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

**A. General data**

|  |  |
| --- | --- |
| **Name of the field** | **Content**  |
| Course title |  Process Management |
| Organizational unit: |  Faculty of Management |
| Organizational unit where the course is offered: |  Faculty of Management |
| Course ID | 2600-IBPPM |
| Erasmus code / ISCED | --------------- |
| Course groups |  IBP & Short-term students |
| Period when the course is offered  |  Summer semester 2024/2025 |
| Short description | The course offers an introduction to fundamental concepts and techniques of business process management. Students will learn to identify, map and analyse processes using computer tools. **Important:** Each course participant will need to allocate significant amounts of time in order to complete course assignments and the final consulting project. Students will work on several case studies, pass a written exam, learn to use two specialist software applications and prepare team consulting project in order to pass (=substantial workload). Therefore, the course is primarily recommended for full-time IBP students, as it might course might prove too difficult for incoming Erasmus exchange students, particularly students with no background in management science. |
| Type of course: | Lecture involving discussions, individual and team assignments based on case studies, computer-supported process modelling, and a final consulting project (30h) |
| Full description | 1. *Introduction to business process management (BPM)*
* Definition of business process
* Effectiveness, efficiency, control, and compliance in process management
* Case study: kristen’s cookie company
* Fishbone (cause-and-effect) diagram
* Case study: Shortening customer telephone waiting times
* Case study: Freemantle restaurant
* Case study: Hong Kong Disneyland (team assignment)
1. *Basics of process analysis*
* Process charts (operation, transportation, inspection, delay, store)
* Case study: Emergency room admission
* Case study: Shaving process
* Value added analysis
* Case study: Registration at IMA conference
* History of process management concepts and approaches
* Capability Maturity Model
* Benchmarking
* Case study: Janson Medical Clinic (team assignment)
* Case study: Gifford Hospital Pharmacy (team assignment)
1. *Analysis of business operations*
* Value chain model and cost drivers (Michael Porter)
* Outsourcing and offshoring
* Make-or-buy decisions and transaction costs
* Virtual organization
* Value chain analysis (team assignment)
* Case study: “In this corner! The contender” (individual assignment)
1. *Optimizing operations (1)*
* Case study: Hank Kolb, Director, Quality Assurance (team presentations)
* Reorder Point System (ROP) Economic Order Quantity (EOQ)
* Case study: Slayton’s Furniture Store
* ABC method
* Case study: Ohio Tool Company (team assignment)
* Value engineering
* Inventory-driven costs (IDCs)
* Supply chain management (SCM)
* “Triple A” supply chain – agile, adaptable and aligned
1. *Optimizing operations (2)*
* Case study: West Midland Electric Car Company Component Company (team assignment)
* MRP and MRP2
* Japanese manufacturing techniques: just-in-time (JiT), kanban, lean management, Total Quality Management (TQM)
* Six Sigma and DMAIC methodology
* Quality management systems and environmental management systems
* Case study: Bonnie Blaine (team assignment)
1. *System dynamics*
* Simple dependencies versus feedback loops
* System dynamics modeling (Forrester)
* Bullwhip effect and “beer game”
* Systemic interdependencies and consequences for organizations (Senge)
* Use of software Vensim PLE
1. *Business process reengineering (BPR) and improvement*
* Cost reduction, downsizing, and automation versus process reengineering (Hammer, Champy)
* Improving workflow
* Disadvantages and limitations of BPR
* Process modeling according to (BPMN) notation
* Use of ARIS Express software
1. *Emerging trends in BPM: digitalization and process innovation*
* AI-driven workflow automation
* Robotic process automation (RPA)
* Machine learning
* Process mining
* Digital Twin of an Organization (DTO)
* Cloud-based BPM
* ESG-Integrated BPM
* Case Study: Amazon same-day delivery process optimization
* Case Study: McDonald’s AI-driven ordering system
* Case study: Vodafone’s process mining for customer service
* Case study: Tesla’s gigafactory and smart manufacturing
1. *Written exam*
2. *Team consulting project*
 |
| Prerequisites | Formal  | * Completion of “Strategic management” course
 |
| Initial  | * Use of personal computers with Microsoft Windows operating system
* Free-of-charge software packages Vensim PLE and ARIS Express
* Internet access
 |
| Learning outcomes |  Upon the completion of the course, you will be able to:* identify, map and analyze business processes of a selected organization,
* use analytical frameworks and techniques including value chain, make-or-buy, fishbone diagram, system dynamics, benchmarking, value analysis, process mining, business process reengineering, balanced scorecard,
* present principles, benefits and limitations of process approaches including Reorder Point System, ABC method, MRP, JiT, lean management, TQM, inventory-driven costs, Triple-A supply chain, Six Sigma, ISO 9001, ISO 14001, EMAS,
* model systemic interdependencies in organizations using software Vensim PLE,
* model business processes using BPMN 2.0 with ARIS Express,
* conduct business analysis in line with recommendations of “The Business Analysis Body of Knowledge®” (BABOK® by IIBA),
* work in teams on solving practical business problems.
 |
| ECTS credit allocation (and other scores) | 4 ECTS |
| Assessment methods and assessment criteria | Students will be graded based on:Individual and team assignments accompanying regular classes (30%)Written exam (30%)Final consulting project (40%)In order to pass the course, students need to gain at least 60%.The method of calculation of the final grade:less than 60% - 2 60% - 67% - sufficient (3)68% - 75% - satisfactory (3.5)76% - 83% - good (4)84% - 90% - fairly good (4.5)91% - 97% - very good (5) 98% and above – excellent (5!) |
| Examination  |  Graded assignments and exam |
| Type of class | Specialist, stage II, academic year I, summer semester  |
| Method of implementation of the subject | Classroom-based lectures and project-based team assignments |
| Language  |  English |
| Bibliography | *Readings supplement the classes:** case studies distributed in the classroom
* proposed readings available on internet

*Reading for the consulting project:** BABOK® (“The Business Analysis Body of Knowledge®”), version 3.0
 |
| Internship as part of the course  |  - |
| Coordinators | prof. Katarzyna Dziewanowska |
| Group instructors | dr Mansour Esmaeil Zaei  |
| Notes  | - |

**B. Detailed data**

|  |  |
| --- | --- |
| **Name of the field** | **Content**  |
| Group instructors: | **Mansour Esmaeil Zaei** |
| Title |  **Dr** |
| Type of class: | Seminar  |
| Learning outcomes defined for didactic method used during the course | Upon the completion of the course, you will be able to:* identify, map and analyze business processes of a selected organization,
* use analytical frameworks and techniques including value chain, make-or-buy, fishbone diagram, system dynamics, benchmarking, value analysis, process mining, business process reengineering, balanced scorecard,
* present principles, benefits and limitations of process approaches including Reorder Point System, ABC method, MRP, JiT, lean management, TQM, inventory-driven costs, Triple-A supply chain, Six Sigma, ISO 9001, ISO 14001, EMAS,
* model systemic interdependencies in organizations using software Vensim PLE,
* model business processes using BPMN 2.0 with ARIS Express,
* conduct business analysis in line with recommendations of “The Business Analysis Body of Knowledge®” (BABOK® by IIBA),

work in teams on solving practical business problems. |
| Assessment methods and assessment criteria for didactic method used during the course | Students will be graded based on:Individual and team assignments accompanying regular classes (30%)Written exam (30%)Final consulting project (40%)In order to pass the course, students need to gain at least 60%.The method of calculation of the final grade:less than 60% - 2 60% - 67% - sufficient (3)68% - 75% - satisfactory (3.5)76% - 83% - good (4)84% - 90% - fairly good (4.5)91% - 97% - very good (5) 98% and above – excellent (5!) |
| Examination for didactic method used during the course |  Graded assignments and exam |
| Range of content | 1. *Introduction to business process management (BPM)*
* Definition of business process
* Effectiveness, efficiency, control, and compliance in process management
* Case study: kristen’s cookie company
* Fishbone (cause-and-effect) diagram
* Case study: Shortening customer telephone waiting times
* Case study: Freemantle restaurant
* Case study: Hong Kong Disneyland (team assignment)
1. *Basics of process analysis*
* Process charts (operation, transportation, inspection, delay, store)
* Case study: Emergency room admission
* Case study: Shaving process
* Value added analysis
* Case study: Registration at IMA conference
* History of process management concepts and approaches
* Capability Maturity Model
* Benchmarking
* Case study: Janson Medical Clinic (team assignment)
* Case study: Gifford Hospital Pharmacy (team assignment)
1. *Analysis of business operations*
* Value chain model and cost drivers (Michael Porter)
* Outsourcing and offshoring
* Make-or-buy decisions and transaction costs
* Virtual organization
* Value chain analysis (team assignment)
* Case study: “In this corner! The contender” (individual assignment)
1. *Optimizing operations (1)*
* Case study: Hank Kolb, Director, Quality Assurance (team presentations)
* Reorder Point System (ROP) Economic Order Quantity (EOQ)
* Case study: Slayton’s Furniture Store
* ABC method
* Case study: Ohio Tool Company (team assignment)
* Value engineering
* Inventory-driven costs (IDCs)
* Supply chain management (SCM)
* “Triple A” supply chain – agile, adaptable and aligned
1. *Optimizing operations (2)*
* Case study: West Midland Electric Car Company Component Company (team assignment)
* MRP and MRP2
* Japanese manufacturing techniques: just-in-time (JiT), kanban, lean management, Total Quality Management (TQM)
* Six Sigma and DMAIC methodology
* Quality management systems and environmental management systems
* Case study: Bonnie Blaine (team assignment)
1. *System dynamics*
* Simple dependencies versus feedback loops
* System dynamics modeling (Forrester)
* Bullwhip effect and “beer game”
* Systemic interdependencies and consequences for organizations (Senge)
* Use of software Vensim PLE
1. *Business process reengineering (BPR) and improvement*
* Cost reduction, downsizing, and automation versus process reengineering (Hammer, Champy)
* Improving workflow
* Disadvantages and limitations of BPR
* Process modeling according to (BPMN) notation
* Use of ARIS Express software
1. *Emerging trends in BPM: digitalization and process innovation*
* AI-driven workflow automation
* Robotic process automation (RPA)
* Machine learning
* Process mining
* Digital Twin of an Organization (DTO)
* Cloud-based BPM
* ESG-Integrated BPM
* Case Study: Amazon same-day delivery process optimization
* Case Study: McDonald’s AI-driven ordering system
* Case study: Vodafone’s process mining for customer service
* Case study: Tesla’s gigafactory and smart manufacturing
1. *Written exam*
2. *Team consulting project*
 |
| Didactic methods | Lecture involving discussions, individual and team assignments based on case studies, computer-supported process modelling, and a final consulting project (30h) |
| Bibliography | *Readings supplement the classes:** case studies distributed in the classroom
* proposed readings available on internet

*Reading for the consulting project:*BABOK® (“The Business Analysis Body of Knowledge®”), version 3.0 |
| Group limit |   |
| Time span |   |
| Location |  Faculty of Management |