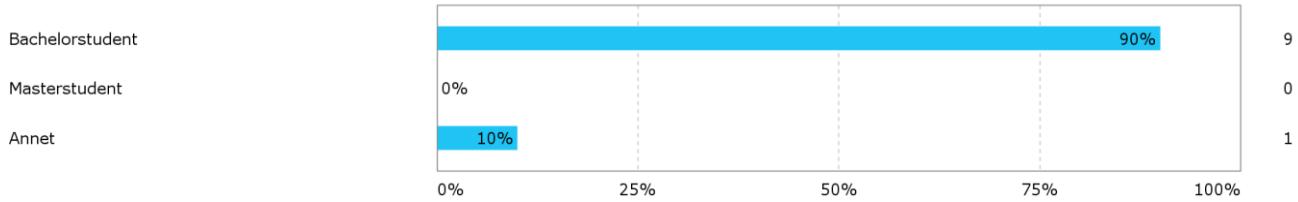


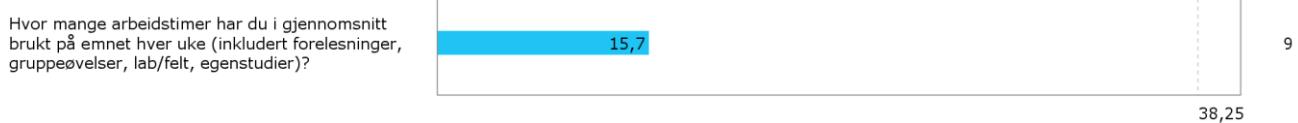
# INF250

## Er du?

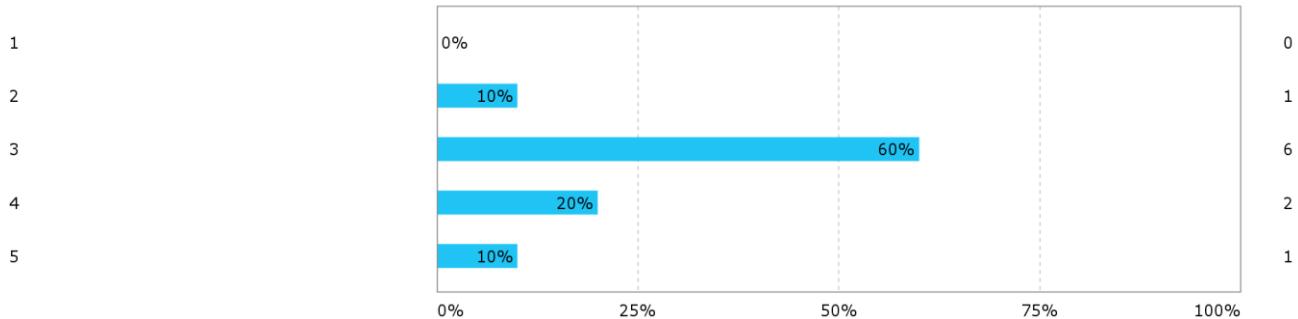


## Er du? - Annet

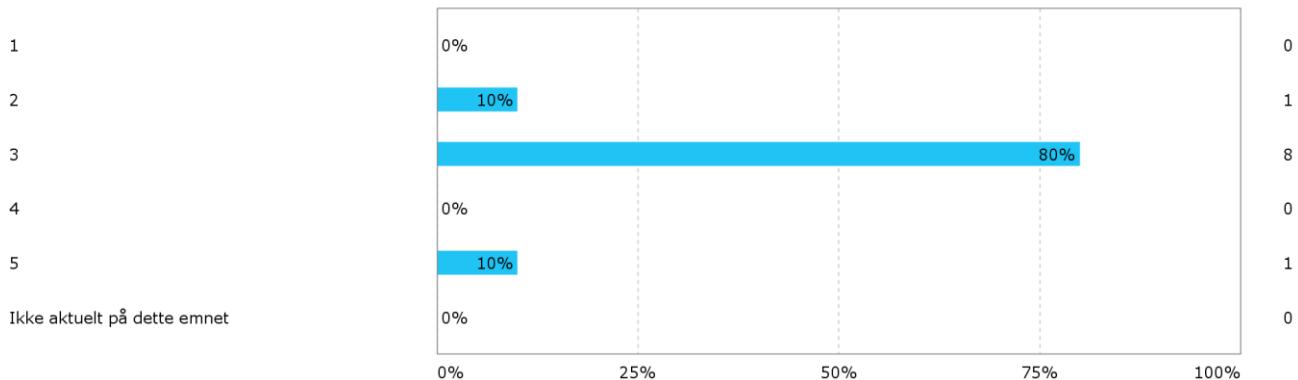
- årsstudium. Har allerede bachelor

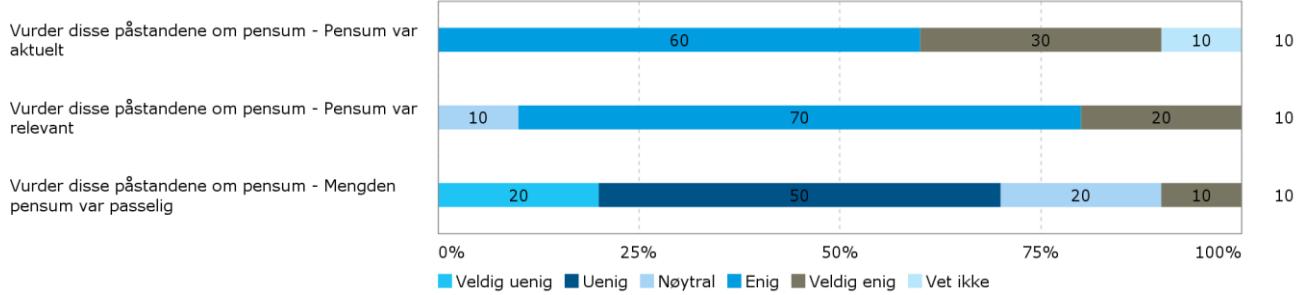


## Hvor mye teoretisk kunnskap har du tilegnet deg på dette emnet? (1 = ingen, 5 = mye)

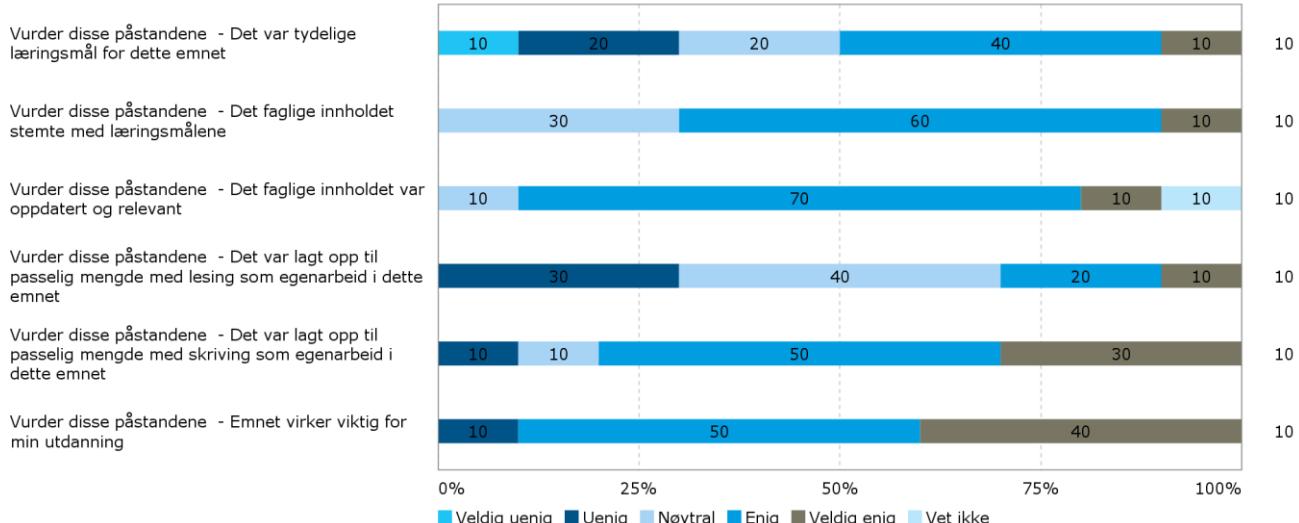
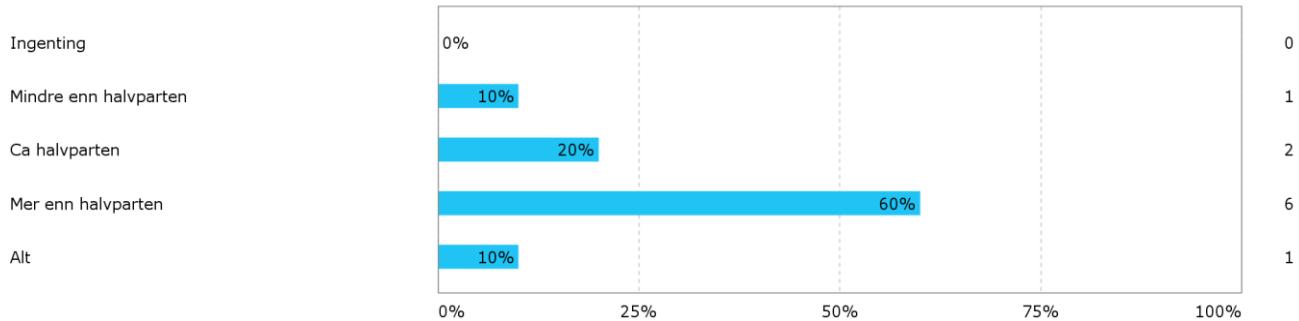


## Hvor mye praktisk kunnskap har du tilegnet deg på dette emnet? (1 = ingen, 5 = mye)

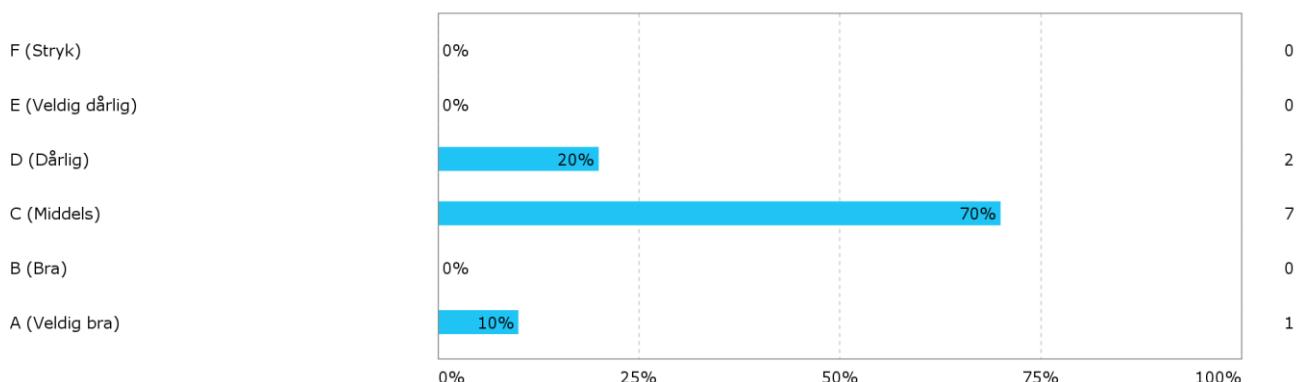




## Hvor mye av pensum leste du?



## Hvilken karakter vil du gi dette emnet?



## Hva likte du mest med dette emnet?

- Veldig interessant
- Stort fokus på praktisk bruk av det man har lært
- Måten det var organisert med mange obligatoriske oppgaver.
- Emnet var relevant, og vi lærte om mange konsept og teknikker som virker svært nyttige videre i studiet.
- The topics themselves are very interesting. I got introduced to a lot of different parts of computer science for future study.
- Det er et kurs ganske likt som et kurs på NTNU. Kurset i seg selv holder mål sammenliknet med tilsvarende kurs.

foreleser har gjort alt han kan for å tilpasse seg studenter som egentlig aldri skulle ha tatt faget, pga manglende matematisk bakgrunn i linær algebra.

- Practical exercises I guess.

## Hva likte du minst med dette emnet?

- At vi på datatek ikke ha hatt Lineær Algebra, og at de mest grunnleggende prinsippene var vanskelig å forstå for oss..
- Veldig høy læringskurve siden man ikke har fått tatt Lineær Algebra eller MAT102 tidligere. Dette gjør at mange DTEK studenter sliter voldsomt i starten og resten av semesteret.  
Altfor teoretisk tungt fag, til at dette er obligatorisk før man evt har hatt muligheten til å ta Linear Algebra eller MAT102. Pensum er for bredt og forelesningene er veldig teoretiske.
- Det var litt som om man skulle fått utdelt matematikkboken til 5. klassinger når man begynte i 1. klasse.

Hvorfor kommer dette emnet FØR valgfrie emner? Noen smartinger meldte seg av dette kurset og tar lineær algebra / statistikk først. Vi andre sitter der med dette kurset uten noe fundament fra nevnte fag i det hele tatt og skjønner egentlig ingenting.

- Jeg savnet oppgaver som kunne brukes til å opparbeide en forståelse for emnet. De obligatoriske oppgavene vi fikk utlevert var ofte svært vanskelige å finne eksempel for, og uten enklere oppgaver for å bli kjent med emnet hadde studentene vanligvis bare et minimum av teoretisk forståelse i bakhånd for å løse og forstå oppgavene.
- At vi ikke hadde MAT121 først, og at vi har en annen eksamen dagen før eksamen i dette faget.
- The amount of different topics, and how in depth all of them were explained. Both the slides and the book are very confusing, as was some of the lectures, because the base level was much too high. Very few lectures or topics had a introductory part to them. Maybe it's impossible to explain a lot of these terms without going into great detail with math and examples. It's at least very hard for me to learn when I have to memorise half a page to explain, in the most general of terms, what a topic is.
- Mange svake studenter (dvs, folk som mangle nødvendig matematisk bakgrunn) drar faget ned som helhet.
- For stort pensum.
- This course is based on the fact that you already know linear algebra, which isn't the case for many students. There are some bachelor degree plans recommend that you take this course before you are allowed to choose linear algebra course. As such, this course has a very steep learning curve and it is easy to catch up.

## Har du forslag til hvordan emnet kan forbedres?

- 6 semester, og lineær algebra som obligatorisk emne 4 semester
- Flytt dette faget til senere i studiet slik at man har mulighet til å få tatt Linear Algebra eller lignende fag før man tar dette faget. Det er meget vanskelig å få satt seg inn i starten pga manglende kompetanse innen matriser og vektor rom for DTEK studenter.
- Legg til flere, enklere oppgaver / eksempler, gjerne en pensumbok som inneholder oppgaver for hvert kapittel.
- Dumb it down. Have less topics, or less details to the topics we cover, and spend more time with basic understanding. If it can't be explained, in the most general of ways, to a five year old, then we have to spend time on it. Also, the exercises during the year, and the past exams was very different from the exam we had. In most subjects, this is not the case and we can use them to study well. Based on how specific the questions were, and how many subjects it could potentially

cover, this is probably the most difficult exam I've had at UIB (especially the day after another exam)

- Det bør være mer tydelig hvem som bør ta dette faget og hvem som ikke bør ta dette faget. Videre må faget flyttes/fjernes fra datateknologi linjen, slik at gjennomsnitts studenten representerer hva anbefalte forkunskaper legger opp til.

Ellers er kurset ganske likt tilsvarende fag, og opplegget er ryddig og profesjonelt utført.

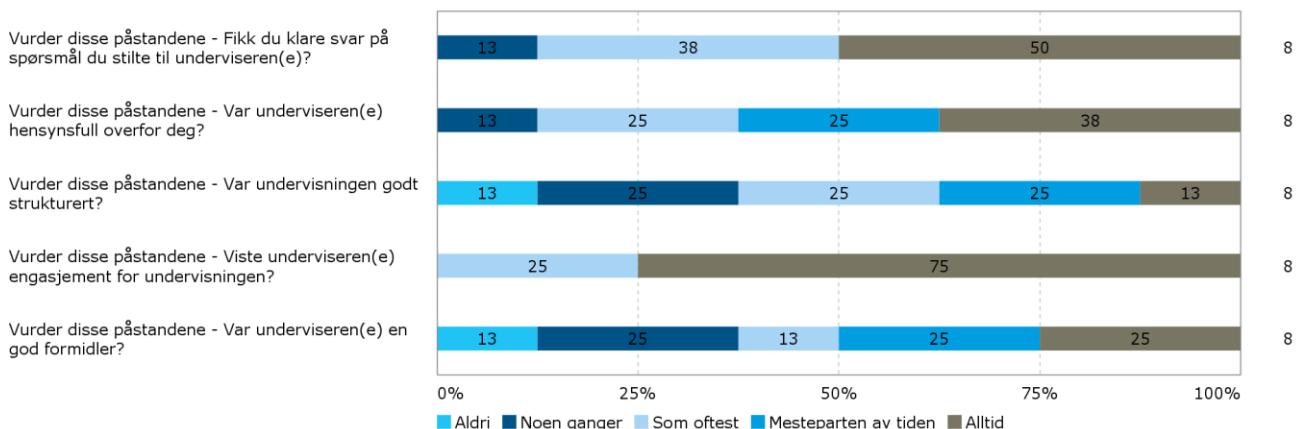
- Nothing on this course itself.

### Tilbakemeldinger på organisert praktisk undervisning:

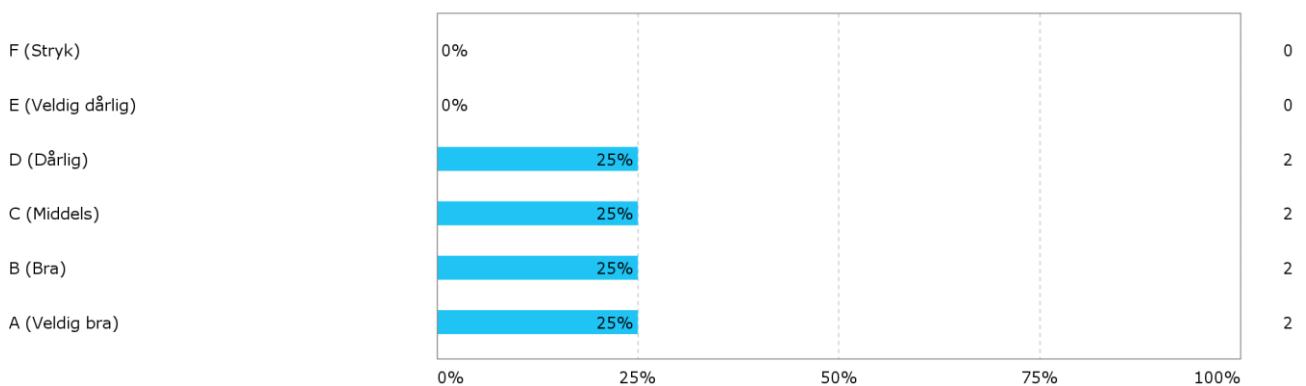
- Disse var gode
- I struggled a lot with these. But they are fine as they're supposed to be difficult as they make up such a large portion of the grade.
- Veldig godt utført arbeid, med gruppeleder som evner å tilpasse seg tilsynelatende svake studenter. Må nevne jeg ikke har vært på så mange øvingsstimer, men basert på hva jeg har hørt er det gitt en del hint og hjelp til de aller svakeste slik at de har kommet seg igjennom.

Som sagt, ganske bra utført!

- More group sessions would be nice, as they were too spaced out. Only once every two weeks, which meant there were none close to the deadline.



### Hvilken karakter vil du gi underviseren(e)?



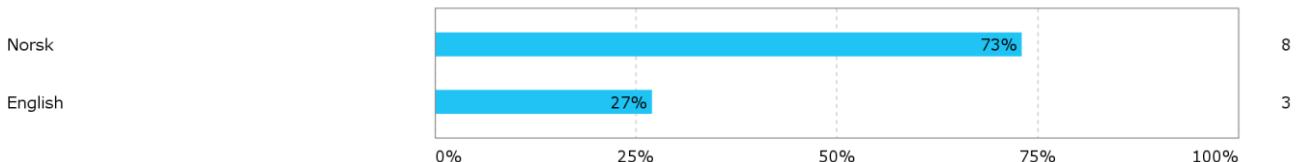
### Har du forslag til hvordan underviseren(e) kan forbedre sin undervisning?

- Man trenger mer tid til å sette seg inn i Lineær algebra enn man fikk mulighet til her.
- It's not really his fault, as we were so ill prepared for the subject, and that clashed with the subject/his approach to it. And the subject is very difficult, so it's hard to explain it clearly, but I was confused much more than I was not in the lectures.

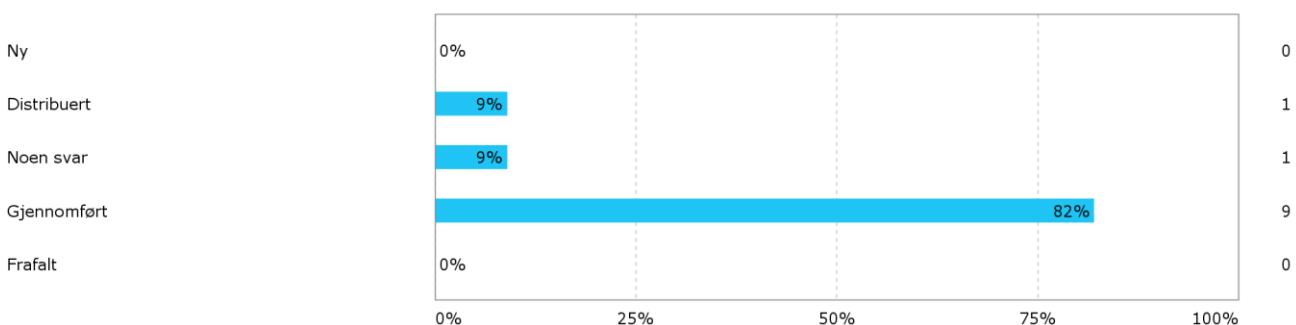
It was much easier to understand the sub-teachers, as they simplified things well.

- En kan være mer interaktivt med tanke på at det er ulike mennesker som lærer anderledes. Mennesker som ikke er så matematisk anlagt, husker og forstår bedre gjennom interaksjon og beskrivende animasjoner. Hvis det lar seg gjøre å bytte ut noe med animasjoner/videoer som forklarer det samme, kan dette kanskje hjelpe veldig svake studenter som ikke klarer å tenke matematisk.  
Uansett, så skyldes mye av svakheten at mange mangler linær algebra og er tvunget til å ta det.
- More concrete examples on the blackboard, with different ones from the slides.

## Språk



## Samlet status



## Forelesers kommentar:

Ten students have filled out (partially) the evaluation of INF250. They write that they have learned both theory and practice in this course (good). They only consider the curriculum of INF250 up-to-date and relevant (good), while they also express that they think it was too much (I've not received any course evaluation before, where this reaction was reported). Mostly, the students, who filled out the evaluation, think that it was clear, what the learning goals are for INF250, that the course content corresponds with the learning goals, that the course is up-to-date and relevant, and that the amount of writing work was OK and that INF250 seemed important for the studies. There were kind of split opinions concerning the amount of reading that was required, corresponding to the impression that the course presented too much content. The overall evaluation of INF250 (by these 10 students) was close to a C (a slightly better evaluation would have been appreciated, of course, so there seems to be room for improvements!).

In terms of what the students liked about INF250, it is good to read that INF250 was found interesting, that the focus on practical applications was appreciated (2\*), that exercises and assignments were found well-organized, that INF250 appeared relevant and important, and INF250 was inspiring for future studies, that the efforts made by the lecturer (myself) to convey the concepts were appreciated. In terms of what the students disliked, it is seemingly most critical that several students lacked sufficient linear algebra knowledge in order to appreciate INF250 (mentioned by about half of the students, who filled out the evaluation) and that several students had difficulties with the level of this course (it appeared too difficult for them)---while INF250 comes with a short introduction of the most central basics in linear algebra, before continuing to the actual curriculum, which is more an application of linear algebra than a base-level course on linear algebra itself, it is clear that students, who lack an appropriate basis in mathematics---in particular in linear algebra---do have difficulties with INF250. As a course that is designed for the 6. semester in Bachelor studies of computer science, a certain basis must be assumed (one cannot and should not start at level zero that far into undergraduate University studies) and it is noted that the course description of INF250 clearly denotes this requirement (at least one completed course in mathematics, basics of linear algebra). Thus, it seems to be important, first and foremost, to

investigate the study plans, which lead students into INF250 without the appropriate mathematical basis. In order to optimize the learning outcomes, it would be helpful to improve the situation in this respect (help that students start with INF250, once they have obtained a sufficiently good mathematical basis).

It is also good to read that the students, who filled out the evaluation, mostly were satisfied with the way the teacher(s) worked in INF250. The overall evaluation of the INF250 instructors turned out to be somewhere between a C and a B (not bad, but could be an itch better, also).