

Tárgytematika / Course Description

Geotechnical structures and technologies

NGM_SE114_1

Tárgyfelelős neve /

Teacher's name: dr. Ray Richard Paul

Félév / Semester: 2014/15/2

Beszámolási forma /

Assesment: Folyamatos számonkérés

Tárgy heti óraszám /

Teaching hours(week): 2/1/0

Tárgy féléves óraszám /

Teaching hours(sem.): 0/0/0

OKTATÁS CÉLJA / AIM OF THE COURSE

Encourage the development of an engineering attitude that allows graduate engineers to design and construct geotechnical structures for full life cycle by balancing functional requirements, environmental constraints, available technology and economical aspects.

TANTÁRGY TARTALMA / DESCRIPTION

Development of geotechnics and new equipments. Overview of earth retaining and special deep foundation structures. Overview of the special deep foundation and soil improvement technologies. Application of earth reinforcement. Interaction of function, material, durability and construction. Overview of the technological risk reduction related to design, construction and maintenance.

SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESSMENT'S METHOD

Exam : Midterm exam (TBA)

Homework assignments

HW1 Foreign literature working up

HW2 Pile design

HW3 Retaining wall design

Course Grade Evaluation

Class activity 10 points

Midterm exam 20 points

HW1 20 points

HW2 25 points

HW3 25 points

Grades

0 - 49 pont (1) unsatisfactory

50 - 61 pont (2) satisfactory

62 - 73 pont (3) fair

74 - 85 pont (4) good

86 - 100 pont (5) excellent

KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

M.J. Tomlinson and R. Boorman: Foundation design and construction, Pearson Education Limited, 2001.
U. Smolczyk : Geotechnical Engineering Handbook, Volume 1-3, Ernst and Sohn, 2003.
EN..... Execution of Special Works, European Standards.
M.P. Moseley, K. Kirsch, ed: Ground Improvement, Taylor and Francis, London,2004.