

<b>Course Title</b>	Introduction to Environmental Engineering
<b>Course Unit Code</b>	CEE 381
<b>Type of Course Unit (Compulsory / Optional)</b>	Compulsory
<b>Level of Course Unit (e.g. 1<sup>st</sup> cycle, 2<sup>nd</sup> cycle, 3<sup>rd</sup> cycle)</b>	1 <sup>st</sup> cycle
<b>Year of Study (that course is offered: 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, etc)</b>	Undergraduate students (1 <sup>st</sup> year)
<b>Semester/Trimester when the Course Unit is Delivered (Fall / Spring)</b>	Fall
<b>Number of ECTS Credits Allocated</b>	6.0
<b>Name of Lecturer(s)</b>	D. Fatta-Kassinou
<b>Learning Outcomes of the Course Unit (overall skills and knowledge students are expected to cumulatively attain by the end of a course) 100 -125 words</b>	<p>Students should be able to:</p> <ol style="list-style-type: none"> <li>1. Become familiar with Environmental Engineering</li> <li>2. Calculate concentrations in solutions</li> <li>3. Perform mass and energy balances for open systems with and without reactions</li> <li>4. Understand the nutrients' cycle in the environment</li> <li>5. Understand the basic concepts of sampling and analysis of pollution parameters</li> <li>6. Understand the main forms of water, land and air pollution</li> <li>7. Understand how a wastewater treatment plant works</li> <li>8. Understand how solid waste can be handled</li> <li>9. Understand the basic principles of air pollution</li> <li>10. Understand what an environmental engineer is and does.</li> </ol>
<b>Mode of Delivery (face to face, distance learning)</b>	<b>Face to face</b>
<b>Prerequisites ( if not exist please fill N/A)</b>	There are no prerequisites for this course.
<b>Co-requisites ( if not exist please fill N/A)</b>	There are no prerequisites for this course.
<b>Recommended Optional Program Components</b>	

<b>Course Contents (course description)</b> <b>100-150 words</b>	<p>The evolution in environmental engineering through the years, units of measurement, materials balance, energy fundamentals, enthalpy in chemical systems and reactions, analytical and organic chemistry, cycles of nutrients, water and wastewater pollutants, water quality control, sampling and water pollutants assessment, wastewater treatment, eutrophication, solid waste management, landfills, air pollution.</p>
<b>Required Reading ( if not exists please fill N/A)</b>	<p>Notes prepared by the lecturer are provided to the students.</p>
<b>Recommended Reading ( if not exists please fill N/A)</b>	<p>G. M. Masters: Introduction to Environmental Engineering and science, ISBN0-13-896549-8, Prentice Hall.</p>
<b>Planned Learning Activities</b>	<p>Educational visit to a waste recycling plant or a wastewater treatment plant or a drinking water production plant.</p>
<b>Teaching Methods</b>	<p>Lectures (3 hours/week)</p>
<b>Assessment Methods and Criteria</b>	<p>Quizzes, Midterm exam, Final exam</p>
<b>Language of Instruction</b>	<p>Greek</p>
<b>Work Placement(s) ( if not exist please fill N/A)</b>	<p>N/A</p>



Field must not be completed