

Gazi University
Faculty of Engineering
Department of Civil Engineering
CE 431 Special Topics (geotechnical)
2021-2022, II. DÖNEM

Instructor: Prof. Dr. Ayhan Gürbüz Office: 249 Class hours: 9.30-12.30, Friday

Content

- 1) Introduction, soil mechanics
- 2) Compaction
- 3) Dynamic Composition
- 4) Vibro Compaction
- 5) Stone Columns
- 6) Preloading
- 7) Vertical Drains
- 8) Injection Methods
- 9) Injection Methods
- 10) Jet Injection
- 11) Blasting
- 12) Deep Mixing
- 13) Reinforced earth

Output of course

- Selection of suitable soil improvement method for various soil types
- Pre-loading and vertical drain, dynamic composite, stone column designs
- Getting basic information about injection types and applications
- Getting basic information about grounding systems

Assessment method

- One Midterm (%30)
- Student presentation (each student is going to present at least two topics mentioned above) (%30)
- One final exam (%40)

Range of points	Grade
90-100	AA
85-89,99	BA
80-84,99	BB
75-79,99	CB
70-74,99	CC
60-69,99	DC
50-59,99	DD
40-49,99	FD
0-39,99	FF

Attendance:

70 % attendance is required

Book:

No book required. (recommended: SOIL IMPROVEMENT AND GROUND MODIFICATION METHODS by PETER G. NICHOLSON)