



**ES 310 - GLOBAL RISKS, REGIONAL VULNERABILITIES AND SUSTAINABLE DEVELOPMENT  
PATHWAYS IN THE MEDITERRANEAN REGION**  
IES Abroad Nice

**DESCRIPTION:**

The Mediterranean region, one of the oldest trading regions in the world, has been described as an area of mutual economic, social and cultural exchanges. Yet this ancient trading ground is now threatened by unsustainable human pressures on fragile linked social and ecological systems, as well as growing distrust between the less developed and more developed parts of the region.

This course will analyze regional vulnerabilities in a context of global risks and will explore mitigation and adaptation strategies at multiple scales, through case studies. The role of international and regional organizations in adaptation, resilience building risks mitigation and disasters preparedness will also be examined.

**CREDITS:** 3 credits

**CONTACT HOURS:** 45 hours

**LANGUAGE OF INSTRUCTION:** English

**INSTRUCTOR:** David Martini

**PREREQUISITES:** None

**ADDITIONAL COST:** None

**METHOD OF PRESENTATION:**

- Lectures
- Discussions
- Case studies
- Student presentations
- Video viewings
- Field Studies
- Moodle

**REQUIRED WORK AND FORM OF ASSESSMENT:**

- Course participation and in class presentations - **35%**
- Midterm Exam - **25%**
- Research paper - **40%**

**Description of Assessments:**

- Student Engagement: Your active participation is a key part of learning for you and your classmates. Through participation you will deepen your understanding, sharpen your critical thinking skills, and share your ideas and questions with everyone. Active participation helps you build communication skills such as expressing ideas clearly and listening with attention. Including participation to class, group, student-led discussions, in-class presentations...

4	Thoughtful contributions with connections to course materials, based on active listening and respectful engagement, with consistently regular participation.
3	Contributions are relevant and demonstrate understanding of course material, listens and responds attentively most of the time, generally collaborates well, but might occasionally dominate or withdraw or disengage.

2	Contributions are relevant but frequently off topic or superficial, occasionally distracted or disengaged, sometime dominates, interrupts or fails to collaborate.
1	Contributions are frequently off topic or not connected to course material, frequently disengaged or inattentive, disrespects others' viewpoints, struggles to work in a group.

- Midterm:

This will use different formats to assess students' progress towards the learning outcomes in the first half of the course. The question formats will include essay questions, multiple choice questions, short answer questions.

- Final exam (Research paper) :

Students will write the first draft of a research paper on one of the suggested topics on the Mediterranean vulnerabilities using required and recommended readings (document of 12 pages, double-spaced; standard margins and fonts). Students will first submit the topic by week 6 and a draft (week 9). After receiving comments from the instructor, the student will then work on the final version of his research paper, (submitted on week 14). This paper will be evaluated by considering the analytical, organizational and formalistic quality of the work as well as the extent to which the student has effectively incorporated the instructor's' comments on the draft.

### LEARNING OUTCOMES:

By the end of the course, students will be able to:

- Understand and apply the Global Governance Framework such as the Sustainable Development Goals, The United Nations Framework Convention on Climate Change and other relevant.
- Understand the key concepts of Risks, vulnerabilities, and Resilience, sustainable development.
- Have a practical approach of the management of land and resources in the Mediterranean region in a context of environmental change.
- Analyze the Mediterranean basin as a genuine laboratory for sustainable development.

### ATTENDANCE POLICY:

Your academics are a priority, and regular class attendance class is mandatory, respectful, and essential to academic success. Being absent from class will prevent you from maximizing your learning and will negatively affect your participation grade.

If you must be absent, please email both your professor and the academic team as soon as possible ([czonza@iesabroad.org](mailto:czonza@iesabroad.org)). Absences for medical reasons and/or emergencies will be considered excused, but justification will be required.

Please arrive on time for each class meeting. Arriving late for class is disruptive for faculty members and students alike and will prevent you from maximizing your learning. If you arrive more than 10 minutes late 3 times, it will count as an absence for that course. If you arrive more than 30 minutes late, it will count as an absence.

If you are absent during an exam, presentation, or other graded in-class assignment, you must provide justification for the absence, or you will receive an automatic F.

In most cases, the justification will take the form of a *certificat médical* from a French doctor, which must be submitted within 24 hours of the absence.

It is understandable that students may occasionally be absent because they feel unwell physically or need to take a mental health day. For this reason, our attendance policy is lenient and allows each student to miss up to one class sessions without having it automatically affect the final grade in a course. Starting with the second unexcused absence, your final grade will be lowered by a third of a letter grade.

For example:

Final grade: A-

1 unexcused absence: A-

2 unexcused absences: B+

3 unexcused absences: B

4 unexcused absences: B-

And so on...

#### ACADEMIC INTEGRITY:

Students are expected to abide by the **IES Abroad Code of Academic Integrity**. All work submitted by a student for academic credit should constitute the student's own original work. Students agree not to engage in plagiarism, cheating, or use of unauthorized materials. Any work submitted for academic credit may be subject to review by a textual similarity detection service for the detection of plagiarism and AI usage.

#### CONTENT:

Week	Content	Assignments
<b>Week 1</b>	<b>Introduction</b> <ul style="list-style-type: none"> <li>3 pillars of sustainability</li> <li>Understanding risks management</li> </ul>	<b>Assigned Reading:</b> <ul style="list-style-type: none"> <li>World Economic Forum, <a href="#">The Global Risks Report 2024 19<sup>th</sup> Edition</a>, pp. 4-36, 95-114 (51 pages)</li> </ul>
<b>Week 2</b>	<b>Drivers of risks one: Is geography destiny?</b> <ul style="list-style-type: none"> <li>Mediterranean Deltas are places of strategic economic, historical, and social importance, which are home to a rich diversity of ecosystems. However, they also face numerous anthropogenic pressures exacerbated by climate change</li> </ul>	<b>Assigned Viewing:</b> <ul style="list-style-type: none"> <li>National geographic: <i>Egypt's Ancient Empire / Egypt From Above (Full Episode)</i>, 2024. (45 minutes)</li> <li></li> </ul>
<b>Week 3</b>	<b>Drivers of risks two: inequality population dynamics, gender inequality &amp; poverty</b> <ul style="list-style-type: none"> <li>This class will illustrate how, despite divergent demographic, economic and social trends between northern and southern Mediterranean countries both sub regions fate are interlinked should they want to address common challenges.</li> </ul>	<b>Assigned Reading:</b> <ul style="list-style-type: none"> <li>Inayatullah Sohail, <a href="#">YOUTH BULGE: Demographic Dividend, Time Bomb, and other Futures</a>, 2016 (14 pages). DOI:10.6531/JFS.2016. 21(2).A21</li> <li>Octavi Quintana, Victoria Reyes-García, Esteve Corbera, Alain Safa, Irina Solovyeva, Elena Xoplaki and Joan Subirats, <a href="#">Socioeconomic impacts of climate change in the mediterranean</a>, October 2021. (62 pages)</li> </ul>
<b>Week 4</b>	<b>Drivers of risks three: climate change</b> <ul style="list-style-type: none"> <li>This class will illustrate how the three pillars of sustainability are directly linked and impacted by climate change and how big the impacts are going to be.</li> </ul>	<b>Assigned Reading:</b> <ul style="list-style-type: none"> <li>World Economic Forum, <a href="#">The Global Risks Report 2024 19<sup>th</sup> Edition</a>, pp. 37-84 (53 pages)</li> </ul>

Week	Content	Assignments
Week 5	<b>Nature based solutions for social and environmental resilience.</b> <ul style="list-style-type: none"> <li>Review and analysis of practical examples</li> </ul>	<b>Assigned Reading:</b> <ul style="list-style-type: none"> <li>Padilla, Marielisa &amp; Mok, Sophie &amp; Vaccari, Brenda, <u>Using Nature-Based solutions to create more Climate-Resilient, Green and Livable Mediterranean Cities</u>, January 2021 (10 pages). DOI:10.48494/REALCORP2020.2003</li> <li>World Economic Forum, <u>The Global Risks Report 2024 19th Edition</u>, pp. 85-92 (7 pages)</li> </ul> <b>Assigned Research:</b> <ul style="list-style-type: none"> <li>Identify and be prepared to quickly (5 minutes) present an example of nature-based solution implemented in the Mediterranean area that you think could be duplicated in your home region.</li> </ul>
Week 6	<b>Understanding and adapting to natural disasters (such as drought and floods).</b> <ul style="list-style-type: none"> <li>Over the past recent years the Maritime Alps have been hit by several natural disasters (floods in 2020 following by a severe drought in 2022). More generally France (and Europe in general) are currently affected by access to drinking water, access to tourists' amenities, agriculture, and urban gardens. In this class, we will discuss the expected impacts of water shortages.</li> </ul>	<b>Assigned Reading:</b> <ul style="list-style-type: none"> <li>The United Nations Educational, Scientific, and Cultural Organization (UNESCO), <u>Best practices on flood and drought risk management</u>, 2023 (34 pages)</li> </ul> <b>Assigned Viewing:</b> <ul style="list-style-type: none"> <li>ABC News, How climate change is fueling natural disasters around the globe, 2021 (16 minutes)</li> <li>DW News, Storm Alex batters France and Italy with torrential rains, 2020 (2 minutes)</li> <li>Africanews, Drought-hit North Africa turns to purified sea and wastewater, 2023 (2 minutes)</li> </ul>
Week 7	<ul style="list-style-type: none"> <li>Course related trip 1 (Monaco)</li> </ul>	
Week 8	<ul style="list-style-type: none"> <li>Course related trip 2 (Fresque du Climat)</li> </ul>	
Week 9	<b>MIDTERM EXAM</b> <ul style="list-style-type: none"> <li>Discussions and Q&amp;A on research papers</li> </ul>	

Week	Content	Assignments
Week 10	<b>Feeding 525 million by 2025 and sustaining livelihoods and social and ecological systems in arid lands</b> <ul style="list-style-type: none"> <li>In the context of growing food insecurity, water scarcity, land losses and marginalization of rural zones, this class will discuss the need to adopt integrated policies for agricultural systems including water that conserve water quantity and quality, look at the sustainability of “virtual water” and the options for water desalination in the region.</li> </ul>	<p>Assigned Reading:</p> <ul style="list-style-type: none"> <li>Capone, Roberto &amp; Fersino, Vincenzo &amp; Stamataki, Eleni &amp; Cerezo, Manuela &amp; Kessari, Myriam &amp; Dernini, Sandro &amp; El Bilali, Hamid, <u>Sustainability of Food Systems in the Mediterranean Region</u>. New Medit. September 2021. Issue N°3. (18 pages) DOI: 20. 131-143. 10.30682/nmsi21i.</li> <li>Mrabet R, Savé R, Toreti A, Caiola N, Chentouf M, Llasat MC, Mohamed AAA, Santeramo FG, Sanz-Cobena A, Tsikliras A, Climate and Environmental Change in the Mediterranean Basin – Current Situation and Risks for the Future. First Mediterranean Assessment Report [Cramer W, Guiot J, Marini K (eds.)] Union for the Mediterranean, Plan Bleu, UNEP/MAP, Marseille, France, 2020. (26 pages)</li> </ul> <p>Assigned Viewing:</p> <ul style="list-style-type: none"> <li>Food and Agriculture Organization, <i>Changing Landscapes of the Mediterranean</i>, 2013 (10 minutes)</li> </ul>
Week 11	<b>Energy Futures in the Mediterranean region</b> <ul style="list-style-type: none"> <li>How to Ensure access to affordable, reliable, sustainable, and modern energy.</li> </ul>	<p>Assigned Reading:</p> <ul style="list-style-type: none"> <li>Observatoire Méditerranéen de l'énergie, Mediterranean energy perspectives to 2050, 2021 edition, executive summary (16 pages)</li> </ul> <p>Assigned Research:</p> <ul style="list-style-type: none"> <li>Chose a country in the mediterranean basin, identify its strategy and objectives (if any) in terms of energy production. Be prepared to do a quick presentation (5-10 minutes)</li> </ul>
Week 12	<ul style="list-style-type: none"> <li>COURSE RELATED TRIP TO MARSEILLE</li> </ul>	<ul style="list-style-type: none"> <li>EXERCICE TO BE DEFINED</li> </ul>

Week	Content	Assignments
Week 13	<b>Sustainable Tourism vs Over Tourism</b> <ul style="list-style-type: none"> <li>This class will examine what the future of tourism looks like and how it must integrate new business models to continue.</li> </ul>	<b>Assigned Reading:</b> <ul style="list-style-type: none"> <li>Waleed Hazbun, <u>Tourism challenges in the eastern mediterranean: overtourism, geopolitical conflicts and sustainability</u>, 2024 (5 pages).</li> <li>Interreg Mediterranean, Catalogue of best practices on sustainable tourism in the mediterranean, June 2022 (25 pages)</li> </ul> <b>Assigned Viewing:</b> <ul style="list-style-type: none"> <li>DW Documentary, <i>Tourism in times of climate change</i>, 2023 (28 minutes)</li> </ul>
Week 14	<b>FINAL EXAM + State of progress of the Sustainable Development Goals</b>	
Week 15	<b>Conclusions Discussions</b> <ul style="list-style-type: none"> <li>Presentations of research papers</li> </ul>	

#### COURSE-RELATED TRIPS:

- Monaco

#### REQUIRED READINGS:

- Please refer to the table of assignment

#### RECOMMENDED READINGS:

- Gunter Pauli, The Blue Economy: 10 years – 100 innovations – 100 million jobs, 2010

#### INSTRUCTOR BIOGRAPHY:

David Martini is a sustainability and risk management expert with extensive experience across diverse industries and international contexts with more than 10 years of professional experience. He holds advanced degrees in project management (obtained in the US) and risks management and sustainability (obtained in France). Currently serving as an ESG and Sustainability Manager in a multinational company and as a CSR Lecturer for Master's degree students, David has previously worked for international organizations (such as IAEA or ACCOBAMS), public sector in France and as a consultant and project manager in the US.