

**UČNI NAČRT PREDMETA / COURSE SYLLABUS**

|                      |                                            |
|----------------------|--------------------------------------------|
| <b>Predmet:</b>      | Ekosistemske storitve v politiki in praksi |
| <b>Course title:</b> | Ecosystem Services in Policy and Practice  |

| Študijski program in stopnja<br>Study programme and level                          | Študijska smer<br>Study field | Letnik<br>Academic year | Semester<br>Semester |
|------------------------------------------------------------------------------------|-------------------------------|-------------------------|----------------------|
| Primerjalni študij idej in kultur,<br>doktorski študij 3. stopnje                  | Humana geografija             | /                       | /                    |
| Comparative study of Ideas and<br>Cultures, doctoral study (3 <sup>rd</sup> cycle) | Human geography               | /                       | /                    |

**Vrsta predmeta / Course type**

Izbirni / Elective

**Univerzitetna koda predmeta / University course code:**

P111

| Predavanja<br>Lectures | Seminar<br>Seminar | Sem. vaje<br>Tutorial | Lab. vaje<br>Laboratory work | Teren. vaje<br>Field work | Samost. delo<br>Individ. work | ECTS |
|------------------------|--------------------|-----------------------|------------------------------|---------------------------|-------------------------------|------|
| 30                     |                    | 20                    |                              | 10                        | 120                           | 6    |

**Nosilec predmeta / Lecturer:**

Mateja Šmid Hribar,  
Daniela Alexandra Teixeira da Costa Ribeiro

**Jeziki /**

**Languages:**

**Predavanja / Lectures:**

**Vaje / Tutorial:**

slovenščina, angleščina / Slovene, English

slovenščina, angleščina / Slovene, English

**Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:**

Končana druga bolonjska stopnja ustrezne smeri ali univerzitetni študij VII. stopnje.

**Prerequisites:**

Completed second-cycle Bologna degree in a relevant field or a university degree of level VII..

**Vsebina:**

Predmet obravnava pojem ekosistemskih storitev v povezavi z rabo zemljišč ter preučuje njihove zmogljivosti, omejitve in uporabo v okoljski politiki in upravljanju. Študenti in študentke pridobijo teoretično znanje, praktične izkušnje in praktično delo na terenu za ocenjevanje in komuniciranje ekosistemskih storitev, s poudarkom na praktični uporabi in kritičnem razmišljanju.

Vsebina bo razdeljena na tri vsebinske sklope:

1. Teoretični del – različne klasifikacije in tipi ekosistemskih storitev; omejitve njihove

**Content (Syllabus outline):**

This course explores the concept of ecosystem services related to land use, and examines their capacities, limitations, and applications in environmental policy and management. Students acquire theoretical knowledge, practical experience, and hands-on fieldwork to assess and communicate ecosystem services, with an emphasis on real-world applications and critical thinking.

The content is divided into three main parts, as following:

1. Theoretical part – Different classifications and types of ecosystem services; limits of

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| <p>rabe; najnovejši trendi v svetovnih raziskavah.</p> <ol style="list-style-type: none"> <li>2. Praktični del – potencialna raba koncepta v politikah in upravljanju pokrajine na podlagi rabe zemljišč; ocena, vrednotenje in kompromisi (trade-offs); etična vprašanja; vključevanje ekosistemskih storitev v upravljanje;</li> <li>3. Terensko delo – praktične vaje in vpogled v zbiranje podatkov; razmislek o tem, katere koristi nam nudi okolje.</li> </ol> <p>Tematika se vsebinsko povezuje s sorodnimi koncepti kot so: raba zemljišč, podnebne spremembe, biodiverzitet, raba naravnih virov, rešitve temelječe na naravi, upravljanje s skupnimi viri in dobrim počutjem ljudi. Predmet podpira trajnostno upravljanje in prehod v bolj prožne družbe.</p> | <p>applying the ecosystem services concept; recent trends in global research.</p> <ol style="list-style-type: none"> <li>2. Practical part – Potential application of ecosystem services in policy and landscape management based on land use; assessment, valuation and trade-offs; ethical considerations; integrating ecosystem services with governance.</li> <li>3. Fieldwork – Hands-on exercises and insights into data collection; reflection on human benefits from the environment.</li> </ol> <p>The theme is linked to other concepts such as land use, climate change, biodiversity, natural resource use, nature based solutions, governing of common-pool resources and human well-being. The course supports sustainable management and the transition to resilient societies.</p> |
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#### Temeljni literatura in viri / Readings:

- Millenium Ecosystem Assesment (2005). Ecosystems and human well-being: Synthesis. Washington. <https://www.millenniumassessment.org/documents/document.356.aspx.pdf>
- Fisher, B., Turner, R. K., Morling, P. (2009). Defining and classifying ecosystem services for decision making. Ecological Economics 68. DOI: 10.1016/j.ecolecon.2008.09.014
- de Groot, R. S., Alkemade, R., Braat, L., Hein, L., Willemen, L. (2010). Challenges in integrating the concept of ecosystem services and values in landscape planning, management and decision making. Ecological Complexity 7-3, 260-272.
- Howe, C., Suich, H., Virac, B., Mace, G. M. (2014). Creating win-wins from trade-offs? Ecosystem services for human well-being: A meta-analysis of ecosystem service trade-offs and synergies in the real world. Global Environmental Change 28(1): 263-275.
- Loft L., Mann, C., Hansjürgens, B., (2015). Challenges in ecosystem-services governance: Multi-levels, multi-actors, multi-rationalities. Ecosystem Services 16, 150-157.
- Heydinger, J. M., (2016). Reinforcing the Ecosystem Services Perspective: The Temporal Component. Ecosystems 19: 661-673. DOI: 10.1007/s10021-016-9959-0
- Bennet, E. M. (2017). Research Frontiers in Ecosystem Service Science. Ecosystems 20, 31–37.
- Burkhard, B., Maes, J. (Eds) (2017). Mapping Ecosystem Services. Advanced Books. <https://doi.org/10.3897/ab.e12837>
- Haines-Young, R.H., Potschin, M.B. (2018). Common International Classification of Ecosystem Services (CICES) v.5.1 and Guidance on the Application of the Revised Structure. Fabis Consulting Ltd., Nottingham. <https://doi.org/10.3897/oneeco.3.e27108>

Cilji in kompetence:

Objectives and competences:

Predmet prispeva predvsem k razvoju naslednjih splošnih in specifičnih kompetenc:

- poznavanje ekosistemskih storitev, njihovih vlog in metod ocenjevanja;
- seznanitev z različnimi metodami in pristopi za ocenjevanje in vrednotenje ekosistemskih storitev;
- znanja in veščin za analizo okoljskih problemov in medsebojnega vpliva človeka in narave;
- sposobnost kritičnega razmišljanja o vlogi družbe v okolju;
- sposobnosti raziskovalnega dela
- razumevanje primerov ekosistemskih storitev na različnih prostorskih ravneh.

The mainly contributes to the development of the following general and specific competences:

- Knowledge of ecosystem services, their roles and assessment methods;
- Familiarity with different approaches to ecosystem services assessment and valuation;
- Skills to analyse environmental problems and interactions between humans and nature;
- Ability to critically reflect on the role of society in the environment;
- Research work skills.
- Understanding of ES examples at different spatial levels.

#### **Predvideni študijski rezultati:**

Po zaključku tega tečaja bodo študenti in študentke sposobni:

- razložiti koncept 'ekosistemske storitve' in različne tipi storitev, ki jih nudijo ekosistemi;
- uporabiti metode in pristope za kartiranje in ocenjevanje ekosistemskih storitev;
- analizirati dileme in kompromise (trade-offs), povezane z vrednotenjem ekosistemov;
- kritično oceniti politike in strategije upravljanja z uporabo okvira ekosistemskih storitev;
- vključiti koncept ekosistemskih storitev v prihodnje raziskave ali strokovno prakso, ki je pomembna za oblikovanje politik.

#### **Intended learning outcomes:**

Upon completion of this course, students will be able to:

- Explain the concept of 'ecosystem services' and the different types of ecosystem services;
- Apply methods and approaches for mapping and assessing ecosystem services;
- Analyse the dilemmas associated and trade-offs associated with ecosystem valuation;
- Critically evaluate policies and management strategies using the ecosystem services framework;
- Integrate ecosystem services concept into future research or professional practice relevant for policy-making.

#### **Metode poučevanja in učenja:**

##### **Oblike dela:**

- ☒ Frontalna oblika
- ☒ Samostojno delo študentov
- ☒ e-izobraževanje

##### **Metode (načini) dela:**

- ☒ Razlaga
- ☒ Razgovor/ diskusija/debata

#### **Learning and teaching methods:**

##### **Types of learning/teaching:**

- ☒ Frontal teaching
- ☒ Independent students work
- ☒ e-learning

##### **Teaching methods:**

- ☒ Explanation
- ☒ Conversation/discussion/debate

|                                                                            |                                                                      |
|----------------------------------------------------------------------------|----------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Delo z besedilom                       | <input checked="" type="checkbox"/> Work with texts                  |
| <input checked="" type="checkbox"/> Proučevanje primera                    | <input checked="" type="checkbox"/> Case studies                     |
| <input checked="" type="checkbox"/> Reševanje nalog                        | <input checked="" type="checkbox"/> Solving exercises                |
| <input checked="" type="checkbox"/> "Terenske vaje" (npr. obiski podjetij) | <input checked="" type="checkbox"/> Field work (e.g. company visits) |
| <input checked="" type="checkbox"/> Vključevanje gostov iz prakse          | <input checked="" type="checkbox"/> Inviting guests from companies   |

| Načini ocenjevanja:           | Delež (v %) /<br>Weight (in %) | Assessment:              |
|-------------------------------|--------------------------------|--------------------------|
| Daljši pisni izdelki          | 80                             | Long written assignments |
| Javni nastop ali predstavitev | 20                             | Presentations            |

## Reference nosilca / Lecturer's references:

- Burkhard, B., Šmid Hribar, M., et al. (2018). Mapping and assessing ecosystem services in the EU-Lessons learned from the ESMERALDA approach of integration. One Ecosystem 3: e29153. <https://doi.org/10.3897/oneeco.3.e291>
- Ribeiro, D., Šmid Hribar, M. (2019). Assessment of land-use changes and their impacts on ecosystem services in two Slovenian rural landscapes. Acta Geographica Slovenica 59 (2), 143-159.
- Rodela, R., Tucker, C.M., Šmid Hribar, M., Sigura, M., Bogataj, N., Urbanc, M., Gunya, A. (2019). Intersections of ecosystem services and common-pool resources literature: An interdisciplinary encounter. Environmental Science and Policy 94, 72–81.
- Šmid Hribar, M., Japelj, A., Vurunić, S. (2021). Sistematično kartiranje raziskav o ekosistemskih storitvah v Sloveniji. Geografski vestnik, 93-1. <https://doi.org/10.3986/GV93101>
- Tucker, C. M., Šmid Hribar, M., Urbanc, M., Bogataj, N., Gunya, A., Rodela, R., Sigura, M., Piani, L. (2023). Governance of interdependent ecosystem services and common-pool resources. Land Use Policy 127. DOI: <https://doi.org/10.1016/j.landusepol.2023.106575>
- Walther, F. E., Šmid Hribar, M., Ribeiro, D., et al. (2025). Uncertainties in ecosystem services assessments and their implications for decision support – a semi-systematic literature review. Ecosystem services 73. <https://doi.org/10.1016/j.ecoser.2025.101714>