

Title: Computer Information Systems.
Lecturer: Senior Lecturer A.M.Gusenkov.
Term:
Lectures + Labs : 18+18 academic hours
ECTS credits:
FEL www:

Annotation: This course presents a classification of computer information systems. The general principles of information retrieval systems associated with the processing of electronic resources on the basis of thesauruses and ontologies are considered.

Course Objectives:

Students who have completed the study of this discipline have to know

- a) the basic principles of information retrieval systems;
- b) the foundations of the theory of information retrieval;
- c) basic techniques for constructing information retrieval systems;
- d) technique for constructing thesaurus and ontologies;
- e) basic clustering algorithms of text systems

be able to:

- a) make a reasonable choice of implementation technique to build information retrieval system;
- b) make implementation of basic algorithms of information retrieval

Syllabus:

1. Classification of computer information systems.
2. General principles of the organization of information retrieval systems.
3. Metadata and processing of electronic resources.
4. Requirements for the software systems providing computer-aided scientific activity.
5. Model of information system.
6. Logical structure of the software system components.
7. Construction of thesauruses and ontologies for the information retrieval systems.
8. Metadata extraction from semistructured documents.
9. Text documents clustering

References:

The main textbooks

1. Вендров А.М. Проектирование программного обеспечения экономических информационных систем: Учебник. – 2-е изд., перераб. и доп. – М.: Финансы и статистика, 2005. – 544с.

Additional textbooks

2. Шокин Ю.И., Федотов А.М., Баракнин В.Б. Проблемы поиска информации. –

Новосибирск, Наука, 2010.

3. Гасанов Э.Э., Кудрявцев В.Б. Теория хранения и поиска информации. – М.: Физматлит, 2002.