



OPIS PREDMETA / SUBJECT SPECIFICATION

Predmet:	Didaktika tehnike I
Subject Title:	Didactic of technology education I

Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
Izobraževalna tehnika		1	zimski
Educational Design		1	Winter

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
30	20		20		140	7

Nosilec predmeta / Lecturer:

Jeziki / Predavanja / Lecture:
Languages: Vaje / Tutorial:

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

Prerequisites:

Osnovno znanje o psihologiji razvoja in učenja, pedagogiki ter osnovah komuniciranja in retorike.

Basic knowledge of psychology of development and learning, pedagogy, and the basics of communication and rhetoric.

Vsebina:

Contents (Syllabus outline):

Predavanja:

- Pedagoška in psihološka izhodišča didaktike tehnike,
- cilji pouka tehnike: tehniška in tehnološka kompetenca,
- strategije, koncepti, modeli, oblike vzgojno izobraževalnega procesa tehniške vzgoje,
- načrtovanje mikro in makro artikulacije vzgojno izobraževalnega procesa tehniške vzgoje,
- metode in načini preverjanja doseženosti ciljev in standardov pri pouku tehnike,
- evalvacija in samoevalvacija učno-vzgojnega procesa tehniške vzgoje in izobraževanja.

Seminar:

- mikropouk oziroma nastopi in hospitacije v manjših skupinah;
- seminarski referati s področja tehnike in tehnologije.

Laboratorijske vaje:

- izdelava učne priprave z elementi analize in vrednotenja;
- priprava elementov za projektno nalogo.

Samostojno delo:

- izdelava priprave na učno uro za posamezne sklope tehnike in tehnologije;

Lectures:

- Pedagogical and psychological origin of didactics of technical education,
- goals of technical and technological education: technical and technological competences,
- strategies, concepts and models for technical education and training,
- planning of micro and macro articulation of educational process in technological education,
- methods for evaluating achieving goals and standards of technological education,
- evaluation and self evaluation of educational process in technical education.

Tutorials and seminar:

- microteaching, guided observation and learning in small groups,
- seminar works from area of technological and technical education.

Laboratory work:

- elaborating the teaching preparing with the elements for analyses and evaluation,
- elaborating the components for seminar work.

Individual work:

- elaborating the teaching preparing for individual parts of curriculum for technological education,

Temeljni študijski viri / Textbooks:

- Huettner, Andreas: Technik unterrichten, Verlag Europa-Lehrmittel, Nourney, Vollmer GmbH, 2005.
- Bonz, B., Ott B.: Allgemeine Technikdidaktik - Theorienansätze und Praxisbezüge, Schneider Verlag Hohengehren, GmbH, Baltmannsweiler, 2003.
- Papotnik, A. S projektno nalogo do boljšega znanja, Izolit, Trzin, 1998.
- Marentič – Požarnik, B. Psihologija učenja in pouka. DZS, Ljubljana 2003.
- Učni načrti za tehniko in tehnologijo in izbirne predmete s področja tehnike in tehnologije.

Cilji:

- uporaba strategij, metod in oblike vzgojno – izobraževalnega procesa pouka tehnike.
- uporaba metodologije načrtovanja makro in mikro artikulacije izobraževalno – vzgojnega procesa,
- analiziranje in (samo)vrednotenje izvajanja in preverjanja dosežkov pouka tehnike.

Objectives:

- application of strategies, methods and concepts of educational process of technology,
- using the methodology for planning macro and micro articulation of educational process,
- analyzing and (self)evaluation of executing and verification results of technology education.

Predvideni študijski rezultati:

Znanje in razumevanje:

- razumevanje strategij, konceptov, metod in pristopov pri tehniki in tehnologiji;
- razumevanje sodobnih strategij vzgojno – izobraževalnega dela.

Prenesljive/ključne spretnosti in drugi atributi:

- kombinirana uporaba znanj načrtovanja, izvajanja in vrednotenja učne ure;
- poglobljanje znanja in razvoj novih idej v okviru projektne in konstrukcijske naloge.

Intended learning outcomes:

Knowledge and Understanding:

- understanding of strategies, concepts and methods for education of technical subjects,
- understanding of contemporary strategies in educational and teaching work.

Transferable/Key Skills and other attributes:

- combined use different skills for planning, executing and (self)evaluation of lessons,
- knowledge's for generation new ideas, in the frame of project and design work.

Metode poučevanja in učenja:

- frontalna predavanja,
- skupinsko delo,
- diskusija v elektronskem forumu in e - učenje,
- mikropouk,
- vodeno opazovanje (hospitacije)
- samostojno načrtovanje in poučevanje pod vodstvom didaktika

Learning and teaching methods:

- frontal lectures,
- work in a small groups,
- discussion in electronic forums, e-learning,
- microteaching,
- guided observation,
- autonomous planning and teaching under tutor supervision.

Načini ocenjevanja:

- ustni izpit;
- domače naloge;
- zaključna seminarska naloga;
- prisotnost na predavanjih, seminarjih in laboratorijskih vajah.

Delež (v %) /
Weight (in %)

40 %
20 %
20 %
20 %

Assessment:

- oral exam;
- home work;
- final seminar work;
- presence at lectures.

Materialni pogoji za izvedbo predmeta :

- predavalnica z multimedijskimi pripomočki;

Material conditions for subject realization

- lecture room with multimedia facilities,

Obveznosti študentov:

(pisni, ustni izpit, naloge, projekti)

- ustni izpit,
- opravljene domače naloge in zaključni seminar,
- opravljene domače naloge.

Students' commitments:

(written, oral examination, coursework, projects):

- oral exam,
- completed home works and final seminar work,
- completed home works.