

## UČNI NAČRT PREDMETA / COURSE SYLLABUS

<b>Predmet:</b>	Priprava patentne prijave
<b>Course title:</b>	Preparation of Patent Application

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Nanoznanosti in nanotehnologije, Informacijske in komunikacijske tehnologije, Ekotehnologije, Senzorske tehnologije, 3. stopnja		1	1
Nanosciences and Nanotechnologies, Information and Communication Technologies, Ecotechnologies, Sensor Technologies, 3 <sup>rd</sup> cycle		1	1

**Vrsta predmeta / Course type**

Izbirni / Elective

**Univerzitetna koda predmeta / University course code:**

SPL-879

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje work	Druge oblike študija	Samost. delo Individ. work	ECTS
15	15			15	105	5

*\*Navedena porazdelitev ur velja, če je vpisanih vsaj 15 študentov. Drugače se obseg izvedbe kontaktnih ur sorazmerno zmanjša in prenese v samostojno delo. / This distribution of hours is valid if at least 15 students are enrolled. Otherwise the contact hours are linearly reduced and transferred to individual work.*

**Nosilec predmeta / Lecturer:**

Prof. dr. Miran Mozetič

**Jeziki /**

**Languages:**

**Predavanja / Lectures:**

**Vaje / Tutorial:**

Slovenski ali angleški / Slovene or English

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

Znanje, ki je ekvivalentno izobrazbi druge stopnje ali univerzitetni izobrazbi s področja naravoslovja ali tehnologije.

**Prerequisites:**

Knowledge, which is equivalent to a second level or university degree from natural sciences or technology.

**Vsebina:**

- Kaj je patent?
- Uvod v patentno zakonodajo.
- Katero znanje je smiselno patentirati.
- Oblika in vsebina patentne prijave.
- Pregled stanja.
- Patentni zahtevki.
- Prijavni obrazci za slovenski in svetovni patent.
- Patentni zastopniki.
- Patentni ocenjevalci.
- Patenti po posameznih državah.
- Vaje iz priprave patentne prijave.

**Content (Syllabus outline):**

- What is a patent?
- Introduction to patent legislation.
- What knowledge should be patented.
- The form and content of patent.
- State of the art.
- Patent claims.
- Forms for Slovenian and international patent.
- Patent attorneys.
- Patent examiners.
- Patents in individual countries.
- Exercises from preparation of patent application.

## Temeljni literatura in viri / Readings:

### Books:

- Lodewijk Pessers, The Inventiveness Requirement in Patent Law. An Exploration of its Foundations and Functioning, Kluwer Law International, 2016, ISBN 9789041167316
- Sabine Kruspig, Claudia Schwarz, Legal Protection for Computer-Implemented Inventions. A Practical Guide to Software-Related Patents, Wolters Kluwer, 2017, ISBN 978-9041152299
- David Gougen, Patent it Yourself, 18th Edition, Nolo Publishing, Washington 2016, ISBN 978-1413322576

### Other sources:

- Urad za intelektualno lastnino RS (<http://www.uil-sipo.si/>) in reference, ki izhajajo iz te spletne strani (The Slovenian Intellectual Property Office and references thereafter)
- Evropski patentni urad (<http://www.epo.org/>) in reference, ki izhajajo iz te spletne strani (European Patent Office and references thereafter)
- Baze podatkov esp@cenet, DEPATISnet, WIPO Resources, PCT Gazette, USPTO Databases (Data bases)

### Cilji in kompetence:

#### Vpeljati študente v osnove:

- patentne zakonodaje v Sloveniji in tujini, posebej v EU in ZDA,
- načinov pregleda relevantnih patentov iz mednarodnih baz podatkov,
- prepoznavanja elementov patentabilnosti znanstvenih izsledkov,
- pisanja patentnih prijav,
- načinov za pripravo patentne prijave od osnovne zamisli do pridobitve patenta,
- seznanijo se tudi z zaščito patentnih pravic po posameznih državah.

#### Kompetence:

- presoditi patentabilnost rezultatov znanstvenega dela,
- izbrati rezultate znanstvenega dela, ki se vključijo v patentno prijavo,
- napovedati patentabilnost znanstvenih izsledkov,
- razlikovati med splošno dostopnimi znanstvenimi deli in rezultati, ki jih je moč tržiti,
- sestaviti kompletno patentno prijavo in jo poslati na patentni urad.

### Predvideni študijski rezultati:

- Študent se nauči pripraviti celovito patentno prijavo, ki je primerna za vložitev na patentni urad:
- sestavi kompletno besedilo patentne prijave,
  - izdelava slike po standardu, ki velja za patentne prijave,

### Objectives and competences:

#### To introduce students to the basics of:

- patent law in Slovenia and abroad, in particular EU countries and USA,
- searching for relevant patents using international databases,
- recognition of patentable elements in their scientific achievements,
- writing patent applications,
- methods for writing patent applications from original idea to submission,
- protection of intellectual rights in relevant countries.

#### Competences:

- judging of scientific results patentability,
- selecting the scientific results to be included in a patent application,
- forecasting patentability of specific scientific discoveries,
- distinguishing between public accessible scientific results and those suitable for protection by a patent application,
- writing a complete patent application and submission to a patent office.

### Intended learning outcomes:

- A student learns how to prepare a patent application and actually prepares an application suitable for submission to a patent office:
- assemble complete text of the patent application,

- sestavi pregled stanja po standardih, ki veljajo za patentne prijave,
- sestavi neodvisne in odvisne patentne zahtevke,
- pravilno izpolni formularje za oddajo patentne prijave,
- vloži patentno prijavo.

- prepares figures according to the patent standards,
- assemble the state-of-the art according to the patent standards,
- prepares independent and dependent patent claims,
- correctly fills the forms necessary for submission to a patent office
- files the patent application.

#### Metode poučevanja in učenja:

Poučevanje je interaktivno. Profesor s predavanji razloži, zakaj in kako pripraviti ustrezno patentno prijavo. Vsak študent poroča o svojih inovativnih rezultatih, razred pa razvije ustrezne patentne zahtevke in razpravlja o vsebini prijave. Posamezni študent pripravi osnutek patentne prijave, ki se izpili do stopnje, ko je primerna za vložitev na patentni urad. Vsebina določene patentne prijave se šteje za skrivnost, profesor in ostali študentje pa niso soavtorji vložene prijave.

#### Learning and teaching methods:

Teaching is interactive. The professor first gives lectures on why and how to prepare a patent application. Each student reports about his/her innovative results and the class develops appropriate claims and discuss the content of the application. The draft application is prepared by an individual student and the application is fine-tuned until suitable for submission. The subject of a particular patent application will remain secret and neither the professor nor other students are co-authors.

Delež (v %) /

#### Načini ocenjevanja:

Weight (in %)

#### Assessment:

Ustna predstavitev tematike raziskav posameznega študenta	20 %	Oral presentation of a student's research task.
Seminarska naloga	40 %	Seminar
Ustni zagovor seminarske naloge	40 %	Oral justification of the seminar

#### Reference nosilca / Lecturer's references:

Selected patents granted since 2010:

- LEHOCKÝ, Marián, STLOUKAL, Petr, SEDLARIK, Vladimír, HUMPOLÍČEK, Petr, VESEL, Alenka, MOZETIČ, Miran, ZAPLOTNIK, Rok, PRIMC, Gregor, KREIZLOVÁ, Dana. A device for generating UV radiation and the method of generating this radiation: EP3168860 (A1), 2017.
- VESEL, Alenka, MOZETIČ, Miran, ZAPLOTNIK, Rok. Device for high-frequency gas plasma excitation: DE 112012000015 (B4), 2016-04-21. Munchen: Deutsches Patent Office, 2016.
- JUNKAR, Ita, MOZETIČ, Miran, VESEL, Alenka, CVELBAR, Uroš, KRAŠNA, Metka, DOMANOVIČ, Dragoslav. Verfahren Zur Behandlung Biomedizinischer Implantate Zur Verbesserung Deren Antithrombogener Eigenschaften: patent AT 513072 B1 granted on 15 Feb. 2014.
- MOZETIČ, Miran, VESEL, Alenka, CVELBAR, Uroš. Method and device for local functionalization of polymer materials: patent US 8247039 B2, granted on 21 Aug. 2012.
- VESEL, Alenka, MOZETIČ, Miran. Method and device for measuring ultrahigh vacuum: patent US 7800376 (B2), granted on 21 Sept. 2010.