



Department of Business Informatics
Subject: Emergent topics in Business Informatics
Academic Year: 2026-2027
Study program: Business Information Systems

SYLLABUS

Topic 1. Algorithms for optimization

Topic 2. Computational intelligence methods for Machine Learning

Topic 3. Game theoretic methods for Machine Learning

Topic 4. Acceptance and adoption of the new technologies (e.g., e/m-learning)

Topic 5. Social support vs. exposure. Social media paradoxical role during emergency situations

Topic 6. Business Analytics Applicability

Topic 7. Evolving Patterns in Recommender Systems and Personalization Technologies

Topic 8. Exploring User Behavior on Online Social Networks and E-commerce Platforms

Topic 9. Understanding the Impact of Social Media User Behavior on the Spread of Misinformation

References:

- Delen, D. (2015), *Real-World Data Mining: Applied Business Analytics and Decision Making*, 1st ed., Financial Times Press.
- Sitar-Taut, D.-A. and Mican, D. (2021), "Mobile learning acceptance and use in higher education during social distancing circumstances: an expansion and customization of UTAUT2", *Online Information Review*, Vol. 45 No. 5, pp. 1000–1019, doi: 10.1108/OIR-01-2021-0017.
- Sitar-Taut, D.-A., & Mican, D. (2023). Social media exposure assessment: influence on attitudes toward generic vaccination during the COVID-19 pandemic. *Online Information Review*, 47(1), 138–161. available at: <https://doi.org/10.1108/OIR-11-2021-0621>
- Sitar-Tăut, D. (2021), "Mobile learning acceptance in social distancing during the COVID-19 outbreak: The mediation effect of hedonic motivation", *Human Behavior and Emerging Technologies*, Vol. 3 No. 3, pp. 347–459, doi: 10.1002/hbe2.261.
- Sitar-Taut, D.-A., Mican, D., Frömbing, L., & Sarstedt, M. (2023). Digital Socialligators? Social Media-Induced Perceived Support During the Transition to the COVID-19 Lockdown. *Social Science Computer Review*, 41(3), 748–767. <https://doi.org/10.1177/08944393211065872>
- Kochenderfer, M. J., & Wheeler, T. A. (2019). *Algorithms for Optimization*. The MIT Press.
- Maschler, M., Solan, E., & Zamir, S. (2020). *Game Theory*. Cambridge University Press.
- Suciu, M.-A., & Lung, R. I. (2020). Nash Equilibrium as a Solution in Supervised Classification. In T. Bäck, M. Preuss, A. Deutz, H. Wang, C. Doerr, M. Emmerich, & H. Trautmann (Eds.), *Parallel Problem Solving from Nature – PPSN XVI* (pp. 539–551). Springer International Publishing.
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