Department of Information Sciences Curriculum
Academic year 2015/2016

All incoming students are kindly asked to choose courses from the curriculum for the current academic year.

All courses (except English language) are in Croatian. Teachers usually work with incoming students (in English language) during their office hours (individually).

Majority of the course descriptions can be found in the document Information Sciences Curriculum – proposal at http://web.ffos.hr/infoznanosti/studijski-programi-kao-rezultati-bolonjskog-procesa . The descriptions of the newly added courses can be found at the end of this document.

Undergraduate level

1st year

Winter term

COURSES	ECTS credits	INSTRUCTOR
Compulsory		
Information sciences I (Theory and practice of inf. work)	6	Sanjica Faletar Tanacković
History and culture of communication	6	Zoran Velagić
Introduction to research methodology	5	Damir Haseny
Information technology I	5	Sanjica Faletar Tanacković
English language I	3	Mirna Varga
Optional		
World literature I	4	Marica Liović
Foundations of Croatian language	2	Goran Tanacković Faletar
Graphic design	4	Josipa Selthofer

COURSES	ECTS credits	INSTRUCTOR
Compulsory		
Information sciences II (Introduction to library and information science)	6	Kornelija Petr Balog
Publishing and bookselling	5	Zoran Velagić
Markup languages for content description and representation	5	Boris Bosančić
English language II	3	Mirna Varga
Optional		
World literature II	4	Tina Varga Oswald
Public libraries	4	Sanjica Faletar Tanacković
Discrete structures and algorithms	5	Anita Papić

2nd year

Winter term

COURSES	ECTS credits	INSTRUCTOR
Compulsory		
Organization of information I	6	Kornelija Petr Balog
Management of information institutions and services I	5	Maja Krtalić
Database development and management I	5	Boris Badurina
Web page design	5	Boris Badurina
Sociology of book and reading I	6	Jelena Lakuš
Optional		
English language III	3	Mirna Varga
Statistical data processing	3	Gordana Dukić
Croatian bibliographies	3	Jelena Lakuš

Summer term

COURSES	ECTS credits	INSTRUCTOR
Compulsory		
Organization of information II	6	Kornelija Petr Balog
Database development and management II	5	Tomislav Jakopec
Data protection and preservation of materials	5	Maja Krtalić
Digital library content design	5	Boris Badurina
Business communication	4	Milijana Mičunović
Optional		
English language IV	3	Mirna Varga
Sociology of book and reading II	4	Jelena Lakuš

3rd year

Winter term

COURSES	ECTS credits	INSTRUCTOR
Compulsory		
Reference services I	5	Jelena Lakuš
Management of information Systems (institutions) I.	4	Gordana Dukić
Metadata and identifiers	5	Boris Bosančić
Optional		
Implementation of programme solutions for content design	4	Tomislav Jakopec
Croatian newspapers	4	Jelena Lakuš
Academic libraries	4	Sanjica Faletar Tanacković
English language III	3	Mirna Varga
Foundations of Croatian language	2	Goran Tanacković Faletar

Summer term

COURSES	ECTS credits	INSTRUCTOR
Compulsory		
Reference services II	4	Jelena Lakuš
Information systems in education	5	Ivana Martinović
Intellectual property and copyright	4	Zoran Velagić
Optional		
Probability and statistics	3	Gordana Dukić
Sociology of book and reading II	4	Jelena Lakuš
English language IV	3	Mirna Varga
Management of information institutions and services II	4	Maja Krtalić

Information technology

1st year

Winter term

COURSES	ECTS credits	INSTRUCTOR
Compulsory		
Information and communication infrastructure	4	Damir Hasenay
Modelling and simulations	3	Anita Papić
Programming 1	3	Boris Badurina
Optional		
Semantic web technologies I.	3	Boris Bosančić
Visual communication	3	Josipa Selthofer

Summer term

COURSES	ECTS credits	INSTRUCTOR
Compulsory		
Information system design	3	Tomislav Jakopec
User experience application development	3	Boris Badurina
Programming 2	3	Tomislav Jakopec
Optional		
Semantic web technologies II.	3	Boris Bosančić
Intelligent systems	3	Anita Papić

Publishing

1st year

Winter term

COURSES	ECTS credits	INSTRUCTOR
Compulsory		
Introduction to publishing	3	Zoran Velagić
History of book, publishing and bookselling	3	Zoran Velagić
Structure of publishing fields	3	Nives Tomašević, VS
Optional		
Project management	3	Gordana Dukić
Visual communication	3	Josipa Selthofer

Summer term

COURSES	ECTS credits	INSTRUCTOR
Compulsory		
Contemporary publishing contexts	3	Milijana Mičunović
Content acquisition and editorial practices	3	Zoran Velagić
Publishing processes	3	Josipa Selthofer
Digital publishing and bookselling	3	Zoran Velagić
Optional		
Digitization and digitized content design	3	Boris Bosančić

Information sciences

1st year

Winter term

COURSES	ECTS credits	INSTRUCTOR
Compulsory		
Information society	3	Boris Badurina
Research methods in information sciences	3	Boris Badurina
Subject indexing and searching	3	Kornelija Petr Balog
Optional		
Technological changes and human-technology interaction	2	Milijana Mičunović
Visual communication	3	Josipa Selthofer
English language for advanced learners I	2	Mirna Varga
Reading habits and interests	2	Snježana Stanarević
Paper preservation methods	2	Damir Hasenay

Summer term

COURSES	ECTS credits	INSTRUCTOR
Compulsory		
Digital preservation	3	Damir Hasenay
Collection management in information institutions	3	Sanjica Faletar Tanacković
Evaluation of information services	3	Kornelija Petr Balog
Optional		
Managing preservation and presentation of cultural heritage	2	Maja Krtalić
Decision making methods and models in information institutions	2	Gordana Dukić
Forms and strategies of youth work in the information environment	2	Ivana Martinović
Change management in information institutions	2	Gordana Dukić

2nd year

COURSES	ECTS credits	INSTRUCTOR
Compulsory		
MODULE I - LIBRARY		
Theory and practice of organization of information	6	Kornelija Petr Balog
Marketing of library products and services	6	Gordana Dukić
MODULE II - PUBLISHING AND BOOKSELLING		
Management in publishing and bookselling	6	Zoran Velagić
Marketing in publishing and bookselling	6	Gordana Dukić
Optional		
English language for advanced learners I	3	Mirna Varga
Library architecture	6	Sanjica Faletar Tanacković
Information policy and technological changes	5	Milijana Mičunović
Preservation of e-documents (Digital preservation)	5	Damir Hasenay

Discrete structures and algorithms

The course is an introduction into discrete structures – abstract mathematical finite structures and possibilities of its applications within information sciences. During the course the most famous algorithms will be presented as well as an impact of data structure to algorithm's process. Within the course the main ideas and methods of graph theory will be shown through illustrations. Different techniques of algorithm's design will be explained. Students will be able to understand the importance of developing skills of algorithmic thinking during different problem solving.

Literature: Divjak, B.; Lovrenčić, A. Diskretna matematika s teorijom grafova. Varaždin: TIVA-FOI, 2005.

Intelligent systems

The course is an introduction into different approaches of artificial intelligence for intellectual problem solving. The techniques of artificial intelligence such as data mining, neural networks, decision trees etc. are used to develop computer systems which show some kind of intelligence – intelligent systems. Intelligent systems can learn new concepts, give useful conclusions, understand natural language etc. and generally show skills which demand human intelligence. Students will be able to describe main functions and characteristics of intelligent systems. Also, students will be able to understand different areas of application of artificial intelligence techniques such as expert systems and describe trends of intelligent systems development.

Literature:

1. Hopgood, A. A. Inteligent Systems for Engineers and Scientists. 2nd ed. Boca Raton: CRS press, 2000.
2. Luger, G. F. Artifical intelligence: structures and strategies for complex problem solving. 6th ed. Boston: Pearson Addison Wesley, 2009.
3. Munakata, T. Fundamentals of the new artificial intelligence: neural, evolutionary, fuzzy and more. 2nd ed. London: Springer, 2008.

Croatian newspapapers

Course description

The history of Croatian newspapers and their major characteristics, from the first newspapers in Croatia till the end of the 20th century. Information, political, ideological and historical roles of newspapers. The most important events and persons. The importance of newspapers as the primary research material.

Objectives

- to give an overview of the history of Croatian newspapers
- to enable students to recognize the importance of newspapers as the primary research material kept in a number of heritage institutions (libraries, archives, museums)
- to develop students' understanding of the importance of making newspapers collections and taking care of them
- to emphasize the significance of newspapers as the symbols of the national memory

Reading list
Required

1. Časopis. // Hrvatska enciklopedija. Zagreb : Leksikografski zavod, Sv. 2. 2000.
2. Horvat, J. Povijest novinstva Hrvatske (1771-1939), Zagreb : Golden Marketing-Tehnička knjiga, 2003.
3. Novak, B. Hrvatsko novinarstvo u 20. stoljeću. Zagreb : Golden marketing - Tehnička knjiga : Press data, medijska agencija HND-a, 2005.
4. Sorokin, B. Hrvatski časopisi : Povijesni pregled. // Otvorena informacijska enciklopedija, http://www.hidd.hr/articles/casopisi.php (2008-09-14)

Recommended

Students' choice – depending on the theme of the paper

Theoretical approaches to information

Students are familiarized with the concept of information from various standpoints: historical, linguistic, philosophical, social, and technical. The concept of information is brought into the relationship with related concepts: data and knowledge.

Required reading:

1. Aparac-Gazivoda, T. Teorijske osnove knjižnične znanosti. Zagreb : Filozofski fakultet, Zavod za informacijske studije Odsjeka za informacijske znanosti, 1993.

2. Bates, M. J. *Information*. // Encyclopedia of Library and Information Sciences. / ed. M. J. Bates i M. N. Maack. 3rd edition. [s. l.]:Taylor & Francis, 2009. Str. 2347-2361

3. Buckland, M. *Information and information systems*. Westport, Connecticut, London: Praeger, 1991.

4. Burgin, M. *Theory of information: Fundamentality, Diversity and Unification*. New Jersey : World Scientific, 2010.

5. Cappuro, R.; Hjørland, B. *The concept of information*. // Annual Review of Information Science and Technology. / ed. B. Cronin, 37 (2003), str. 343-411. URL: http://www.capurro.de/infoconcept.html (2014-02-20)

6. Dretske, F. I. *Epistemology and information*. // Handbook of the Philosophy of Science. / Philosophy of Information, eds. Pieter Adriaans and Johan van Benthem, 2008.

7. Floridi, L. *Information: a very short introduction*. Oxford : Oxford University Press, 2010.

8. Floridi, L. *Semantic conceptions of information*. // *The Stanford Encyclopedia of Philosophy. / ed.* Edward N. Zalta. URL: http://plato.stanford.edu/archives/spr2011/entries/information-semantic/ (2013-08-25)

9. Tuđman, M. Teorija informacijskih znanosti. Zagreb: Informator, 1986.

Project management

The aim of the course is to emphasize the importance and benefits of a project approach to business activities and to train students for using the most important tools of project management. Students will gain basic theoretical knowledge in the field of project management, with a special emphasis on the design, implementation and evaluation of projects in the archive, museum, bookselling, library and publishing activities. In the practical part of the course, students will become familiar with the most popular methods of network programming and software project management.

Required reading:

1. Carpenter, Julie: Project Management in Libraries, Archives and Museums: Working with government and other external partners, Chandos Publishing, Witney, 2011.

2. Omazić, M.A., Baljkas, S.: Projektni menadžment, Sinergija, Zagreb, 2005.