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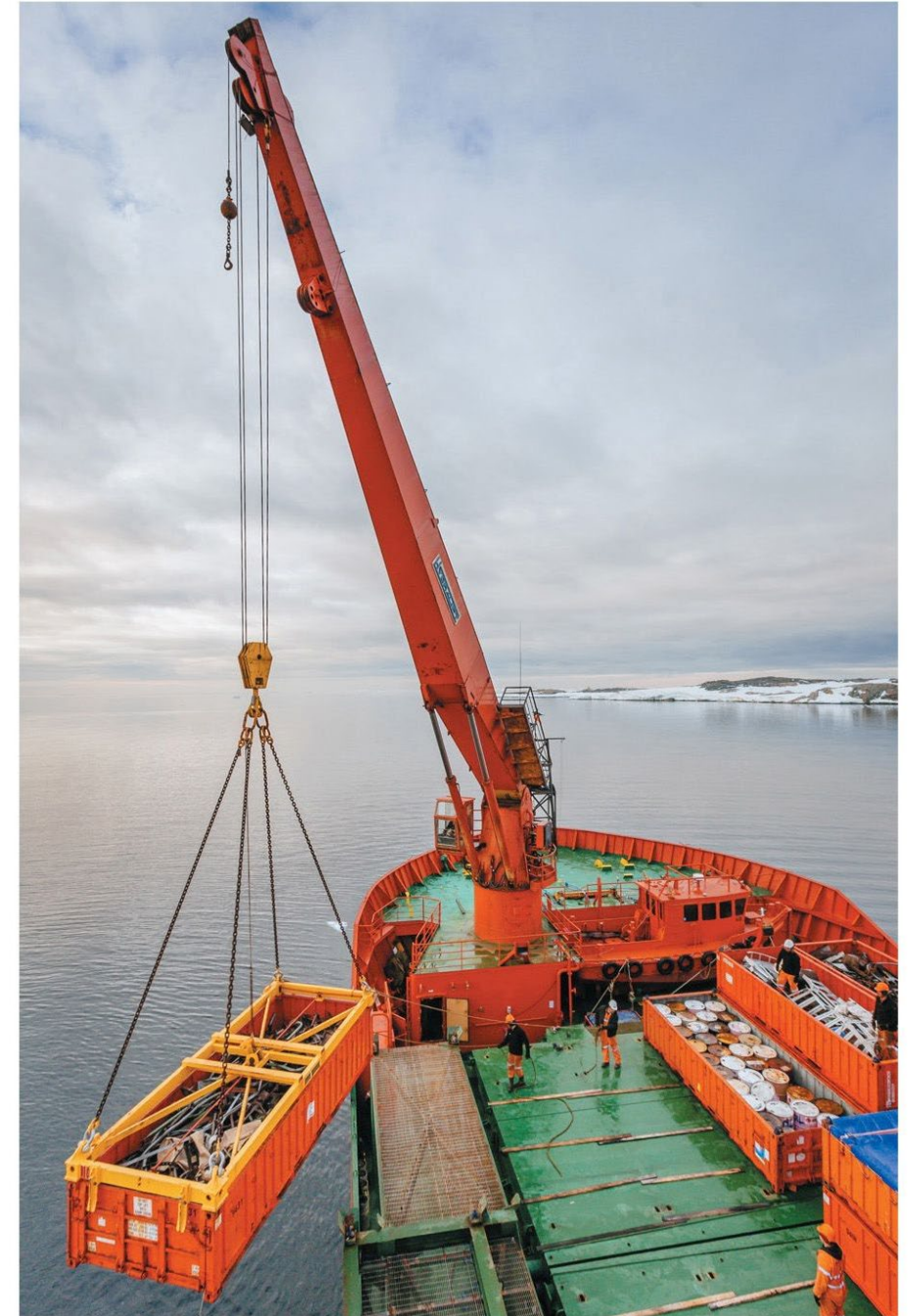Aalto University

COE-C1002: Statics
Course information

Luc St-Pierre

Why is this important?

Most structures and machines are designed using principles of statics.

These principles are the foundation of many other engineering subjects such as solid mechanics and vibrations.

Material

- All lecture notes, assignments, solutions and other relevant information will be communicated via **MyCourses**.

- For more detailed explanations, consult the textbook:
  - *R.C. Hibbeler, Engineering Mechanics: statics, 15th edition, Pearson, 2017.*
  - *Ebook available, see MyCourses.*
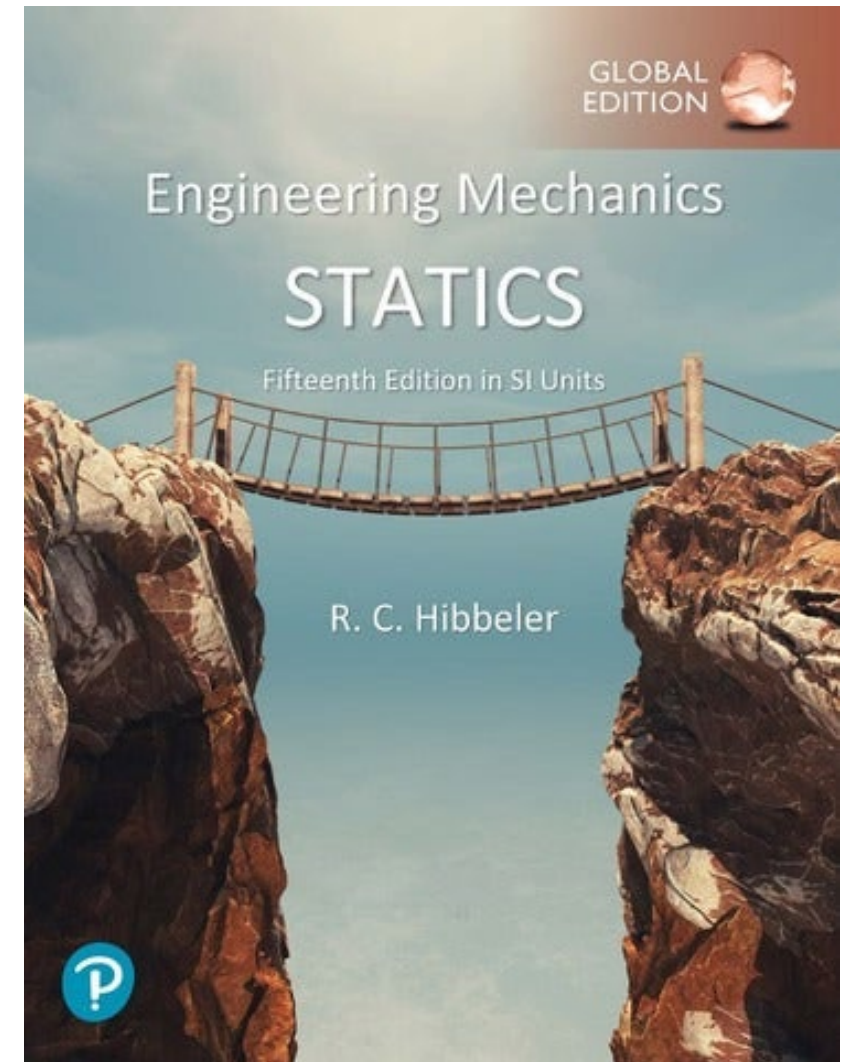
Schedule

No traditional lectures:

- No lectures on Tuesdays (12.15-14.00). Use this time to go through the weekly material available online.

Seminars:

- Wednesdays (10.15-12.00), Otakaari 4 room 216.
- I will summarise the theory and present example problems.

Calculation hours:

- Thursdays (12.15-14.00), Otakaari 1 room U271.
- Get help to solve the weekly assignments.

Evaluation

Assignments (30%)

- Your best 3 out of 5 assignments.
- Submit your assignment by the end of Sunday.
  - *All assignments should be uploaded via MyCourses.*
  - *Late submissions will not be accepted.*

Exams (70%)

- Monday, Dec 4 (9.00-12.00), Maarintie 8, room 2005.
- [Retake: Tuesday, Feb 20, 9.00-12.00, Otakaari 4, room 150.]

Grading

Grade	Final mark %
5	≥90
4	80-89
3	70-79
2	60-69
1	50-59
0 – Fail	≤49

- **Assignments (30%)**
- **Exam (70%)**

Learning outcomes

After the course, you should be able to:

- Prepare accurate free-body diagrams for complex loading scenarios.

- Analyse the equilibrium conditions of a particle.

- Use equilibrium equations to find the support reactions and internal forces inside truss structures or beams.

- Solve engineering problems involving equilibrium of a particle or rigid body.

The key is to practice solving a lot of problems!

Contact persons

Teacher in charge:

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