Lecture 1 Name:

Short questions (1p each, answer should be shorter than 50 words, a figure counts as 20 words):

1. What is the difference between a sedimented soil and a fully descructured soil?

2. When clays contract upon shearing?

3. When clays dilate upon shearing?

4. What is the difference between saturated and unsaturated clay microstructure?

5. When sands densifies upon shearing? When it dilates?

6. What is the small strain stiffness?

7. When sands can liquefy?

8. What is the sedimental compression line?

9. What is the intrinsic compression line?

10. What is the critical state / steady state line?

Long question (10p):

Explain the soil behaviour in shearing depending on its void ratio state. In the explanation use the concept of critical state line. Write 100 to 150 words, include a figure in the description (don’t count words for the figure).

**Total: 20 points, each point will correspond to 0.25% in the Lecture Test 1, if taken on the right date. Please leave your answer in MyCourses before the due date, late submissions will not be considered.**