Java and web technologies - course description

General information

Course name	Java and web technologies
Course ID	11.3-WE-INFP-JavaiWeb-Er
Faculty	Faculty of Computer Science, Electrical Engineering and Automatics
Field of study	Computer Science
Education profile	academic
Level of studies	First-cycle Erasmus programme
Beginning semester	winter term 2019/2020

Course information

Semester	3
ECTS credits to win	6
Course type	obligatory
Teaching language	english
Author of syllabus	• dr inż. Andrzej Czajkowski

Classes forms

The class form	Hours per semester (full-time)	Hours per week (full-time)	Hours per semester (part-time)	Hours per week (part-time)	Form of assignment
Lecture	30	2	-	-	Exam
Laboratory	30	2	-	-	Credit with grade

Aim of the course

- Familiarize students with fundamentals of Java Platform and object-oriented programming,

- Introduce students to design and implement standalone and network applications.

Prerequisites

Principles of programming , Object-oriented programming,

Scope

- Java Platform, Standard Edition
- Memory Managment
- Naming Conventions
- Lexical Elements
- Fundamental Types
- Reference Types
- Object-Oriented Programming
- Statements and Blocks
- Exceptions Handling
- I/O API
- Concurency
- GUI in Java
- Lambda Expressions

Teaching methods

lecture, laboratory classes.

Learning outcomes and methods of theirs verification

Outcome description	Outcome symbols	Methods of verification	The class form
Student is able to find and analyse API documentation of specific classes		• an observation and evaluation of activities during the classes	• Laboratory
Student can create API documentation using javadoc annotations		• an observation and evaluation of the student's practical skills	• Laboratory
Student knows and can use the basics of Java language syntax to write simple applications on J2SE platform		• a quiz	• Lecture • Laboratory
Student can analyse and explain the java code, find the logical and syntax errors.		• a quiz • an examination test with score scale	• Lecture • Laboratory

Outcome description	Outcome symbols	Methods of verification	The class form
Student knows the fundamentals of object oriented programming and can properly use those in self written applications		• a quiz • an examination test with score scale	• Lecture • Laboratory

Assignment conditions

Lecture - the passing criterion is a sufficient mark from the final test.
Laboratory - the passing criterion are positive marks for laboratory exercises and tests.
Final mark components = lecture: 50% + laboratory: 50%

Recommended reading

1. B. Eckel, Thinking in Java, Prentice Hall, 2006
2. D. Flanagan, B. Evans, Java in a Nutshell, 6th Edition: A Desktop Quick Reference, O'Reilly, 2014

Further reading

1. Richard Warburton, Java 8 Lambdas, O'Reilly, 2014
2. Java Code Convention, Sun Microsystems, 1997

Notes

Modified by prof. dr hab. inż. Andrzej Obuchowicz (last modification: 27-10-2019 10:40)