



OPIS PREDMETA / SUBJECT SPECIFICATION

Predmet:	Dimenzijske spremljave in vrednotenja tehnike in tehnologije
Subject Title:	Dimensions of Design and Technology attendance and evaluation

Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
Izobraževalna tehnika		3	zimski
Educational Design		3	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
20	10				150	6

Nosilec predmeta / Lecturer:

Samo Fošnarič

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

slovenski / Slovenian

slovenski / Slovenian

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

Ni posebnih pogojev.

No special prerequisites.

Vsebina:

- Pristopi k načrtovanju in spremljavi pouka tehnike in tehnologije: načrtovanje procesnega in učno ciljnega pristopa poučevanja, učenje, znanje in razumevanje naravoslovja in tehnike, Bloomova taksonomija vprašanj, nalog in dejavnosti pri tehniki in tehnologiji, Marzanova taksonomija.
- Elementi preverjanja in ocenjevanja znanja tehnike in tehnologije: koncept preverjanja in ocenjevanja znanja, prednosti in slabosti obstoječega sistema, oblikovanje vprašanj, nalog in dejavnosti za preverjanje in ocenjevanje tehnike in tehnologije, ciljno strukturiranje vprašanj in nalog za preverjanje in ocenjevanje tehnike in tehnologije, opisni kriteriji za preverjanje in ocenjevanje znanja.
- Priprava, izvedba in analiza preizkusov znanja in praktičnega dela iz tehnike in tehnologije: analiza obstoječih preizkusov znanja iz naravoslovja in tehnike, priprava novih, ustrezno strukturiranih preizkusov znanja iz tehnike in tehnologije.

Contents (Syllabus outline):

- Accession at planning and accompaniment of Science and Technologies: planning process and content-aims accession of teaching, Knowledge and understanding Design and Technology, Bloom taxonomy of questions, Marzan taxonomy.
- Elements of Design and Technology examining and estimating: concepts of examining and estimating knowledge, preference and weak point of our system, formations of questions, exercises and activitys for Design and Technology examining and estimating, aims forming of questions and exercises for Design and Technology examining and estimating, descriptive criterions and specifications for Design and Technology examining and estimating.
- Preparing, realization and analysis of knowledge tests and practical work from Design and Technology: analysis of existential tests of knowledge from Design and Technology. preparing a new, suitability structured tests of knowledge from Design and Technology.

Temeljni študijski viri / Textbooks:

- Ilc Rutar, Z. (2004). Pristopi k poučevanju, preverjanju in ocenjevanju znanja. Zavod Republike Slovenije za šolstvo. Ljubljana.
- Zupan, A. (ur.). (2005). Od opazovanja do znanja, od znanja h kompetencam. Zavod Republike Slovenije za šolstvo. Ljubljana.
- Schleicher, A. (ur.) and Vendramel, T.C. (ur.) (2003). The PISA 2003 assessment framework : mathematics, reading, science

- and problem solving knowledge and skills. Organisation for Economic Co-operation and Development. Paris.
- Fošnarič, S. in sod.(2003) Tehnika in tehnologija 7, Učbenik za 7. razred devetletne osnovne šole. Izotech, Limbuš.
  - Fošnarič, S. in sod.(2004) Tehnika in tehnologija 6, Učbenik za 6. razred devetletne osnovne šole. Izotech, Limbuš.
  - Fošnarič, S. in sod.(2004) Tehnika in tehnologija 8, Učbenik za 8. razred devetletne osnovne šole. Izotech, Limbuš.

### Cilji:

Cilj predmeta je študente seznaniti z različnimi taksonomijami tvorbe vprašanj, nalog in dejavnosti poučevanja tehnike in tehnologije ter jih naučiti ob upoštevanju zakonodaje pravilno spremljati in vrednotiti delo učencev pri tehniki in tehnologiji.

### Objectives:

The objective of this course is to acquaint students with different taxonomies of questions, exercises and activities in the Design and Technology and teach them, by consideration the legislation, how we can regularly attend and evaluate pupils work on the secondary level.

### Predvideni študijski rezultati:

#### Znanje in razumevanje:

Po zaključku tega predmeta bo študent sposoben

- izkazati znanje in razumevanje pomena šolske dokumentacije za spremljavo učenčevega dela,
- izkazati znanje in razumevanje dejavnikov procesnega in učno ciljnega pristopa poučevanja relacije: »Učenje - znanje - razumevanje« znotraj tehnike in tehnologije,
- identificirati in rešiti probleme povezane z uporabo različnih taksonomij za tvorbo vprašanj, nalog in dejavnosti pri tehniki in tehnologiji v osnovni šoli in jih uporabiti na drugih področjih,

#### Prenosljive/ključne spretnosti in drugi atributi:

- *Spretnosti komuniciranja:* ustni zagovor laboratorijskih vaj, pisno izražanje pri pisnem izpitu.
- *Uporaba informacijske tehnologije:* uporaba programskih orodij pri sestavi testov znanj iz tehnike in tehnologije.
- *Reševanje problemov:* sposobnost reševanja problemov, ki nastanejo pri oblikovanju vprašanj, nalog in dejavnosti za preverjanje in ocenjevanje tehnike in tehnologije s poudarkom na njihovi pripravi, izvedbi in analizi.

#### Intended learning outcomes:

#### Knowledge and understanding:

On completion of this course the student will be able to

- demonstrate knowledge and understanding of sense of school documentations for pupils accompaniment,
- demonstrate knowledge and understanding of process and content-aims accession of teaching on relation »Teaching-Knowledge-Understanding« inside of Design and Technology,
- identify and solve problems connection with usage different taxonomies for questions formations, exercises and activities related to Design and Technology in secondary school and use them in other areas,

#### Transferable/Key skills and other attributes:

- *Communication skills:* oral lab work defence, manner of expression at written examination.
- *Use of information technology:* use of software tools in the process of preparing Design and Technology knowledge tests.
- *Problem solving:* ability to solve problems which are a product of a question forming, exercising and other activities for examined and estimate Design and Technology with a point on their preparing, realization and analysis.

### Metode poučevanja in učenja:

- predavanja,
- laboratorijske vaje.

### Learning and teaching methods:

- lectures,
- lab work.

### Načini ocenjevanja:

Delež (v %) /  
Weight (in %)

### Assessment:

- opravljen seminar s portfoliom,
- pisni izpit.

- completed seminars (portfolio),
- written examination.

### Materialni pogoji za izvedbo predmeta :

- predavalnica z multimedijskimi pomočki;

### Material conditions for subject realization

- lecture room with multimedia facilities;

### Obveznosti študentov:

(pisni, ustni izpit, naloge, projekti)

- opravljen seminar s portfoliom,
- pisni izpit.

### Students' commitments:

(written, oral examination, coursework, projects):

- completed seminars (portfolio),
- written examination.