



Aalto University

MS-C1350 Partial differential equations

Course practises

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Teachers

- ▶ Lecturer: Riikka Korte
- ▶ Head assistant: Timo Takala (H01)
- ▶ Assistants: Joonas Lindell (group H04), Kasper Väistö (group H02) and Qingxin Yang (groups H03 and H05) .
- ▶ You find email addresses in MyCourses.

Lectures

- ▶ Only on campus.
- ▶ Extra material: Old lecture videos and lecture slides are available.
- ▶ *Flipped classroom method.*
- ▶ Lecture note pages for each week are given.
- ▶ It is important to read lecture notes! We do not have time to cover everything here in detail.
- ▶ In the lectures, we can discuss the topics according to you wishes. Or then I just try to choose most important topics.

Study material

- ▶ Lecture notes available in MyCourses.
- ▶ The course follows the lecture notes and there is no need to get any book.
- ▶ If you want some extra reading, a couple of books are listed on lecture notes page.
- ▶ Old online lectures (and new slides) will also be available in MyCourses.

Homework assignments

- ▶ New homework assignment set **every second** week (6 sets)
- ▶ All the solutions are returned using MyCourses, preferably in PDF form. **DL Fri 23:59**
- ▶ Assistants grade the exercises. Three randomly chosen exercises will be graded more carefully and with some feedback, points 0-3. Other exercises will be graded without feedback, points 0-1.
 - ▶ 1 = serious attempt to solve at least part of the problem (applies for both 1 and 3 point problems)
 - ▶ 2 = about half done
 - ▶ 3 = almost complete / correct solution

Evaluation

- ▶ Course exam max 55%
- ▶ Assignments and quizzes max 45 %

- ▶ Feedback questionnaire +1%

Difficult alternative: Final exam (100%)
– not the same as course exam!!

Evaluation

- ▶ Course exam max 55%
- ▶ Assignments and quizzes max 45 %
 - ▶ Pre-lecture quizzes (starting from week 2) 15%
 - ▶ Homework assignments (every second week) 30%
 - ▶ Extra problems to compensate for lost exercise and quiz points (max 10%) – one set of problems in each period.
- ▶ Feedback questionnaire +1%

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Exercise classes

- ▶ Groups H01 and H02 are in Finnish.
- ▶ You can **visit** other groups if there is space in the classroom.
- ▶ Purpose of the exercise classes: to give help in solving exercises.

Languages

- ▶ All teachers speak both Finnish and English, and are happy to communicate with you using both of the languages.
- ▶ The official language of the course is English.
- ▶ Exercise groups H01 and H02 are in Finnish.
- ▶ Lectures and problem sheet and exams are in English, but it is OK to write solutions in Finnish as well (both for homework assignments and exams).
- ▶ There is a link to a math dictionary on course webpage (Finnish-English-Swedish). Joint effort to include more PDE vocabulary?

Laskutupa (Math Tutoring Lab)

`https://math.aalto.fi/en/studies/laskutupa/`

- ▶ You can also get extra support from Laskutupa.
- ▶ Many of the teachers there have a PDE superpower. Those are present in period I at the following times:
 - ▶ Monday 10-16
 - ▶ Tuesday 12-18
 - ▶ Wednesday 10-18
 - ▶ Thursday 10-14
 - ▶ Friday 14-16.

Collaboration

- ▶ We encourage you to study in groups and to attend exercise classes to get help. This course is very challenging especially if you try to do it all alone.
- ▶ However: Everyone has to write their own solutions. It is not ok to directly copy solutions.
- ▶ Answering to pre-lecture quizzes and solving homework problems are both very important, and they cover different aspects of the course.

Pre-lecture quizzes

- ▶ 11 quizzes, DL Tuesday evening (weeks 2-12)
- ▶ There are always 20 yes/no –questions
- ▶ Read lecture notes → answer the quiz → come to the lecture and ask about things that are still unclear.
- ▶ You are encouraged to think about and discuss the pre-lecture quizzes also in groups.

Exams

- ▶ The course exam is on December 9.
- ▶ Other exams may be organized in EXAM-rooms.
Registration for 100% exam is in Sisu.
- ▶ The course exam (55%) is *softer* than the 100% exam.
- ▶ Exercise points are valid only in one course exam. If you are for example sick during the exam, we can arrange another opportunity to take the exam so that the exercise points are valid.
- ▶ If you need individual study arraignments for the exam, please fill a form on time.

Communication

- ▶ All official information can be found in MyCourses.
- ▶ Follow your MyCourses-messages as well.
- ▶ There is an unofficial Telegram-channel for the course. It is probably usually the quickest way to contact teaching assistants.
- ▶ The best way to contact lecturer is by email and before/after the lectures.

Changes compared to previous years

- ▶ Lectures are now at the same time in both periods.
- ▶ Homework assignments give a bit less points than before (40->30%), quizzes (10->15%) and the exam (50->55%) a bit more.
- ▶ Homework assignments have 3 problems worth 1 point and and 3 problems worth 3 points.
- ▶ More detailed learning goals (divided biweekly)
- ▶ New in 2023: Extra problems available to compensate for lost exercise points.
- ▶ New in 2024–2025: English-Finnish-PDE-dictionary?

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- ▶ Focus on understanding and problem solving. No need to learn complicated formulas by heart!

Questions?