

<b>Course Title</b>	Energy Planning and Environmental Change			
<b>Course Code</b>	DLCLIMA512			
<b>Course Type</b>	Compulsory			
<b>Level</b>	MSc			
<b>Year / Semester</b>	1 <sup>st</sup> year/ 2 <sup>nd</sup> semester			
<b>Teacher's Name</b>	Dr. Paris A. Fokaides			
<b>ECTS</b>	7.5	<b>Lectures / week</b>		<b>Laboratories/week</b>
<b>Course Purpose</b>	<p>This course introduces students to energy and environmental policies, focusing on how energy markets are influenced by policies, regulations, EU Directives, and the environment. Due to Europe's limited energy reserves, half of its energy is imported, making it vulnerable to global market fluctuations and creating significant challenges, such as dependency on imports, limited diversification, volatile prices, and climate change risks. The EU addresses these challenges by building a cohesive Energy Union, aimed at providing secure, sustainable, competitive, and affordable energy. The course explores key dimensions like security, solidarity, a fully integrated energy market, energy efficiency, climate action, decarbonization, research, and innovation.</p> <p>Students will understand the political and regulatory framework of the EU, including energy security, market integration, renewable energy, and the EU Emissions Trading System (EU ETS). They will develop critical thinking to analyze energy trends, the benefits of energy efficiency policies, and approaches for promoting a circular economy and sustainability. Through this course, students gain insights into the strategic measures and regulations shaping the EU's energy landscape, equipping them with the knowledge to assess and respond to energy policy challenges effectively.</p>			
<b>Learning Outcomes</b>	<p>Upon completion of this course, students will be able to:</p> <ul style="list-style-type: none"> <li>• Understand the EU's political system and energy policy framework, including the roles of major EU institutions.</li> <li>• Analyze the challenges related to energy dependency, market integration, and climate change.</li> <li>• Critically assess EU energy regulations and their implications for market transparency, efficiency, and sustainability.</li> <li>• Apply knowledge of energy efficiency policies, renewable energy systems, and circular economy strategies to real-world scenarios.</li> <li>• Develop the skills necessary for independent and collaborative problem-solving within energy and environmental policy contexts.</li> </ul>			
<b>Prerequisites</b>	None	<b>Corequisites</b>	None	
<b>Course Content</b>	This course introduces students to energy and environmental policies, focusing on how energy markets are influenced by policies, regulations, EU			

	<p>Directives, and the environment. Due to Europe's limited energy reserves, half of its energy is imported, making it vulnerable to global market fluctuations and creating significant challenges, such as dependency on imports, limited diversification, volatile prices, and climate change risks.</p> <p>The EU addresses these challenges by building a cohesive Energy Union, aimed at providing secure, sustainable, competitive, and affordable energy. The course explores key dimensions like security, solidarity, a fully integrated energy market, energy efficiency, climate action, decarbonization, research, and innovation.</p> <p>Students will understand the political and regulatory framework of the EU, including energy security, market integration, renewable energy, and the EU Emissions Trading System (EU ETS). They will develop critical thinking to analyze energy trends, the benefits of energy efficiency policies, and approaches for promoting a circular economy and sustainability. Through this course, students gain insights into the strategic measures and regulations shaping the EU's energy landscape, equipping them with the knowledge to assess and respond to energy policy challenges effectively.</p>
<p><b>Teaching Methodology</b></p>	<p>This course is delivered entirely online, using a variety of digital tools, including teleconferences, discussion forums, wikis, and interactive presentations. The learning platform facilitates student interaction with peers and the instructor, fostering a collaborative online learning community.</p>
<p><b>Bibliography</b></p>	<ul style="list-style-type: none"> <li>▪ Energy Union Package: A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy, COM (2015) 80 final.</li> <li>▪ European Commission - Energy Union Fact Sheet. Available from: <a href="#">EU Countries Factsheets</a>.</li> <li>▪ Fourth Report on the State of the Energy Union, COM (2019) 175.</li> <li>▪ Regulation (EU) No 994/2010 on Security of Gas Supply and Regulation 2017/1938.</li> <li>▪ European Energy Security Strategy, SWD (2014) 330.</li> <li>▪ Directive 2009/119/EC on Minimum Stocks of Crude Oil and Petroleum Products.</li> <li>▪ Vassilikos Master Plan.</li> <li>▪ Regulation (EU) No 347/2013 on Trans-European Energy Infrastructure.</li> <li>▪ Commission Delegated Regulation (EU) 2016/89.</li> <li>▪ Directive 2009/72/EC on the Internal Market in Electricity and Directive (EU) 2019/944.</li> <li>▪ Directive 2009/73/EC on the Internal Market in Natural Gas.</li> <li>▪ Regulation on the Internal Market for Electricity (EU) 2019/943.</li> <li>▪ Regulation on Risk Preparedness in the Electricity Sector (EU) 2019/1941.</li> <li>▪ Regulation Establishing a European Union Agency for the Cooperation of Energy Regulators (EU) 2019/942.</li> <li>▪ CERA's Electricity Market Liberalization Rules.</li> <li>▪ Directive (EU) 2018/2002 on Energy Efficiency.</li> <li>▪ Directive (EU) 2018/844 on the Energy Performance of Buildings.</li> </ul>

	<ul style="list-style-type: none"> <li>▪ Directive 2009/125/EC on Ecodesign Requirements for Energy-Related Products.</li> <li>▪ Directive 2010/30/EU on Energy Labelling.</li> <li>▪ 3rd National Energy Efficiency Action Plan for Cyprus.</li> <li>▪ Directive 2009/28/EC on Renewable Energy.</li> <li>▪ The Role of Waste-to-Energy in the Circular Economy, COM (2017) 34 final.</li> <li>▪ Report on Sustainability Requirements for Biomass Use in Energy, COM 2010 11.</li> <li>▪ Guidance for the Design of Renewables Support Schemes, SWD (2013) 439.</li> <li>▪ Energy Roadmap 2050, COM (2011) 885/2.</li> <li>▪ National Renewable Energy Action Plan – Cyprus.</li> <li>▪ Towards a Circular Economy: A Zero Waste Programme for Europe, COM (2014) 398.</li> <li>▪ Circular Economy Action Plan, COM/2015/0614 final and COM/2020/98.</li> <li>▪ Report on the Implementation of the Circular Economy Action Plan, COM (2019) 190.</li> <li>▪ Roadmap to a Resource Efficient Europe, COM (2011) 571..</li> </ul>
<b>Assessment</b>	<p>Weekly Activities (15%)  Assignment 1 (20%)  Assignment 2 (15%)  Final Examination (50%)</p>
<b>Language</b>	Greek / English