

Kursanalys - KTH

Formulär för kursansvarig.

Kursanalysen utförs under kursens gång.

Nomenklatur: F – föreläsning, Ö – övning, R – räknestuga, L – laboration, S – seminarium)

KURSDATA Obligatorisk del		
Kursens namn	Kursnummer	
History of Mathematics	SF2719 and SF2725	
Kurspoäng och poäng fördelat på exam-former	När kursen genomfördes	
6 hp (SF2719); 7.5 hp (SF2725)	Period 1, 2022	
Kursansvarig och övriga lärare	Undervisningstimmar, fördelat på F, Ö, R, L, S	
Tilman Bauer	Lektion 14 x 2h	

Antal registrerade studenter

35 (SF2719) + 5 (SF2725)

Prestationsgrad efter 1:a examenstillfället, i %

31 (SF2719) = 88.6%

4 (SF2725) = 80%

Examinationsgrad efter 1:a examenstillfället, i % $_{\mbox{\ Se\ OVan}}$

The aim of the course is to give students the knowledge and skills to analyze and contextualize historical mathematical texts with respect to the development of mathematics through history, the mutual influences between mathematics and society, and to draw conclusions about the role and relevance of mathematics today.

After completion of the course, a student will be able to:

- express analyses and arguments around original mathematical texts orally and in written form in a structured and scientific way
- ask relevant and creative historical questions
- express own thoughts about societal aspects of mathematics such as the structure of society, politics, and gender, both in the past and the present
- sketch the development through history of several mathematical ideas, mathematical subjects, and frameworks in which mathematics was done
- sketch important contributions, biographies and the social context of several prominent historical mathematicians.

Ange hur kursen är utformad för att uppfylla målen

The course consists of lectures mixed with group work, discussions, and reading. Four homework essays are used to train the first 4 objectives. Four short quizzes during the lectures test the last objective.

Eventuellt deltagande i länkmöte före kursstart

n/a

Kursens pedagogiska utveckling I

This year the course has returned to on-campus teaching with in-class quizzes and a final exam, after two pandemic on-line years. Content-wise, only small changes were made.

Kontakt med studenterna under kursens gång

Studenter i årets kurs-nämnd:

Namn

E-post (lämnas blank vid webbpublicering)

Rafael Polycarpou Quick rafaelpq@kth.se Isabel Navarro Guirado isabelng@kth.se

Nicole Polis <u>polis@kth.se</u> (SF2725)

Resultat av formativ mit-

n/a

Resultat av kursmöten

In a meeting with the course representatives in course week 3, the following points were highlighted:

- Continuous examination and the possibility to pass the course before the exam
- Good and interesting lectures
- groups discussions with printouts of texts were appreciated
- Quiz questions were easy to answer if one followed the course
- Essays were fun
- Unclear expectations for the first essay
- Earlier access to essay questions was requested
- In quiz 2, a question about "cossists" was asked, but the term wasn't defined in lecture. The question was later taken away from the quiz but it wasn't clear how this would affect the final grade of the quiz.
- Sometimes it is hard to understand where in time we are, in the lectures
- Could one have the quiz before the (usual) break instead of at the beginning of class?
- The TA's essay comments were sometimes hard to decipher
- It would be better to have the feedback for an essay before

Kontakt med övriga lärare under kursens gång

Kommentarer

Regular discussion with the assistant Paolo Minelli(who helped with the grading).

Kursenkät; teknologernas synpunkter Obligatorisk del

Att komma ihåg:

- 1) Uppmana, mha kursnämnden, till ifyllande av kursenkät i anslutning till / just efter slutexaminationen
- 2) Delge kursnämnden enkäten
- 3) Publicera enkäten under en kortare tid

Period, då enkäten var aktiv

The survey was done online after class, online. The survey was open from Oct 14 to Nov 16.

Frågor, som adderades till standardfrågorna	 LEQ was not used. Questions: How many hours a week did you spend on this course on average? What was the most challenging aspect of this course? What, in your opinion, was the main goal / were the main goals of this course? For each goal, indicate on a scale of 1-5 (5=best) how well you think you have reached it. What did you like best about the course? What did you dislike most? Name one thing that would make this course better for you. Do you have anything else you would like to ask?
Svarsfrekvens	10 responses out of 40 registered students (25%)
Förändringar sedan förra genomförandet	None
Helhetsintryck	Both the lecturer and the vast majority of students considered the course a success – it was challenging, interesting, and with reasonable requirements.
Relevanta webb-länkar	Course home page: https://canvas.kth.se/courses/34902/
Kursansvarigs tolknir	ng av enkät
Positiva synpunkter	interesting and varied topics, essay-writing and research for them, peer reviews and rebuttals, requirements for continuous work/bonus points, the variety of examination, the final exam which leaves creative freedom
Negativa synpunkter	feedback (especially on the essays) was often too late and a bit unclear. The quizzes felt boring (but nice to earn bonus points)
Var kursen relevant i förhållande till kursmålen?	Most students thought that the aim of getting an understanding of the development of math was a main goal of the course and they attained it well (4.5/5) Students also identified the analysis of historical texts as a goal, which was attained reasonably well (4/5)
Syn på förkunskaperna	Some students struggled with the more advanced math behind some of the more recent texts.

Syn	på	undervisningsfor-
men		

The structure was generally seen as very positive

Syn på kurslitt/kursmater-

Syn på examinationen

Generally very positive, with the exception that some thought that the essay questions were too vague. (They were intentionally vague so that the students could focus on an aspect they thought was particularly interesting to them.) It was suggested to replace the in-class quizzes with a more interactive form of examination that also is better in line with the learning goals.

Speciellt intressanta kommentarer

n/a

Synpunkter från övriga lärare efter avslutad kurs

Vad fungerade bra

Vad fungerade mindre bra

Resultat av kursnämndsmöte efter examination

Studenternas sammanfattn.

In another meeting in course week 7, which also served as an evaluation feedback, the following points were highlighted:

- The continuous examination and the possibility to pass the course without writing the final exam was much appreciated
- The course was seen as interesting and engaging
- The essays were seen as interesting, challenging and stimulating
- It was seen as an improvement to have more detailed announcements about the contents of the guizzes
- A flaw in one of the quizzes was criticized (the term "cossists", asked about in the quiz, had not been taken up in lecture)
- Some students regarded the quizzes as less relevant for the learning goals.
- Some students asked for more detailed and clearer instructions and more clearly stated expectations for the essays, especially the first one.
- Clearer comments on quizzes and essay grading were asked for
- The grading for quiz 1 ended up somewhat chaotically because the course TA didn't have access to Canvas
- A more interesting topic for essay 1 was asked for.

Förslag till förändringar

- Some students wished to have access to the essay topics a few days earlier, and get more opportunities to ask questions about them.
- The grading of essays should be speedier

Länk till kursnämndsprot.	n/a	
Kursansvarigs sammanfattande berättelse		
Helhetsintryck	The course was a lot of fun and it was generally seen as meaningful and challenging. It was a big improvement that this course could be given in person again.	
Positiva synpunkter	The essays worked really well - I could see a marked improvement in almost all students from essay 1 to essay 4. The in-class discussions were lively. The students were engaged.	
Negativa synpunkter	The work load for the teacher was, for the course of this size, a bit on the high side. The technical problem of getting the TA access to canvas had a big negative impact on the first quarter of the course.	
Syn på förkunskaperna	Fine.	
Syn på undervisningsfor- men	The mixed lecturers/discussions/group work worked well.	
Syn på kurslitt/kursmater- ial	Altogether, the students got acquainted with a wide variety of types of historical texts, and this should be kept.	

Syn på examinationen	The variety of examination worked generally well, but the stu-
	dents' criticism of the quizzes is justified. They might be re-
	placed by a seminar-style activity in the future.
	A final exam is much better than an oral exam in this course

Kursens pedagogiska utveckling II obligatorisk del		
Hur förändringarna till denna kursomgång fungerade	The return to campus teaching was a huge improvement for student engagement, interaction, and examination.	
Förändringar som bör göras inför nästa kursomgång	Vary the topics somewhat from year to year. Think about involving guest lectures by a historian. Organize an expedition, for example to the Mittag-Leffler institute. Replace the quizzes with an alternative kind of examination.	
Övrigt		