#### "MODELS AND METHODS FOR PROCESSING AND ANALYZING LARGE VOLUMES OF INFORMATION".

(name of the discipline) OUTLINE

# TO THE CURRICULUM OF THE INSTITUTION OF HIGHER EDUCATION

specialty 7-06-0612-03 system information management

	form of higher education	
	full-time (full-time)	Correspondence
Course	1	1
Semester	2	2
Lectures, hours	16	4
Laboratory, hours	16	4
Exam, semester	2	2
Classroom hours in the educational discipline	32	8
Self-work, hours	76	100
Total hours of the discipline / credit units	108/3	

## 1 Summary of the contents of the discipline

Learning the theoretical foundations of big data analysis, including basic elements of statistical programming and intelligent analysis of large data sets.

## 2 Learning objectives

As a result of studying the academic discipline, the student should

## know:

- basic concepts and principles of big data analysis;

- Basic algorithms of big data analysis and approaches to their creation;
- the problems of analyzing big data sets;

#### be able to:

- use special algorithms for big data analysis;

- apply methods of big data analysis to solve practical problems of managing and processing large amounts of information;

- creatively and effectively use the acquired knowledge in professional activities;

# have the skill:

- skills of working on multi-core computing systems;
- tools of software development using Internet resources of statistical programming projects
- Technologies of big data analysis using special environments of statistical programming.

#### 3. Formable competencies

UK-1 Apply methods of scientific cognition in research activities, generate and implement innovative ideas, SK-13 Formulate solutions based on the analysis of complex cause-effect relationships.

# 4 Requirements and forms of current and intermediate attestation.

Current - ZIZ, intermediate - credit.