



UČNI NAČRT PREDMETA / SUBJECT SPECIFICATION

Predmet:	Inženirska pedagogika
Subject Title:	Engineers pedagogy

Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
Izobraževalna tehnika		2	zimski
Educational Design		2	Autumn

Univerzitetna koda predmeta / University subject code:

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. vaje Labor work	Teren. vaje Field work	Samost. Delo Individ. Work	ECTS
30	15		15		120	6

Nosilec predmeta / Lecturer:

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

Pogoji za opravljanje študijskih obveznosti:

Osnovno znanje iz didaktike, pedagogike in psihologije.

Prerequisites:

Basic knowledge from didactics, pedagogy and psychology.

Vsebina:

Predavanja:

- Osnovna izhodišča sodobne inženirske pedagogike;
- Visokošolska didaktika in inženirska pedagogika;
- Sodobna inženirska pedagogika v evropskih kurikulumih;
- Sodobni inženirski praktikum - idejna zasnova, makro in mikro priprava,
- Osnove oblikovanja dela;
- Organizacija praktičnega izobraževanja v delovnih procesih;
- Načrtovanje in izvajanje učnega procesa;
- Uporaba sodobnih metod in tehnologij pri izvajanju učnega procesa;
- Sodobni načini priprave učnih gradiv;

Seminar:
Seminar aplikativno dopolnjuje vsebino predavanj z reševanjem praktičnih problemov iz izobraževalnega procesa v inženirski praksi .

Content (Syllabus outline):

Lectures:

- base origin of contemporary Engineer Pedagogy;
- High School didactics in face of Engineer Pedagogy;
- contemporary Engineer Pedagogy in the European Curriculum;
- contemporary Engineer practicum - planning of ideas, macro and micro plan;
- basis for work modelling;
- organize practical education and training in working process;
- planning and executing educational and training process;
- use of advance methods and technologies for executing educational and training process;
- Contemporary methods for preparing learning materials.

Seminar:
The seminar applicatively completes the contents of lectures through the solution of practical problems from educational process in Engineers practice.

Temeljni literatura in viri / Textbooks:

- Rečnik, F., Slivar, B., Aberšek, B. in ost., *Pedagoško-Andragoško Usposabljanje, Priročnik za usposabljanje mentorjev, CTU in Zavod RS za šolstvo, Ljubljana, 1999.*
- Aberšek, B., *Tehnologija sporazumevanja*, Fakulteta za strojništvo, Maribor, 2005.
- Malezinek, A., *Inženirska pedagogika, CPI, Ljubljana, 2000.*

Cilji:

- podati poglobljeno teoretično znanje s področja prepoznavanja osnovnih značilnosti delovne, tehničnega in proizvodno – tehničnega usposabljanja za delo,
- ugotoviti mesto inženirske pedagogike v visokošolski didaktiki;
- podati sodobne opredelitve konceptov in modelov v inženirski pedagogiki;
- prikazati praktično uporabo strategij vzgojno – izobraževalnih strategij pri usposabljanju za delo;
- razviti sposobnost za uspešno načrtovanje različnih oblik izobraževanja;
- razviti sposobnosti ljudi za samostojno in kompetentno reševanje praktičnih primerov načrtovanja in vrednotenja učinkov izobraževalnega dela.

Predvideni študijski rezultati:

Znanje in razumevanje:

- poznavanje splošnih kriterijev za načrtovanje delovnih, tehničnih in proizvodno – tehničnih usposabljanj;
- poznavanje osnovnih opredelitev, ki se nanašajo na koncepte in modele v inženirski pedagogiki;
- razumevanje pomena uporabe in priprave strokovne literature ter sodobnih pripomočkov za učinkovit in kakovosten izobraževalni proces.

Prenesljive/ključne spretnosti in drugi atributi:

- načrtovanje, priprava in izvedba različnih oblik usposabljanj;
- kombiniranje uporab različnih znanj za praktično načrtovanje strategije izobraževalnega dela;
- izdelava celotnega kurikula za določeno usposabljanje.

Metode poučevanja in učenja:

- frontalna predavanja,
- skupinsko delo;
- izdelava seminarske naloge,
- diskusije v elektronskem forumu,
- e-učenje.

Načini ocenjevanja:

- diskusije v elektronskem forumu,
- seminarske naloge,
- pisni izpit,

Objectives:

- to represent profound theoretical knowledge in the field of recognizing the basic characteristics of working, technical and production – technical education and training for work;
- found and located the place of Engineers pedagogy in high school didactics;
- to represent modern concept and model definitions of teaching and training in Engineers pedagogy;
- to show practical usage of training – educational strategies to qualify someone for work ;
- develop capability for successful planning and executing different form of education and training;
- to develop the peoples abilities for an independent and competent for solving of practical examples with regard to planning and evaluating the effects of educational work.

Intended learning outcomes:

Knowledge and understanding:

- knowledge of general criteria for planning the working, technical and production – technical training and education;
- knowledge of basic definitions, relating to the concepts and models in Engineers pedagogy;
- understanding of the meaning of using and developing professional literature and modern, as well as working teaching aids for a successful and qualitative training and educational process.

Transferable/Key Skills and other attributes:

- planning, preparing and executing different forms of education and training;
- combined usage of various knowledge for planning practical strategy for training – educational work;
- elaboration of complete curriculum for concrete course.

Teaching and learning methods:

- frontal lectures,
- work in small groups;
- seminar work,
- discussion in electronic forums,
- e-learning.

Delež (v %) /
Weight (in %)

Assessment methods:

- | | | |
|------------------------------------|------|------------------------------------|
| • diskusije v elektronskem forumu, | 20 % | • discussion in electronic forums, |
| • seminarske naloge, | 20 % | • seminar works, |
| • pisni izpit, | 30 % | • written examination, |