ES/GE 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

PREREQUISITES: None

METHOD OF PRESENTATION:
Lectures
The major part of a class session will consist of a lecture by the instructor; it aims at giving a core knowledge of sustainable development and a general approach of the Mediterranean context and its related issues.

Class discussion
About half of each class will consist of discussions of key themes. The students will be provided with the texts to read for each class mainly on online information resources, together with a list of reading questions designed to focus their attention on key points and concepts in the texts. These will form the basis of the class discussions. The theoretical readings will be supplemented with archival sources (such as maps, texts, iconography), distributed through Moodle or in class, which will serve to illustrate the issues presented in the lectures and the readings. Additional reading may be assigned during the course of the semester.

Field studies
One field study will be organized, in addition to the Marseille Study trip, in order to illustrate the different challenges of sustainable development in the Provence Alpes-Maritimes region: Sospel, on the Salt road, illustrating vulnerabilities, environmental risks, natural disasters and adaptation techniques in an medieval village located at 450m altitude in the olive trees range, 15 km from the coast.

Video viewings
There will be some video clips viewings throughout the course. They will serve as material for discussion of the theoretical concepts covered in the course.

REQUIRED WORK AND FORM OF ASSESSMENT:
- Course participation: 25%
- Midterm Exam: 20%
- Final Exam: 30%
- Final Essay: 25%

Course Participation
Students will be expected to come to class prepared and to participate actively in class.
Midterm Exam
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 and justified True/False questions.

Final Exam
This will use different formats to assess students’ progress towards the learning outcomes of the entire course. The question formats will include essay questions, multiple choice questions, short answer questions and justified True/False questions.

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 15 pages, double-spaced; standard margins and fonts). Students will first submit the topic by week 7 and a draft (week 10). 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 taking into account 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 the key concepts of sustainable development
- Have a practical approach of the management of resources
- Assess the importance of environmental issues in the economic development policy of a country
- Analyze the Mediterranean basin as a genuine laboratory for sustainable development

ATTENDANCE POLICY:
Attendance is mandatory for all IES Abroad classes, including field studies. Any exams, tests, presentations, or other work missed due to student absences can only be rescheduled in cases of documented medical or family emergencies. If a student misses more than two classes in any course half a letter grade will be deducted from the final grade for every additional absence. Seven absences in any course will result in a failing grade.

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<td>Lesson 2</td>
<td>Geography is Destiny and climate change is part of it.</td>
<td>→ Case study: The Nile Delta</td>
<td>Assigned Reading 1: Schwarz, B. (December, 2008). “Geography is Destiny”</td>
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<td>Lesson 3</td>
<td>Population dynamics; Implications for the economy and the environment</td>
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<td>This class will illustrate how, in spite of very different demographic trends in the Northern and Southern Mediterranean countries, both sub regions face common challenges such as unemployment, and the increasing burden of an aging population. If not addressed these challenges present serious risks.</td>
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<td>Dam(n)ing the Nile?</td>
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<td><a href="http://www.theatlantic.com/magazine/archive/2008/12/geography-is-destiny/307163/">http://www.theatlantic.com/magazine/archive/2008/12/geography-is-destiny/307163/</a></td>
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<th>Lesson 4</th>
<th>Hotspots of high vulnerabilities Sea, mountain regions, arid zones, deltas: The impact of unwise land use decisions is being felt now throughout the region and is being exacerbated by climate change.</th>
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<td>FIELD STUDY ONE Sospel on the salt Road</td>
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<th>Lesson 5</th>
<th>Improving integrated water resource management and transboundary river management</th>
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<td>In the Mediterranean region, water is a scarce and fragile resource that is unequally distributed in time and space, and climate change is expected to lead</td>
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<td>Case Study: Tunisia: managing water for multiple users in context of growing water scarcity and climate unpredictability</td>
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<td>Assigned Reading 2:</td>
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to more irregular and lower volumes of rainfall. This class will discuss pressing challenges of water management such as how to manage scarce water resources sustainably; how to secure access to safe drinking water for population groups who do not yet have it; and how to promote transboundary collaboration, in shared water basins.


**Lesson 6**

**Ensuring access to and sustainable management of energy in a context of shift to renewable energy sources.** This class will discuss energy consumption trends and the high dependent on fossil fuels, with pricing and tax structures that are not conducive to energy saving. In a context of climate change a rise in greenhouse gas emissions coupled with increased energy dependency is not sustainable. Efforts to move towards renewable energies will be presented.

→ *Case Study: DESERTEC*

[www.desertec.org/](http://www.desertec.org/)

Assigned Reading 1:


Assigned Reading 2:


**Lesson 7**

**MID TERM EXAM**
### Lesson 8

**Ancient cities and sprawling urban growth: How can the Mediterranean region protect and nurture its rich urban legacy while meeting the needs of a growing urban citizenry?**

This lecture will discuss population dynamics and urban growth in a region where the urban population is expected to stabilize in Northern Mediterranean urban regions and grow in Southern and Eastern Mediterranean cities. Since most of this growth will occur in coastal zones, challenges of unsustainable human pressures aggravated by climate change must be dealt with through integrated coastal zones management and adaptive governance. Examples of integration of SD principles in spatial planning of the exceptional cultural, historical and landscape assets of Mediterranean cities will be highlighted as well as policies to reduce air pollution, waste generation and disaster vulnerability.

**FIELD STUDY> 2**

→ **Marseille**

**Assigned Reading 1:**


**Assigned Reading 2:**


### Lesson 9

**Feeding 525 million by 2025 and sustaining livelihoods and social and ecological systems in arid lands: The Food, Energy Land/Water nexus in the Mediterranean region**

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.

**Case Study: Food security and conflicts in Lebanon and Egypt**

**Assigned Reading 1:**


**Assigned Reading 2:**

| Lesson 10 | Meeting sustainable development challenges in the Mediterranean region: a new governance framework  
This class will discuss emerging the governance framework for sustainable development in the Mediterranean region and its evolution in a context of rapid context of population growth, climate change and social tensions. The revised Mediterranean Strategy for Sustainable Development (MSSD), which promotes “A prosperous and peaceful Mediterranean region in which people enjoy a high quality of life and where sustainable development takes place within the carrying capacity of healthy ecosystems”, will be discussed. | → Case Study:  
The effectiveness of the existing governance framework in dealing with wastewater pollution | Assigned Reading 1:  
Assigned Reading 2:  
| Lesson 11 | Sustainable Tourism  
This class will discuss the ecological footprint of tourism in the region and see how recent efforts to promote eco-tourism, agritourism and forms of tourism that are more socially equitable have succeeded. | → Case study:  
French Riviera: economic, social and environmental vulnerabilities. | Assigned Reading 1:  
Billé et al. (2013). Tourism and Climate Change in the Mediterranean 1: Challenges and Prospects. Read Introduction and Conclusion. |
| Lesson 12 | Policies and tools to achieve sustainable management of the sea and coastal zones  
Coastal zones in the Mediterranean region are coveted, valuable yet fragile resources. This class will highlight some of the most pressing challenges on resources, social and ecological systems and livelihoods such as tourism, construction, land-based pollution, waste disposal and poor watershed management. We will also discuss pollution from ships including illegal oil discharges and | → Case study:  
Towards a “Blue Economy” for the Mediterranean. | Assigned Reading 1:  
The 1976 Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention).  
Assigned Reading 2:  
| Lesson 13 | **Transition towards a green economy; including sustainable consumption and production**  
This class will highlight how the environment-economy nexus is key to meeting the challenges facing Mediterranean countries. The lecture will demonstrate how policies, programs and partnerships mainstreaming the environment in economic policies and promoting a green growth agenda at the national, regional levels and local level can lead to job creation, greater equity and sustainable management of natural resources. |  
**Case Study:** Regional planning, local economies and food systems and green growth in Italy | Assigned Reading 1:  
| Lesson 14 | **Migration a risk or an opportunity?**  
This lecture will discuss how migration represents both an opportunity and a challenge in the Mediterranean region. While well-managed migration may foster progress and welfare in origin-as well as destination countries, its mismanagement may put social cohesion, security and national sovereignty at risk. Sound policy-making on migration and related matters must be based on knowledge, but the construction of knowledge must in turn address policy priorities. |  
**Case Study:** Mare Nostrum? | Assigned Reading 1:De Bruycker et al. (2013). Migrants smuggled by sea to the EU: facts, laws and policy options. Migration Policy Centre Research Report 2013/0+.  
FINAL RESEARCH PAPER |
| Lesson 15 | **FINAL EXAM** |  |  |

**REQUIRED READINGS:**
• Billé et al. (2013). Tourism and Climate Change in the Mediterranean 1: Challenges and Prospects. Read Introduction and Conclusion.
• The 1976 Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention).

Online resources
• 2009 NISDR Terminology on Disaster Risk Reduction: http://www.unisdr.org/we/inform/terminology
• UNISDR Disaster Statistics: http://www.unisdr.org/we/inform/disaster‐statistics
• DESERTEC Foundation www.desertec.org/
• UNHCR Statistics http://www.unhcr.org/figures-at-a-glance.html

Maps

RECOMMENDED READINGS:
• Mediterranean Energy Perspectives (mep). mep 2011 with the OME scenarios. For more information on the model and the mep: www.ome.org.
- Raphaël Billé, Julien Rochette, The Mediterranean ICZM Protocol: paper treaty or wind of change?