**UNIVERSITY OF ECONOMICS – VARNA**

**FACULTY OF „MANAGEMENT“**

**DEPARTMENT OF INFORMATICS**

**Adopted by the FC (record №/ date):**

**Adopted by the DC (record №/ date):**

**ACCEPTED BY:**

**Dean:**
**(Prof. Stoyan Marinov, PhD)**

# SYLLABUS

**SUBJECT: “CRM AND ERP SYSTEMS”;**

**DEGREE PROGRAMME: „International Business“; BACHELOR`S DEGREE**

**YEAR OF STUDY: 4; SEMESTER: 8;**

**TOTAL STUDENT WORKLOAD: 150 hours; incl. curricular 60 hours**

**CREDITS: 5**

**DISTRIBUTION OF WORKLOAD ACCORDING TO THE CURRICULUM**

| *TYPE OF STUDY HOURS* | **WORKLOAD, hours** | **TEACHING HOURS PER WEEK, hours** |
|---|---|---|
| CURRICULAR:<br>incl. | | |
| • LECTURES | 30 | 2 |
| • SEMINARS /LAB. EXERCISES | 30 | 2 |
| EXTRACURRICULAR | 90 | - |

**Prepared by:**

1. **……..**
   **(Assoc. Prof. Silvia Parusheva, PhD)**
2. **……..**
   **(Assoc. Prof. Ivan Kuyumdzhiev, PhD)**
3. **……**
   **(Chief Assist. Yanka Aleksandrova, PhD)**

**Head of department of Informatics: ……**
**(Prof. Julian Vasilev, PhD)**

## I. ANNOTATION

*The discipline focuses on two of the strategically important corporate information systems – Customer Relationship Management Systems (CRM systems) and Enterprise Resource Planning Systems (ERP systems). These systems allow automating all important business processes in organizations and therefore are characterized by an extremely high level of complexity. Their technological architecture requires the application of modern information technologies.*

*The lectures present important concepts related to the architecture and functional structure of CRM and ERP systems. Trends in the development of the systems are also presented. Students have the opportunity to get acquainted with modern information and communication technologies related to the building and implementing CRM and ERP systems. During exercises, students will be able to apply the acquired knowledge in the working environment of leading representatives of the this kind of systems – Microsoft Dynamics CRM and Microsoft Dynamics NAV. Specific use cases will be solved in order to demonstrate the advantages of ERP and CRM systems for business activity management.*

## II. THEMATIC CONTENT

| № | TITLE OF UNIT AND SUBTOPICS | NUMBER OF HOURS | | |
|---|---|---|---|---|
| | | L | S | L.E. |
| **Theme 1. Corporative business information systems** | | **4** | | |
| 1.1 | Architecture of the corporative business information systems | 1 | | |
| 1.2 | Classification of the corporative business information systems | 1 | | |
| 1.3 | Information and communication technologies, related to corporative business information systems | 1 | | |
| 1.4 | Trends in corporative business information systems | 1 | | |
| **Theme 2. ERP systems** | | **10** | **12** | |
| 2.1 | Essence, structure and evolution of the ERP systems | 2 | | |
| 2.2 | Architecture of the ERP systems | 2 | | |
| 2.3 | Functional structure of the ERP systems. | 2 | | |
| 2.4 | Main modules of the ERP systems - "Financial management", "Production management", "Supply chain management", "Sales force automation", etc. | 4 | 12 | |
| **Theme 3. CRM systems** | | **10** | **12** | |
| 3.1 | Essence, structure and evolution of the CRM systems | 2 | | |
| 3.2 | Architecture of the CRM systems | 2 | | |
| 3.3 | Functional structure of the CRM systems | 2 | | |
| | Main modules of the CRM systems – "Lead management", "Opportunity management", "Sales management", "Marketing", "Customer service", etc. | 4 | 12 | |
| **Theme 4. Integration of CRM and ERP systems** | | **3** | **3** | |
| 4.1 | Need, advantages, prerequisites and requirements for CRM and ERP integration | 1 | | |
| 4.2 | Architectures and technologies for CRM and ERP integration | 2 | 3 | |
| **Theme 5. Management of the ERP and CRM systems** | | **3** | **3** | |
| 5.1 | Criteria for evaluation and choosing the right ERP and CRM system | 1 | | |
| 5.2 | Implementing ERP and CRM systems. Initial setup and customization | 1 | 3 | |
| 5.3 | Maintenance and support of the ERP and CRM systems | 1 | | |
| | **Total:** | **30** | **30** | |

## III. FORMS OF CONTROL:

| № | TYPE AND FORM OF CONTROL | Number | extra-curricular, hours |
|---|---|---|---|
| | | | |
| **1.** | **Midterm control** | | |
| 1.1. | Practical test in an ERP environment | **1** | **25** |
| 1.2. | Practical test in a CRM environment | **1** | **25** |
| | **Total midterm control:** | **2** | **50** |
| **2.** | **Final term control** | | |
| 2.1. | Examination (test) | **1** | **40** |
| | **Total final term control:** | **1** | **40** |
| | **Total for all types of control:** | **3** | **90** |

## IV. LITERATURE

### REQUIRED (BASIC) LITERATURE:

1. Bala, A., Lorente, C., Lorente, L. Microsoft Dynamics NAV 2016 Financial Management, Packt Publishing, 2017.
2. Bradford, M. Modern ERP Select, Implement, and Use Today's Advanced Business Systems. 3-rd Ed., LuLu, 2016.
3. Gronwald, K.-D. Integrated Business Information Systems A Holistic View of the Linked Business Process Chain ERP-SCM-CRM-BI-Big Data. Springer-Verlag, 2017.
4. Wolenik, M. Microsoft Dynamics CRM 2016 Unleashed. Sams Publishing. 2016.

### RECOMMENDED (ADDITIONAL) LITERATURE:

1. Caserio, C., Trucco, S. Enterprise Resource Planning and Business Intelligence Systems for Information Quality. Springer, 2018.

2. Kinnett, S. How to Win at CRM: Strategy, Implementation, Management. Auerbach Publications, CRC Press, 2017.

3. Vivek, K. Enhancing enterprise intelligence: leveraging ERP, CRM, SCM, PLM, BPM, and BI. CRC Press, 2016.