



Univerza v Mariboru
University of Maribor

Fakulteta za naravoslovje in
matematiko / Faculty of Natural
Sciences and Mathematics



OPIS PREDMETA / SUBJECT SPECIFICATION

Predmet:	Biološko raziskovalno delo
Subject Title:	Biological research work

Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
Izobraževalna biologija , pedagoški dvopredmetni študijski program 2. stopnje		1.	Poletni
Educational Biology , pedagogical two stream study, 2 nd. degree		1	Summer

Univerzitetna koda predmeta / University subject code:

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. Vaje Lab. Work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
15			45		90	5

Nosilec predmeta / Lecturer:

Jana Ambrožič-Dolinšek

Jeziki /

Languages:

Predavanja / Lecture:

Vaje / Tutorial:

slovenski / Slovenian

slovenski / Slovenian

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

Prerequisites:

Vsebina:

Predmet je zastavljen tako, da uvaja študente v znanstveno raziskovalno delo. Študente vpeljuje v naravoslovno pismenost in jih seznani z nekaterimi metodami. Je posrednik med študijem in pravim raziskovalnim delom, med knjižnim znanjem in izkušnjo eksperimentalnega dela. Nudi vpogled v snovanje, vrednotenje in izvedbo veljavne raziskave.

Contents (Syllabus outline):

A course designed to introduces students to scientific research. It introduces students to the nature of science and selected methods. Is catalyst between studying and direct scientific research, between knowledge from books and real experimental experience. It offers insight in initiating, evaluating, and conducting valid scientific research.

Temeljni študijski viri / Textbooks:

Jones A., Reed R., and Weyers J. 2003. Practical Skills in Biology (3rd Edition). Pearson Education Ltd, Harlow, UK
Reed R., and Weyers J., Jones A., Holmes D. 2003. Practical Skills in Biomolecular (3rd Edition). Pearson Education Ltd, Harlow, UK

Cilji:

- Razprava o naravi znanosti in njenih metodah.
- Izbira raziskovalnega področja, primerne za raziskovanje.

Objectives:

- Discusses the nature of science and its methods.
- Select the research topic feasible for investigation.
- Distinguish between library research and field or

- Razlikovanje med knjižnim znanjem in laboratorijskim oziroma terenskim raziskovanjem.
- Seznanjanje z raziskovalnim delom z izbranega področja raziskovanja.

Predvideni študijski rezultati:

Znanje in razumevanje:

- Razumevanje znanstveno raziskovalnega dela.
- Naravoslovna pismenost.
- Poznavanje izbranih eksperimentalnih metod dela.

Prenesljive/ključne spretnosti in drugi atributi:

- Urjenje v snovanju, vrednotenju in izvedbi veljavne raziskave.
- Seznanjanje z izbranimi laboratorijskimi metodami dela.
- Varno delo v laboratoriju.

Metode poučevanja in učenja:

- Predavanja
- Laboratorijske vaje
- Individualno delo

Načini ocenjevanja:

- Pisni izpit
- Ocena izdelave in predstavitve poročil z laboratorijskih vaj

Prenesljive/ključne spretnosti in drugi atributi:

- Seznanjanje z izbranimi laboratorijskimi metodami dela.
- Varno delo v laboratoriju.

laboratory research.

- Introduce with research work in selected research field.

Intended learning outcomes:

Knowledge and Understanding:

- Understanding the scientific research.
- Understanding the nature of science.
- Experience in selected experimental methods.

Transferable/Key Skills and other attributes:

- Practice in initiating, evaluating, and conducting valid scientific research.
- Qualification for work with selected laboratory methods.
- Safe working practice in laboratory.

Learning and teaching methods:

- Lectures
- Laboratory excersises
- Individual work

Assessment:

- Written exam
- Examination of preparation and presentation of laboratory reports

Transferable/Key Skills and other attributes:

- Qualification for work with selected laboratory methods.
- Safe working practice in laboratory.

Materialni pogoji za izvedbo predmeta :

- *Multimedijska predavalnica*
- *Laboratorij za fiziologijo rastlin opremljen z osnovno laboratorijsko opremo: sušilnik, kuhalnik, plin, voda, pH-meter, tehnica, avtoklav, laminarij, spektrofotometer, mikroskop, rastna komora, steklovina in orodje*

Obveznosti študentov:

(pisni, ustni izpit, naloge, projekti)

- Ocenaizpita.
- Ocena izdelave in predstavitve poročil z laboratorijskih vaj
- Aktivno sodelovanje na predavanjih in vajah

Material conditions for subject realization

- *Lecture hall for multimedia presentations*
- *Plant physiology laboratory equipped with selected laboratory equipment: cooker, gas, water, pH-meter, balance, dryer, autoclave, microscope, glass-wares and other equipments.*

Students' commitments:

(written, oral examination, coursework, projects):

- Evaluation of exam
- Evaluation of preparation and presentation of laboratory reports
- Active collaboration on lectures and exercises