

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	Projektni management
Course title:	Project management

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Pravo in management nepremičnin - 2. stopnja		2	1
Law and Management of Real Estate - 2nd degree		2	1

Vrsta predmeta / Course type obvezni / mandatory

Univerzitetna koda predmeta / University course code:

Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje work	Druge oblike študija	Samost. delo Individ. work	ECTS
40	0	10	0	0	160	8

Nosilec predmeta / Lecturer: prof. ddr. David Bogataj / Prof. David Bogataj, PhD

Jeziki / Languages: **Predavanja / Lectures:** Slovenski jezik /Slovenian/Angleški jezik/English
Vaje / Tutorial:

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

Vpis v 2. letnik magistrskega študija.
Vsaj 80% prisotnosti na predavanjih.

Prerequisites:

Enrollment in the 2nd year of master study.
At least 80% attendance at lectures.

Vsebina: _____

Content (Syllabus outline): _____

Predmet Projektni management da sistematičen poglobljen pogled v vse vidike projektne managementa. Management projektov je vse pomembnejši vidik sodobnega poslovanja, zato predmet poudarja pomen razumevanja povezave med projekti in strateškimi cilji organizacije, ter prispevek projektov k ustvarjanju nove vrednosti organizacij. Predmet obravnava tudi sposobnosti vodenja projektne timov, potrebnih za uspešno vodenje projektov od začetka do konca. Management projektov je strokovna disciplina z lastnimi orodji, znanjem in veščinami. Koncepti so podkrepjeni s študijami primerov, ki zajemajo najrazličnejše vrste projektov in panoge, v našem, primeru pa še posebej področje gradnje, obnove in vzdrževanja napermičnin.

Ta predmet študentom omogoča vpogled v ključne vidike in izzive projektne managementa (PM). Študenti bodo razumeli pomen projektne managementa na vseh področjih dela, od organizacije posameznih dogodkov do gradnje objektov in komunalno opremljanje naselji. Razumeli bodo, da so veščine PM ključne za večino poklicev in da jih je mogoče uporabiti v večini podjetij.

Predmet na magistrski ravni študija obravnava orodja, ki izboljšujejo študentovo sposobnost načrtovanja, izvajanja in managementa projektov v njihovem celotnem življenjskem ciklu, od določitve obsega projekta do njegovega zaključka, vključno z metodologijami ocenjevanja časa in stroškov izvedbe projekta ter izvajanje nadzora vključno z merjenjem napredka in uspešnosti.

Predmet na magistrski ravni študija daje poseben poudarek učinkovitemu vodenju v običajno precej heterogenih skupinah, organizaciji in obvladovanju rizika, opredelitvi dejavnikov uspeha in dejavnikov, ki prispevajo k prekoračitvi časa in stroškov ter morebitnemu neuspehu projekta. V teku izvajanja bodo analizirani številni primeri projektov v različnih panogah s poudarkom na projektih gradnje in obnove nepremičnin, da bi študentje razumeli edinstvenost projektov in projektne vodenja.

The Project Management course provides a systematic, in-depth look at all aspects of project management. As project management is an increasingly important aspect of modern business, the course emphasises the importance of understanding the link between projects and an organisation's strategic objectives, and the contribution of projects to the creation of new value for organisations. The course also looks at the project team management skills needed to successfully manage projects from start to finish. Project management is a professional discipline with its own tools, knowledge and skills. The concepts are supported by case studies covering a wide range of project types and industries, in our case in particular the construction, renovation and maintenance of real estate.

This course provides students with an insight into the key aspects and challenges of project management (PM). Students will understand the importance of project management in all areas of work, from the organisation of individual events to the construction of buildings and the municipal amenities of settlements. They will understand that PM skills are essential for most professions and can be applied in most businesses.

The course at Master's level addresses tools that enhance the student's ability to plan, implement and manage projects throughout their life cycle, from project scoping to project completion, including methodologies for estimating project time and cost, and for exercising control, including measuring progress and performance.

The course at Masters level places particular emphasis on effective leadership in what are usually quite heterogeneous teams, organisation and risk management, identification of success factors and factors contributing to time and cost overruns and potential project failure. In the course of the course, a number of case studies of projects in different industries will be analysed, with a focus on real estate construction and renovation projects, to help students understand the uniqueness of projects and project management.

1.Študentje bodo osvežili naslednje zanje iz osnov projektnega managementa:

- Kaj je projekt?
- Kaj je projektni management?
- Razmerje med projektnim managementom, managementom programa, upravljanjem z naborom projektov, organizacijo projektnega managementa in strategijo.
- Prispevek projekta k vrednosti podjetja.
- Vloga projektnega managerja.

2. Projektni management v gradbeništvu in v poslovanju z nepremičninami.

3. Organizacijski vplivi na projektni management:

- Grozdi in slogi;
- Komunikacije;
- Strukture;
- Sredstva;
- Okolje;
- Deležniki in upravljanje;
- Projektni tim;
- Življenjski cikel projekta.

4. Študentje bodo pridobili poglobljeno znanje kako s sistemskim pristopom k projektnemu managementu ustvariti nove vrednosti. Poglobljeno znanje vključuje obvladovanje:

- procesov projektnega managementa ter integracije procesov pri projektnem managementu;
- kvantitativnih metod v procesih projektnega managementa in integracije: statistične metode in napovedovanje, grafi in mreže;
- obsega projekta in časovno usklajevanje projektnih aktivnosti;
- uporabe kvantitativnih metode pri časovnem usklajevanju projektnih aktivnosti (grafi, mreže);
- stroškov projekta ter analizo neto sedanje vrednosti aktivnosti in denarnih tokov;
- upravljanja s človeškimi viri v okviru projekta in managementa kakovosti;
- managementa komunikacij v okviru projekta;
- rizikov v okviru projekta;
- dobaviteljev v okviru projekta;
- deležnikov v okviru projekta.

1.Students will be refreshed on the following project management basics:

- What is a project?
- What is project management?
- The relationship between project management, programme management, project set management, project management organisation and strategy.
- The contribution of the project to the value of the company.
- The role of the project manager.

2. Project management in construction and real estate.

3. Organisational influences on project management:

- Clusters and styles;
- Communications;
- Structures;
- Resources;
- Environment;
- Participants and governance;
- Project team;
- Project life cycle.

4. Students will gain an in-depth knowledge of how to create new value through a systematic approach to project management. In-depth knowledge includes mastering:

- Project management processes and integration of project management processes;
- quantitative methods in project management processes and integration: statistical methods and forecasting, graphs and networks;
- project scope and timing of project activities;
- the use of quantitative methods in the timing of project activities (graphs, grids);
- project costs and analysis of the net present value of activities and cash flows;
- human resources management in the project and quality management;
- project communication management;
- project risk management;
- suppliers in the context of the project;
- stakeholders in the context of the project.

Temeljni literatura in viri / Readings:

- Jack R. Meredith, Scott M. Shafer, Samuel J. Mantel Jr. Project Management: A Managerial Approach 11th Edition, Wiley, 2021
- A guide to the project management body of knowledge : (PMBOK guide) 7th Edition, Newtown Square: Project Management Institute, 2021
- Stare, Aljaž, PROJEKTNI MANAGEMENT, Teorija in praksa, Založba agencija POTI, november 2011

Priporočena literatura:

Larson, E.W. and Gray, C.F. (2018), Project management the managerial process, Eight Edition, McGraw-Hill

Ostala literatura:

- Hauc, A.: Projektni management, Ljubljana : GV založba, 2002
- Izbrani članki indeskirani v Wos in Scopus

Cilji in kompetence:

Študenti/ke bodo pridobili/e naslednje predmetno specifične kompetence:

- razumevanje potenciala, ki jih projekti predstavljajo za ustvarjanja nove vrednosti
- razumevanje pomena upravljanja s človeškimi viri v večini industrij in podjetij ter uporaba posebnih orodij, modelov in procesov;
- razumevanje pomena uporabe teh metodologij in orodij v štirih različnih fazah življenjskega cikla projekta (faza opredelitve, načrtovanja, izvedbe in zaključka projekta);
- razumevanje pomena vodenja, zlasti v heterogenih in virtualnih skupinah, ter upravljanja in pristopov k reševanju konfliktov;
- razumevanje ključnih vzvodov za merjenje in nadaljnje ukrepanje in ključnih kazalnikov uspešnosti;
- prepoznavanje in analiziranje dejavnikov uspešnih projektov ter razlogov za neuspeh na podlagi konkretnih študij primerov v okviru učinkovitega obvladovanja tveganj;
- razume strukturo računovodskih izkazov, ki se nanašajo na izkaz poslovnega izida, izkaz denarnih tokov in bilanco stanja (Študentje morajo prepoznati pozitivne in opozorilne znake v računovodskih izkazih kot pokazatelje težav, ki jih mora obravnavati poslovodstvo);
- razumevanje pomena vrednot in kulturnih razlik, zlasti pri mednarodnih projektih.

Študenti/ke bodo pridobili/e naslednje splošne kompetence:

Objectives and competences:

Students will gain the following subjects specific competences:

- . understanding the value creation potential of projects
- understanding the importance of human resources management in most industries and businesses, and the use of specific tools, models and processes;
- understanding the importance of applying these methodologies and tools in the four different phases of the project lifecycle (definition, planning, execution and closure);
- understanding the importance of leadership, especially in heterogeneous and virtual teams, and of management and conflict resolution approaches;
- understanding of key levers for measurement and follow-up and key performance indicators;
- Identifying and analysing the success factors of successful projects and the reasons for failure through concrete case studies in the context of effective risk management;
- understand the structure of financial statements relating to the income statement, cash flow statement and balance sheet (Students should identify positive and warning signs in financial statements as indicators of problems that need to be addressed by management);
- understanding the importance of values and cultural differences, especially in international projects.

- uporaba primernih metod pri raziskavah v okviru projektnega managementa;
- sposobnost predstavitve zapletenih zadev na dobro strukturiran in razumljiv način ter s skladnimi in logičnimi zaključki;
- timsko delo pri razvoju in manageriranju projektov;
- uporaba procesov projektnega managementa pri ustvarjanju nove vrednosti v okviru projekta;
- uporaba procesov projektnega managementa pri upravljanju z obsegom projekta;
- uporaba procesov projektnega managementa pri upravljanju z sporedom/urnikom projekta;
- uporaba procesov projektnega managementa pri upravljanju s stroški projekta;
- uporaba procesov projektnega managementa pri upravljanju z projektnim timom;
- uporaba procesov projektnega managementa pri upravljanju z riziki v okviru projekta;
- razvoj komunikacijskih sposobnosti in kompetenc pri managementu projektov.

Študentje se bodo naučili analizirati kompleksnosti projektov na podlagi znanja in dejstev ter spoštovanja različnih mnenj. Pričakuje se:

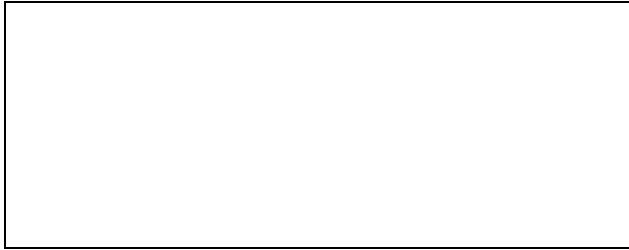
- odprt odnos do medkulturnega timskega dela
- uporabe ustreznih metod projektnega managementa, izvedbe procesov ter analize in sinteze;
- sposobnost skupinskega dela in pripravljenosti za sodelovanja pri reševanju konkretnih primerov s področja projektnega managementa;
- razvoj komunikacijskih sposobnosti in veščin pri managementu projektov;
- razvoj veščin ustvarjanje nove vrednosti z uporabo procesov projektnega managementa;
- razvoj ustvarjalnosti in sposobnosti premagovanja problemov pri uporabi procesov projektnega managementa;
- razvoj sposobnost vodenja pri reševanju konkretnih primerov s področja projektnega managementa;
- razvoj sposobnosti uporabe interdisciplinarnih znanj pri reševanju zadev s področja projektnega managementa;
- sposobnost uporabe projektnega managementa pri upravljanju s človeškimi viri in reševanju sporov v delovnem okolju.

Students will gain the following general competences::

- Applying appropriate research methods in the context of project management;
- the ability to present complex issues in a well-structured and comprehensible manner and with coherent and logical conclusions;
- working in a team in project development and management;
- applying project management processes to create new value within a project;
- applying project management processes to manage the scope of a project;
- Applying project management processes to project schedule/schedule management;
- use of project management processes in project cost management;
- the use of project management processes in project team management;
- the use of project management processes in project risk management;
- developing communication skills and competences in project management.

Students will learn to analyse the complexities of projects on the basis of knowledge and facts and respecting different opinions. Expected:

- an open attitude towards intercultural teamwork
- the use of appropriate project management methods, process implementation and analysis and synthesis;
- ability to work in teams and willingness to work collaboratively to solve concrete cases in the field of project management;
- development of communication and project management skills;
- development of skills in creating new value through the application of project management processes;
- developing creativity and problem-solving skills in the application of project management processes;
- developing leadership skills in solving concrete cases in the field of project management;
- developing the ability to apply interdisciplinary skills in solving project management cases;
- the ability to apply project management to human resource management and conflict



resolution in the work environment.

Predvideni študijski rezultati:

Znanje in razumevanje:

Študent/študentka:

- Osveži znanja osnovnih pojmov projektnega managementa;
- Osveži temeljna vprašanja povezana z ustvarjanjem nove vrednosti v okviru projektov;
- Razvije poglobljeno znanje o procesih projektnega managementa;
- Razvije kritično razumevanje projektnega managementa;
- Zmožen/na je kritične presoje ter analize in interpretacije dogodkov in usmeritev s področja projektnega managementa;
- Sposoben je kritično oceniti in se opredeliti do prakse projektnega managementa;
- Sposoben je kritičnega presojanja, analizirati in razlagati dogodke in politike, povezane z vidiki projektnega managementa;
- Pozna in uporablja napredne metodološke pristope pri raziskovanju na področju managementa projektov in ustvarjanja nove vrednosti v okviru projektnega managementa.
- Sposoben je predstaviti zapletenih zadev na dobro strukturiran in razumljiv način ter s skladnimi in logičnimi zaključki;
- Uporablja je sposoben ustrezne metode navajanja in bibliografske metode;
- Izkazuje učinkovito in povezovalno timsko delo.

Intended learning outcomes:

Knowledge and understanding:

Student / student:

- Refresh knowledge of basic project management concepts;
- Refreshes the fundamental issues related to the creation of new value in projects;
- Develops an in-depth knowledge of project management processes;
- Develop a critical understanding of project management;
- Be able to make critical judgements and analyse and interpret developments and trends in the field of project management;
- Is able to critically evaluate and reflect on the practice of project management;
- Be able to critically assess, analyse and interpret events and policies related to aspects of project management;
- Knows and applies advanced methodological approaches to project management research and value creation in the context of project management.
- Be able to present complex issues in a well-structured and comprehensible manner and with coherent and logical conclusions;
- Be able to use appropriate citation and bibliographic methods;
- Demonstrates effective and cohesive teamwork.

Metode poučevanja in učenja:**Oblike dela:**

- Frontalna oblika poučevanja
 Delo v manjših skupinah oz. v dvojicah
 Samostojno delo študentov
 e-učenje
 Kombiniran način študija
 drugo (vpišite) _____

Metode (načini) dela:

- Razlaga
 Razgovor/ diskusija/debata
 Delo z besedilom
 Proučevanje primera
 Igra vlog
 Druge vrste nastopov študentov
 Reševanje nalog
 Študijski obiski podjetij ipd.)
 Vključevanje gostov iz prakse
 Udeležba na okrogli mizi, na konferenci

Learning and teaching methods:**Types of learning/teaching:**

- Frontal** teaching
 Work in smaller groups or pair work
 Independent students work
 e-learning
 Combined study mode
 other _____

Teaching methods:

- Explanation
 Conversation/discussion/debate
 Work with texts
 Case studies
 Role-play
 Different presentation
 Solving exercises
 Field work (e.g. company visits)
 Inviting guests from companies
 Attending round table and conference

Načini ocenjevanja:

Delež (v %) /

Weight (in %)

Assessment:

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

Pisni izpit in ustni izpit

Seminarska naloga

Prisotnost na predavanjih

40%**40%****20%**

Type (examination, oral, coursework, project):

Written examination; and seminar paper.

Attendance of lectures

Reference nosilca / Lecturer's references:

- CAMPUZANO BOLARÍN, Francisco, MARIN-GARCÍA, Fulgencio, MORENO-NICOLÁS, José Andrés, BOGATAJ, Marija, BOGATAJ, David. Network Simulation Method for the evaluation of perturbed supply chains on a finite horizon. Central European Journal of Operations Research. 2021, vol. 29, str. 823-839. ISSN 1435-246X. DOI: 10.1007/s10100-021-00748-3. [COBISS.SI-ID 60889091]
- GRAH, Barbara, DIMOVSKI, Vlado, PENDER, Sandra, COLNAR, Simon, BOGATAJ, David. Sustainability of health and care systems : modelling the nursing employment dynamics in an ageing population. Društvena istraživanja : časopis za opća društvena pitanja. 2021, vol. 30, iss. 2, str. 379-400. ISSN 1330-0288. DOI: 10.5559/di.30.2.10. [COBISS.SI-ID 72141571]
- CAMPUZANO BOLARÍN, Francisco, MARIN-GARCÍA, Fulgencio, MORENO-NICOLÁS, José Andrés, BOGATAJ, Marija, BOGATAJ, David. Impacts of variable interest rates on the market areas of a spatial duopoly in supply chains operating on the finite horizon. International journal of production economics. [Print ed.]. Jun. 2021, vol. 236, art. 108109, 11 str. ISSN 0925-5273. DOI: 10.1016/j.ijpe.2021.108109. [COBISS.SI-ID 57478659]
- BOGATAJ, David, ROGELJ, Valerija, BOGATAJ, Marija, DROBEŽ, Eneja. Housing equity withdrawal for development of assisted-living facilities. Facilities. [in press] 2020. ISSN 0263-2772. DOI: 10.1108/F-10-2018-0125. [COBISS.SI-ID 24792323]

5. CALZAVARA, Martina, BATTINI, Daria, BOGATAJ, David, SGARBOSSA, Fabio, ZENNARO, Ilenia. Ageing workforce management in manufacturing systems : state of the art and future research agenda. *International Journal of Production Research*. 2020, vol. 58, iss. 3, str. 729-747. ISSN 0020-7543. DOI: 10.1080/00207543.2019.1600759. [COBISS.SI-ID 25069286]
 6. KAVŠEK, Marta, OVSENIK, Marija, BOGATAJ, David. Vrednotenje življenjskega sloga in prostorsko oskrbnih potreb starejših. *Revija za univerzalno odličnost : RUO*. jun. 2020, letn. 9, št.2, str. 153-169. ISSN 2232-5204. DOI: 10.37886/ruo.2020.009. [COBISS.SI-ID 20332291]
 7. BOGATAJ, David, BOGATAJ, Marija, DROBNE, Samo. Sustainability of an activity node in global supply chains. *Sustainability*. 2020, vol. 12, iss. 21, art. 8881, 23 str. ISSN 2071-1050. <https://www.mdpi.com/2071-1050/12/21/8881>, DOI: 10.3390/su12218881. [COBISS.SI-ID 34184707]
 8. BOGATAJ, David, HUDOKLIN, Domen, BOGATAJ, Marija, DIMOVSKI, Vlado, COLNAR, Simon. Risk mitigation in a meat supply chain with options of redirection. *Sustainability*. 2020, vol. 12, art. 8690, 23 str. ISSN 2071-1050. DOI: 10.3390/su12208690. [COBISS.SI-ID 33370371]
- financer: EC, H2020, 873077, EU, Models and Methods for an active ageing workforce, MAIA
9. BOGATAJ, David, BOGATAJ, Marija, DROBNE, Samo. Interactions between flows of human resources in functional regions and flows of inventories in dynamic processes of global supply chains. *International journal of production economics*. [Print ed.]. 2019, vol. 209, str. 215-225, ilustr. ISSN 0925-5273. DOI: 10.1016/j.ijpe.2017.10.018. [COBISS.SI-ID 8180321]
 10. BOGATAJ, David, BATTINI, Daria, CALZAVARA, Martina, PERSONA, Alessandro. The ageing workforce challenge : investments in collaborative robots or contribution to pension schemes, from the multi-echelon perspective. *International journal of production economics*. [Print ed.]. Apr. 2019, vol. 210, str. 97-106, ilustr. ISSN 0925-5273. <https://www.sciencedirect.com/science/article/pii/S0925527318304948?via%3Dihub>, DOI: 10.1016/j.ijpe.2018.12.016. [COBISS.SI-ID 39869445]
 11. BOGATAJ, David, BOGATAJ, Marija. NPV approach to material requirements planning theory : a 50-year review of these research achievements. *International Journal of Production Research*. 2019, vol. 57, iss. 15/16, str. 5137-5153. ISSN 0020-7543. DOI: 10.1080/00207543.2018.1524167. [COBISS.SI-ID 39751173]