



Univerza v Mariboru

Fakulteta za naravoslovje
in matematiko

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	Tehniški praktikum 1
Course title:	Technology practicum 1

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Enovit magistrski študijski program Predmetni učitelj 2. stopnje	Izobraževalna tehnika	1	Poletni
Five-year master's degree program Subject Teacher	Technical education	1	Summer

Vrsta predmeta / Course type

Obvezni / Obligatory

Univerzitetna koda predmeta / University course code:

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Lab. vaje Laboratory work	Druge oblike študija	Samost. delo Individ. work	ECTS
	10		80		60	5

Nosilec predmeta / Lecturer:

Kosta Dolenc

Jeziki /
Languages:

Predavanja /
Lectures:

slovenski / slovene

Vaje / Tutorial:

slovenski / slovene

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

Osnovno znanje iz konstruiranja, gradiv in obdelav.

Prerequisites:

Base knowledge from designing, materials and productional technologies.

Vsebina:**Vaje in seminar:**

- Zagotavljanje varnosti in zdravja pri delu ter upoštevanje varnostnih ukrepov pri delu z materiali, orodji, stroji in napravami;
- prepoznavanje gradiv in njihove lastnosti in njihov vpliv na namembnost/uporabnost;
- pregled proizvodnih tehnologij;
- priprava in organizacija proizvodnje.
- uporabe tehniške in tehnološke dokumentacije;
- izdelovalni in preoblikovalni postopki za različna tehniška gradiva.

Content (Syllabus outline):**Tutorials and seminar:**

- Ensuring occupational safety and health and adhering to safety measures when working with materials, tools, machinery, and equipment;
- to identify engineering materials and their properties and their influence on the applicability;
- review of production technologies;
- production management.
- use of technical drawings and technological documentation by given requirements;
- drawing by computer using appropriate programme software;
- manufacturing process for different technical material.

Temeljni literatura in viri / Readings:

- Aberšek, B., Tehnologija in obdelava gradiv, Didakta, Radovljica, 1995.
- Glodež, S. (2012). Tehnično risanje (5. natis, str. 208). Tehniška založba Slovenije.

Dodatna literatura:

- Dolenc, K. (2025). Varnost pri delu v šolski delavnici: delovno gradivo za študente (str. 64 f.). Fakulteta za naravoslovje in matematiko.

Cilji in kompetence:

- podati in utrditi osnovno znanje o materialih, njihovih lastnostih in načinih obdelave;
- razumeti pomen pravilnega načrtovanja proizvodnega procesa;
- spoznati osnovne o strojih in orodjih za obdelavo;
- podati osnovne smernice o varnosti pri delu;
- poznati temeljna načela varnosti in zdravja pri delu ter jih upoštevati pri delu z materiali, orodji, stroji in napravami.

Objectives and competences:

- to provide and to strengthen the base knowledge about materials, their properties and manufacturing procedures;
- Understand the appropriate planning of manufacturing process;
- to provide the base knowledge about manufacturing machines and tools;
- to provide basic guidelines about work safety.
- understand the basic principles of occupational safety and health and apply them when working with materials, tools, machinery, and equipment.

Predvideni študijski rezultati:

Znanje in razumevanje:

- razumevanje osnovnih pojmov o materialih in načinih obdelave;
- razumevanje načinov obdelave nekovinskih gradiv (les, papir, usnje itd.);
- znati izdelati izdelke po pripravljeni tehniško-tehnološki dokumentaciji;

pozna in upošteva temeljna načela varnosti in zdravja pri delu.

Prenesljive/ključne spretnosti in drugi atributi:

- praktične spretnosti pri izdelavi izdelkov;
- pri delu uporablja upošteva predpisane varnostne ukrepe.

Intended learning outcomes:

Knowledge and understanding:

- understanding of basic concept of materials and manufacturing procedures;
- understanding of manufacturing processes of non-metallic materials (wood, paper, leather etc.);
- to know how to make product from technical-technological documentation;
- is familiar with and adheres to the basic principles of occupational safety and health..

Transferable/Key Skills and other attributes:

- practical skills by manufacturing products;
- follows the prescribed safety measures while working.

Metode poučevanja in učenja:

- laboratorijske vaje;
- seminar;
- sprotno preverjanje znanja.

Learning and teaching methods:

- laboratory work;
- seminar;
- formative assessment.

Načini ocenjevanja:

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

- laboratorijsko delo;

Delež (v %) /

Weight (in %)

100%**Assessment:**

Type (examination, oral, coursework, project):

- laboratory work

Reference nosilca / Lecturer's references:

Šorgo, A., Dolenc, K., & Ploj Virtič, M. (2022). Challenges and opportunities in incorporating entrepreneurial competences into pre-university schools for all. *International journal of management in education*, 16(1), 1–19. doi:10.1504/IJMIE.2022.10043285

Dolenc, K., & Fošnarič, S. (2023). Supporting the development of technical creativity among elementary education students during the COVID-19 pandemic. V *Perspectives on teacher education and development* (str. 487–509). University of Maribor, University Press.

<https://press.um.si/index.php/ump/catalog/book/770>

Zemljak, D., Aberšek, B., & Dolenc, K. (2021). Uporaba sodobnih obdelovalnih tehnologij pri pouku tehnike in tehnologije. V *Izzivi in priložnosti tehniškega izobraževanja* (str. 59–79). Univerzitetna založba. <https://press.um.si/index.php/ump/catalog/book/624>