COE-C1001: Statics & dynamics

Introduction

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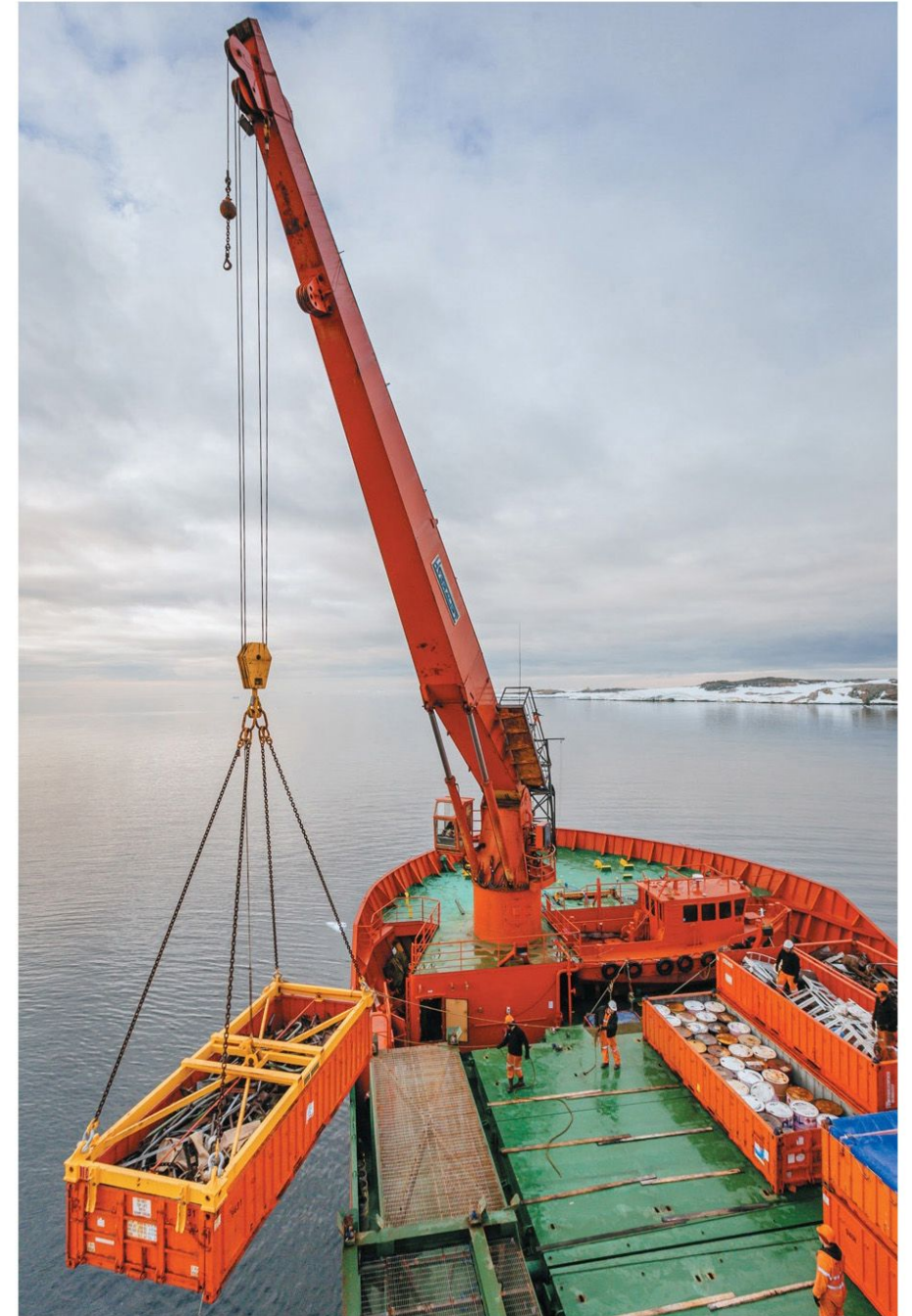
Why is this important?

Most structures and machines are designed using principles of statics and dynamics.

Principles of statics and dynamics 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 and dynamics, 14th edition, Pearson, 2017.*
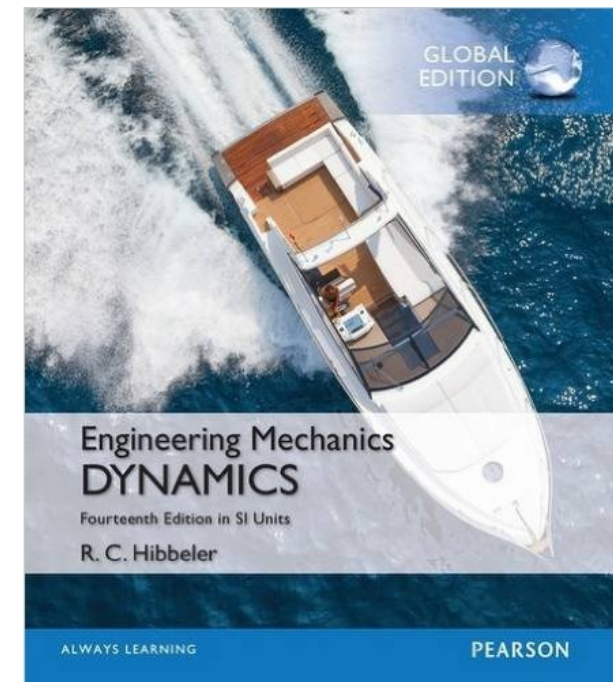
Schedule

Lectures:

- Will be pre-recorded and made available on Mondays.

Help desk:

- Thursday (12.15-14.00). I will be available on Zoom to answer questions and I will solve example problems. The link is on the course's home page.

Calculation hours:

- Fridays (10.15-12.00). Also on Zoom, see link on the course's home page.

Evaluation

Assignments (40%)

- 6 weekly assignments
- Submit your assignment by the end of Monday.
  - *All assignments should be uploaded via MyCourses.*
  - *Assignments submitted late will be penalised (-20% for every hour).*
  - *Contact me if you need an extension.*

Exams (60%)

- Statics (30%): Monday, Nov 16, 16-19.
- Dynamics (30%): Wednesday, Dec 9, 8.30-11.30.

Grading

Grade	Final mark %
5	≥86
4	76-85
3	66-75
2	56-65
1	50-55
0 – Fail	≤49

- **Assignments (40%)**
- **Exams (60%)**

I keep the option of modifying this grading system if necessary. If changes are made, they will not penalize you.

Learning outcomes

After the course, you should be able to:

- understand the concepts of force and moment,

- Determine the equilibrium state of a body,

- describe the motion of a rigid body.

- Solve engineering problems involving static structures or dynamic rigid bodies.

The key is to practice solving a lot of problems!

Contact persons

Teacher in charge:

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Teaching assistants:

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