Code: ENVE 535  
Course: Coastal Engineering

Mandatory: ✔  
Elective: ❌  
Specialization: ❌

Semester: Fall - Spring  
Teaching Units: 3  
ECTS: 5

Teaching Hours per week:  
T: 2  E: 1  L: 

Instructors: Dr. Zacharia D. Skoula  
[Email: zskoula@gmail.com]

Textbooks (Eudoxus):  
1. Εισαγωγή στην Παράκτια Τεχνική και τα Λιμενικά Έργα, Κουτίτας Χριστόφορος Γ., Εκδόσεις Ζήτη, 1994.  
2. Παράκτια Γεωμορφολογία, Καρύμπαλης Θ. Ευθύμιος

Other recommended books:  

Notes:

Labs:  
# of lab exercises:  
Individual Reports  
Team Reports  
Lab final written exam  
% of Final Lab Grade

Final Grade:  
Final Exam 80 %  
Project 20 %  
Labs  
Other ( ) %

Course Syllabus:  
1. Introduction to basic aspects of coastal hydrodynamics and wave theory such as:  
   i. Analytical two-dimensional wave theories.  
   ii. Simple analytical description of coastal wave transformations (diffraction, refraction, breaking and run up).  
   iii. Modern numerical methods able to simulate the aforementioned aspects.  
   iv. Statistical analysis and forecasting of wind-induced wave generation.  
2. Circulation, mixing and transport of sediments and fluids.  
3. Coastal sediment transport and coastal protection works and design.