Course information in english

General course information:

| Course title: | | Highway ngineering II | Course code: | | CE06-T01 | |
|--|-----------------------|--------------------------|--------------------|--------|----------|---|
| Credits: | | 5 | Work load (hours): | | 100 | |
| Course level: | | Undergraduat | | Gradu | ate 🗆 | |
| Course type: | | Mandatory | ⊠ Selectiv | | ve | |
| Course category: | | Basic [| X | Orient | ation | |
| Semester: | | 6th | Hours per v | week: | 4 | ŀ |
| Course objectives (capabilities pursued and learning results): | | | | | | |
| Road Construction | Roa | nd Infrastructu | re | | | |
| Earthworks Study. Road Construction Procedures. Materials quality control Principles of Infrastructure Design. Road Construction Economics. | | | | | | |
| Prerequisites: • Highway En | ginee | ring I | | | | |
| Soil Mechani Hydrology Building Ma Hydraulics I | ics terials | | | | | |

Instructor's data:

| Name: | Nikolaos Eliou |
|---------------|--------------------------------------|
| Level: | Professor |
| Office: | |
| Tel email: | +30-24210-74150 <u>neliou@uth.gr</u> |
| Other tutors: | Kaliabetsos G., Scientific Assistant |

Specific course information:

| Week No. | | Hours | | |
|----------|---|-------------------|-------------|--|
| | Course contents | Course attendance | Preparation | |
| 1-2 | Earthworks Study | 4 | 1 | |
| 3-4 | The Nature of Soil - Soil Mechanics | 4 | 2 | |
| 5-6 | Earthworks, Soils, Embankments, Cuttings, Slope Protection | 4 | 2 | |
| 7-8 | Compaction | 4 | 2 | |
| 9-10 | Earthworks Management | 4 | 2 | |
| 11-12 | Principles of Retaining Walls Design. | 4 | 2 | |
| 13-14 | Road Drainage | 4 | 1 | |
| | | | | |
| | | | | |
| | | | | |

| Additional hours for: | | | | |
|-----------------------|--------------|------------------------------|-------------------|--|
| Class project | Examinations | Preparation for examinations | Educational visit | |
| - | 4 | 16 | - | |

Suggested literature:

- "Earthworks. Road Infrastructure", Prof. A. Mouratidis A.U.Th.
- "Soil Mechanics, Theory, Methods & Applications" Prof. S.S. Tsotsos A.U.Th.

| Teaching method (select a | nd describe if r | iecessary - wei ş | ght): | | |
|----------------------------------|------------------|--------------------------|-------------|----------|--|
| Teaching | | | 50 % | | |
| Seminars | | | % | | |
| Demonstrations | | | % | | |
| Laboratory | | | % | | |
| Exercises | X | | 50% | | |
| Visits at facilities | | | % | | |
| Other (describe): | | | % | | |
| Total | | | 100% | | |
| | 1 | | 1 | | |
| Evaluation method (select |)- weight: | | | | |
| | <u>written</u> | <u>%</u> | <u>Oral</u> | <u>%</u> | |
| Homework | | | | | |
| Class project | X | 20 | | | |
| Interim examination | | | | | |
| Final examinations | X | 80 | | | |
| Alternative: Advanced Project | X | 30 | | | |