

## **Avaliação Ambiental / *Environmental Assessment***

**Mestrado em Ordenamento do Território e Urbanismo / *Master in Territorial Management and Urban Studies***

**2º Ano/2<sup>nd</sup> Year, 1º Semestre / 1<sup>st</sup> Semester, P1, 2021-2022**

### **Objetivos de aprendizagem**

Espera-se que os estudantes saibam, até ao final do semestre, porquê e como a Avaliação Ambiental (AA) pode desempenhar um papel na plena integração das questões ambientais e de sustentabilidade no ordenamento territorial e no urbanismo. Os estudantes são introduzidos aos instrumentos de AA, particularmente a Avaliação de Impacto Ambiental (AIA) e a Avaliação Ambiental Estratégica (AAE), como instrumentos relevantes de apoio à tomada de decisões para o ordenamento territorial e urbanismo. Aprenderão sobre os principais benefícios da utilização dos instrumentos, as suas grandes diferenças, a sua aplicabilidade e quais podem ser os resultados esperados com a sua aplicação, reconhecendo o mandato legal destes instrumentos. Os estudantes terão desenvolvido capacidades e competências para saber quando optar pela utilização de AIA e da AAE e o que cada instrumento pode trazer à prática do ordenamento territorial e do urbanismo, como podem ser utilizados, bem como sobre a sua boa prática na perspectiva de um desenvolvimento sustentável.

### ***Learning objectives***

*Students are expected to know, by end of the semester, why and how Environmental Assessment (EA) can play a role in ensuring full integration of environmental and sustainability issues in territorial management and urban studies. Students are introduced to EA instruments, particularly Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA), as relevant decision-making support instruments for territorial management and urban studies. They will learn the core benefits of using the instruments, the major differences between them, its applicability and what can be the respective expected outcomes with its application, recognizing the legal mandate of these instruments. Students will have developed capacities and competencies to know when to choose to use EIA and SEA and what each instrument can bring to the practice of territorial management and urbanism, how they can be used and what is good practice in view of a sustainable development.*

### **Lecturers**

#### Coordenação e Responsabilidade / *Coordination and Responsibility*

Maria do Rosário Partidário, Professor

Contacto / *contacts*: mariapartidario@tecnico.ulisboa.pt, ext. 2341 | gabinete / *room* 3.41.1 (Alameda)

Horário de dúvidas / *Students allocated time*: quarta-feira / *wednesday*, 13,30-14,30h

#### Docente de apoio / *Teaching assistance*

Margarida Barata Monteiro

margarida.monteiro@tecnico.ulisboa.pt, ext 2342 | gabinete / *room* 3.42 (Alameda)

Horário de dúvidas / *Students allocated time*: segunda-feira / *monday*, 14:00h – 15:0h

### Learning methodological approach

A problem/project-based learning (PBL) approach is adopted in this course during the whole semester. With the PBL approach students are the main actors of a process of research of a problem that they collectively identify, in groups, from the beginning of the semester. Classes offer the concepts, instruments and tools, the knowledge base for that research journey – “a unique opportunity to acquire new knowledge and competences at a high academic level in an independent manner” (AAU). More information at <http://www.en.aau.dk/education/problem-based-learning>.

The learning process is deeply rooted in the development of a project, associated to a central theme. Information on the project work is provided in a road-map that will drive students work throughout the semester. Students use the information provided and develop research to further collect and gather relevant information which they will be working with during the semester to address the project group theme and requirements. A broad perspective on the environment is adopted (including biophysical, social and economic aspects).

### Continuous evaluation

This course runs under continuous evaluation, distinguishing the individual and the group evaluation. The continuous evaluation replaces the first call of exams. Fulfillment of this course only by exam is restricted to working students, at their request. Students that do not get approval in the continuous evaluation have the opportunity to complete the course in the 2<sup>nd</sup> call of exams, as long as they have a min mark of 7 as their final mark based on the continuous evaluation.

With the exception of the 1<sup>st</sup> week of classes, all theoretical classes will finish with one question relative to the theme of the lecture, to be answered individually by students. A total of 10 questions will be asked but only the best eight questions will be considered in the evaluation. Each question has a value of 2,5.

The evaluation is based on the individual performance of the work developed, both individually and in group, during the whole semester, considering the level of dedication of each student. Final mark is fine-tuned based on subjective assessment of the professors on the students' performance during the semester.

### Course final approval: minimum of 9,5

Summary table on the AA evaluation rules:

Type	Deliverables	%	Min
Individual	1MAP5 or 10 each week (each value: 5) – final mark is based on the sum of the best four)	50%	>= 9,5
Group	Project: <ul style="list-style-type: none"> <li>• Report: 60%</li> <li>• Oral presentation: 30%</li> <li>• Continuous work: 10% (report on 4 classes)</li> </ul>	50%	>= 9,5
Exam	Only one option in 2 <sup>nd</sup> call General case: min mark of 7,0 Working student status: no min mark required	100%	>= 9,5

## Sample Bibliography

- Glasson, J., Therivel, R. 2019. Introduction to Environmental Impact Assessment, 5th edition, Routledge, Oxon and New York.
- Jones, C., Baker, M., Carter, J., Jay, S., Short, M. and Wood, C., 2005, Strategic Environmental Assessment and Land Use Planning - an international evaluation, Earthscan, London.
- Noble, Bram, 2006. Introduction to environmental impact assessment: a guide to principles and practice. Oxford University Press. Oxford.
- Partidário, M.R., 2021. Strategic thinking for sustainability in SEA. Ch 4 in Fischer T. and Gonzalez, A. (eds), Handbook on Strategic Environmental Assessment. Cheltenham: Edward Elgar Research Handbooks of Impact Assessment Series: 41-57.
- Partidário, M.R. 2012. Strategic Environmental Assessment Better Practice Guide – Methodological Guidance for Strategic Thinking in SEA. APA and REN, Lisbon.  
<https://apambiente.pt/index.php?ref=17&subref=147&sub2ref=652>
- Partidário, M.R. e Jesus, J., 2003. Fundamentos de Avaliação do Impacte Ambiental. Universidade Aberta, Lisboa.
- Porter, A.L. & Fittipaldi, J.J., 1998. Environmental Methods review: retooling impact assessment for the new century, Available at: [https://iaia.org/publicdocuments/special-publications/Green\\_Book\\_Environmental\\_Methods\\_Review.pdf](https://iaia.org/publicdocuments/special-publications/Green_Book_Environmental_Methods_Review.pdf).
- Sánchez, Luis Enrique, 2006. Avaliação de Impacto Ambiental. Conceitos e Métodos. Oficina de Textos. S. Paulo.
- Sadler, B. Dusík, J. 2016. European and International Experiences of Strategic Environmental Assessment: Recent Progress and Future Prospects. Routledge: Milton Park, Abingdon, Oxon.
- Sadler, B., Aschmann, R., Dusik, J., Fischer, T., Partidário, M.R. and Verheem, R. (2011), Handbook on SEA, Earthscan, London.
- Schmidt, M., João, E. and Albrecht, E. (Eds) (2005), Implementing Strategic Environmental Assessment, Springer-Verlag.
- Therivel, R., 2004, Strategic Environmental Assessment in Action, London: Earthscan.
- Special Issue Articles: SEA effectiveness. 2019. Impact Assessment and Project Appraisal. <https://www.tandfonline.com/toc/tiap20/37/3-4?nav=tocList>
- Thérivel, R. and Wood, G. 2018. Methods of Environmental and Social Impact Assessment. Routledge. New York and London.

### International Sites:

- UNECE – United Nations Economic Commission for Europe (Espoo and Aarhus Conventions) (<http://www.unece.org/env/welcome.html>)
- EEA – European Environment Agency (<http://www.eea.europa.eu/>)
- European Commission – environment ([http://ec.europa.eu/environment/index\\_en.htm](http://ec.europa.eu/environment/index_en.htm))
- European Commission – sustainable development / <http://ec.europa.eu/environment/eussd/>  
[http://ec.europa.eu/sustainable/welcome/index\\_en.htm](http://ec.europa.eu/sustainable/welcome/index_en.htm))
- European Commission – environmental impact assessment (<http://ec.europa.eu/environment/eia/eia-legalcontext.htm>)
- International Association for Impact Assessment (<http://www.iaia.org/>)

## General Programme

Day	Time	Lecture	Week student actions
29/9	9-11	Introduction to the course. T What is EA? EIA and SEA as public policy instruments for private and public benefit GD What should be the role of EIA and SEA in spatial planning and urbanism for a sustainable development? D Groups feed-back	<b>Read</b> Caldwell, L. 1998
	11-13	Introduction to the project Organization of groups. Tasks and activities, expected deliverables	
6/10	9-11	T Basic concepts common to EIA and SEA. Different rationale of EIA and SEA as decision support instruments GD How different is to assess a project with EIA and to assess a strategy with SEA? D Groups feed-back	<b>Read</b> Weaver, A., Pope, J., Morrison-Saunders, A., & Lochner, P., 2008
	11-13	T European and national regulatory requirements and institutional contexts for EIA and SEA Project groups - major problems, related environmental and social issues and relationships	
13/10	9-11	T Project based environmental impacts. Cumulative impacts. Process and activities of project's EIA. GD How do you convince higher decision-makers that EIA should be used in spatial planning and urbanism? What is expected from EIA? D Group feed-back	<b>Read</b> Morgan, R. 2012
	11-13	Project groups - scoping: selecting relevant impacts and issues. Identify possible alternatives	
20/10 Julio	9-11	T EIA - case example. EIA as decision-making support instrument. GD Benefits and limitations with EIA D Groups feed-back	<b>Read</b> O'Faircheallaigh, C., 2010
	11-13	Project groups - assessment and mitigation, monitoring	
27/11 Margari da	9-11	T Public participation and stakeholders engagement. GD Why do we need public participation in EIA and SEA for sustainable development?	<b>Read</b> Tetlow, M and M Hanusch (2012)

		D Group feed-back	
	11-13	T Get introduced to the practice of SEA. Strategic and policy context in spatial planning and urbanism. Learning with a practical case. GD Role of SEA in achieving the SDG D Groups feed-back Project groups - strategically explore the spatial planning and urbanism project context - creating a larger picture in spatial planning and urbanism	
3/11	9-11	T SEA basic concepts: strategy, complexity, systems thinking. GD SEA in territorial and sectoral policy and planning instruments. When do we know we can use an SEA? D Groups feed-back	<b>Read</b> Partidário, 2021
	11-13	T SEA models: strategic thinking and impact assessment. Role of SEA in decision-making. GD What are major difference between the two dominant models in SEA? D Groups feed-back Project groups - strategic focus in the spatial planning and urbanism case application	
10/11	9-11	T Methodology: Strategic thinking for sustainability in SEA. Critical Decision Factors GD Exploring the ST4S methodology: key features? D Groups feed-back	
	11-13	T How to get focused in SEA? Explore and assessment of options. Project groups - Options assessment. Follow-up. Relating the strategic assessment and project assessment: SEA-EIA link.	

Papers to read:

Caldwell, L. 1998. Implementing Policy Through Procedure: Impact Assessment and The National Environmental Policy Act (NEPA). ch 1. in Porter, A.L. & Fittipaldi, J.J., 1998. Environmental Methods review: retooling impact assessment for the new century, Available at: [https://iaia.org/publicdocuments/special-publications/Green\\_Book\\_Environmental\\_Methods\\_Review.pdf](https://iaia.org/publicdocuments/special-publications/Green_Book_Environmental_Methods_Review.pdf).

Morgan, R. 2012. Environmental Impact Assessment: the state of the art. Impact Assessment and Project Appraisal, 30:1, 5– 14. <http://dx.doi.org/10.1080/14615517.2012.661557>

O'Faircheallaigh, C., 2010. Public participation and environmental impact assessment: Purposes, implications, and lessons for public policy making. Environmental Impact Assessment Review, 30(1), pp.19–27. Available at: <http://dx.doi.org/10.1016/j.eiar.2009.05.001>.

- Partidário, M.R., 2021. Strategic thinking for sustainability in SEA. Ch 4 in Fischer T. and Gonzalez, A. (eds), Handbook on Strategic Environmental Assessment. Cheltenham: Edward Elgar Research Handbooks of Impact Assessment Series: 41-57.
- Tetlow, M and M Hanusch (2012). Strategic environmental assessment: The state of the art. Impact Assessment and Project Appraisal , 30, 15– 24. <http://dx.doi.org/10.1080/14615517.2012.666400>
- Weaver, A., Pope, J., Morrison-Saunders, A., & Lochner, P., 2008. Contributing to sustainability as an environmental impact assessment practitioner. Impact Assessment and Project Appraisal, 26(2), 91–98. Available at: <http://doi.org/10.3152/146155108X316423>.