Kursrapport MM7043 HT22 Antal respondenter: 1

Antal svar: 1 Svarsfrekvens: 100,00 %

Utvärdering av kursen

Studenternas synpunkter och erfarenheter enligt kursutvärderingar bör ingå som underlag i utvärderingen.

. Beskrivning av kursupplägget.

Beskrivning av kursupplägget.

"Galois theory" taught during Fall 2022 was roughly divided into the following topics listed on the course The course webpage:

- 0. Some background on rings
- 1. Algebraic field extensions
- 2. Splitting Fields & Separability 3. Embeddings & More on separability
- 4. Finite Fields
- 5. Roots of Unity and Cyclotomic Extensions
- 6. Quadratic reciprocity via roots of unity & Frobenius
- 7. Primitive Element Theorem
- 8. Fundamental Correspondence of Galois Theory
- Cyclotomic and abelian extensions
 Solvability by radicals
- 11. Computing Galois groups

. Kursens fördelar, beakta studenternas uppfattning i kursutvärderingar.

Kursens fördelar, beakta studenternas uppfattning i kursutvärderingar.

The course illustrates how seemingly different mathematical areas interact with one another. Galois theory is a beautiful subject!

In particular, students have recently learned about groups in "Abstract Algebra" and in this course they see some of the first applications of groups to other things, such as fields. The course also covered several interesting applications of Galois theory, including solvability by radicals, the fundamental theorem of algebra and quadratic reciprocity.

The course also offers students a glimpse of some of the questions and general methods of thought that are utilized in research today.

I think it was nice that there were tablet notes and video associated with each lecture, that students could access whenever it was helpful to them and/or if they had to miss a lecture etc. They could also compare with the notes and video from the webpage of the last time the course was offered two years ago.

The textbook by Dummit & Foote also seems to work well.

. Kursens nackdelar, beakta studenternas uppfattning i kursutvärderingar.

. Slutsatser samt förslag till förbättringar.

Slutsatser samt förslag till förbättringar.

Overall, I think the course was successful. There were several talented students, and many students did well in the course. I was delighted that some of the students were eager to continue learning more even after the course was over, and that many students seem interested in taking further courses in math.