Course information

October 26, 2020

Course period. 02 November 2020 to 18 December 2020 (lectures, exercises, computer labs). Schedule available here.

Important dates.

- Start of the lecture: 02 November 2020, 10:00
- Deadlines for the projects: 04 December 2020 and 18 December 2020
- Last day to register to the exam: 17 December 2020
- Exam: 16 January 2021
- Last day to register to the re-exam: 21 March 2021
- Re-exam: 07 April 2021.

Lectures. Over zoom.

Exercises. The exercise sessions will take place over zoom: zoom K2 and zoom Bt2. A list of suggested exercises will be provided in due time. If necessary, some exercises can be discussed during these sessions.

Teachers: Max Blom (K2) and Sebastian Persson (Bt2).

Computer labs/Project. The computer labs will take place over zoom. A list of computational tasks will be provided in due time. In addition, a lab report (written form) on a project is expected (**1.5** ECTS). Submission of your lab reports are done via Canvas and should be done before 04.12.20, resp. 18.12.20. If not done correctly, students have the possibility to (re)-submit their report (more information in due time).

Teachers: Max Blom and Sebastian Persson and Georg Bökman.

Examination and grading (6 ECTS+1.5 ECTS).

- Element 1 (Theory, **6** ECTS) is assessed through written examination. Students are expected to know and be able to apply the main definitions and results (statements and possibly some ideas of the proofs) from the lecture in order to solve various tasks. Grades: U, 3, 4 or 5.
- Element 2 (Project, **1.5** ECTS) is assessed through written lab reports. Grades: Fail (U) or Pass (G).
- To pass the whole course, all elements must have been passed. Grades (according to the grade obtained for Element 1): U, 3, 4 or 5.
- Students have the possibility to get bonus points for the exam by doing various activities. Details will follow. The awarded bonus points are only valid on the first two exam dates when the course is given.

Literature.

M. Asadzadeh and F. Bengzon: *Lecture notes in Fourier analysis,* available as .pdf at link and errata.

M. Asadzadeh: *An Introduction to the Finite Element Method for Differential Equations*, available under https://www.wiley.com/, see also the compendium under chalmersstore.se or the .pdf file.

G. Folland: *Fourier Analysis and Its Applications*, available under ebookcentral.

M.G. Larson and F. Bengzon: *The Finite Element Method: Theory, Implementation, and Applications,*

available under springer.

Canvas. Under Quiz you will find a couple of feedback surveys and self tests quizes.

In order to encourage you to study regularly, a student that passes all self test quizes will earn 1 **bonus point** for the exam.

All uploaded files will (most probably) be uploaded on the start page Kursöversikt.

Piazza. We will use piazza as a platform for discussion. You can ask questions that also other students can answer. You can also ask questions anonymously.

In order to encourage your active participation, a student will earn 1 **bonus point** at the exam if she/he, at least, posts one question and answers two questions. The questions/answers must be relevant to the course and non-anonymous.

For questions related to administration, please contact Elisabeth Eriksson. For all other relevant questions, feel free to send me an email.