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<tr><td colspan="2">NAME OF THE COURSE</td><td colspan="5">ERP systems</td></tr>
<tr><td>Code</td><td>EUB217</td><td>Year of study</td><td colspan="4">III</td></tr>
<tr><td>Course teacher</td><td>Full professor Maja Ćukušić, PhD<br>Assistant professor Tea Mijač, PhD</td><td>Credits (ECTS)</td><td colspan="4">5 ECTS</td></tr>
<tr><td rowspan="2">Associate teachers</td><td rowspan="2">Full professor Maja Ćukušić, PhD<br>Assistant professor Tea Mijač, PhD<br>Ivana Ninčević Pašalić, PhD</td><td rowspan="2">Type of instruction (number of hours)</td><td>L</td><td>S</td><td>E</td><td>F</td></tr>
<tr><td>26</td><td></td><td>26</td><td></td></tr>
<tr><td>Status of the course</td><td>Compulsory</td><td>Percentage of application of e-learning</td><td colspan="4">40%</td></tr>
<tr><td colspan="6">COURSE DESCRIPTION</td></tr>
<tr><td>Course objectives</td><td colspan="5">Get a complete insight into the aspects of designing and implementing modern integrated information systems. Develop the ability of students to use the tools for modeling and optimizing business processes.</td></tr>
<tr><td>Course enrolment requirements and entry competences required for the course</td><td colspan="5">No prerequisites.</td></tr>
<tr><td>Learning outcomes expected at the level of the course (4 to 10 learning outcomes)</td><td colspan="5">Analyze contemporary technical concepts of IT systems.<br><br>1. Link the concept of business processes (re)engineering with ERP implementation into business organizations.<br>2. Categorize aspects of selecting the right ERP system as a business choice.<br>3. Link the choice of ERP implementation approach to ERP system design phase, i.e. with the choice of the type and the scope of the change.<br>4. Identify the importance of ERP system security management and of the additional functionalities of ERP systems.<br>5. Propose an optimized business process based on the existing process model and quantitative and qualitative analysis of the proposed improvements.</td></tr>
<tr><td>Course content broken down in detail by weekly class schedule (syllabus)</td><td colspan="5"><table>
<tr><td rowspan="2">Week</td><td colspan="2">Lectures</td><td colspan="2">Exercises:</td></tr>
<tr><td>Topic</td><td>Hours</td><td>Topic</td><td>Hours</td></tr>
<tr><td>1</td><td>Introduction. The definition and the concept of ERP systems. Business impact of ERP systems.</td><td>2</td><td>Context and conceptual definition of BPM. Introduction to ARIS platform.</td><td>2</td></tr>
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| | 2 | Business processes and approaches to organizational changes. | 2 | Value of Business Process Management. BPM Life Cycle. Prerequisites for business process management. Identification of business processes. Process map (Porter VAC) | 2 | |
| | 3 | Business Process Reengineering. Relation of ERP systems and reengineering. | 2 | ARIS platform. ARIS house. Organizational chart. Application system diagram. | 2 | |
| | 4 | ERP system as a business choice. Aspects of choosing an ERP system. | 2 | Process view and VACD (Value-added chain) diagram. Creating VACD High Level Diagrams, Types of Objects and Connections. Assignments (model levels, connectivity). | 2 | |
| | 5 | Multicriteria approach to ERP system selection. | 2 | EPC (Event Process Chain). Function and Event: Definitions and Conventions of Appointments. Process flow and logic operators. Modeling Rules. Process interface. | 2 | |
| | 6 | Designing ERP systems. Reengineering approaches. | 2 | Reflection on the task of previous exercises. Continuation with EPC modeling. | 2 | |
| | 7 | Selection of models, objects and processes of an ERP system. | 2 | BPMN definition. BPMN elements. Pool, lanes. | 2 | |
| | 8 | Test | | | | |
| | 9 | Implementation of ERP systems. Approaches to implementation.<br><br>Migration, stabilization and evaluation of ERP systems. | 2 | Time Analysis of Business Processes. Non-value-added processes. Lean modeling. 5 why.<br><br>Redesigning Business Processes. Access redesign business processes. Business Process Reengineering. | 2 | |
| | 10 | Additional functionalities of ERP systems. Business Intelligence. | 2 | Functional view; AST model. Nested objects. | 2 | |

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| | 11 | Managing relationships with suppliers and customers (SCM and CRM). | 2 | Ways to improve business processes. | 2 |
| | 12 | Activity based accounting and the ABC model. | 2 | Automation of business processes. BPMS. Bizagi.<br><br>An example of automating a business process. | 2 |
| | 13 | ERP systems and activity based accounting. Integrating ABC with ERP systems. | 2 | Creating an Automated Process Implementation Plan | 2 |
| | 14 | Risks and security of ERP systems. Measures to protect the ERP system. | 2 | Process Monitoring - BAM - Business Process Monitoring, BPI - Business Process Intelligence. Process intelligence. The final assignments. | 2 |
| | 15 | Test | | | |

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| Format of instruction | x lectures<br>☐ seminars and workshops<br>x exercises<br>☐ *on line* in entirety<br>x partial e-learning<br>☐ field work | x independent assignments<br>x multimedia<br>☐ laboratory<br>x work with mentor<br>☐ (other) |
| Student responsibilities | The course work can be described as a method of continuous student progress evaluation since a model of accumulation of points has been formulated which enables the student to collect points through various activities. The goal is that every student collects sufficient number of points corresponding to a grade during the semester. In this model, a low result in one activity can be compensated by points in other activities and enabling students to decide how to allocate their efforts.<br>Requirement for taking the test: 4 out of 7 assignments completed for the first test, and 4 out of 6 for the second test.<br>Requirement for the exam: Completed final assignment. | |

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| Screening student work *(name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS value of the course)* | Class attendance | 1,7 ECTS | Research | | Practical training | |
| | Experimental work | | Report | | Tests (Other) | |
| | Essay | 0,5 ECTS | Seminar essay | | Final assignment (Other) | 1 ECTS |
| | Tests | 1,6 ECTS | Oral exam | | Workshop participation (Other) | 0,2 ECTS |
| | Written exam | | Project | | (Other) | |
| Grading and evaluating student | Requirements for the exam exemption: a total of 71 points achieved overall based on the tests, assignments, and homework during the semester. Through additional | | | | | |

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<tr><td>work in class and at the final exam</td><td colspan="3">engagement and active participation (for example by submitting critical review of the book chapters and coursework), the student can get up to 14 bonus points. In the case of exam exemption, the score is based on the total number of points where every five points give a higher grade.<br>Threshold and related grades:<br>0-70 insufficient (1)<br>71-75 sufficient (2)<br>76-80 good (3)<br>81-85 very good (4)<br>86-100 excellent (5)<br>If a student does not have enough points from the assessment activities during the semester, he or she is required to take the exam. The first part of the exam is a mandatory written test on which a maximum grade good can be achieved (3). The second part of the exam, which is not obligatory, is either a written or oral test with questions of an open, essay type on which a maximum of 10 points can be achieved.</td></tr>
<tr><td rowspan="3">Required literature (available in the library and via other media)</td><td>Title</td><td>Number of copies in the library</td><td>Availability via other media</td></tr>
<tr><td>Lecture material (2023)</td><td></td><td>Moodle</td></tr>
<tr><td>Željko Garača: ERP sustavi, Ekonomski fakultet Split, Split , 2008.</td><td>10</td><td></td></tr>
<tr><td>Optional literature (at the time of submission of study programme proposal)</td><td colspan="3">Laudon and Laudon (2020): Management Information Systems: Managing the Digital Firm, 17th Edition, Pearson<br>O'Leary, D. E.: Enterprise Resource Plannning Systems,. Cambridge University Press NY, 2005.<br>Bosilj Vukšić, V., Kovačić, A.: Upravljanje poslovnim procesima, Sinergija, Zagreb, 2004.<br>Davis, R., Brabänder, E.: ARIS Design Platform / Getting Started with BPM, Springer-Verlag, London, 2007.<br><br>Papers:<br>• Mijač, Tea; Jadrić, Mario; Ćukušić, Maja: In Search of a Framework for User-Oriented Data- Driven Development of Information Systems // Economic and business review : for Central and South-Eastern Europe, 21 (2019), 3; 439-465 doi:10.15458/ebr.89 (međunarodna recenzija, članak, znanstveni)<br>• Jadrić, Mario; Ćukušić, Maja.: Međuovisnost karakteristika primjene informatičke tehnologije i unapređenja poslovnih procesa // Utjecaj organizacijskih varijabli na uspjeh programa unapređenja poslovnih procesa / Buble, Marin (ur.). Split : Ekonomski fakultet u Splitu, 2012. Str. 133-142.<br>• Alfirević, Nikša; Ćukušić, Maja; Skender, Dubravko: Application of Business Process Management in Higher Education: in Search of Strategic Performance // ECONOMIC DEVELOPMENT AND ENTREPRENEURSHIP IN TRANSITION ECONOMIES: Assessment of the last 25 years, going beyond the `transition` / Ateljević, J., Trivić, J. (ur.). Banja Luka : Faculty of Economics in Banja Luka, 2016. 578-590.<br><br>Other publications:<br>Business process modeling with ARIS Business Designer, official ARIS training material.</td></tr>
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| | Management of ARIS Projects with ARIS Business Architect, official ARIS training material. |
| Quality assurance methods that ensure the acquisition of exit competences | • Monitoring attendance and performance of other student obligations (teacher)<br>• Teaching Supervision (Vicedean for Teaching)<br>• Analysis of the success of studies in all subject studies (Vicedean for Teaching)<br>• Student Survey on the Quality of Teachers and Teaching for Each Subject Study (UNIST, Center for Quality Improvement)<br>• The exam conducted by the subject teacher examines all learning outcomes of the subject. Periodic examination of the content of the exam is conducted on the basis of which the appropriateness of the method of checking the learning outcomes (Vicedean for Teaching) |
| Other (as the proposer wishes to add) | |