

**THE BASICS OF OBJECT-ORIENTED PROGRAMMING**

(course title)

**COURSE SYLLABUS ABSTRACT**

**of higher education institution**

**speciality**

Electronic marketing 1-28 01 02

(speciality code and name)

(specialisation code and name)

	STUDY MODE		
	full-time	part-time	part-time (shortened program)
Year	2	2	2
Semester	3	3	3
Lectures, hours	34	8	8
Practical classes (seminars), hours			
Laboratory classes, hours	34	10	8
In-class test (semester, hours)		2(3 semester)	2 (3 semester)
Course paper, semester			
Course project, semester			
Pass/fail, semester			
Exam, semester	3	3	3
Contact hours	68	20	18
Independent study, hours	76	124	126
Total course duration in hours / credit units		144/4	

1. Course outline

The aim of Object Oriented Programming is to teach students how to build complex programmes and systems using object-oriented programming.

2. Course learning outcomes

Upon completion of the course, students will be expected to

know:

- basic language concepts and syntax, OOP technology and programme development techniques;
- methods for defining and using basic objects and language constructions;
- technology of organization and use of hierarchy of classes, predefined classes and data types, methods of access limitation and handling of exceptional situations;
- methods of classes parameterization and their use to solve problems;
- methods of templates and container abstractions application;
- threading and development of multithreaded applications;

be able to:

- define abstractions, modules, build a hierarchy of classes to implement programmes;
- use methods: typing, encapsulation, inheritance, polymorphism for software development
- use the capabilities of standard libraries;
- use the exception mechanism to create stable applications;
- create their own and use provided standard libraries of templates of complex data structures;
- Use OOP technology to develop complex programs and systems;

possess:

- methods and tools and systems for developing object-oriented software;
- techniques for creating object-oriented software components and organizing their interaction in software projects.

3. Competencies

AC-1 Be able to apply basic scientific-theoretical knowledge to solve theoretical and practical problems.

AC-2 Be able to apply systems and comparative analysis.

AC-3 Have research skills.

AC-4 Be able to work independently.

AC-5 Be able to generate new ideas (have creativity).

AC-6 Have an interdisciplinary approach to problem solving.

AC-8 Have oral and written communication skills.

AC-9 Be able to learn and develop their skills throughout life.

AC-10 Use the basic laws of science in professional activities.

AC-13 Be familiar with the basic concepts of economic theory and apply them in the context of a market economy.

AC-14 Organize their work on a scientific basis and independently evaluate the results of their activities.

SLC-1 Possess the Characteristics of Citizenship

SLC-1 2 Be capable of social interaction.

SLC-3 Interpersonal communications skills

SLC-5 Able to criticism and self-criticism

SLC-6 Be able to work in a team

PC-15 Carry out preliminary studies, identify customer information needs in the field of electronic marketing and establish the requirements for the information system to be designed

PC-16 Research the market for information systems in the area of interaction between the organization and its customers

PC-17 Carry out the analysis of alternative solutions in the field of information, forming criteria for their selection

PC-18 Develop project documentation

PC-19 Develop schedules of maintaining and operating information systems for electronic marketing

PC-20 Design, maintain and operate electronic marketing information systems

PC-21 Prepare technical tasks for developing and upgrading of information systems in electronic marketing

PC-22 Simulate subject matter, including functional business process models, data flow and process flow models, database models

PC-23 Participate in the elaboration of the policy of the organization (enterprise) in the field of informatization of its activities and preparation of drafts of relevant documents (concepts, plans, activities, programs, solutions, etc.)

PC-24 Carry out software testing in the field of electronic marketing

PC-25 Develop technical documentation for the electronic marketing software

4. Requirements and forms of midcourse evaluation and summative assessment

The module-rating system for assessing students' knowledge is used in the study of the discipline. The following forms of classes are used: traditional lectures and multimedia lectures, problem / problem-oriented laboratory classes with the use of a computer. The results of the laboratory work are defended.