



Univerza v Mariboru

Fakulteta za naravoslovje
in matematiko

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet: Ekološko kmetijstvo
Course title: Organic Agriculture

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Biologija in ekologija z naravovastvom, 2. stopnja	/	1,2	Poletni / Zimski
Biology and Ecology with Nature Conservation, 2 nd cycle	/	1,2	Summer / Winter

Vrsta predmeta / Course type

Izbirni / Elective

Univerzitetna koda predmeta / University course code:

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje work	Teren. vaje Field work	Samost. delo Individual work	ECTS
15	15	10		5	135	6

Nosilec predmeta / Lecturer:

Martina Bavec

Jeziki / Predavanja / Lectures: Slovenski / Slovenian
Languages: Vaje / Tutorial: Slovenski / Slovenian

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

Prerequisites:

Vsebina:

Content (Syllabus outline):

Osnovni cilji, definicije in znanstvene podlage ekološkega kmetijstva ter zakonodaja
 Zgodovina in razvoj ekološkega kmetijstva v svetu in pri nas
 Položaj in pomen ekološkega kmetijstva v okviru kmetijskih okoljskih ukrepov
 Preusmeritev v ekološko kmetijstvo in vzdrževanje trajnostnega sistema
 Osnovne zahteve ekološkega kmetijstva po panogah in problemi ob preusmeritvi
 Uravnavanje ekološkega ravnotežja v rastlinski pridelavi (rodovitnost tal, kroženje hranil, prehrana, pleveli, bolezni, škodljivci – koristni organizmi, energija,...)
 Osnovne zahteve in specifičnosti ekološke reje živali
 Smernice za ekološko kmetovanje (nadstandardi)
 Kontrola in certifikacija ekološke predelave, uvoza in prometa z ekološkimi pridelki oz. živili
 Ekološko kmetijstvo v SKP in akcijski načrt
 Notranja kakovost in pomen ekoloških živil v prehrani ljudi
 Regionalni, tradicionalni, geografski, sociološki, etnološki... vidiki uspešnosti pridelave in trženja ekoloških proizvodov ter vizije razvoja ekološkega kmetijstva na regionalni in globalni ravni

The aims, definitions and scientific bases of organic farming incl. law requirements
 History and development of organic farming in the World and in Slovenia
 Role and impact of organic farming on agro-environmental measures
 Conversion into organic farming and maintenance of sustainable development
 Basic requirements of organic farming in different branches and expected problems during conversion
 Management of ecological equilibrium in plant production (soils, nutrient cycling, fertilizing, weeds, pests and diseases – useful organisms, energy,...)
 Requirements in organic animal production
 Different guidelines for organic farming (Demeter, Biodar,...)
 Inspection and certification
 Organic farming in CAP and action plans
 Quality of organic products and impact of organic foods in nutrition
 Regional, traditional, geographic, social, ethnological etc. views of organic production and marketing
 Vision of organic farming development on regional and global level

Temeljni literatura in viri / Readings:

Temeljni viri / Basic

Bavec M., F. Bavec Impact of organic farming on biodiversity. V: YUEH-HSIN, Lo (ur.). *Biodiversity in ecosystems - Linking structure and function*. Rijeka: InTech. 2015

Priporočeni viri / Recommended:

Bavec F., M. Bavec, 2006: Organic Production and Use of Alternative Crops, Taylor & Francis CRC Press, Boca Raton, New York, London.

Bavec, M. in sod. 2000. Ekološko kmetijstvo. ČZD Kmečki glas, Ljubljana.

Lampkin, N., 1994: Organic farming. Farming press, Ipswich, UK.

Freyer B., 2016: Okologischer Lanbau. Grundlagen, Wissensstand und Herausforderungen. Utb. Koln, Toronto, New York.

Robačar M. s sod., 2018: Koraki do zaupanja vredne (certificirane) ponudbe ekološke hrane v gastronomiji. 1. izd. V Mariboru: Univerzitetna založba Univerze

Standardi IFOAM in ekoloških združenj, Zakonodaja s področja ekološkega kmetijstva Regulation (EU) 848/2018

Izbrani članki / Selected papers from Web of Science in Science Direct.

Cilji in kompetence:

- Poznavanje in razumevanje utemeljitev ter razvoja ekološkega kmetijstva
- Sposobnost analize, sinteze in predvidevanje rešitev ter posledic konvencionalnega v primerjavi z ekološkim kmetijstvom
- Razumevanje in prepoznanje ekološke pridelave, predelave ter ekološke hrane

Objectives and competences:

- Get basic knowledge, understand justifying and development of organic farming
- Ability to analyze, synthesize and predict the solutions and consequences of conventional versus organic farming
- Understanding and recognizing organic production, processing and organic food

Predvideni študijski rezultati:

- Po uspešno opravljeni učni enoti naj bi študenti:
- znali predstaviti zahteve in prednosti ekološkega kmetijstva ter razlikovati ekološke produkte od konvencionalno ali integrirano pridelanih;
 - razumeli sistem ekološke pridelave, predelave, kontrole, certifikacije ter verodostojnosti certifikata.

Intended learning outcomes:

- By the end of this course, students should be able to:
- represent requirements and advantages of organic agriculture, such as differentiate products from conventional and integrated production systems;
 - understand organic production system, inspection and certification, such as validity of certificate.

Metode poučevanja in učenja:

- Predavanja
- Vaje
- Projektno delo in seminarsko delo
- Terenske vaje

Learning and teaching methods:

- Lectures
- Tutorial
- Project work and seminar work
- Field work

Delež (v %) /

Načini ocenjevanja:

Weight (in %)

Assessment:

Način (pisni izpit, ustno izpraševanje, naloge, projekt)

- Seminarska naloga
- Pisni izpit

50%

50%

Type (examination, oral, coursework, project):

- Seminar essay
- Written exam

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Reference nosilca / Lecturer's references:

BAVEC, Franc, LISEC, Urška, BAVEC, Martina. Importance of underutilized field crops for increasing functional biodiversity : Chapter 18. V: ŞEN, Bülent (ur.), GRILLO, Oscar (ur.). *Selected studies in biodiversity*. London, UK: IntechOpen. cop. 2018, str. 377-388, graf. prikazi. [COBISS.SI-ID [4464684](#)]

NAVARRO-MIRÓ, David, BLANCO-MORENO, José M., CIACCIA, Corrado, TESTANI, Elena, TAMM, Kalvi, BENDER, Ingrid, BURGIO, Giovanni, BAVEC, Martina, ROBAČER, Martina, CANALI, Stefano, et al. The concurrent assessment of agronomic, ecological and environmental variables enables better choice of agroecological service crop termination management. *Journal of Applied Ecology*. Print ed. 2022, vol. 59, str. 1-12, ilustr. ISSN 0021-8901. <https://besjournals.onlinelibrary.wiley.com/doi/10.1111/1365-2664.14112>, DOI: 10.1111/1365-2664.14112. [COBISS.SI-ID 96719619]

TURNŠEK, Maja, GANGENES SKAR, S. L., PIIRMAN, Marit, THORARINSDOTTIR, Ragnheidur, BAVEC, Martina, JUNGE-BERBEROVIC, Ranka. Home gardening and food security concerns during the COVID-19 pandemic. *Horticulturae*. 2022, 8, 778, str. 1-22, graf. prikazi. ISSN 2311-7524. DOI: [10.3390/horticulturae8090778](https://doi.org/10.3390/horticulturae8090778). [COBISS.SI-ID [119407363](#)]

ŠEREMEŠIĆ, Srđan, JOVOVIĆ, Zoran, JUG, Danijel, DJIKIĆ, Mirha, DOLIJANOVIĆ, Željko, BAVEC, Franc, JORDANOVSKA, Suzana, BAVEC, Martina, ĐURĐEVIĆ, Boris, JUG, Irena. Agroecology in the West Balkans: pathway of development and future perspectives. *Agroecology and sustainable food systems*. 2021, vol. 45, iss. 8, str. 1213-1245. ISSN 2168-3573. <https://doi.org/10.1080/21683565.2021.1913464>, DOI: [10.1080/21683565.2021.1913464](https://doi.org/10.1080/21683565.2021.1913464). [COBISS.SI-ID [60402435](#)]

BAVEC, Martina, BAVEC, Franc, BAVEC, Andrej, ROBAČER, Martina. Healthy facts of organic food. *Biomedical journal of scientific & technical research*. 2019, vol. 20, iss. 1, str. 14802-14805. ISSN 2574-1241. <https://biomedres.us/volume20-issue1.php>, DOI: [10.26717/BJSTR.2019.20.003403](https://doi.org/10.26717/BJSTR.2019.20.003403). [COBISS.SI-ID [4597804](#)]