International Ataturk Alatoo University

Международный Университет «Ататюрк-Алатоо»

Confirmed by / Утверждено
Head of Department / Зав. Кафедрой

_____   _____

Last Name, First Name / Ф. И.   Signature (подпись)

"___" _____ 201__

SYLLABUS / РАБОЧАЯ ПРОГРАММА

Course Title / Название предмета   Programming Languages I_____

Department / Кафедра   Computer Engineering 2013 - 2014 academic year

Faculty / Факультет   New Technologies _____

	Semester		Course		Credits	Lectures (weeks)
	Семестр __fall__	Курс	__3__	Зачет __4__	Лекции (недель) _60(15)____

Examinations	Assignment(s)	Research Projects / Practical Work
Экзамены __2__	Индивидуальная Работа _9_	Курсовые Работы / Практические Занятия _12____

The Syllabus is based upon the educational standard
Рабочая программа составлена на оснавании стандарта образования

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APPROVED at the Department Session
РАСМОТРЕННО на Заседании кафедры

Order / Приказ № _____ "____" _____ 201 ___ year

Syllabus (Программа)

COURSE TITLE / Название предмета:

Programming Languages I

1. COURSE DESCRIPTION / Описание предмета:

The Core Java technologies and application programming interfaces (APIs) are the foundation of the Java Platform, Standard Edition (Java SE). They are used in all classes of Java programming, from desktop applications to J2EE applications.

2. AIMS & OBJECTIVES / Цели и задачи:

This course offers an introduction to the Java programming language for those students who have had little or no background in programming. Toward this goal students will learn how to:

- Write programs using the Java language. Basic topics considered are programs and program structure in general, and Java syntax, data types, flow of control, classes, methods, objects, arrays, exception handling, recursion, and graphical user interfaces (GUIs).
- Understand fundamentals of object-oriented programming in Java, including defining classes, invoking methods, using class libraries etc.

3. BY THE END OF THIS COURSE STUDENT WILL BE ABLE TO (К КОНЦУ этого курса студенты смогут):

- ✓ *Comprehend* the art of programming and, in particular, the structure and meaning of basic Java programs

- ✓ *Design* and build programs using problem-solving techniques such as top-down design

- ✓ *Modify*, compile, debug, and execute Java programs
- ✓ *Understand* how to create graphical user interfaces

4. GRADING / Оценка:

1 Quiz	15% of Midterm
1 Project	15% of Midterm
Homework	10% of Midterm
1 Quiz	15% of Final
1 Project	15% of Final
Homework	10% of Final
Midterm Exam	40% of Final Grade
Final Exam	60% of Final Grade

5. LITERATURE / литература:

Course book: Java how to program 9th edition (Paul Deitel, Harvey Deitel)

Additional Books: Thinking in Java 4th edition (Bruce Eckel)

Internet Resources: http://www.javatutorialhub.com/first-java-program.html

Note: Literature from our library should be also included

6. ATTENDANCE / посещаемость:

(Policy description)

The attendance policy of this class will follow the policy of the University.

7. CONTENT & COURSE CALENDAR / содержание и календарь курса:

The calendar below provides information on the course's lecture (L), recitation (R) sessions and quizzes.

Week #	Course calendar.			
	SES #	TOPICS	Reading(Chapter)	KEY DATES
	Introduction and Review			
1	L1	Syllabus, Introduction to Java and Java Applications	Reading 1 -2	
	R1	Java Environment		
	Object-Oriented Programming			
2	L2	Introduction to Classes, Objects, Methods and Strings	Reading 3	HW 1 out
	R2	Data Types		
3	L3	Classes and Objects: A Deeper Look	Reading 8	HW 1 due
	R3	Classes structures		HW 2 out
4	L4	Encapsulation and Overriding	Reading 8.3	HW 2 due
	R4	Interfaces, fields accessibility		HW 3 out
5	L5	Inheritance and Polymorphism	Reading 9-10	HW 3 due
	R5	Sub Classes and Super Classes		HW 4 out
6	L6	Exception Handling	Reading 11	HW 4 due
	R6	Exceptions and risk systems		
7	L7	Quiz - 1 (duration 1 hour, 5-6 Questions)		

	R4	Solving Quiz Questions		
8	L8	Multithreading	Reading 26	HW 5 out
	R8	Threads, runnables		HW 5 due
MIDTERM				
Files and Streams, Graphical User Interface				
9	L9	Files and Streams	Reading 17	HW 6 out
	R5	Types of Streams		
10	L10	Object Serialization	Reading 17	HW 6 due
	R10	Examples		HW 7 out
11	L11	GUI Components	Reading 14	HW 7 due
	R6	Buttons, TextFields, Selects etc.		
12	L12	Quiz - 2 (duration 1.2 hour, 5-7 Questions)		
	R12	Quiz 2 Questions and Computability Wrap-up		
13	L13	Listeners and Events	Reading 25	HW 8 out
	R13	Events Handling		
14	L14	Layout Managers	Reading 14, 25	Hw 8 due
	R14	Examples		HW 9 out
15	L15	Overall Review		HW 9 due
	R15	Summary		
FINAL EXAM				