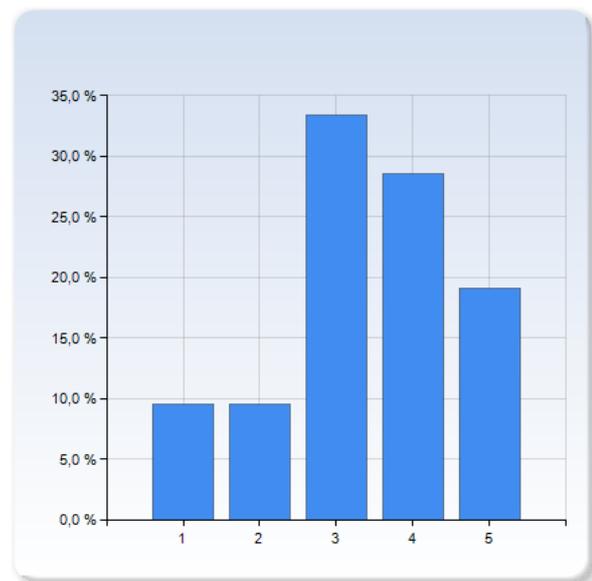
4 = positive

5 = very positive

What is your general opinion of...

Chandler's book?

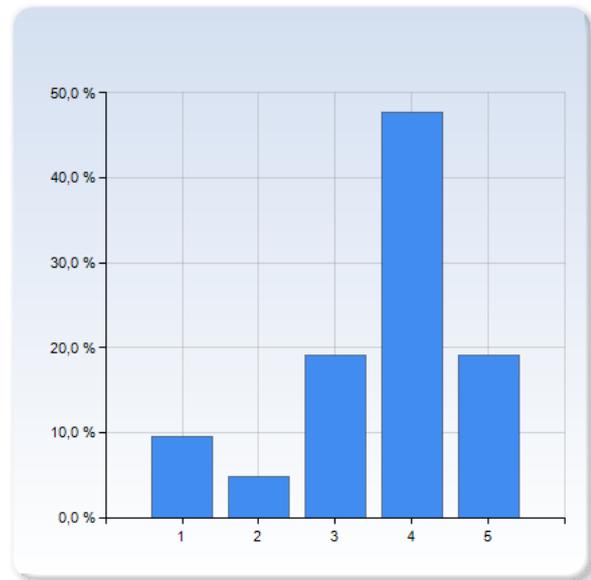
Chandler's book?	Number of Responses
1	2 (9,5%)
2	2 (9,5%)
3	7 (33,3%)
4	6 (28,6%)
5	4 (19,0%)
Total	21 (100,0%)



	Mean	Standard Deviation
Chandler's book?	3,4	1,2

the lectures?

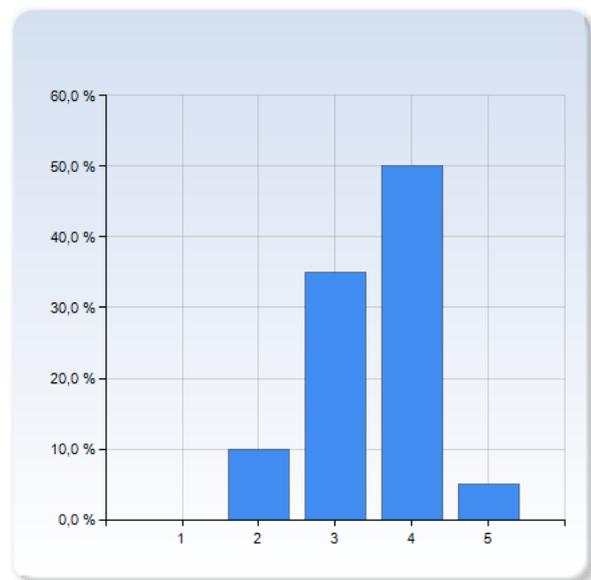
the lectures?	Number of Responses
1	2 (9,5%)
2	1 (4,8%)
3	4 (19,0%)
4	10 (47,6%)
5	4 (19,0%)
Total	21 (100,0%)



the lectures?	Mean	Standard Deviation
	3,6	1,2

the problem solving classes?

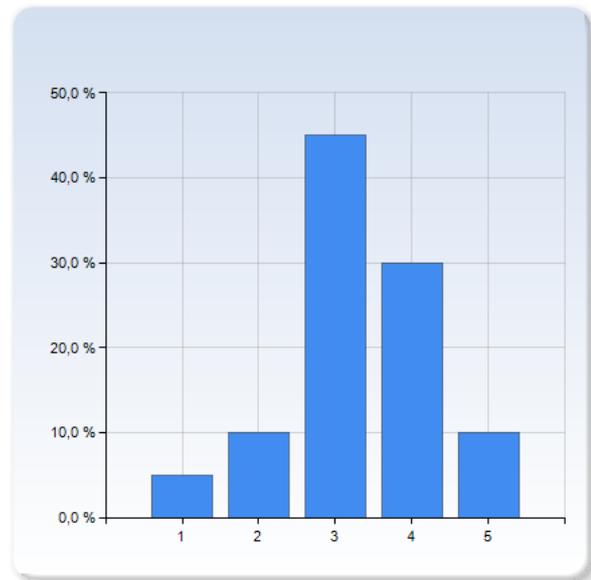
the problem solving classes?	Number of Responses
1	0 (0,0%)
2	2 (10,0%)
3	7 (35,0%)
4	10 (50,0%)
5	1 (5,0%)
Total	20 (100,0%)



the problem solving classes?	Mean	Standard Deviation
	3,5	0,8

the computer exercise?

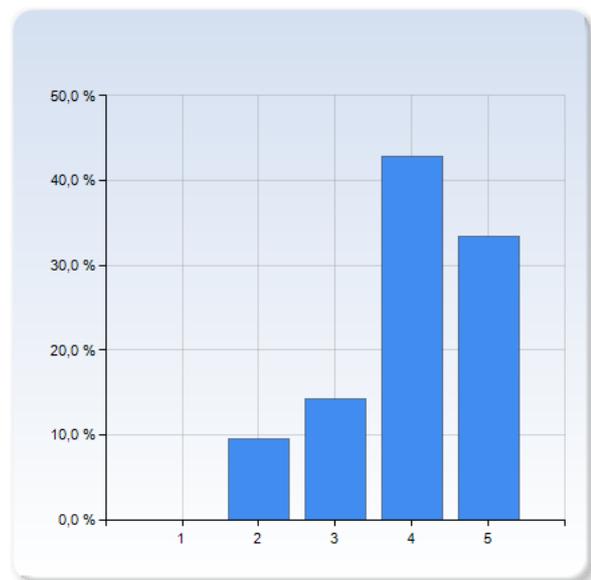
the computer exercise?	Number of Responses
1	1 (5,0%)
2	2 (10,0%)
3	9 (45,0%)
4	6 (30,0%)
5	2 (10,0%)
Total	20 (100,0%)



the computer exercise?	Mean	Standard Deviation
	3,3	1,0

the hand-in exercises?

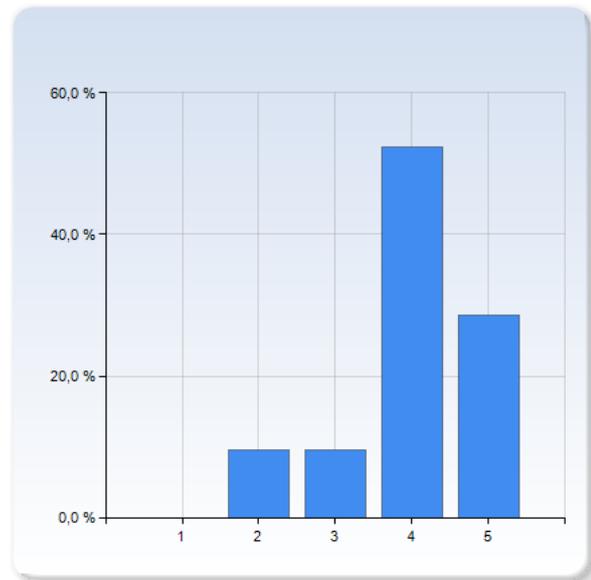
the hand-in exercises?	Number of Responses
1	0 (0,0%)
2	2 (9,5%)
3	3 (14,3%)
4	9 (42,9%)
5	7 (33,3%)
Total	21 (100,0%)



the hand-in exercises?	Mean	Standard Deviation
	4,0	0,9

the seminar presentation?

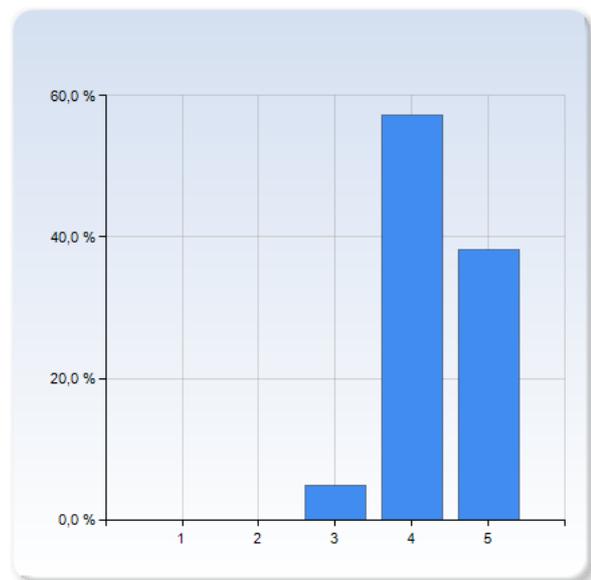
the seminar presentation?	Number of Responses
1	0 (0,0%)
2	2 (9,5%)
3	2 (9,5%)
4	11 (52,4%)
5	6 (28,6%)
Total	21 (100,0%)



the seminar presentation?	Mean	Standard Deviation
	4,0	0,9

the oral exam?

the oral exam?	Number of Responses
1	0 (0,0%)
2	0 (0,0%)
3	1 (4,8%)
4	12 (57,1%)
5	8 (38,1%)
Total	21 (100,0%)



the oral exam?	Mean	Standard Deviation
	4,3	0,6

Comment (help us interpret your grades!)

I did not use Chandler's book personally, so I cannot comment much upon it, the lecture notes were sufficient. The lectures could have done with a bit more structure, title-subtitle etc.. to guide thoughts.

The hand-ins really helped me, and without them I do not believe I would have passed the exam. The oral exam was very nice, and Anders was very helpful.

Nothing has actually been bad. I think the book has for the main part been fairly easy to understand. The same is true for my lecture notes, so I guess the lectures has been ok, I didn't fall asleep during any of them I think. (y) I did not have time to do the problems, and therefore I didn't have so much use of the problem solving class, which was unfortunate. The same for the computer exercise. The last hand in exercise was much harder than the first one, and I had major problems with several of the latter exercises and had to ask another student for help. I don't like it when I have to do that, I feel like a stupid child. I think I could more negative than I am right now, and it does indeed have to do with the fact that I neglected the course. Though I didn't like the matrix thing, I don't know how to solve the matrices were were to solve, and that annoyed me. The seminars seemes rather pointless, but I think it's good that we are forced to learn to present things, so that's fine as well. The oral exam was not horrible at all, so thumbs up for that. :)

No computer exercise?

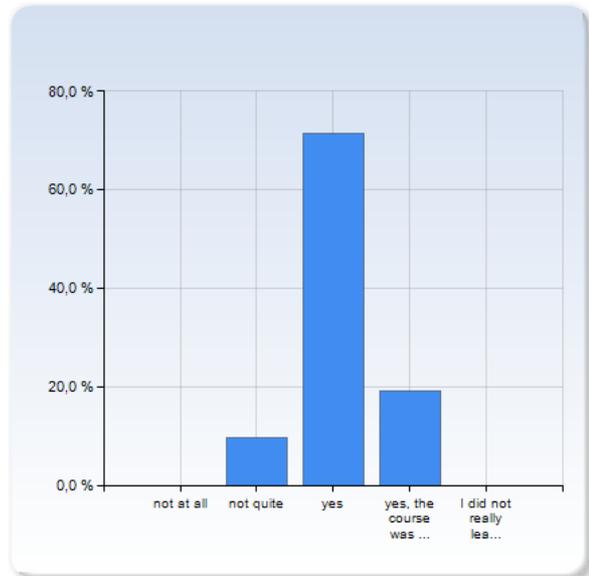
1) Chandler's book was not that good, it has some nice explanations once in a while, but also a lot of unclear explanations. The exercises could be a bit hard to understand I thought, but I guess most stuff cleared out on the problem solving classes. 2) I think the lectures in general were good. Sometimes I thought the lecturer could be a bit hard to follow, but that might be related to how much I had read in the book before going to the lecture. Anders drew a lot of graphs, which I think is nice but it would be good if he wrote some more text explaining them also. Mainly for me it was that when I looked at the graphs at a later time I had forgotten what they meant. 3) The computer exercise was good, it gave me more understanding for the Ising model. 4) The grading parts (i.e. homework, seminar and oral exam) I thought were good, it was a nice mixture together with the weekly exercises from the book.

I am very possitive to the fact that there is time planed in for problem solving. But i also would love time when students can have time to work on problems while getting help.

The treatment in the book is quite confusing and quite unclear. The lectures follow the book (which itself is good) but the presentation is even less clear. Among other things, lectures spent too much time on deriving things on the board on barely any time explaining concepts.

Did you have enough prior knowledge for this course?

Did you have enough prior knowledge for this course?	Number of Responses
not at all	0 (0,0%)
not quite	2 (9,5%)
yes	15 (71,4%)
yes, the course was a bit easy	4 (19,0%)
I did not really learn anything new	0 (0,0%)
Total	21 (100,0%)



	Mean	Standard Deviation
Did you have enough prior knowledge for this course?	3,1	0,5

If your prior knowledge was not fairly appropriate, please comment!

What prior knowledge was missing/overlapping?

What is your background (year of higher education, relevant courses)?

A surprisingly large part of the course was the same as in the statmek-part of FYTA12. Many parts felt like just repetition.

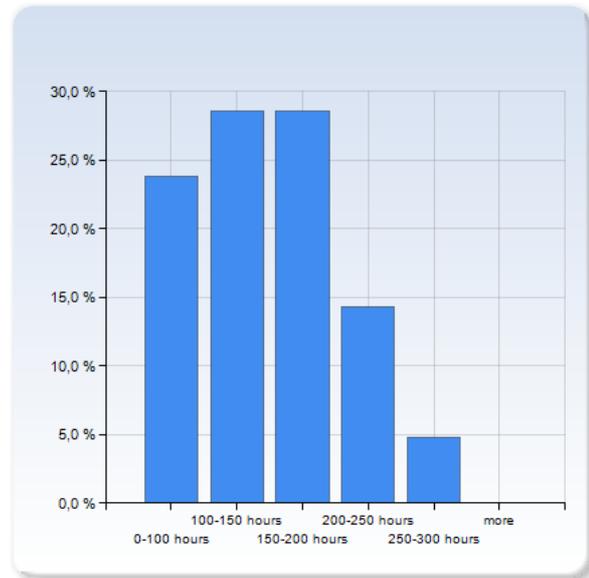
I recognized some from physics two, but not much, so I think the course was on a very reasonable level.

The Statistical Mechanics course given by Bo Söderberg is very thorough.

Taken FYTA11 in the past which has overlap in thermodynamical part

How much time have you spent on the course? (In total you are supposed to spend about 200 hours or 25 work-days on a 7.5 hp course)

How much time have you spent on the course? (In total you are supposed to spend about 200 hours or 25 work-days on a 7.5 hp course)	Number of Responses
0-100 hours	5 (23,8%)
100-150 hours	6 (28,6%)
150-200 hours	6 (28,6%)
200-250 hours	3 (14,3%)
250-300 hours	1 (4,8%)
more	0 (0,0%)
Total	21 (100,0%)



How much time have you spent on the course? (In total you are supposed to spend about 200 hours or 25 work-days on a 7.5 hp course)	Mean	Standard Deviation
	2,5	1,2

Comment

I did not spend as much time as I would have needed, and not as much time as I wanted, mostly because I prioritised the course theoretical particle physics, which demanded a lot more than full time for me.

I don't know, less than I was expected I'm pretty sure.

As before, theoretical particle physics took most of my time.

Difficult to estimate but I think I approximately spend around what is expected, maybe a little bit more.

have to admit i spent abit to little time on it, because i had another very timedemanding course at the same time.

My other course stole a whole lot of time.

What did you particularly like with the course?

What did you particularly like with the course?

The subject matter is very interesting; I enjoyed the theoretical approach and found it quite nice that we "proved" the ideal gas law.

I learned about phase transitions with good examples and working exercises.

I was very nice with a course where by the end of it, one had actually understood all the areas treated. The oral exam preparation questions, the lectures, the exercises, the book and the hand-ins, were all covering the same areas, but from various approaches.

I liked everything about the course. The subject seems to be a bit dry, but is actually fun when you dive into it. The lecturer was very good, helpful, pedagogical and nice to talk to.

The course was relaxed and well paced. The handins were interesting and fun to do. The computer exercise was very illustrative and should be included for future students. Finally it is nice that it is clear what is expected to be learned from this course.

The derivations. I like derivations. And the lecturer was nice, I liked him too. He wasn't scary even though he was a theoretical physicist (they usually are).

I feel like I got a good understanding for the basic concepts of thermodynamics and statistical mechanics.

Ising model, Transfer Matrix Methods, Renormalization group method

Most of it, it is a field i feel like you cant know to much about it, no matter with field in science you are in.

Everything was presented in a clear and consise manner.

Computer exercise was a nice touch. It is good that there are regular exercises including graded hand in ones. Review questions for the exam were good as well and that the exam followed these.

What in the course do you think could improve?

What in the course do you think could improve?

I think we could spend less time on thermodynamics at the beginning of the course, and cover more advanced topics of statistical mechanics in the second part.

It covers a relatively wide topics in a short time period.

I'm a bit split, because I think that at least half the course contained things that me and the theoretical physics students already have been through. Still, I'm happy that this was the case, as it let me focus on the course I had running parallel to this, so having this as a less demanding course helped me.

I think the lectures did a fine job of going through all of the relevant derivations. An improvement could possibly be found in adding more conceptual treatments of the topics to the lectures - like for example discussing the understanding behind the derivation of the self consistency equation; for me this was key to understanding mean field theory. Likewise a discussion on coarse graining might be beneficial for understanding renormalization group methods.

Hm.. I'm not sure. As I said, I didn't really feel that anything was bad. Maybe it could be more fun. But I don't really know how it could be made more fun. Also here I think the main problem was my lack of time. Maybe more parallels to the real world could have been drawn. But then again, our models were rather crude and often for 1- and 2-D. Pretty much only for 1- and 2-D. The big bang stuff was nice though. Oh, yes. The seminars could have been improved by not picking things from the book, because the book is not fun, or interesting. To practise presentation you really don't need to present anything mathematical or derive anything. It's better to do something "flashy", that is not hard to get. The derivations need thinking before they make sense to the audience, and it becomes very boring. A list with interesting but not necessarily complicated aspects of statistical mechanics. I think the course would have been much more fun then, but I realize this requires more time from the lecturer. And as I said, it's not at all a bad course as it is. :)

Chandler's book is not very inspiring.

different course book

Would love to see more links to "reality", so how the stat mec and equations are used on real systems and in real science.

It could probably be a bit more fast paced, at least if you have had Bo Söderberg before.

Lectures -- more emphasis on concepts, please, less on derivations.

The book is absolutely awful, it needs to go. It is good when you already have a good take on the subject, but as an introduction to new concepts you need more examples, more explanations, more text.