Course description form (syllabus form) – for 1st and 2nd cycle studies

**A. General data**

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| **Name of the field** | **Content**  |
| Course title | Business Process Management – from enterprise design to information system design  |
| Organizational unit: | Faculty of Management |
| Organizational unit where the course is offered: |   |
| Course ID |   |
| Erasmus code / ISCED | Information Technology 04200 |
| Course groups |   |
| Period when the course is offered  | Summer semester 2024/25 |
| Short description | The main goal of the course is to prepare students to understand the mechanisms of integrating technology with the business aspects of an organization. Students will learn the basic principles of business process management, which are the link between the design of an organization (defined in business/process architecture) and the design of information systems. The course covers the stages of information system design and implementation and their impact on the business elements of the organization (structure, culture, and other processes). The concept of a Digital Twin of an Organization is also discussed. |
| Type of course: | Seminar, 14 hours |
| Full description | 1. Introduction to system thinking and conceptual modeling
2. Understanding Business Process Management (BPM)
	1. Definition of BPM and its evolution
	2. Process, its attributes, and types
	3. Hierarchy of processes
	4. Process management life cycle
	5. Process maturity of an organization
3. Understanding principles of Enterprise Design
	1. Business model and strategic alignment
	2. Enterprise structure: function, project, process-oriented
	3. Business architecture vs. process architecture
4. Understanding IT solutions design
	1. Steps in the IT solutions design process
	2. Requirements elicitation - business requirements, stakeholders’ requirements, solution requirements (functional, non-functional)
5. Integration of IT solutions design with enterprise design
	1. Business – IT alignment during IT solutions design
	2. Impact of information technology on non-technological aspects of an enterprise
6. A Digital Twin of an Organization (DTO)
	1. The concept of DTO and its key features (performance monitoring, simulation, optimization)
	2. Enabling technology
7. Challenges and Future Trends
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| Prerequisites | Formal  |  No  |
| Initial  | The course is intended for master’s level students |
| Learning outcomes | Student, after completing the course:K\_W01 Knows and understands the concepts and principles of business process managementK\_W02. Understands the principles of Enterprise Design and the need to align all enterprise resources including technology. K\_W02. Understands the process of IT solution design and the requirements elicitation process. K\_U01 Can cooperate with IT teams to transfer process requirements while designing supporting IT tools. K\_U02 Can recognize interrelations between business processes and their alignment with strategy K\_U03 Can see and discuss relationships between processes, technology, and people subsystems in organizationsK\_S01 Can better understand the perspective of IT specialists.K\_S02 Can self-educate, develop qualifications, and support others in this area. |
| ECTS credit allocation (and other scores) |  2 |
| Assessment methods and assessment criteria | Participation in discussion, assessing examples from business practice, interactive explanation of key concepts. The basic assessment criterion is a test |
| Examination  | The final grade consists of two elements: 70% of the grade is a test, and 30% of the grade is participation in discussions and preparation for seminars.  |
| Type of class | Seminar  |
| Sposób realizacji przedmiotu  | Remote  |
| Language  | English |
| Bibliography | * Harmon, P. (2019). *Business process change, 4th edition*. Morgan Kaufmann.
* Dumas, M., Rosa, L. M., Mendling, J., & Reijers, A. H. (2018). *Fundamentals of business process management*. Springer-Verlag.
* *Handbook on Business Process Management*, Ed.; J.v Brocke, M. Rosemann, International Handbooks on Information Systems, (2015)
* Articles and case studies advised by the lecturer
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| Internship as part of the course  |  No |
| Coordinators | Aneta Biernikowicz |
| Group instructors | Aneta Biernikowicz |
| Notes  |  |

**B. Detailed data**

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| **Name of the field** | **Content**  |
| Group instructors: | Aneta Biernikowicz |
| Title  | dr |
| Type of class: | Seminar |
| Learning outcomes defined for didactic method used during the course | Student, after completing the course:K\_W01 Knows and understands the concepts and principles of business process managementK\_W02. Understands the principles of Enterprise Design and the need to align all enterprise resources including technology. K\_W02. Understands the process of IT solution design and the requirements elicitation process. K\_U01 Can cooperate with IT teams to transfer process requirements while designing supporting IT tools. K\_U02 Can recognize interrelations between business processes and their alignment with strategy K\_U03 Can see and discuss relationships between processes, technology, and people subsystems in organizationsK\_S01 Can better understand the perspective of IT specialists.K\_S02 Can self-educate, develop qualifications, and support others in this area. |
| Assessment methods and assessment criteria for didactic method used during the course | Participation in discussion, assessing examples from business practice, interactive explanation of key concepts. The basic assessment criterion is a test. |
| Examination for didactic method used during the course | The final grade consists of two elements: 70% of the grade is a test, and 30% of the grade is participation in discussions and preparation for seminars.. Rating scale: DST (51%-60%), DST Plus (61%-70%), DB (71%-80%), DB Plus (81%-90%), BDB (91%-100%). |
| Range of content | 1. Introduction to system thinking and conceptual modeling
2. Understanding Business Process Management
	1. Evolution of BPM
	2. Process, its attributes, and types
	3. Hierarchy of processes
	4. Process management life cycle
	5. Process maturity of an organization
3. Understanding principles of Enterprise Design
	1. Business model and strategic alignment
	2. Business Architecture vs. Process Architecture
	3. Process-oriented enterprise design
4. Understanding IT solutions design
	1. Steps in the IT solutions design process
	2. Requirements elicitation - business requirements, stakeholders’ requirements, solution requirements (functional, non-functional)
5. Integration of IT solutions design with enterprise design
	1. Business – IT alignment during IT solutions design
	2. Impact of information technology on various aspects of an enterprise
6. A Digital Twin of an Organization
	1. The concept of DTO and its key features (performance monitoring, simulation, optimization)
	2. Enabling IT tools
7. Challenges and Future Trends
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| Didactic methods | Interactive explanation of key concepts, case study analysis. The basic assessment criterion is a test.  |
| Bibliography | * Harmon, P. (2019). *Business process change, 4th edition*. Morgan Kaufmann.
* Dumas, M., Rosa, L. M., Mendling, J., & Reijers, A. H. (2018). *Fundamentals of business process management*. Springer-Verlag.
* *Handbook on Business Process Management*, Ed.; J.v Brocke, M. Rosemann, International Handbooks on Information Systems, 2015
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| Group limit  |   |
| Time span |   |
| Location |  Zoom |