

Federal State Autonomous Educational Institution of Higher Education
Peoples' Friendship University of Russia

Faculty of Science

ANNOTATION OF THE ACADEMIC DISCIPLINE

Educational program

02.03.02 Fundamental informatics and informational technologies
(code and name of the educational program)

Developers

Dosent

(position)

M. B. Foin

(name)

Head of the department of

(department)

(department)

(name)

Name of the discipline	Programming technology.
Scope of the discipline	108 credits (hours)
Brief summary of the discipline	
Name of the section (subject) of the discipline	Brief summary of the section (subject) of the discipline
Classes, data fields and class methods. Class String.	Static data fields and class methods. Initialization of static data. Dangerous and safe class methods. Transformation of abstract data types.
Inheritance of classes. Public and private subclasses.	Rules of access for friendly and child classes and objects to private, protected and public members. Order of calling constructors and destructors
Polymorphism	Dynamic and static linking. Overloading of new and delete operators. Process of resolving inconsistency of calling overloaded functions. Three types of conformity (nobody knows what is it) Virtual functions.
Multiple inheritance.	Virtual classes. Order of calling constructors and destructors.
Parameterized functions and classes. STL library.	Different types of sequence and associative containers. Different types of iterators and functional objects. Classification of algorithms.
Programming with the expectation of the future changes. Processing exceptions.	

Introducing into basic programming patterns.	Examples of quality programming, ideas independent of language and field of usage.
Complicated systems. Representation of complicated system in different resources.	

