

## FYTA14 vt15

Respondents: 21  
Answer Count: 9  
Answer Frequency: 42,86 %

### General opinion

Give your opinion in the scale 1-5.

1 = very negative

2 = negative

3 = neutral

4 = positive

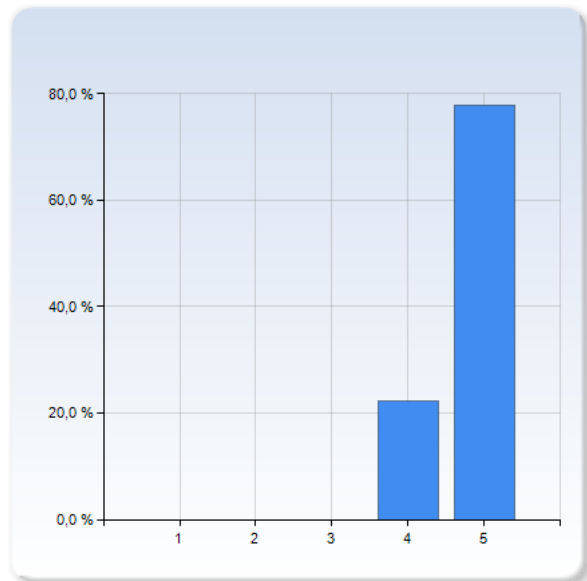
5 = very positive

***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?

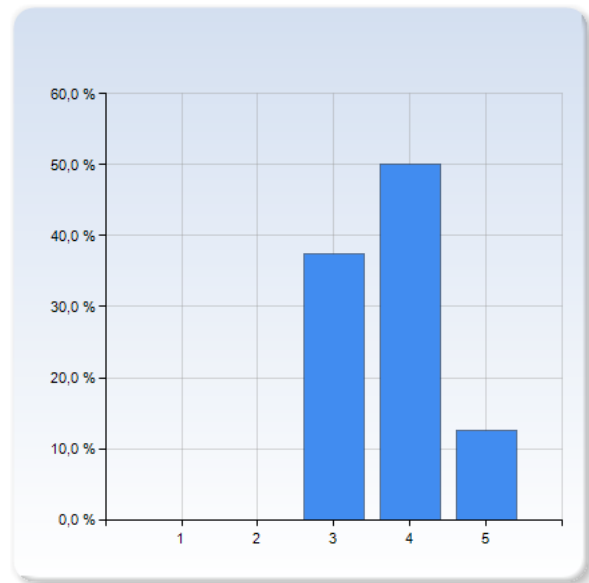
the course?	Number of Responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	2 (22,2%)
5	7 (77,8%)
Total	9 (100,0%)



the course?	Mean	Standard Deviation
	4,8	0,4

### "Physics of Continuous Matter" by Lautrup?

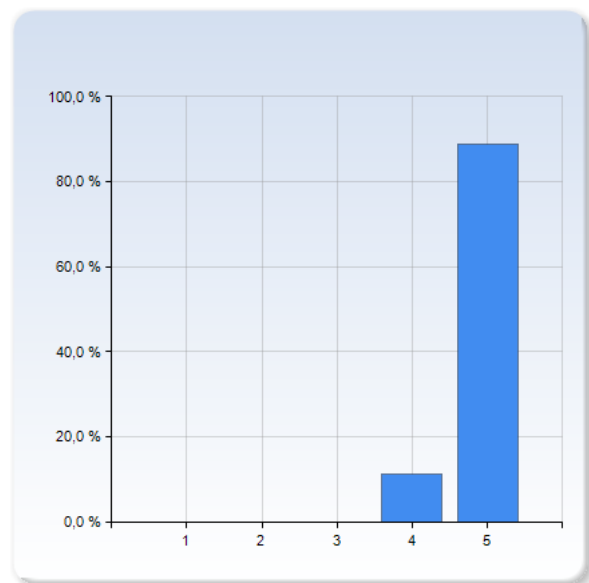
"Physics of Continuous Matter" by Lautrup?	Number of Responses
1	0 (0,0%)
2	0 (0,0%)
3	3 (37,5%)
4	4 (50,0%)
5	1 (12,5%)
Total	8 (100,0%)



"Physics of Continuous Matter" by Lautrup?	Mean	Standard Deviation
	3,8	0,7

### the information about the course when it started?

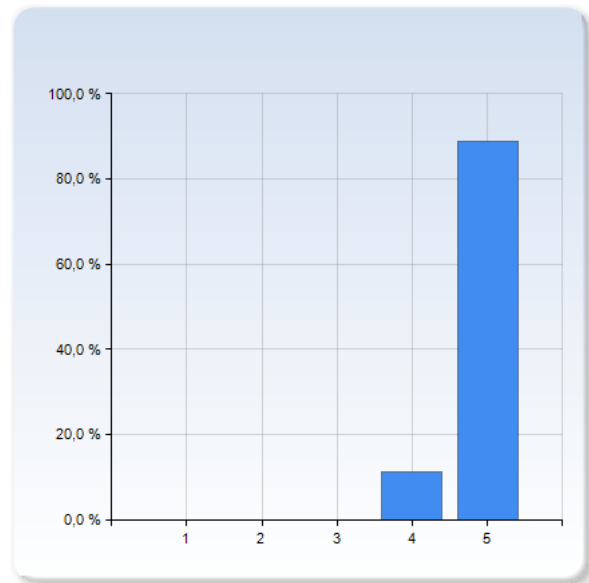
the information about the course when it started?	Number of Responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	1 (11,1%)
5	8 (88,9%)
Total	9 (100,0%)



the information about the course when it started?	Mean	Standard Deviation
	4,9	0,3

## the information about what was expected of you?

the information about what was expected of you?	Number of Responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	1 (11,1%)
5	8 (88,9%)
Total	9 (100,0%)



	Mean	Standard Deviation
the information about what was expected of you?	4,9	0,3

### Comment (*help us interpret your grades!*)

The book is really good as a book to learn fluid dynamics, with good examples and practice questions. It's only lacking when used as a reference book, sometimes a bit too much backtracking is needed to understand what everything in an equation means and when the equation is applicable.

En bra kurs, men litteraturen var sådär.

The course itself was very hard, but with all kinds of help from Patrik it felt viable.

I did not read the book enough to judge it.

The structure with five hand-ins, problem solving sessions and lecture notes and other material on the web-page is really good. It helped me to focus on key things and not become overwhelmed by the lectures and the rather big book.

## Lectures and problem solving sessions

Give your opinion in the scale 1-5.

1 = very negative

2 = negative

3 = neutral

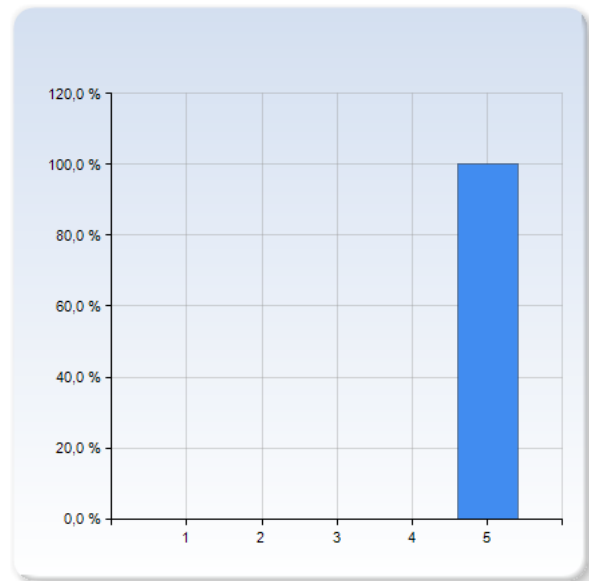
4 = positive

5 = very positive

What is your general opinion of...

the lectures with Patrik Edén?

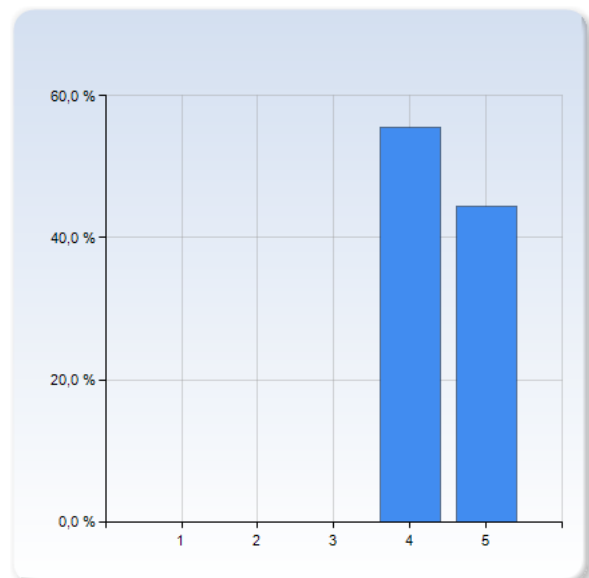
the lectures with Patrik Edén?	Number of Responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	0 (0,0%)
5	9 (100,0%)
Total	9 (100,0%)



the lectures with Patrik Edén?	Mean	Standard Deviation
	5,0	0,0

the lectures with Anders Johansen?

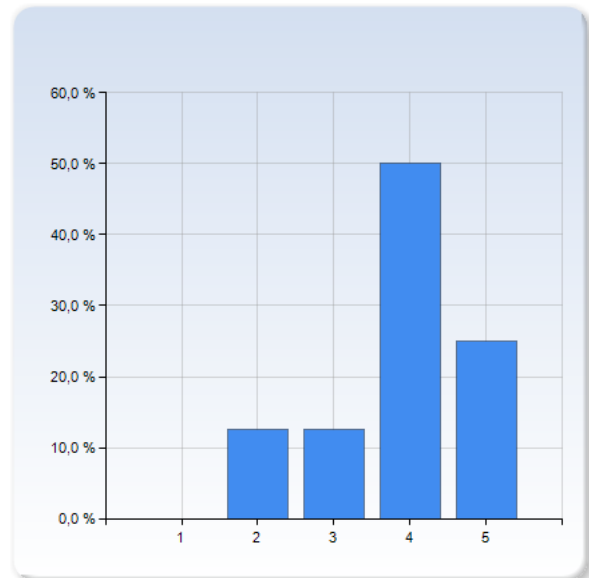
the lectures with Anders Johansen?	Number of Responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	5 (55,6%)
5	4 (44,4%)
Total	9 (100,0%)



	Mean	Standard Deviation
the lectures with Anders Johansen?	4,4	0,5

### the format of the problem solving sessions?

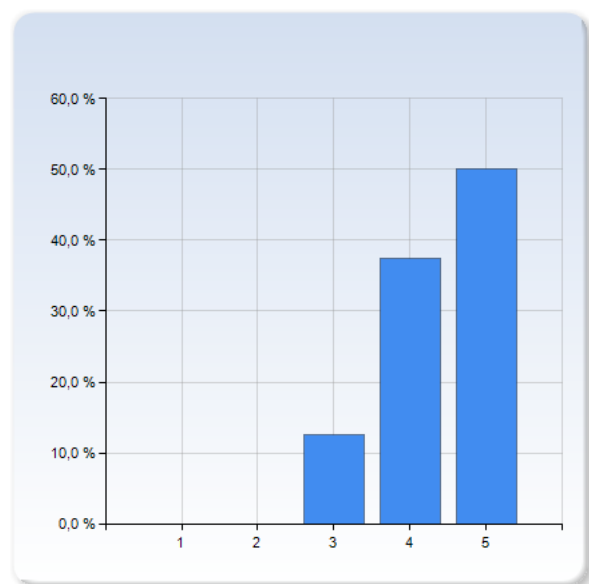
the format of the problem solving sessions?	Number of Responses
1	0 (0,0%)
2	1 (12,5%)
3	1 (12,5%)
4	4 (50,0%)
5	2 (25,0%)
Total	8 (100,0%)



	Mean	Standard Deviation
the format of the problem solving sessions?	3,9	1,0

### the exercises at the problem solving sessions?

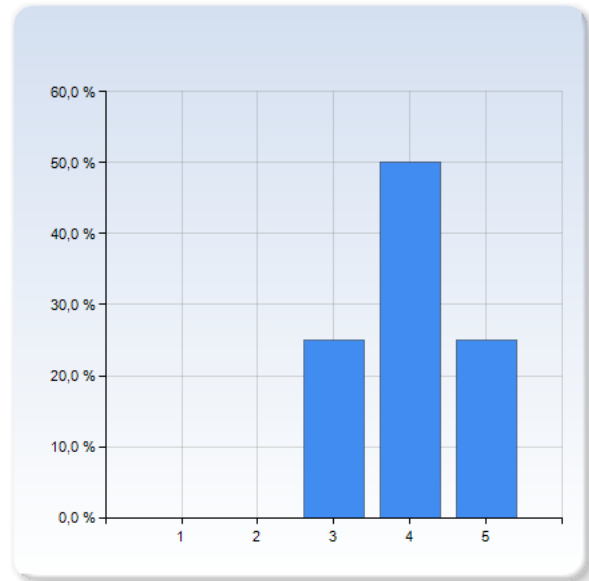
the exercises at the problem solving sessions?	Number of Responses
1	0 (0,0%)
2	0 (0,0%)
3	1 (12,5%)
4	3 (37,5%)
5	4 (50,0%)
Total	8 (100,0%)



	Mean	Standard Deviation
the exercises at the problem solving sessions?	4,4	0,7

## the balance between lectures and problem-solving sessions?

the balance between lectures and problem-solving sessions?	Number of Responses
1	0 (0,0%)
2	0 (0,0%)
3	2 (25,0%)
4	4 (50,0%)
5	2 (25,0%)
Total	8 (100,0%)



	Mean	Standard Deviation
the balance between lectures and problem-solving sessions?	4,0	0,8

### Comment (*help us interpret your grades!*)

I learnt a lot during the problem solving sessions since it is really then you place the theory of what you just learnt in to practice. However, maybe it would be a good idea for groups to present to each other on some sessions and not in front of the whole class? That way it will be easier to ask questions if one doesn't understand the other group's solution to a problem.

Patrik is a really good, fun and engaging Lecturer.

Anders is also good, but it was a bit noticable that it was the first time he held the course, will surely be better next time.

Could have had one or two more problem solving sessions.

Bra med problem solving efter varje delmoment. Missade Anders föreläsningar pga sjukdom men hört att dom var bra och fått bra anteckningar därifrån.

The idea is good. I didn't felt comfortable to present and it was hard to follow an other students solution.

I did not attend problem solving sessions.

I learned a lot from the problem-solving sessions. The lectures were also very helpful but I would rather have more problem solving-sessions. I liked the structure in the lectures and that the lecturers started with a recap on the material of the previous lecture. I had a little more difficulty in following Anders' lectures, i think since he talks faster.

I think that more exercises sessions would be nice...

## Examination

Give your opinion in the scale 1-5.

1 = very negative

2 = negative

3 = neutral

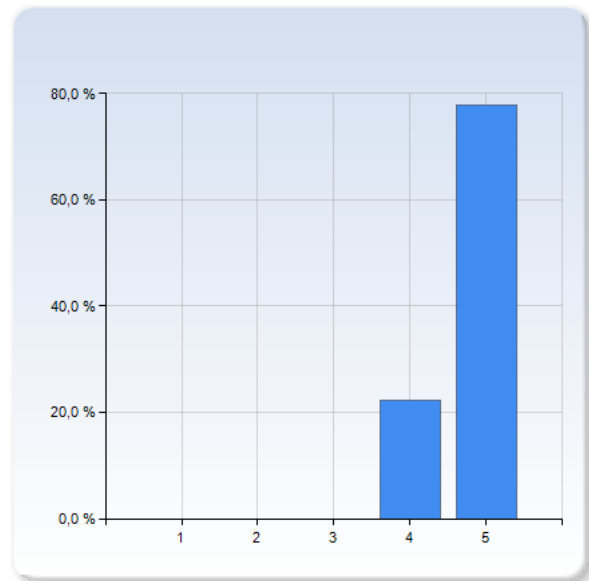
4 = positive

5 = very positive

What is your general opinion of...

the hand-in exercises?

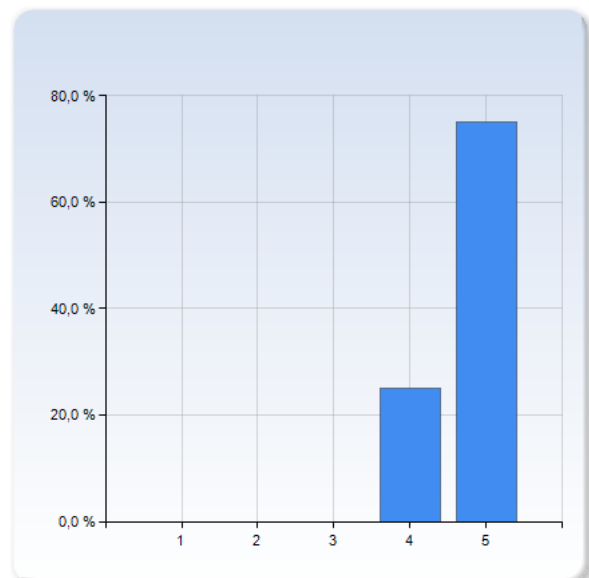
the hand-in exercises?	Number of Responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	2 (22,2%)
5	7 (77,8%)
Total	9 (100,0%)



the hand-in exercises?	Mean	Standard Deviation
	4,8	0,4

the written exam?

the written exam?	Number of Responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	2 (25,0%)
5	6 (75,0%)
Total	8 (100,0%)



	Mean	Standard Deviation
the written exam?	4,8	0,5

*Comment (help us interpret your grades!)*

I really appreciated having exam type questions as hand-ins.

I felt that both the hand-in exercises and the written exams reflect well on the course content.

Bra med inlämningar, tentan var bra upplagd.

It was good that the hand-ins sometimes were from old exams.

I especially appreciated that some of the hand-in exercises were problems from old exams. It gives you less anxiety about studying for the exams later on, since you get a chance to have a look at some of it earlier in the course.

Good balance in both exercises and exam.

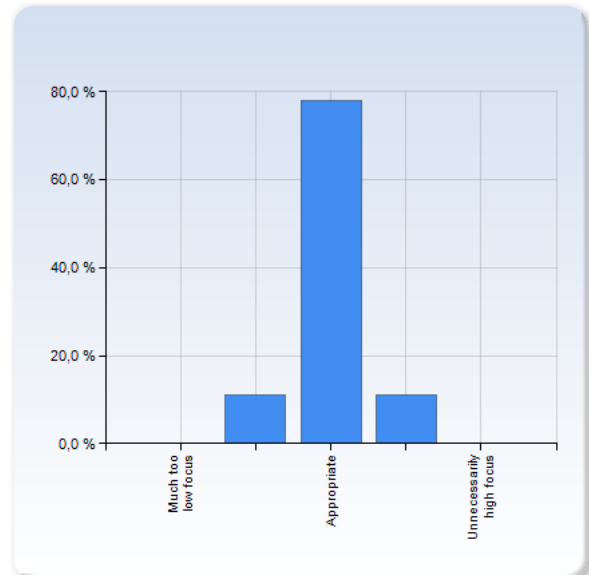
## The focus of the course.

**Below are learning goals from the course plan. Mark how much focus these goals got during the course, compared to what you feel would be needed.**

### "The student..."

#### can work with tools from vector calculus, and use basic integral relations

can work with tools from vector calculus, and use basic integral relations	Number of Responses
Much too low focus	0 (0,0%)
	1 (11,1%)
Appropriate	7 (77,8%)
	1 (11,1%)
Unnecessarily high focus	0 (0,0%)
Total	9 (100,0%)

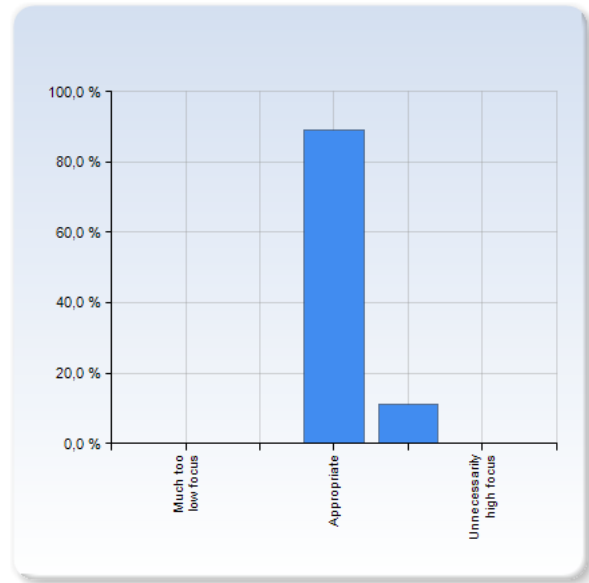


	Mean	Standard Deviation
can work with tools from vector calculus, and use basic integral relations	3,0	0,5



### can give conditions for, and describe properties of, hydrostatic equilibrium

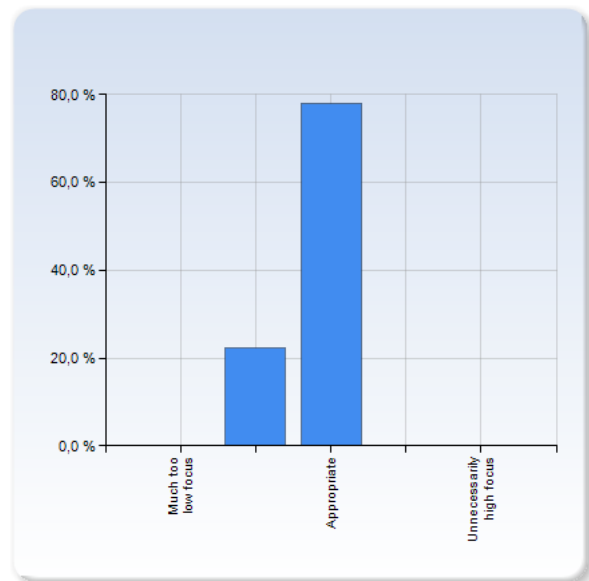
can give conditions for, and describe properties of, hydrostatic equilibrium	Number of Responses
Much too low focus	0 (0,0%)
Appropriate	8 (88,9%)
Unnecessarily high focus	1 (11,1%)
Total	9 (100,0%)



	Mean	Standard Deviation
can give conditions for, and describe properties of, hydrostatic equilibrium	3,1	0,3

### can explain the meaning of the Reynolds number, and when viscosity is important

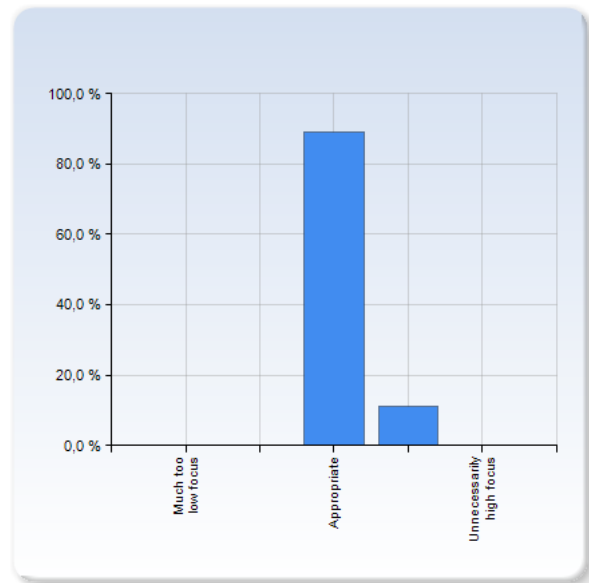
can explain the meaning of the Reynolds number, and when viscosity is important	Number of Responses
Much too low focus	0 (0,0%)
Appropriate	7 (77,8%)
Unnecessarily high focus	0 (0,0%)
Total	9 (100,0%)



	Mean	Standard Deviation
can explain the meaning of the Reynolds number, and when viscosity is important	2,8	0,4

### can interpret the different terms in the Navier-Stokes equations

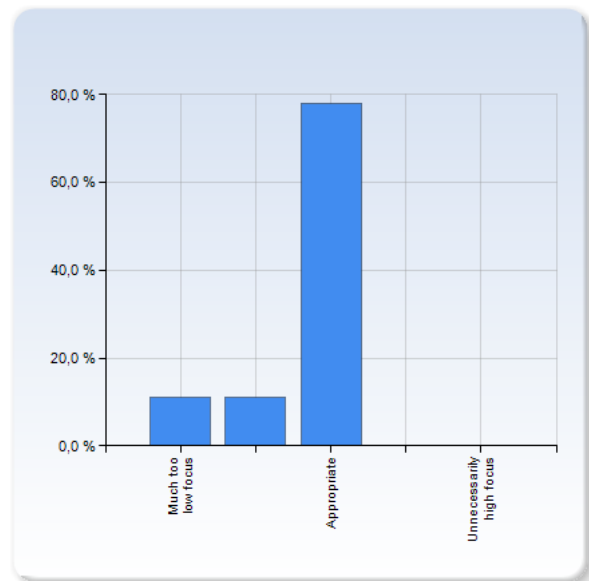
can interpret the different terms in the Navier-Stokes equations	Number of Responses
Much too low focus	0 (0,0%)
Appropriate	8 (88,9%)
Unnecessarily high focus	1 (11,1%)
Total	9 (100,0%)



	Mean	Standard Deviation
can interpret the different terms in the Navier-Stokes equations	3,1	0,3

### can outline some basic properties of turbulence

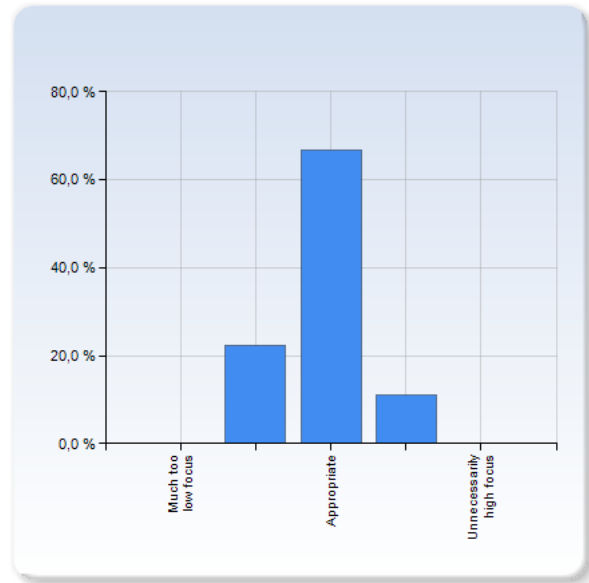
can outline some basic properties of turbulence	Number of Responses
Much too low focus	1 (11,1%)
Appropriate	7 (77,8%)
Unnecessarily high focus	0 (0,0%)
Total	9 (100,0%)



	Mean	Standard Deviation
can outline some basic properties of turbulence	2,7	0,7

### can calculate equilibrium states for hydrostatic atmospheres

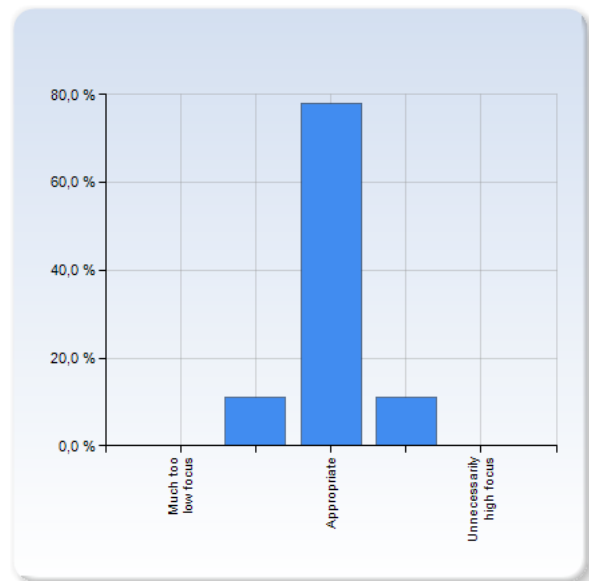
can calculate equilibrium states for hydrostatic atmospheres	Number of Responses
Much too low focus	0 (0,0%)
	2 (22,2%)
Appropriate	6 (66,7%)
	1 (11,1%)
Unnecessarily high focus	0 (0,0%)
Total	9 (100,0%)



can calculate equilibrium states for hydrostatic atmospheres	Mean	Standard Deviation
	2,9	0,6

### can apply laws of mechanics on continuous systems and work with velocity fields

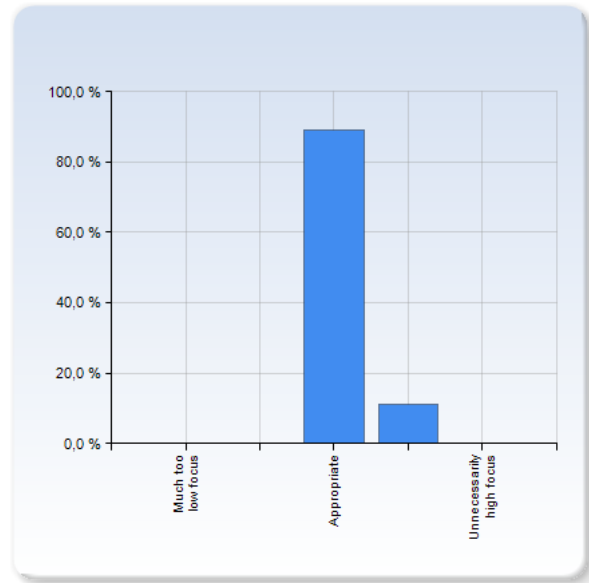
can apply laws of mechanics on continuous systems and work with velocity fields	Number of Responses
Much too low focus	0 (0,0%)
	1 (11,1%)
Appropriate	7 (77,8%)
	1 (11,1%)
Unnecessarily high focus	0 (0,0%)
Total	9 (100,0%)



can apply laws of mechanics on continuous systems and work with velocity fields	Mean	Standard Deviation
	3,0	0,5

### can describe the origin of centrifugal- and Coriolis forces

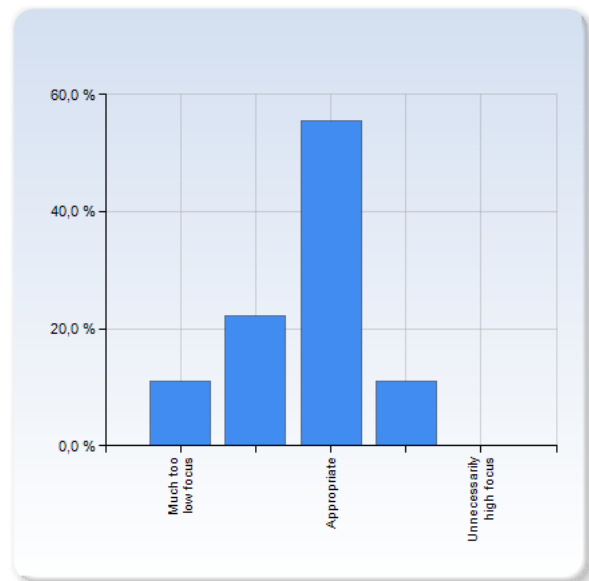
can describe the origin of centrifugal- and Coriolis forces	Number of Responses
Much too low focus	0 (0,0%)
Appropriate	8 (88,9%)
Unnecessarily high focus	1 (11,1%)
Total	9 (100,0%)



	Mean	Standard Deviation
can describe the origin of centrifugal- and Coriolis forces	3,1	0,3

### can do applications of Coriolis forces on flows in rotating systems

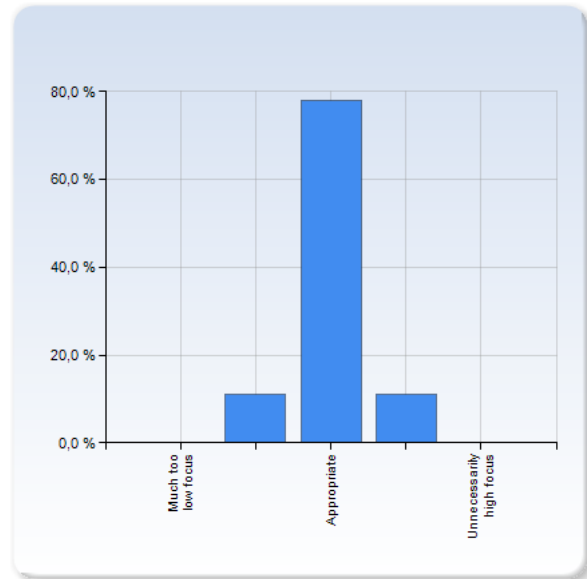
can do applications of Coriolis forces on flows in rotating systems	Number of Responses
Much too low focus	1 (11,1%)
Appropriate	5 (55,6%)
Unnecessarily high focus	1 (11,1%)
Total	9 (100,0%)



	Mean	Standard Deviation
can do applications of Coriolis forces on flows in rotating systems	2,7	0,9

## can calculate geostrophic flow from a pressure field and evaluate under what assumptions this is a good approximation to the flow

can calculate geostrophic flow from a pressure field and evaluate under what assumptions this is a good approximation to the flow	Number of Responses
Much too low focus	0 (0,0%)
	1 (11,1%)
Appropriate	7 (77,8%)
	1 (11,1%)
Unnecessarily high focus	0 (0,0%)
Total	9 (100,0%)



can calculate geostrophic flow from a pressure field and evaluate under what assumptions this is a good approximation to the flow	Mean	Standard Deviation
	3,0	0,5

### Comment

Bra kursmoment

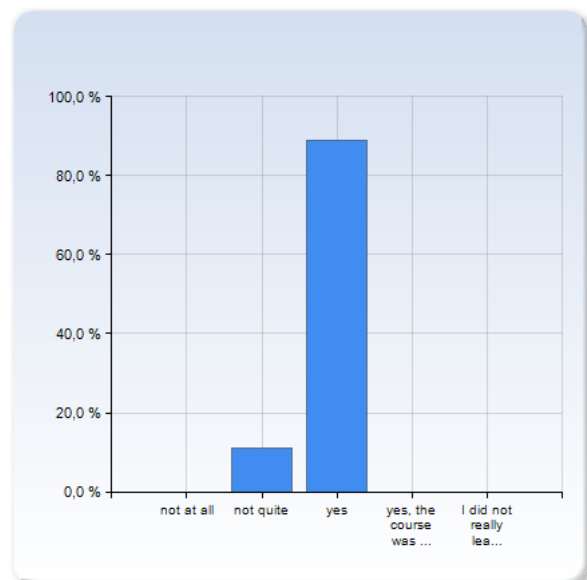
You followed the course plan in a good way.

These goals could be handy to see in the problem solving sessions.

I think most of the grading I made depends on how much I read in the book since I really need that as a compliment to the lectures. Hence, that might mean that the lecturer actually did focus more on the things that I didn't have time to read and hence don't know much about.

## 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	1 (11,1%)
yes	8 (88,9%)
yes, the course was a bit easy	0 (0,0%)
I did not really learn anything new	0 (0,0%)
Total	9 (100,0%)



Did you have enough prior knowledge for this course?	Mean	Standard Deviation
	2,9	0,3

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)?

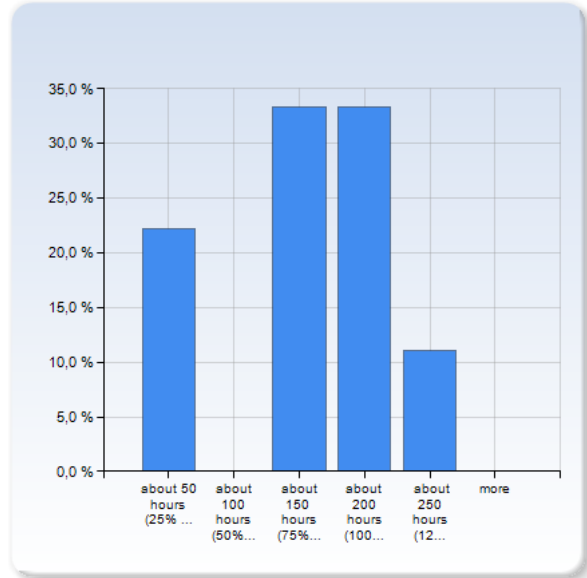
Hade egentligen för lite mattekunskaper, men det tog jag snabbt igen. Kursen var svår, så jag fick ge den mycket tid.

It is hard to make the course over all. I needed to study a lot to make it. One and a half year with physics and math.

The math was not hard at all which I liked since I have never had a course with or on vector calculus. I really liked the introductory lectures on vector calculus.

## 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
about 50 hours (25% of allotted time)	2 (22,2%)
about 100 hours (50% of allotted time)	0 (0,0%)
about 150 hours (75% of allotted time)	3 (33,3%)
about 200 hours (100% of allotted time)	3 (33,3%)
about 250 hours (125% of allotted time)	1 (11,1%)
more	0 (0,0%)
Total	9 (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
	3,1	1,4

Comment

Svårt att säga, men la ner mycket tid för jag tyckte det var svårt.

I think I needed to study more.

I focused only on what I need for my field.

I did my bachelor project/thesis at the same time as I had this course and I definitely (and unfortunately) put a lot more focus on that. I joined in every exercise session which was very helpful since I spent pretty much no other time with the course.

## What did you particularly like with the course?

What did you particularly like with the course?

A very enthusiastic teacher who showed great interest for the taught subject and really inspired me to want to learn more. Communication also worked very well with Patrik, he gave direct answers and was generous with office hours outside class.

The lectures and the course contents. Fluid Dynamics as presented in the course really feels like something I, as a physics student, should have a basic understanding of, and the course gave me that.

Upplägget

The lectures.

Patrik's insights into maths and physics (vector calculus, continuum mechanics, ...)

Problem solving sessions, it was good to solve a problem then try to sum up what you did and present it to the others. Also the hand-ins and that they were evenly spread out during the course. Plus all the material on the web page.

The dynamisms of the lecturers.

The balance between lectures and exercises were excellent. Also the communication with the student's during the lectures was very good. It was nice to have two different lecturers giving two a little bit different presentations on things. Both the introductory vector calculus and the exam was really good!

## What in the course do you think could improve?

What in the course do you think could improve?

Not much, I think that there was a fair balance between lectures, hand-ins, and problem solving sessions. All elements worked very good within themselves also.

One more problem solving session aimed at waves and perhaps more examples on viscosity, Coriolis force and geostrophic flow would have helped.

Utformningen av problem solving session.

Problem solving sessions.

More multi-media materials (like showing a video of streaklines, streamlines, etc.)

Maybe insert a small problem solving moment in the lecture where the students tries to solve a problem, then present the answer and continue the lecture. It would give a break from listening and activate the students thinking on their own.

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

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

It was really good that there was ample time between the last lecture and the exam so that I could fill in some knowledge gaps without getting too stressed.

Patrik was very helpful which I am very thankful for.

The structure was pedagogic, I felt I was learning a lot, and it was a nice and encouraging atmosphere at the lectures and problem sessions. Thanks for a great course!