# Mon 1st March - Fri 16th Apr 2021 - Advanced soil mechanics D, GEO-E2010

| Week | Lectures: Mon & Wed 10:15 am, online https://aalto.zoom.us/j/7791646359 | | Exercises and tutorials: Tue & Thu 10:15 am, online, see MyCourses for links other than for WS | |
|---|---|---|---|---|
| 9 | 1.3 | L1 Introduction / soil structure and microstructure | 2.3 | Laboratory exercise online session 1 (ML) |
| | 3.3 | L2 Soil structure and microstructure, real soil behaviour | 4.3 | Design exercise: slope stability (HG) |
| 10 | 8.3 | L3 Soil Modelling, Mohr-Coulomb & Elastic models for soils | 9.3 | T1 Mohr Coulomb Model (WS, AG) |
| | 10.3 | L4 Limit analysis L5 Slope Stability | 11.3 | **9:15** T: Q&A before test 1 (WS) |
| | | | 11.3 | C1 Settlements 1 (HG, AG) |
| | **12.3. Friday** 12.15 Slope Stability exercise- Geocalc test etc. online session 2 (HG) | | | |
| | **12.3. Friday** 14.15 Laboratory exercise Q&A online session 2 (ML) | | | |
| 11 | 15.3 | **Test 1 (L1-3)** L5 Slope Stability | 16.3 | C2 Settlements 2 (HG, AG) |
| | 17.3 | L6 Earth pressures & retaining walls | 18.3 | C3 Sheet pile wall (HG, AG) |
| 12 | 22.3 | L7 Water flow and seepage | 23.3 | C4 Water flow & seepage (WS, AG) |
| | 24.3 | L8 Critical State soil Mechanics L9 Modified Cam Clay Model | 25.3 | **9:15** T: Q&A before test 2 (WS) |
| | | | 25.3 | L 9-10 Modified Cam Clay Model and SCLAY-1 model (WS) |
| | **26.3** | <span style="color:red">**Deadline for the return of the laboratory exercise (ML)**</span> | | |
| 13 | 29.3 | L10 SCLAY-1 model (WS) **Test 2 (L 4-7)** | 30.3 | T2 Modified Cam Clay Model (WS,AG) |
| | 31.3 | L11 Risk based design (Daniel Castillo) | 1.4 | T3 SCLAY-1 model (WS) |
| 14 | *5.4* | *Easter Monday* | 6.4 | **9:15** T: Q&A before test 3 (WS) |
| | | | | L12 Interaction between soil and structures |
| | 7.4 | **Test 3 (L8-13) (other date, to be discussed, Thu 8.4)** | 8.4 | C5 Soil - structure interaction (WS, AG) |
| | | | **9.4** | <span style="color:red">**Deadline for return of the design exercise (HG)**</span> |

**Grading:** 1/2 lecture , 1/6 lab, 1/6 exercise (C1-C5), 1/6 design exercise. **Teachers:** WS – Wojtek Sołowski (use link **https://aalto.zoom.us/j/7791646359** for all classes), HG – Henry Gustavsson, ML – Monica Löfman, AG – Abhishek Gupta,

**Class codes:** L – lecture, C – calculation exercise (graded), T – tutorial (not graded). **Note that some exercise and lecture sessions may not be recorded, or recorded only partially.**

<span style="color:red">**Small changes possible, please follow MyCourses!**</span>