Course description

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| **1. GENERAL INFORMATION** | | | | | | | | | | | | | | | |
| 1.1. Course teacher | Ivan Balabanic, PhD | | | | | | 1.6. Year of the study | | | | | 1 | | | |
| 1.2. Name of the course | Learning social media analytics | | | | | | 1.7. ECTS credits | | | | | 3 | | | |
| 1.3. Associate teachers | Luka Sikic, PhD | | | | | | 1.8. Type of instruction (number of hours L + E + S + e-learning) | | | | | 15+15+0 | | | |
| 1.4. Study programme (undergraduate, graduate, integrated) | Graduate | | | | | | 1.9. Expected enrolment in the course | | | | | 15 | | | |
| 1.5. Status of the course | mandatory | | elective | | | | 1.10. Level of application of e-learning (level 1, 2, 3), percentage of online instruction (max. 20%) | | | | | 1 | | | |
| **2.COUSE DESCRIPTION** | | | | | | | | | | | | | | | |
| 2.1. Course objectives | The social media has become a powerful tool to create knowledge and propagate opinions. Simultaneously, social media has created an unprecedented opportunity for companies to engage real-time interactions with consumers. Furthermore, the size and richness of social media data has provided a deep reservoir of insights to understand the society and transform business and marketing operations.  *The learning social media analytics* course will enable students to understand social media and grasp the analytics tools to leverage social media data. The course will describe the current state and trends in the social media space, clarify the technology infrastructure for social media platforms and show how AI, linguistic and statistical methods can be used to study relevant social media topics. The course will introduce state of the art tools for social media analysis such as: data visualization, sentiment analysis, topic modelling, social network analysis, machine learning, natural language processing, neural networks. This toolset will equip students with the ability to independently interpret, analyse and develop social media strategy. | | | | | | | | | | | | | | |
| 2.2. Enrolment requirements and/or entry competences required for the course | Introductory statistical analysis | | | | | | | | | | | | | | |
| 2.3. Learning outcomes at the level of the programme to which the course contributes |  | | | | | | | | | | | | | | |
| 2.4. Expected learning outcomes at the level of the course (3 to 10 learning outcomes) | 1. Understand the state and contemporary trends in the social media space.  2. Understand ICT infrastructure for social media.  3. Understand and apply key concepts in social media metrics.  4. Understand specific and unique aspects of the particular social media platform.  5. Identify thematic relevance in the analysis social media analysis.  6. Interpret the results of peer-reviewed frontier social media analysis.  6. Ability to collect, clean and prepare social media data for analysis.  7. Apply state of the art methods and use adequate tools for the social media analysis.  8. Monitor consumers and competitors and glean deeper consumer insights based on advanced social media data modeling.  9. Develop social media strategy and measure social media campaign effectiveness.  10. Make better business decisions by leveraging social media data | | | | | | | | | | | | | | |
| 2.5. Course content (syllabus) | 1. Course introduction and overview  2. Current state and latest trends in the social media space  3. IT prerequisites and programming language syntax (*R, Python*) for the social media analysis  4. *Big Data* infrastructure and data acquisition procedures (*API, Web/Screen Scraping*) for social media analysis  5. Methods for social media analysis I (*descriptive statistics, visualization*)  6. Methods for social media analysis II (*network analysis, Natural Language Processing*)  7. Methods for social media analysis III (*time series, machine learning, deep learning, neural networks*)  8. General principles of digital marketing (*key performance indicators, search engine optimization, social media listening*)  9. Twitter: trend formation and event detection  10. Facebook: analysis of the institutional, political and brand reach  11. Instagram: influencer market space and image recognition  12. LinkedIn: business network and geolocation analysis  13. Online portals and forums: text analysis and application od NLP methods  14. Traditional media (newspaper, TV, radio): public sentiment analysis and opinion polarity  15. Future trends in social media | | | | | | | | | | | | | | |
| 2.6. Format of instruction: | lectures  seminars and workshops  exercises  online in entirety  partial e-learning  field work | | | | | independent assignments  multimedia and the internet  laboratory  work with mentor  (other) | | | | | 2.7. Comments: | | | | |
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| 2.8. Student responsibilities | Attending at least 12 content units (lectures), submitting the empirical project | | | | | | | | | | | | | | |
| 2.9. Monitoring student work | Class attendance | YES | |  | Research | | | YES |  | Oral exam | | | |  | NO |
| Experimental work |  | | NO | Report | | |  | NO | (other) | | | | YES | NO |
| Essay |  | | NO | Seminar paper | | |  | NO | (other) | | | | YES | NO |
| Preliminary exam |  | | NO | Practical work | | | YES |  | (other) | | | | YES | NO |
| Project | YES | |  | Written exam | | |  | NO | ECTS credits (total) | | | | 3 | |
| 2.10. Required literature (available in the library and/or via other media) | **Title** | | | | | | | | | | | **Number of copies in the library** | **Availability via other media** | | |
| Klassen,M., Russel, M.A. (2019). Mining the Social Web. O'Reilly Media. | | | | | | | | | | |  |  | | |
| Bali,R., Sarkar, D. ,Sharma, T., (2017). Learning Social Media Analytics with R. Packt Publishing. | | | | | | | | | | |  |  | | |
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| 2.11. Optional literature | Szabo, G., Polatkan, G., Boykin, P. O., Chalkiopoulos,A. (2018). Social Media Data Mining and Analytics. Wiley. | | | | | | | | | | | | | | |
|  | Goncalves, A. (2017). Social Media Analytics Strategy -Using Data to Optimize Business Performance. Apress. | | | | | | | | | | | | | | |
|  | Bonzanini, B. (2016). Mastering Social Media Mining with Python. Packt Publishing. | | | | | | | | | | | | | | |
| 2.12. Other (as the proposer wishes to add) |  | | | | | | | | | | | | | | |