ASTM13, ht14

Respondents: 11
Answer Count: 10
Answer Frequency: 90,91 %

General opinion

Give your opinion in the scale 1-5.

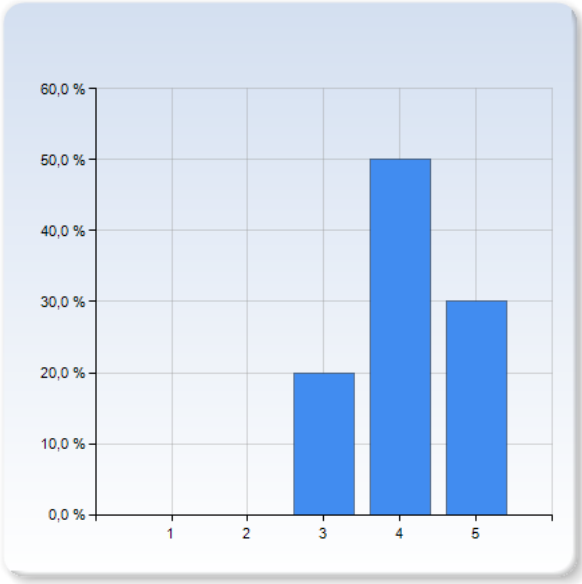
1 = very negative
2 = negative
3 = neutral
4 = positive
5 = very positive

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?

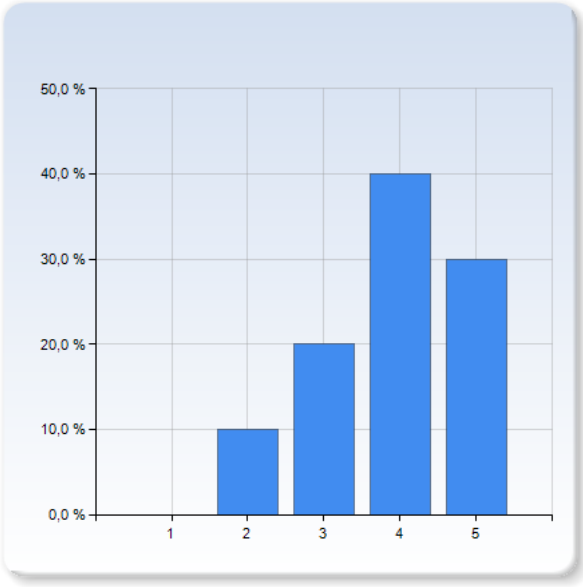
the course?	Number of Responses
1	0 (0,0%)
2	0 (0,0%)
3	2 (20,0%)
4	5 (50,0%)
5	3 (30,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
the course?	4,1	0,7

the information about the course when it started?

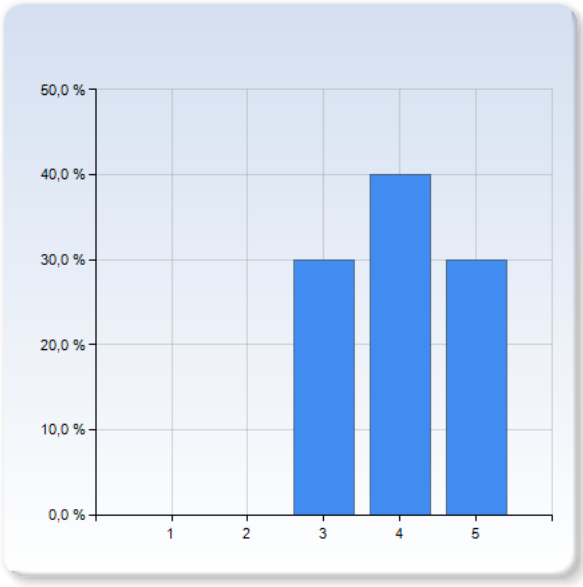
the information about the course when it started?	Number of Responses
1	0 (0,0%)
2	1 (10,0%)
3	2 (20,0%)
4	4 (40,0%)
5	3 (30,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
the information about the course when it started?	3,9	1,0

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	3 (30,0%)
4	4 (40,0%)
5	3 (30,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
the information about what was expected of you?	4,0	0,8

Comment (*help us interpret your grades!*)

Short time with the projects early while the course ended early. Could put things forward some with the deadline and try to have more lectures early on. Better project information early on I think might be key.

Teaching and examination

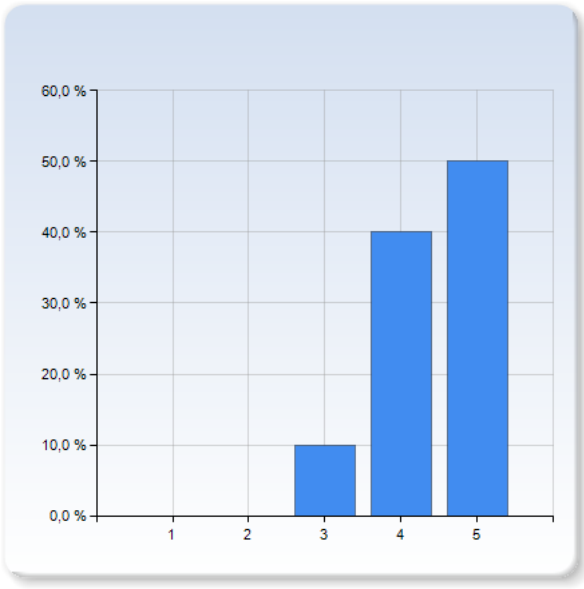
Give your opinion in the scale 1-5.

1 = very negative
2 = negative
3 = neutral
4 = positive
5 = very positive

What is your opinion of...

the course compendium by Lennart Lindegren

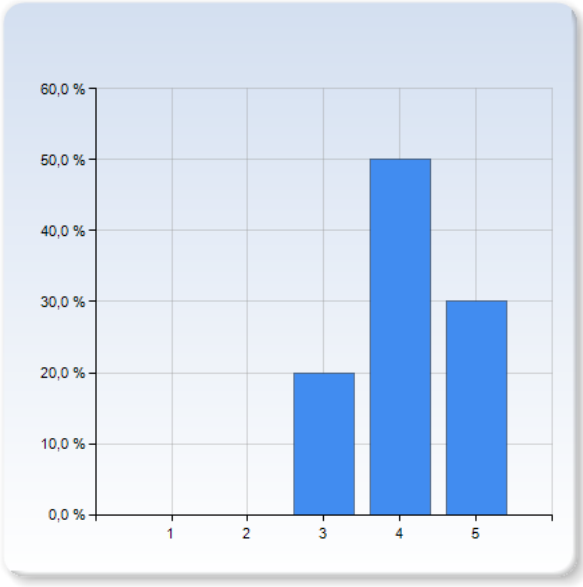
the course compendium by Lennart Lindegren	Number of Responses
1	0 (0,0%)
2	0 (0,0%)
3	1 (10,0%)
4	4 (40,0%)
5	5 (50,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
the course compendium by Lennart Lindegren	4,4	0,7

the lectures with David Hobbs?

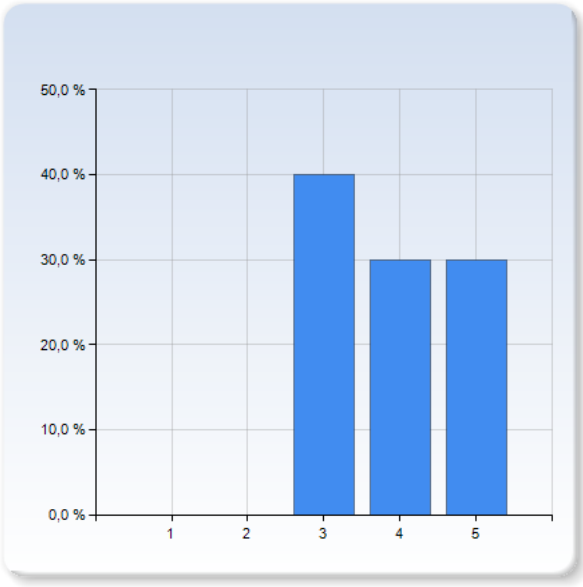
the lectures with David Hobbs?	Number of Responses
1	0 (0,0%)
2	0 (0,0%)
3	2 (20,0%)
4	5 (50,0%)
5	3 (30,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
the lectures with David Hobbs?	4,1	0,7

the lectures with Alexander Mustill?

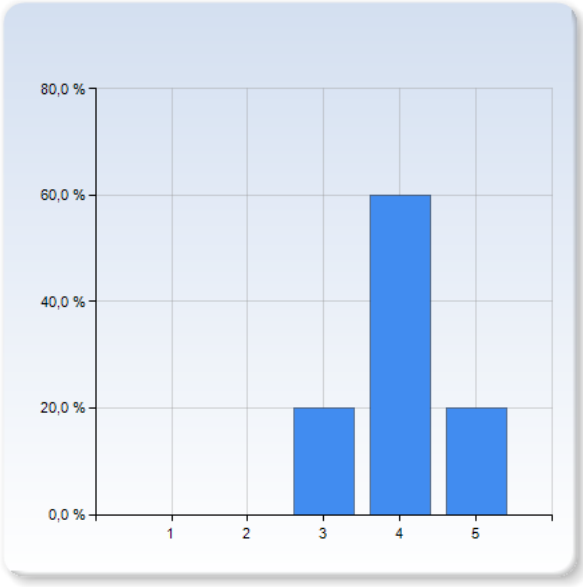
the lectures with Alexander Mustill?	Number of Responses
1	0 (0,0%)
2	0 (0,0%)
3	4 (40,0%)
4	3 (30,0%)
5	3 (30,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
the lectures with Alexander Mustill?	3,9	0,9

the speed of the course?

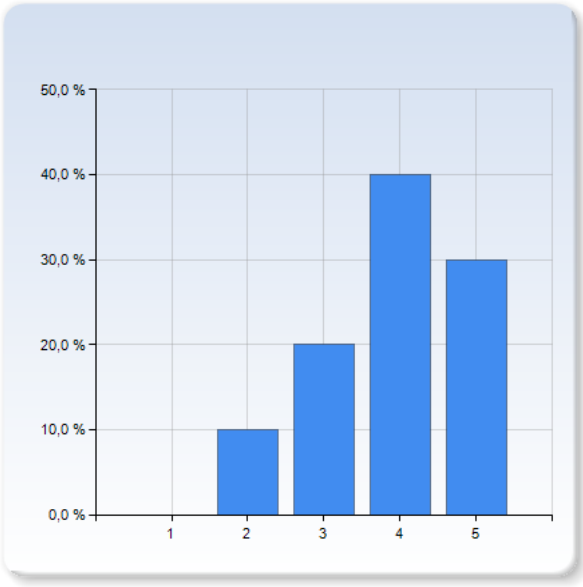
the speed of the course?	Number of Responses
1	0 (0,0%)
2	0 (0,0%)
3	2 (20,0%)
4	6 (60,0%)
5	2 (20,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
the speed of the course?	4,0	0,7

the MATLAB lectures by Daniel Carrera?

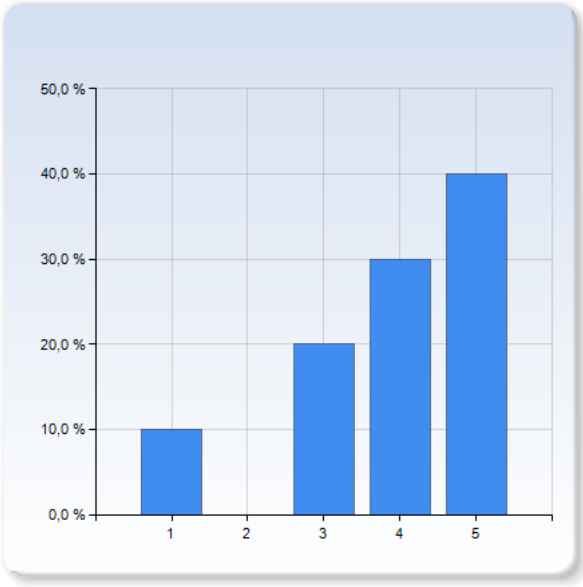
the MATLAB lectures by Daniel Carrera?	Number of Responses
1	0 (0,0%)
2	1 (10,0%)
3	2 (20,0%)
4	4 (40,0%)
5	3 (30,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
the MATLAB lectures by Daniel Carrera?	3,9	1,0

the relevance of the MATLAB lectures to the course?

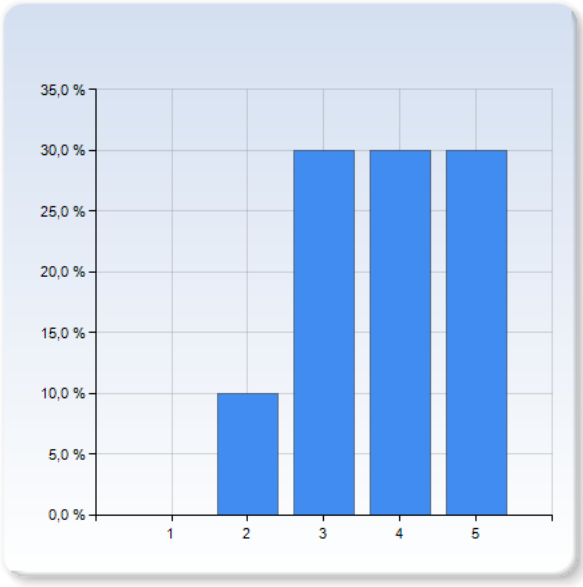
the relevance of the MATLAB lectures to the course?	Number of Responses
1	1 (10,0%)
2	0 (0,0%)
3	2 (20,0%)
4	3 (30,0%)
5	4 (40,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
the relevance of the MATLAB lectures to the course?	3,9	1,3

the project work sessions?

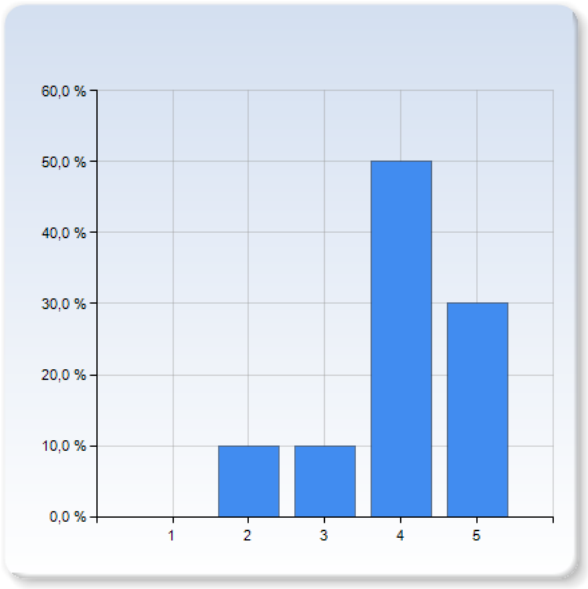
the project work sessions?	Number of Responses
1	0 (0,0%)
2	1 (10,0%)
3	3 (30,0%)
4	3 (30,0%)
5	3 (30,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
the project work sessions?	3,8	1,0

the balance between lectures and project work sessions?

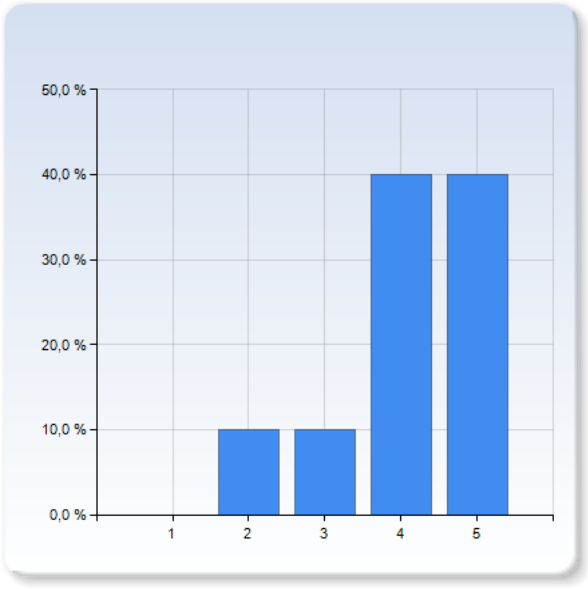
the balance between lectures and project work sessions?	Number of Responses
1	0 (0,0%)
2	1 (10,0%)
3	1 (10,0%)
4	5 (50,0%)
5	3 (30,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
the balance between lectures and project work sessions?	4,0	0,9

the take-home exam?

the take-home exam?	Number of Responses
1	0 (0,0%)
2	1 (10,0%)
3	1 (10,0%)
4	4 (40,0%)
5	4 (40,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
the take-home exam?	4,1	1,0

Comment (*help us interpret your grades!*)
The lectures (both David and Alexanders) gave a lot of mathematical understanding as to where the equations in the compendium came from and how they were derived. This was greatly appreciated. That being said, it would be nice if a little more emphasis could be put on their physical interpretation.
For someone not very familiar with matlab, the lectures were very good for me to get a general idea of some of the functionality but left me woefully unprepared for the complex things that one needed to know how to do and understand in order to be successful in the projects. The balance of lectures and project sections was far to weighted toward lectures (at least for me, someone who is well versed on the theory and math, but struggled with the computer aspects) as the take home exam was very straightforward while the project sessions were far more complicated and difficult. While they were weighted the same overall in the grading of the class, it seemed we spent much more time focusing on lecture material that ended up not being covered in the exam than we did on material relevant for the projects, which left me in a terrible position when it came to completing the projects accurately and easily even though I had no issues with the exam.
It was excellent that Daniels MATLAB tutorials were somehow relevant to the course! Big props! And Daniel is engaging, fun and a very good teacher in my humble opinion. David and Alexander presented the compendium and answered the questions from us the students to the best of their ability, as I know from myself that there were many questions =) I think that the course structure was better with Davids schedule than what was originally intended, thanks to David for the much better hand-in dates. The dates did not clash with the Statistics course and neither did the exam.
All my time went to the projects, not deriving things from the LN and the lectures. I think either that there should be some focus to show derivations in reports, or other homework covering that. But I really liked the projects, so I wouldn't really trade a project for more derivation homework. So I think the exam should be at least 50% programming.

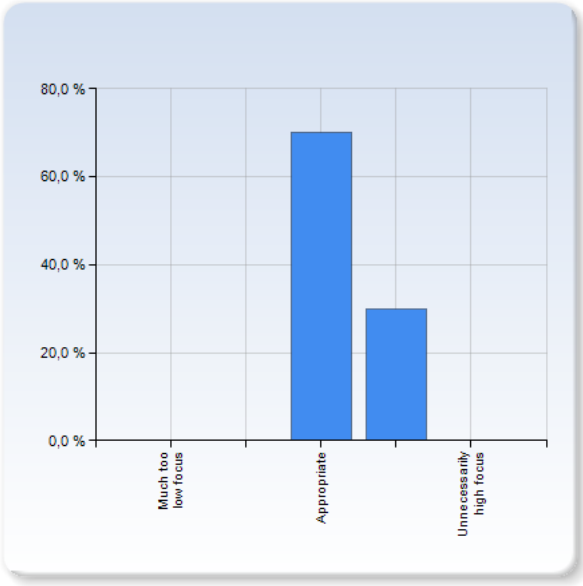
The focus of the course.

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 use basic astrometric data and other observations to compute objects' three-dimensional positions and velocities

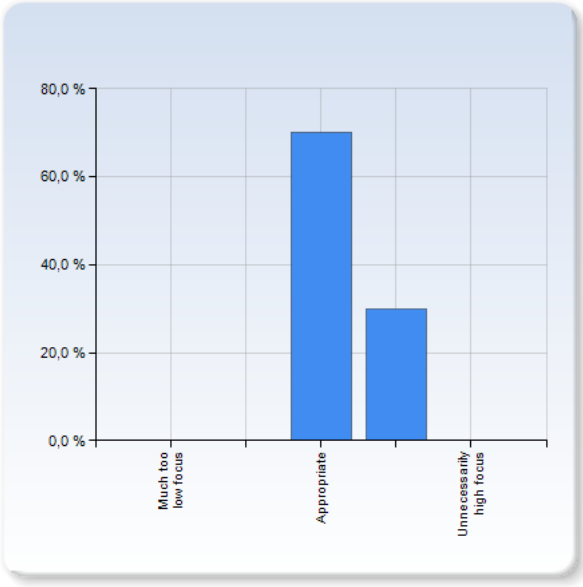
can use basic astrometric data and other observations to compute objects' three-dimensional positions and velocities	Number of Responses
Much too low focus	0 (0,0%)
	0 (0,0%)
Appropriate	7 (70,0%)
	3 (30,0%)
Unnecessarily high focus	0 (0,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
can use basic astrometric data and other observations to compute objects' three-dimensional positions and velocities	3,3	0,5

can calculate statistical kinematic quantities such as average speed and velocity dispersion

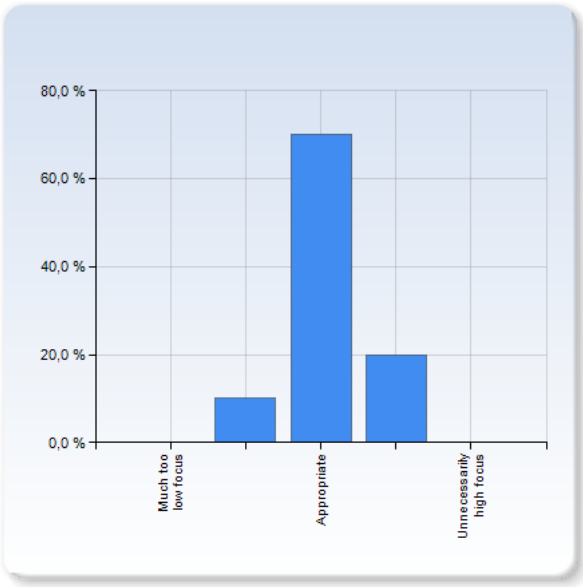
can calculate statistical kinematic quantities such as average speed and velocity dispersion	Number of Responses
Much too low focus	0 (0,0%)
	0 (0,0%)
Appropriate	7 (70,0%)
	3 (30,0%)
Unnecessarily high focus	0 (0,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
can calculate statistical kinematic quantities such as average speed and velocity dispersion	3,3	0,5

can describe the observed correlations between the statistical quantities and how these vary depending on the object's physical properties

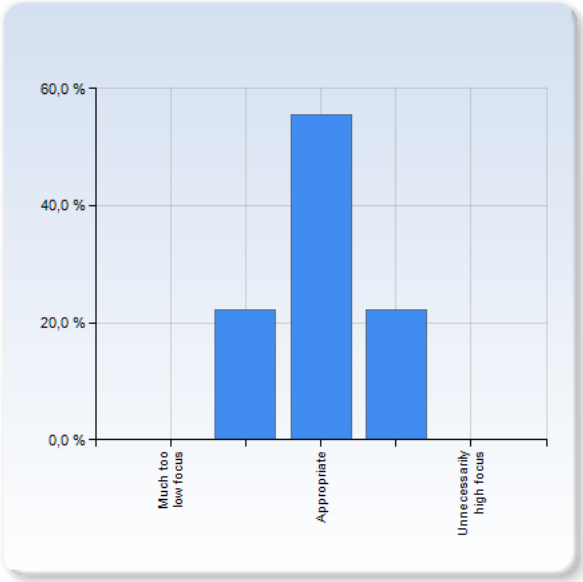
can describe the observed correlations between the statistical quantities and how these vary depending on the object's physical properties	Number of Responses
Much too low focus	0 (0,0%)
	1 (10,0%)
Appropriate	7 (70,0%)
	2 (20,0%)
Unnecessarily high focus	0 (0,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
can describe the observed correlations between the statistical quantities and how these vary depending on the object's physical properties	3,1	0,6

can explain and apply the principles of dynamic determination of mass or mass density in a dynamic system

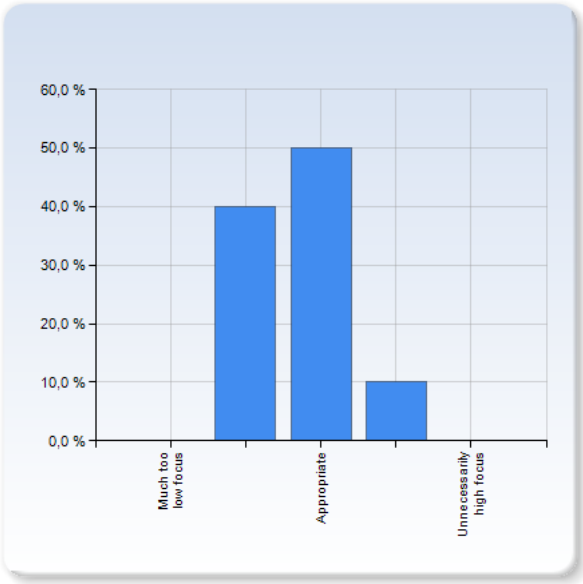
can explain and apply the principles of dynamic determination of mass or mass density in a dynamic system	Number of Responses
Much too low focus	0 (0,0%)
	2 (22,2%)
Appropriate	5 (55,6%)
	2 (22,2%)
Unnecessarily high focus	0 (0,0%)
Total	9 (100,0%)



	Mean	Standard Deviation
can explain and apply the principles of dynamic determination of mass or mass density in a dynamic system	3,0	0,7

can numerically calculate the paths of particles within a given potential

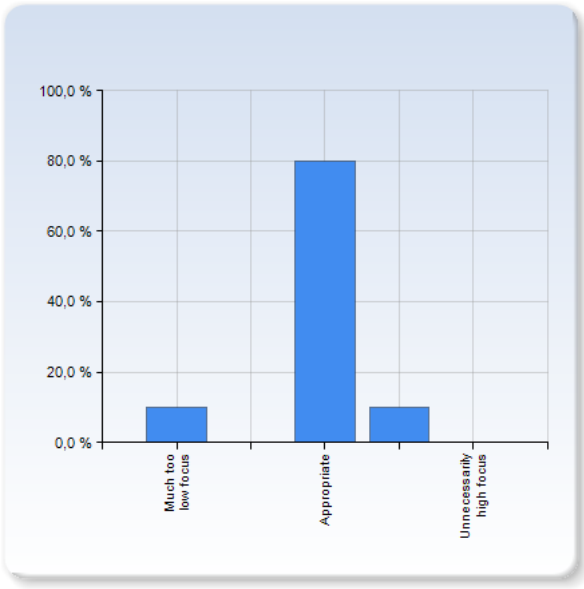
can numerically calculate the paths of particles within a given potential	Number of Responses
Much too low focus	0 (0,0%)
	4 (40,0%)
Appropriate	5 (50,0%)
	1 (10,0%)
Unnecessarily high focus	0 (0,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
can numerically calculate the paths of particles within a given potential	2,7	0,7

has received training in use of Matlab

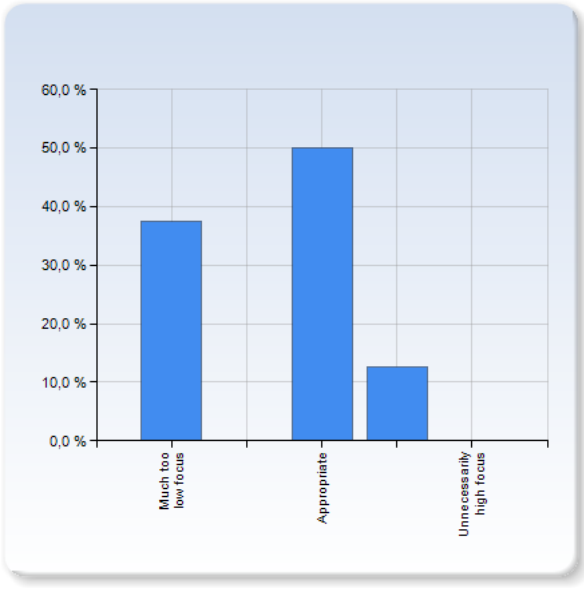
has received training in use of Matlab	Number of Responses
Much too low focus	1 (10,0%)
	0 (0,0%)
Appropriate	8 (80,0%)
	1 (10,0%)
Unnecessarily high focus	0 (0,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
has received training in use of Matlab	2,9	0,7

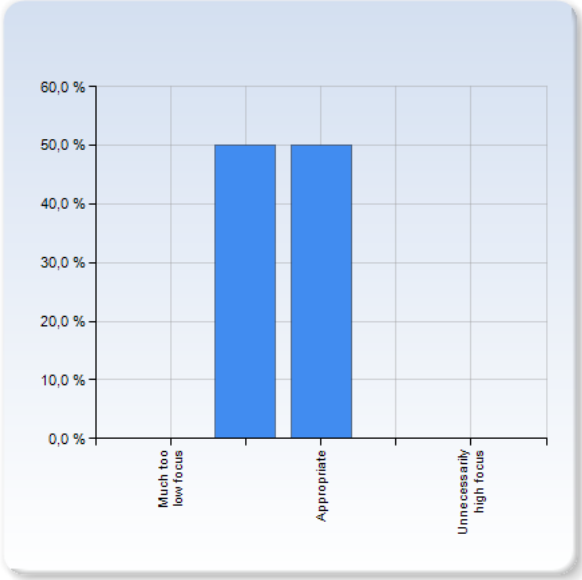
has received training in numerical integration of ordinary differential equations

has received training in numerical integration of ordinary differential equations	Number of Responses
Much too low focus	3 (37,5%)
	0 (0,0%)
Appropriate	4 (50,0%)
	1 (12,5%)
Unnecessarily high focus	0 (0,0%)
Total	8 (100,0%)



	Mean	Standard Deviation
has received training in numerical integration of ordinary differential equations	2,4	1,2

	Number of Responses
Much too low focus	0 (0,0%)
	2 (50,0%)
Appropriate	2 (50,0%)
	0 (0,0%)
Unnecessarily high focus	0 (0,0%)
Total	4 (100,0%)

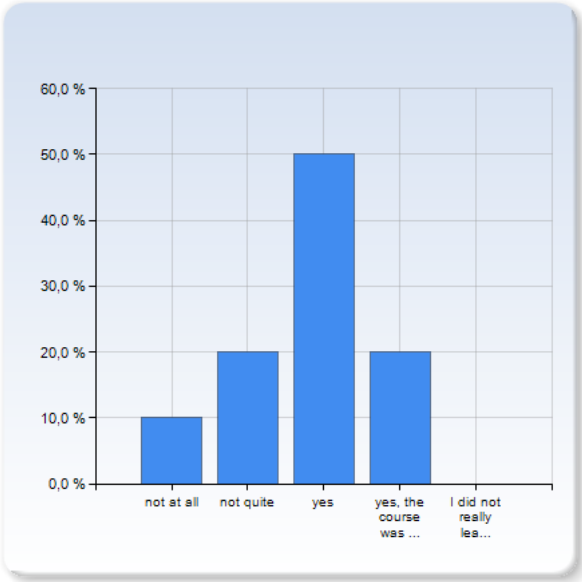


	Mean	Standard Deviation
	2,5	0,6

Comment
the dynamic determination of mass I'm sure was in the compendium and even the exam but I don't recall it being a major part of the labs and that's why I gave it a low focus score as I learned the most when I did the labs!

Did you have enough prior knowledge for this course?

Did you have enough prior knowledge for this course?	Number of Responses
not at all	1 (10,0%)
not quite	2 (20,0%)
yes	5 (50,0%)
yes, the course was a bit easy	2 (20,0%)
I did not really learn anything new	0 (0,0%)
Total	10 (100,0%)

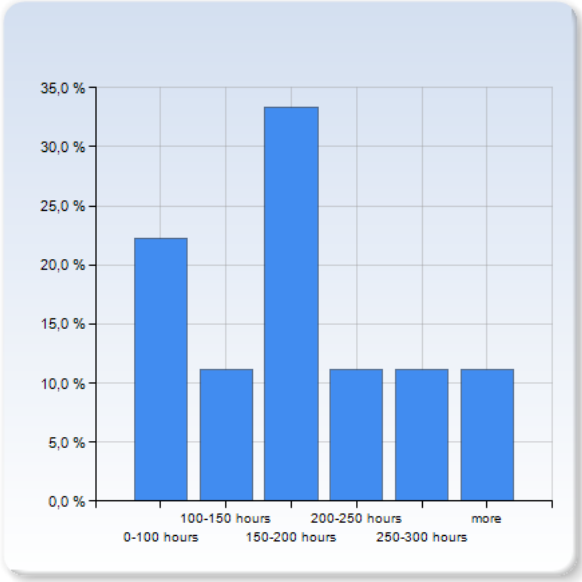


	Mean	Standard Deviation
Did you have enough prior knowledge for this course?	2,8	0,9

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)?
Background in astronomy
As a third year student in university pursuing a double major in mechanical and aerospace engineering, I had only used matlab for simple calculations, data entry and graphing/plotting, but when it came to the complex maneuvers required by this course in the projects (especially numbers 2 and 3), I could not complete them due to the fact that the matlab training sessions, while generally valuable, did almost nothing to help with the difficult aspects of the projects. And coming into project sessions proved just as unhelpful as I was seemingly the only foreign student in the class and far behind everyone else in terms of matlab knowledge. Therefore what was easy for others to do was something I hadnt seen before and they had a low ability to help me understand better how to complete different tasks without basically doing the project for me.
New to matlab, but otherwise it was nice

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	2 (22,2%)
100-150 hours	1 (11,1%)
150-200 hours	3 (33,3%)
200-250 hours	1 (11,1%)
250-300 hours	1 (11,1%)
more	1 (11,1%)
Total	9 (100,0%)



	Mean	Standard Deviation
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)	3,1	1,7

Comment
After the project sessions and matlab tutorials proved unhelpful, I stopped going to project sessions and spent an inordinate amount of my time scouring the internet and forums to try to work my way through each tiny aspect of the project at a time, while still not understanding some of the basic steps that went into what I was doing. This left me with several sleepless nights trying to solve problems out of my understanding and interpret error messages that I did not know the basis of so could not easily correct.
The project and reports took time, but the textbook was quite short though. Could have longer compendium with some more information about properties like how age is correlated to velocity dispersion and other interesting topic about stellar properties related to dynamics.
Did not Keep track of my working hours, might also be more or less

What did you particularly like with the course?

What did you particularly like with the course?
The projects were well planned and and relevant!
The lectures and compendium made it easy to understand the math based and theoretical information behind the course and therefore the take home final exam was quite simple to complete.
Good mix of theory and practical use of data measurements of real stars.
The Project work was very interesting and fun. It was nice to work with some actual observational data to do some Standard astronomy calculations.
Projects were very nice
The labs were extremely fun and interesting. I learned 95% from the labs, the rest 5% I got from getting my questions answered from lectures. I loved to discuss the concepts with the rest of the students and to code something myself that has major relevance. It was in the discussion with the other students I learned most of the central concepts in the course, such as proper motion and so on..
Lennarts lecture notes, the lab sessions where one could work and ask questions, and that projects use real data in ways that are similar to literature. Cool to see that we are able to get values close to the current best estimates

What in the course do you think could improve?

What in the course do you think could improve?
The hand-out sheets for the projects. Some of the questions to be answered relied on earlier copies of the compendium.
There has to be a better introduction to matlab for students who do not have a strong background. I went to the tutorial sections and learned a great deal but still felt totally in the dark with what was asked of me and the things I needed to do in order to complete the projects. Very frustrating when no one in the class could easily help me (without doing the entire project for me) and then reading seemingly every article about matlab functions and suggestions, still to come up short of the correct answer due to input errors and not knowing how to deal with very specific issues that I did not understand.
The schedule since it was stressful at the start and very little too do at the end.
I think Project two should be done later in the course as it requires a lot of the later chapters in the compendium. Maybe Change P2 and P3.
Maybe MATLAB teaching
The course is 99% perfect, best course I've ever had! I would include some more graphical representations of the dynamical concepts in Dynamical Astronomy. Maybe show some clips/animations of proper motion, LSR and so on.
Exam relevance to course workload