

DESCRIPTION OF A STUDY COURSE – SYLLABUS

Title of a course	Decision support information system				
Head of course	PhD Sabrina Šuman, Senior Lecturer				
Study programme	Specialist professional graduate study Entrepreneurship				
Status of a course	Elective				
Year of study	2.	Semester	III.	ECTS credits	5
Teaching plan (L + E + S+ Pr)	1+2+1+0				
Goals of a course					
Adopt basic terminology and apply business performance management methods through working in selected software tools.					
Conditions for enrolling course					
No conditions					
Learning outcomes on a level of a study programme which includes course					
<p>Outcome 1: Recommend solutions for business operations improvement by analysing business indicators and reports.</p> <p>Outcome 3: Apply management and marketing tools in managing business processes.</p> <p>Outcome 4: Suggest possible responses to changes in the business environment.</p> <p>Outcome 5: Monitor and analyse market needs and trends and propose an appropriate business model.</p> <p>Outcome 8: Propose ways to manage human and other business resources.</p> <p>Outcome 10: Apply sales and negotiation strategies and tactics to improve business processes.</p> <p>Outcome 15: Analyse and design improvements to business procedures and processes.</p>					
Expected learning outcomes on a level of a course					
<ol style="list-style-type: none"> 1. Explain the need for a systematic mindset in business operations and the establishment of a business intelligence system 2. Explain the importance of managing business performance and give examples of key performance indicators 3. Characterize the big data era and list the problems and business needs specific to that era 4. Select appropriate source data and interpret the used statistical methods 5. Create multi-dimensional interactive business reports 6. Evaluate the best type of visualization for a report 7. Develop a model and sensitivity analysis of multi-criteria decision-making with the chosen method 					
Content of a course					
<p>Definition of decision-making. Systematisation of decision-making problem. Role and function of managers on all levels of organisation. Evolution of decision-support systems. Concepts, methodologies and technologies for decision-support. Sorts of analytics: descriptive, predictive, prescriptive.</p> <p>Business performance management: tools of business intelligence, business performance indicators, PDCA circle, six sigma.</p> <p>Decision-support system's modelling. Big data era, development of Internet of Things, difficulties in storing new data types, examples of modern data architecture.</p>					
Teaching modes	<input checked="" type="checkbox"/> lectures <input type="checkbox"/> auditory exercises <input checked="" type="checkbox"/> seminars and workshops <input type="checkbox"/> distance learning <input type="checkbox"/> field classes		<input checked="" type="checkbox"/> individual assignments <input type="checkbox"/> multimedia and network <input type="checkbox"/> laboratory <input type="checkbox"/> supervisor's work <input type="checkbox"/> other _____		
Comments					
Students' obligations					

The requirement to take the full exam is a completed task within the given time limit

Grading, evaluation and monitoring of students' work continuously during lectures and exams

Grading is based upon evaluation of course's learning outcomes' adoption. Grading is performed continuously during lectures and/or during exam, in compliance with the provisions of Regulation on the assessment of students.

Continuous check-up:

Outcomes	Written test	Project 1	Project 2	Home assignment	Threshold	Max
Outcome 1	10%				5%	10%
Outcome 2	10%				5%	10%
Outcome 3	10%				5%	10%
Outcome 4				15%	7,5%	15%
Outcome 5		20%			10%	20%
Outcome 6		5%		5%	5%	10%
Outcome 7			25%		12,5%	25%
Percentage of ECTS	1,5	1,25	1,25	1	-	-
Total	30%	25%	25%	20%	50 %	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

Exam term:

Outcomes	Theory (oral / written)	Practical tasks	Threshold	Max
Outcome 1	10 %		5%	10 %
Outcome 2	10 %		5%	10 %
Outcome 3	10 %		5%	10 %
Outcome 4	20 %		10%	20 %
Outcome 5		20%	10%	20 %
Outcome 6		5%	2,5%	5%
Outcome 7		25%	12,5%	25%
Percentage of ECTS	2,5	2,5	-	-
Total	50 %	50 %	50 %	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

Grading:

A student has passed the exam if he has acquired at least 50% of anticipated credits of a specific learning outcome.

If a student has passed learning outcomes of all courses, the accomplished credits (percentages) of all passed learning outcomes are being added, while the final grade is defined upon following table:

Range of credits (percentages)	Numerical grade	ECTS grade
90,00 – 100,00	Excellent (5)	A
75,00 – 89,99	Very good (4)	B
60,00 – 74,99	Good (3)	C
50,00 – 59,99	Sufficient (2)	D
0,00 – 49,99	Insufficient (1)	F

Obligatory literature

- Šuman, S., Sustavi za potporu odlučivanju i upravljanju- teorija i riješeni primjeri, Veleučilište u Rijeci, 2016. Skripta dostupna u knjižnici.
- Šuman, S., Sustavi poslovne inteligencije, Veleučilište u Rijeci, 2017. Skripta- Dostupno na nastavnim materijalima kolegija.

Additional literature

1. Turban, E., Sharda, R., Delen, D., Decision support and business intelligence systems, Pearson (international edition), 9-th edition, 2011.

