Gazi University Faculty of Engineering Department of Civil Engineering CE 461 Foundation Engineering I 2022-2023, I. TERM

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Class hours: 13.30-16.20, Monday

Content

- Necessity and Content of Soil Investigation
- Soil Investigation and Sampling Methods
- Experiments Conducted in the Field
- Soil Lateral Thrust and Supported Excavations
- Retaining Wall Design
- Bearing Strength of Shallow Foundations
- Estimation of Settlement at Shallow Foundations
- Continuous Foundations and Raft Foundations
- Foundations in Earthquake Zones
- Introduction of Pile Foundations
- Pile Foundation Design

Outputs

- Knows field experiments
- Knows the land survey
- Knows the soil lateral pressure theories
- Can design retaining structure
- Calculate the bearing capacity of shallow foundations
- Can calculate the settlement of shallow foundations
- Can design raft foundations

Evaluation:

2 Midterm (% 60)

Final (% 40)

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

Book

Braja M. Das, "Principles of Foundation Engineering" SI Edition,

Attendance

70 % attendance is required