**Course Syllabus**

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| Title of the course | **Information Systems (offered in English) (for the 1st year students)** |
| Title of the Academic Programme  | Bachelor’s Programme 'Sociology and Social Informatics' |
| Type of the course  | Obligatory |
| Prerequisites | None |
| ECTS workload | 7 |
| Total indicative study hours | Directed Study | Self-directed study  | Total |
| 64 | 202 | 266 |
| Course Overview | This course studies the interconnections of technology, people, and business in organizations implemented as information systems. Starting from the basics of Information Technology, we will discuss how organizations use contemporary IT toolkit to achieve their goals. The course will introduce students to the concepts of business processes, social computing, business analytics, organizational analysis. We will study different types of information systems and major approaches to their design in alignment with organizational goals, including data processing, decision making and transaction costs aspects. We will uncover the strong social nature of IS planning, design, and development processes and how social science theory and methods can enrich these processes. We will study different types of IS for different audiences, including business information systems and information systems in science and research. From a sociotechnical point of view, we will discuss mobile technologies, cloud computing, Big Data, social media, and how they influence the present and the future of information systems. Then the course will move to collaborative systems of different levels – from small group document sharing to the World Wide Web, and their design principles. |
| Intended Learning Outcomes (ILO) | As a result of this course, students: * will know different types of information systems and main approaches to analyzing organizations from an information perspective;
* will be able to design simple business processes paying attention to the needs of customers and organizations;
* will be able to construct basic analytical reports using Tableau;
* will be able to describe organizational goals of different services and model possible interactions between service systems and clients;
* will know basic principles of programming in the framework of working with Ren’Py library for Python.
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| Teaching and Learning Methods | Teaching and learning methods include tutorials, seminars, group work, home assignments. |
| Content and Structure of the Course |
| **№** | **Topic / Course Chapter** | **Total** | **Directed Study** | **Self-directed Study** |
| **Seminars** | **Tutorials** |
| 1 | Business Analytics and Data Processing | 106 | 10 | 16 | 80 |
| 2 | Information Systems and Business Processes | 92 | 8 | 14 | 70 |
| 3 | Web Services and Social Computing | 68 | 6 | 10 | 52 |
| **Total study hours** | 266 | 24 | 40 | 202 |
| Indicative Assessment Methods and Strategy  | Assessment strategy is designed to cover both practical skills and teamwork via group projects and theoretical knowledge via 3 tests.* Group project (module 2) – 20% of the cumulative grade
* Test I (module 2) – 10% of the cumulative grade
* Group project (module 3) – 20% of the cumulative grade
* Test II (module 3) – 10% of the cumulative grade
* Test III (module 3) – 40% of the cumulative grade

Resulting grade is equal to cumulative grade. |
| Readings / Indicative Learning Resources | Mandatory 1. Olson, David. Information Systems Project Management. New York: Business Expert Press, 2014. <https://ebookcentral.proquest.com/lib/hselibrary-ebooks/detail.action?docID=1908997>
2. Vanderjack, Brian. The Agile Edge : Managing Projects Effectively Using Agile Scrum. New York: Business Expert Press, 2015. <https://ebookcentral.proquest.com/lib/hselibrary-ebooks/detail.action?docID=2145193>
3. Milligan, Joshua N.. Learning Tableau. Olton Birmingham: Packt Publishing Ltd, 2015. <https://ebookcentral.proquest.com/lib/hselibrary-ebooks/detail.action?docID=2037694>

Optional1. Murray, Daniel G.. Tableau Your Data! : Fast and Easy Visual Analysis with Tableau Software. Hoboken: John Wiley & Sons, Incorporated, 2016. <https://ebookcentral.proquest.com/lib/hselibrary-ebooks/detail.action?docID=4334741>
2. Fichman, Pnina, and Rosenbaum, Howard, eds. Social Informatics : Past, Present and Future. Newcastle-upon-Tyne: Cambridge Scholars Publishing, 2014. <https://ebookcentral.proquest.com/lib/hselibrary-ebooks/detail.action?docID=1656497>
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| Indicative Self- Study Strategies | **Type** | **+/–** | **Hours** |
| Reading for seminars / tutorials (lecture materials, mandatory and optional resources) | + | 40 |
| Assignments for seminars / tutorials / labs | + | 40 |
| E-learning / distance learning (MOOC / LMS) | - |  |
| Fieldwork | - |  |
| Project work | + | 60 |
| Other (please specify) | - |  |
| Preparation for the tests | + | 34 |
| Academic Support for the Course | Academic support for the course is provided via e-mail and dropbox. |
| Facilities, Equipment and Software | Computer class, projector, Python, Tableau, MS Office |
| Course Instructor | Sr. Lecturer Ilya Musabirov, Lecturer Viktor Karepin, Lecturer Pavel Gulyaev |