# Course analysis SF2705 Fourier Analysis, HT19

# Course analysis carried out by

Kevin Schnelli, schnelli@kth.se

#### COURSE DESIGN

Briefly describe the course design (learning activities, examinations) and any changes that have been implemented since the last course offering.

TLA: 16 double lectures (32 units), 8 biweekly exercise sheets, with possibility for bonuspoints.

Examination design: Summative written exam (TEN1), with optional oral exam for higher grades (A,B,C). Bonuspoints from home works apply for written exam.

Changes: Minor changes in content, went from 16 homeworks to 8, but longer, homeworks. Written examination time increased to 4 hours from 3 hours. Grading criteria were introduced already in VT18.

#### THE STUDENT'S WORKLOAD

Does the students' workload correspond to the expected level (40 hours/1.5 credits)? If there is a significant deviation from the expected, what can be the reason?

LEQ does not indicate a too high or too low working load.

## THE STUDENTS' RESULTS

How well have the students succeeded on the course? If there are significant differences comp ared to previous course offerings, what can be the reason?

Student succeeded similarly to previous course offerings. 20 students took the regular exam, out of which 16 passed.

#### OVERALL IMPRESSION OF THE LEARNING ENVIRONMENT

What is your overall impression of the learning environment in the polar diagrams, for example in terms of the students' experience of meaningfulness, comprehensibility and manageability? If there are significant differences between different groups of students, what can be the reason?

LEQ indicates a good learning environment. The students consider the course valuable and relevant to their education and interesting questions were treated. Interdisciplinary aspects of the course were particularly appreciated.

#### ANALYSIS OF THE LEARNING ENVIRONMENT

Can you identify some stronger or weaker areas of the learning environment in the polar diag ram - or in the response to each statement - respectively? Do they have an explanation?

LEQ does not indicate stronger or weaker areas of the learning environment.

#### PRIORITY COURSE DEVELOPMENT

# What aspects of the course should primarily be developed? How could these aspects be developed in the short or long term?

As already indicated above, the course is constructively aligned, uses blended learning, has outcome based grading criteria, assessment design is up to date, etc.

A teaching assistant would be beneficial. Has been discussed with study director.

#### OTHER INFORMATION

## Is there anything else you would like to add?

#### Sensible students' comments:

#### On estimated workload:

- -The workload was very reasonable. I found the homework interesting and there were some challenging problems, on which I worked longer and which I typed for a longer time. The interplay between theory and application I found interesting to read about.
- -The amount of work from the homework was fair and so was the reward in bonus points for the exam
- -In a good way very different teaching from what I'm used to.

What was the best aspect of the course?

- -Interdisciplinary perspective on mathematics
- -Passionate teaching
- -Interplay between Functional Analysis, Fourier Analysis, and Applications in other fields of- mathematics.
- -Diversity of topics studied
- -The mix of applications shown of the core concepts of the course.