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# Course manual Applied land and marine spatial planning on/for islands

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# Introduction

This course introduces land and marine spatial planning on islands and for islands. Land planning has been a well-established discipline within geography and planning sciences. In this course the geography of islands, including their physical, economic, societal and symbolic characteristics, will be brought into the development planning process for land on islands. Specificities related to their size and physical limits are discussed and their influence on land planning is presented in detail with many examples of how these are dealt with under different planning and governance contexts and systems. Urban and tourism pressures have a special place within a context of sustainable development on islands.

Marine spatial planning on the other hand, has been a relatively new addition to spatial planning theory and practice. It is similar to land planning in the sense that it has to propose what type of activities can and should be located, but it is also more three dimensional, in the sense that depth is an issue of great importance. The importance of marine spatial planning increases as the need for sea and sea bottom resources increases and therefore issues of limits and location gain importance. Islands in this context become central, due to their place and importance in the international legal system. Disputes in marine land planning around the globe prove the point. In this course, marine spatial planning principles and applications are presented and discussed within a context of sustainable use of marine resources and students are asked to study and review practices and contexts and apply them in a marine (or land) planning case study on (or around) islands.

# Learning objectives

After the course the student can:

1. Apply and extend academic skills in understanding and formulating policy implications of applied spatial research for/on islands (2G, 2H)
2. Develop and improve research competences that are relevant to future career and related to the study programme, including theory- guided empirical research related to planning and evaluating policies (1H, 3A)
3. Apply and extend communication skills required to communicate knowledge and ideas to specialist and non-specialist audiences, including reporting (1H, 2B)
4. Collaborate with others by clearly defining their own contribution in addressing a specific research problem that is original and supported by relevant literature (1D, 3B)
5. Develop students’ analytical understanding of the specific issues for land and sea spatial planning on islands and relevant inter-disciplinary themes.
6. Coherently analyse complex spatial socio-economic phenomena pertaining to planning on/for islands, including climate change, vulnerability and resilience, governance and participatory processes, carrying capacity, sustainable development as well as policy making and local environments.

# Course components

## A. Lectures

The lectures will introduce students to the basic conceptual, theoretical, institutional and practical aspects of both land and marine spatial planning and will provide guidance and material to understand how the geographical and the institutional context affects policy formulation and evaluation and how to plan for and on islands. The lecture plan is as follows:

1. What is planning? Different approaches to planning and Collaborative planning (T. Kizos)
2. Planning Methodologies and Evaluation (I. Spilanis)
3. Drivers, Actors and Impacts of Planning: exploring the conceptual frameworks of the planning processes (T. Kizos)
4. Tourism and Islands: to plan or not to plan? (I. Spilanis)
5. Methodological issues and Strategical and physical Planning (G. Tsilimigkas)
6. Protected areas – Landscape and planning (T. Kizos – I. Spilanis)
7. Planning for islands (I. Spilanis)
8. Methodological issues and Planning levels (G. Tsilimigkas)
9. The Planning Framework and key weaknesses (G. Tsilimigkas)
10. Integrated Planning for Islands (I. Spilanis)
11. Maritime Spatial Planning (G. Tsilimigkas)
12. Housing on islands: locals vs tourism vs short term rentals vs second homes (T. Kizos)
13. Wrapping it all up (T. Kizos)

## B. Individual paper review and discussion in class

During the first two weeks of the course students will be asked to read and discuss a paper from the list that is provided in this guide and then submit a short critical review of the paper (1500 words). The papers will be relevant to one of the issues discussed in the lectures and students will have 10 minutes to present it critically in the classroom. Students can select papers out of this list after consulting instructors.

List of papers for the review

1. Armstrong, H.W., Giordano, B., Kizos, Τ., Macleod, C., Olsen, L.S. and Spilanis, I. (2012) The European Regional Development Fund and Island Regions: An Evaluation of the 2000-06 and 2007-13 Programs, Island Studies Journal, Vol. 7, No. 2, 2012, pp.177-198.
2. Beckham Hooff, S., Botetzagias, I., Kizos, T. (2017) Seeing the Wind (Farm): Applying Q-methodology to Understand the Public’s Reception of the Visuals Around a Wind Farm Development. Environmental Communication A Journal of Nature and Culture, DOI:10.1080/17524032.2017.1292937
3. Derdemezi, E.-T., Tsilimigkas, G., Kizos, T. (2021) Mining activity and island landscape issues: evidence from Cyclades islands, Greece, European Planning Studies, 2021, https://doi.org/10.1080/09654313.2021.1958172
4. Jessica Gosling-Goldsmith, Britta Ricker & Menno Jan Kraak (2020) Topographic and thematic (in)visibility of Small Island Developing States in a world map, Journal of Maps, 16:1, 50-56, DOI: 10.1080/17445647.2020.1736194
5. Monitoring the SDGs at regional level in EU. REGIONS2030 pilot project,

https://publications.jrc.ec.europa.eu/repository/handle/JRC135594

1. Kizos, T., P. H. Verburg, M. Bürgi, D. Gounaridis, T. Plieninger, C. Bieling, and T. Balatsos. 2018. From concepts to practice: combining different approaches to understand drivers of landscape change. Ecology and Society 23(1):25. https://doi.org/10.5751/ES-09910-230125
2. Kizos, T., Tsilimigkas, G., Karampela, S. (2017) What Drives Built-Up Area Expansion on Islands? Using Soil Sealing Indicators to Estimate Built-Up Area Patterns on Aegean Islands, Greece. Tijdschrift voor Economische en Sociale Geografie, 4, Vol. 108, No 6, pp. 836–853, DOI:10.1111/tesg.12244
3. Mahadeo, S. (2022) Marine spatial planning in the Eastern Caribbean: Trends and progress, Marine Policy, 145, 105277, <https://doi.org/10.1016/j.marpol.2022.105277>
4. Puig-Cabrera, M., Martínez-del Vas, G., Beltrán-Bueno, M.Á. and Nuevo-López, A. (2022), "Tourism towards the well-being of Small Island Developing States: Tourism Agenda 2030", Tourism Review, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/TR-02-2022-0100>
5. Sjöstedt, M., & Povitkina, M. (2017). Vulnerability of Small Island Developing States to Natural Disasters: How Much Difference Can Effective Governments Make? The Journal of Environment & Development, 26(1), 82–105. <https://doi.org/10.1177/1070496516682339>
6. Tsilimigkas, G., Kizos, T. (2014) Space, pressures and the management of the Greek landscape. Geografiska Annaler Series B Human Geography, 96(2), DOI:10.1111/geob.12043
7. Tsilimigkas, G., Kizos, T., Gourgiotis, A. (2018) Unregulated Urban Sprawl And Spatial Distribution Of Fire Events. Evidence from Greece, Environmental Hazards, https://doi.org/10.1080/17477891.2018.1430554

## C. Empirical paper writing and presentation in class

During the last two weeks of the course students will be asked to present and then submit an empirical paper (3000-4000 words). Students will have 15 minutes to present it in the classroom. The empirical papers will be in two different thematic strands:

* -Monitoring island attractiveness and sustainability: theoretical and practical approaches and measurement for different islands, archipelagoes, groups of islands;
* -Integrated management of islands with a focus on tourism pressures: theoretical and practical approaches for islands and/or island states.

A side objective will be to prepare a presentation that will bring together some or all of your assignments and be presented in the Conference of the Department of the Environment of the University of the Aegean on 1-2 June 2024.

Students are advised to use spatial data sets for their papers. These papers and the spatial data sets will be made available by an assistant and students are expected to use them also in the following class on terrestrial and maritime planning for/on islands. These data sets will include:

* Land Cover: CORINE land cover data 1990-2018 (including changes): <https://land.copernicus.eu/en/products/corine-land-cover>
* Land cover: Built up areas: soil sealing: <https://land.copernicus.eu/en/products/high-resolution-layer-imperviousness>
* Global human settlements: <https://ghsl.jrc.ec.europa.eu/download.php>
* Footprint: <https://www.footprintnetwork.org/licenses/public-data-package-free/>
* Open street map: <https://www.openstreetmap.org/export#map=2/42.8/22.9>
* Services: open street map: <https://export.hotosm.org/en/v3/>
* Other data sets for Europe from EEA: <https://www.eea.europa.eu/en/datahub>
* Global data sets: Global Island Explorer: <https://rmgsc.cr.usgs.gov/gie/gie.shtml>
* Global Island Database: <https://www.sciencebase.gov/catalog/item/63bdf25dd34e92aad3cda273>

Airbnb: <http://insideairbnb.com/>

FIRM fires: <https://www.earthdata.nasa.gov/learn/find-data/near-real-time/firms>

MSP marine: <https://emodnet.ec.europa.eu/en>

ASTER DEM: [https://search.earthdata.nasa.gov/search](https://search.earthdata.nasa.gov/search/)

Landsat: <https://earthexplorer.usgs.gov/>

OECD database: <https://www.oecd.org/regional/regional-statistics/>

EUROSTAT database: <https://ec.europa.eu/eurostat/web/sdi/database>

<https://ec.europa.eu/commission/presscorner/detail/en/qanda_22_763>

## D. Submitting documents to Eclass / Brightspace

At the end of the course, all students need to submit two reports, one for each of the papers they have to complete: the first is a critical reading of a scientific paper and the second an empirical paper. These papers need to be uploaded to Eclass and Brightspace.

E. *Evaluation and Assessment*

The instructors will evaluate the presentations and the written papers that students will deliver and submit.

The **evaluation criteria for the presentations** are:

* Keeping the time
* Familiarity with the subject

The **evaluation criteria for the papers** are:

(for both papers)

* Respecting word limits
* Clear structure
* Readability
* Relevance of the content

(for the empirical paper)

* Clear presentation of methods of analysis
* Concise presentation of the results
* Discussion of the results

Grading will come from

10% from the presentation of the review paper

30% from the review paper

10% from the presentation of the empirical paper

50% from the empirical paper

# Course schedule

The course schedule gives an overview when the course components should take place. If you want to change the schedule, please contact the course coordinator to discuss the options.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Applied land and marine spatial planning on/for islands** | | | | |
| **25-29 March** | Public Holiday | 10-12 Lecture 1: What is planning? Different approaches to planning and Collaborative planning (T. Kizos) | 10-12 Lecture 2: Planning Methodologies and Evaluation (I. Spilanis) | 10-12 Lecture 3: Drivers, Actors and Impacts of Planning: exploring conceptual frameworks of planning processes (T. Kizos) | Group meeting 10-12 |
| **1-5-April** | 12-14 Lecture 4: Tourism and Islands: to plan or not to plan? (I. Spilanis) | 12-14 Lecture 5:  Methodological issues and Strategical and physical Planning (G. Tsilimigkas) | 9-12  Present papers | Free day, discussion with instructors for final assignment | 12-14 Lecture 6: Protected areas – Landscape and planning (T. Kizos – I. Spilanis) |
| **8-12 April** | 12-14 Lecture 7: Planning for islands (I. Spilanis) | 12-14  Lecture 8: Methodological issues and Planning levels The Planning Framework and key weaknesses (G. Tsilimigkas) | 10-12  Lecture 9: The Planning Framework and key weaknesses (G. Tsilimigkas) | Work on paper | Group meeting 12-14 |
| **15-19 April** | 12-14 Lecture 10: Integrated Planning for Islands (I. Spilanis) | 12-14  Lecture 11: Maritime Spatial Planning (G. Tsilimigkas) | Work on paper | 12-14  Lecture 12: Housing on islands: locals vs tourism vs short term rentals vs second homes (T. Kizos) | Work on paper |
| **22-26 April** | 12-14  Lecture 13: Wrapping it all up (T. Kizos) | Progress meeting  Work on paper | Work on paper | Work on paper | 9-12  Present papers |

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| --- | --- | --- | --- | --- | --- |
|  | **Week 1** | **Week 2** | **Week 3** | **Week 4** | **Week 5** |
| **Lectures/ meetings / presentations** | Lectures 1-3 | Lectures 4-6  Presentations of papers | Lectures 7-9- | Lectures 10-12- | Presentations of empirical papers |
| **Other forms of seeing instructors** | Meetings with instructors to discuss review and empirical papers | Meetings with instructors to discuss review and empirical papers | Meetings with instructors to discuss empirical papers | Meetings with instructors to discuss empirical papers | Meetings with instructors to discuss empirical papers |
| **Student work load** | * Students decide which paper to review * Students discuss topic of empirical paper | * Students decide which paper to review * Students decide topic of empirical paper | Students work on empirical paper | Students work on empirical paper | Students work on empirical paper |
| **What to do at the end of the week** | Preparation for reviews presentation | All review presentations | Work on empirical paper  Submit review paper | Work on empirical paper | Present empirical paper  Submit empirical paper |

|  |  |  |
| --- | --- | --- |
| **What is due:** | **When (deadline)** | **Who involved?** |
| 1. Decide the review paper | End of first week (preferably sooner) | Student, instructors |
| 2. Present review paper | End of 2nd week | Student |
| 3. Decide empirical paper | End of 2nd week | Student, instructors |
| 4. Submit review paper | End of 3rd week | Student |
| 5. Present empirical paper | Thursday morning of 4th week | Student |
| 5. Submit empirical paper | End of 4th week (Sunday evening) | Student |
| 6. Evaluation grade | One week later | Instructors |

# Literature list:

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Presentation 09-10.04.2024

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* Derdemezi E.-T., Tsilimigkas, G. Kizos, T., 2021. “Mining activity and island landscape issues. Evidence from Cyclades islands, Greece. European Planning Studies. Volume 30, Issue 2/2022, Pages : 384–404. (DOI: 10.1080/09654313.2021.1958172)
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