Postgraduate Studies Program
«ENVIRONMENTAL ENGINEERING»

Specialization:
1-WRC: WATER RESOURCES AND CLIMATE CHANGE
2-WWT: WATER AND WASTE TREATMENT
3-SEC: ENVIRONMENTAL MANAGEMENT, SUSTAINABLE ENERGY AND CLIMATE CHANGE

Code: GEN 03 Course: Environmental Impact Assessment
Required: ☐ Elective: ☒

Instructor: Associate Professor Petros Gikas

Bibliography

Course objectives
The course focuses on the estimation and the confrontation of the environmental impacts, due to new projects or activities, or due to the upgrade of old ones. The content and methodology for the composition of Environmental Impact Assessment Studies and of Strategic Environmental Impact Assessment Studies is presented. Also the legal frame that governs the Impact Assessment Studies is presented. During the course, the students will compose and will present a full Environmental Impact Assessment Study.

Syllabus
1st Week: Introduction to the Assessment of Environmental Impacts

2nd Week: International, European and Greek legal framework
The ordinance of Environmental Impact Assessment, legal framework with emphasis on the Greek European legislation.

3rd Week: Projects
Project assignment and discussion about the way of work.
4\textsuperscript{th} Week: Environmental Impact Assessment Studies (Methodology, Content)  
Methodology of Environmental Impact Assessment Studies, with emphasis on the structure of the studies.

5\textsuperscript{th} Week: Description of the Environment (baseline studies)  
Methodology about the description of the existing situation, so to be used as the basis for the zero intervention scenario.

6\textsuperscript{th} Week: Description of the project/activity  
Methodology for the selection of the best alternative solution and positioning of the project. Best Available Technologies (BAT). Methodology for the description of the project or the activity. Selection of the most environmentally friendly technologies. Mass and energy balances.

7\textsuperscript{th} Week: Evaluation of Environmental Impacts  
Methodology for the evaluation of the environmental impacts, in relation to the zero intervention scenario.

8\textsuperscript{th} Week: Confrontation of Environmental Impacts  
Methodology for the confrontation of Environmental Impacts. Environmental Impact monitoring methodology and program.

9\textsuperscript{th} Week: Strategic Environmental Impact Assessment Studies  
Methodology for the composition of Strategic Environmental Impact Assessment Studies and discussion about of the main distinct differences with respect to Environmental Impact Assessment Studies.

10\textsuperscript{th} Week: Project/Specialized lectures

11\textsuperscript{th} Week: Project/Specialized lectures

12\textsuperscript{th} Week: Project/Specialized lectures

13\textsuperscript{th} Week: Project/Specialized lectures

\textbf{Work load}  
Project (text and presentation)

\textbf{Student evaluation}  
1. Project (presentation) (20%)  
2. Project (report) (30%)  
3. Final exam (50%)