# "NON-CLASSICAL LOGICS"

(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** | **Correspondence** |
| **Course** | **1** | **1** |
| **Semester** | **2** | **2** |
| **Lectures, hours** | **24** | **6** |
| **Laboratory, hours** | **24** | **6** |
| **Exam, semester** | **2** | **2** |
| **Classroom hours in the educational discipline** | **48** | **12** |
| **Self-work, hours** | **60** | **96** |
| **Total hours of the discipline / credit units** | **108/3,0** | |

**1 Summary of the content of the discipline**

Deep knowledge in the field of formal logic, in particular the systems of non-classical logic (fuzzy logic, modal logic, temporal logic, etc.) in application to the problem of knowledge representation; acquisition of modern tools of formalization of reasoning and automatic building of conclusion.

**2 Learning objectives**

As a result of studying the discipline, the student should

**know:**

- basic facts about the calculus of non-classical logics;
- Semantics of non-classical logics;
- algorithms of common sense checking;

**be able to:**

- construct formal inference in a given calculus;
- verify the truth of formulas in models;
- use the language of non-classical logics to formalize a given set of facts and rules;

**have the skill:**

- skills in working with modern systems of automated inference construction in calculus of non-classical logics.

**3. Competencies to be formed**

UPK-4 Apply the skills of formulation and solution of optimal control problems.

**4 Requirements and forms of current and intermediate attestation.**

Current - CR, intermediate - exam.