



Kursanalys

Kurstitel: Bioinformatik	
Kurskod: CB2442	Högskolepoäng: 7.5 hp
Kursen ingår i programmet: TMBIM	
Termin: HT	Läsperiod: 1
Kursansvarig: Anders Andersson	Examinator: Lukas Käll
Antal registrerade studenter: 83	Antal godkända vid sista kursdatum: 73
Svarsfrekvens kursvärderingsenkät (%):	19 (23%)

Kursfakta

Lärare: Lukas Käll, Olof Emanuelsson, Anders Andersson.

Kursen är 7.5 hp och har 2 moment:

LAB1 Datorlaboration, 2.5 hp. P/F.

TEN1 Examination, 5.0 hp. A, B, C, D, E, FX, F.

Deltagande och resultat

Totalt 83 registrerade.

Totalt 78 skrev tentan vid första tillfället (2023-10-19).

Av dessa klarade 73 tentan (94%).

Totalt 7 skrev omtentan vid andra tillfället (2023-12-18).

Av dessa klarade 5 omtentan (varav 1 var godkänd sen tidigare).

Totalt är 83 godkända på labb-momentet av kursen (2023-12-18).

Genomförda förändringar till detta kurstillfälle

Detta var första gången denna kurs (CB2442 Bioinformatik) hölls. Kursen bygger till stor del på BB2441 Bioinformatik. Den huvudsakliga skillnaden är att modulen i grundläggande Python-programmering som fanns i BB2441 nu har skrotats. Istället är Python-programmering en integrerad del av CB2442s övriga moduler. Detta har implementerats genom 4 nya Python-labbar där studenterna får programmera några grundläggande bioinformatiska algoritmer. Detta var något som många studenter i BB2441 efterfrågade och som nu var möjligt att genomföra då studenterna numer kan förväntas ha en kurs i grundläggande Python-programmering i bagaget då de börjar på kursen.

LEQ resultat

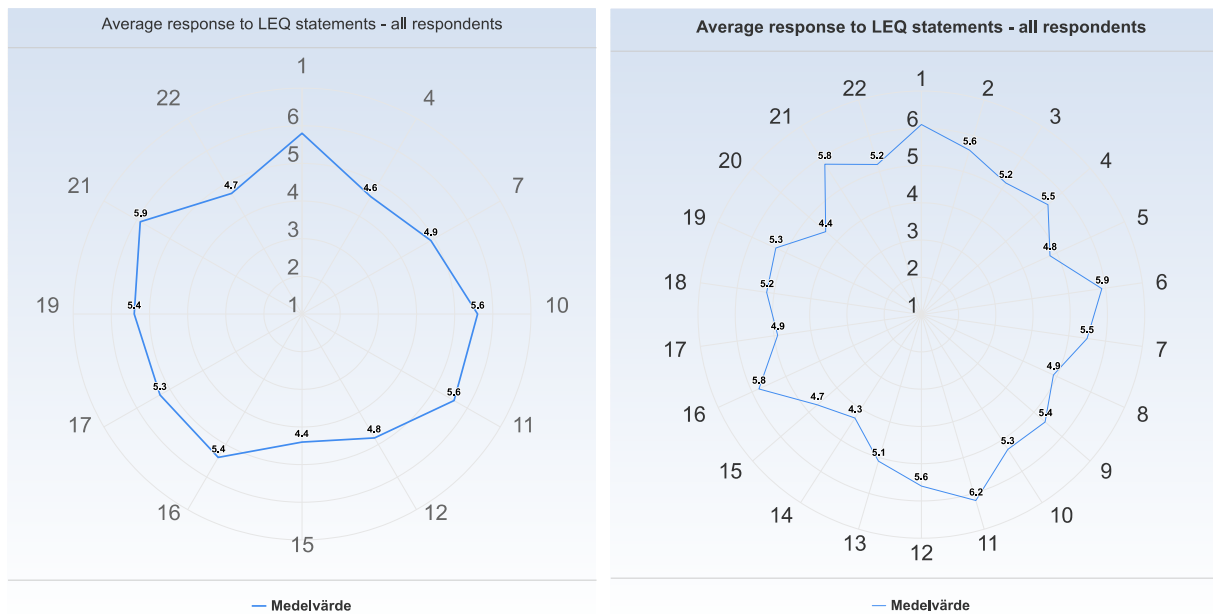


Fig 1: **Studenternas genomsnittliga LEQ svar.** Vänstra panelen: förra kursomgång av BB2441 Bioinformatik (HT-2022), högra panelen: årets kursomgång av CB2442 Bioinformatik (HT-2023).

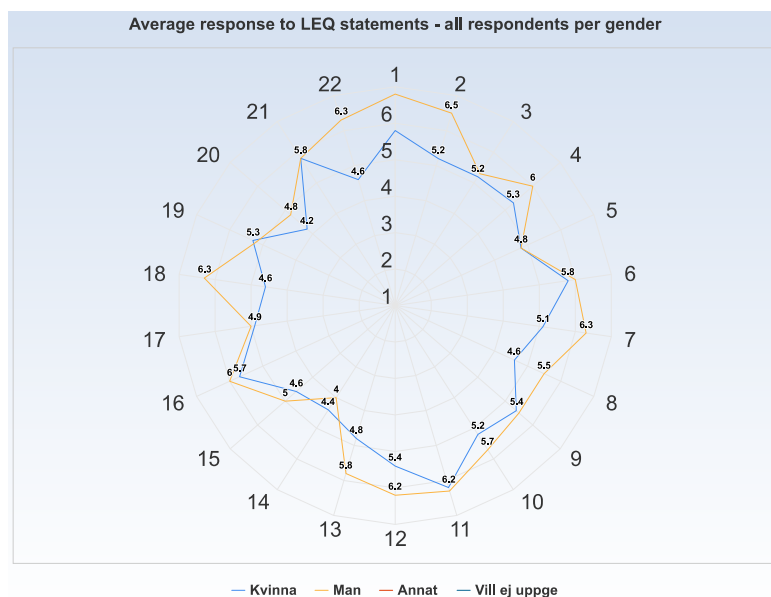


Fig 2: **Studenternas genomsnittliga LEQ svar, nedbrutet på könstillhörighet.**

Fig 1 visar kvantitativa omdömen, förra årets omgång av BB2441 är med som jämförelse. Notera dock att innehåll och upplägg skiljer sig en del mellan de två kurserna. Resultaten var likvärdiga men, CB2442-2023 erhöll något högre siffror på de flesta parametrar som var med i båda utvärderingarna.

Fig 2 visar att liksom tidigare år ger kvinnor kursen lägre poäng än män. Men, liksom tidigare för BB2441, så var kvinnor starkt överrepresenterade bland de som skrev A på tentan.

LEQ svar på fritextfrågor, representativa svar:

What was the best aspect of the course?

- I really enjoyed the different parts (modules) that dealt with different topics, but they were all tied together very well and it gave a good context overall.
- The best part of this course was the variation of subjects as well as the combination of labs and lectures. I found that the exercises, especially the ones we got in the phylogeny module were really helpful for increased understanding, as well as the quizzes in the other modules.
- I also think that, overall, the "level" of information we were expected to understand was challenging but not overwhelming, which I appreciated.
- Good with three modules to structure up the course.
- Liked written assignments as a way of getting bonus points, as it made you always follow the course work and read the literature.
- Good thing about the Python labs was that you could use the testing-function to check your code.
- The course made us do all the tasks in a continuation.
- Discussions before the lectures allowed me to read about the subjects of the lectures and to look deeper into the points I wasn't able to completely understand or I that I was more curious about.
- Really liked the written assignments with both the fact that you could ask questions and answer, depending on how fast you can understand the material.
- I enjoyed the programming labs a lot, because you can really work with the methods.
- Bioinformatics is an interesting subject and I think it was nice to have the written assignments on canvas (for bonus points), which made sure that I watched the lectures according to the schedule and tried to keep up with the learning material.
- The course managed to cover most of the important key aspects of bioinformatics within a short period.
- Pre-recorded lectures, availability of learning material, teachers' attitude.
- The computer labs had good topics and tasks!

What would you suggest to improve?

- I think that more lab assistants are needed for the labs, or maybe to organise the labs in a better way somehow. Sometimes, we had to wait up to an hour to get help or to get our lab approved if we had already finished which wasted a lot of time for everyone involved.
- I would suggest to have more assistants, and maybe after 2 h of each lab have one assistant focusing on accepting those who were done so you didn't have to wait so long after finished.
- Lab P4 was way to time demanding for the scheduled time. This goes for all the programming labs but especially this one.
- For the Q&A lectures, it would have been a lot better if the professors always had information in for example a PowerPoint instead of just loosely talking about one of the questions.
- It would have been good if the first two modules also had exercises like the Phylogenetics module had.
- Not all the students have the same background on programming, I suggest an introduction class to Python.



- It would have been better if all three teachers had used a similar format on Canvas to make it easy to understand where e.g. lecture slides are uploaded.

What advice would you like to give to future participants?

- Go to all classes, they're useful and you really learn a lot, even if it's online.
- Work with other people and problem-solve together.
- Use the practice material: do quizzes and exercises by yourself and then check with the other students and/or lecturer!
- Ask many questions during the lectures!! pay attention to details during the lectures and make sure to do the exercises on phylogeny!
- Study the old exams and read the book.
- Study early and stay in pace. Get access to the book as it will be very necessary for the course. Read the literature provided. Attend the live lectures and, if possible, re-watch the recorded lectures. Do the preparatory questions for the labs. Do not be afraid to ask questions, the professors are very helpful and friendly
- Do the labs together in groups, it is much easier to understand when you can discuss the problems and topics.
- Ask questions.
- Read and study in advance so that you get something out of the lectures on site where you can ask questions and deepen your understanding.
- Study by doing old exams.
- Do the written assignments. It gives you bonus and is a good way of keeping up with the work from start.
- Practice Python before you attend the course.
- Be open to reading more about the concepts on your own.
- Learn Python before.

Summaring

Detta var bra:

Intressanta ämnen, bra blandning av moment, bra med räkneövningar, bra med 'quizzar' på föreläsningar, svåra men lärorika labbar.

Detta var dåligt:

Många studenter klagade på att det tog lång tid att få hjälp och att få redovisa sin labb för labbassistenterna på Python-labbarna. Någon av Python-labbarna verkar ha varit för svår.

Förslag till förändringar för kommande kurstillfälle

1. Finjustera vissa Python-labbar (någon var för svår)
2. Implementera ett bättre kösystem (för att få hjälp) på datorlabbar
3. Se till att fler labbassistenter närvarar på Python-labbarna
4. Hitta en ny kursbok – den gamla går ej längre att beställa

Sammanställt av Anders Andersson 2024-05-30