Syllabus

Basic data of the subject	
University/Faculty:	**Faculty of Engineering and Informatics**
Academic unit:	**Industrial Engineering with Informatics**
Title of the subject:	**Computer Literacy**
Level:	**Bachelor**
Course Status:	**Core**
Year of studies:	**IST**
Number of hours per week:	**3**
Value of Credits - ECTS:	**5**
Time / location:	**Monday,**
Course lecturer:	**Prof. Ass. Dr. Bashkim Cerkini**
Contact details:	bashkim.çerkini@ushaf.net
Course Description	*Computer Literacy will equip student with comprehensive knowledge of computer science, examining computers at different levels: from hardware and history of computer to the impact they have on society.* *The course contains basic topics on computer science: Brief history of computers, main hardware parts of a computer and their function; Computer software (System software and Application software); Security; Computer Networks and Internet.* *In addition to, this course will introduce student to the use of Algorithms for solving practical problems, with basics and elementary rules of programming as well as the use of the console to write and execute programs.*
Objectives of the course:	*The aim of this course it to introduction students with a variety of terms, definitions and concepts that apply to the use of computers, to get acquainted with different algorithmic techniques for problem solving as well as to equips student with basic knowledge of computer programming in the C# programming language.*
Expected learning outcomes:	*After completing this course, student will be able to:* • *Know about history of computer and their evolution.* • *Identify main hardware parts of a computer and their function and to understand the purpose of software in a computer (System software and Application software)* • *Understand how the computer works, the constituent components of the computer and their interaction to produce what we see on the computer* • *Describe a computer network, to know Internet operation and use, protection against computer viruses and spam emails as well as the code of ethics.*

	• *Analyze a practical problem, build algorithmic solutions and know the programming concepts and basic rules of C # syntax.*

Contribution to the student load (which must correspond with learning outcomes)			
Activity	**Hour**	**Day/Week**	**In total**
Lectures with numerical exercises	3	15	45
Internship			
Contacts with teacher / consultations	1	5	5
Field exercises			
Midterm, seminars and projects.	2	2	4
Homework			
Self-learning time student (at the library or at home)	3	15	45
Final preparation for the exam	3	8	24
Time spent on evaluation (tests, quiz and final exam)	2	2	4
Projects and presentations	1	1	1
Total			**128**

Teaching methodology:	*Classroom lectures and discussions as well as practical exercise with computer.* *The study projects in which students will work in groups.*
Assessment methods:	*The student can choose to be evaluated one of the two forms of evaluation, given below:* *1. Form 1: Assessment with colloquiums and project 2.* *Form 2: Assessment with the final exam.* *Form 1:* *In the first form of assessment "Assessment with colloquiums and project" the student is assessed in four activities that are carried out during the lectures:* *1. Colloquium 1 (30%), individual assessment* *2. Colloquium 2 (30%), individual evaluation* *3. Class activity (10%), individual assessment 4. Project (30%), group assessment. Additional clarification:* *If the student in each activity above reaches the maximum points, then he will be evaluated with 100 points.* *Students who pass the exam according to form 1 of the assessment, are released from the obligation to take the final exam. Only if the student is not satisfied with the grade achieved according to form 1, then he can undergo the final exam to obtain a higher grade.* *Form 2:* *In the second form of evaluation, "Evaluation with the final exam", the student will undergo the exam which is held after the completion of the course lectures, and is organized in the exam deadlines, determined by the University senate.*

	Through the final exam, the student can achieve a maximum of 70% of the points from the total of 100 points. The rest of the 30% points must be completed by group work in the Project, an activity carried out during the lectures. *In Colloquium 1, Colloquium 2 and Final Exam, the assessment of students will be done through an assessment form, which must be completed individually by the student. The evaluation form will contain objective and subjective questions through which the student's learning outcomes will be evaluated:* *• The objective questions will be of the following types: (1) Multiple choice questions, (2) True/False, (3) Completion and (4) Composition/Matching; questions that will be used to assess the student's abilities to recall and recognize the concepts and material of the course.* *The subjective questions will be of the Essay/written task type that will be used to assess the student's understanding and abilities to apply the knowledge gained in the analysis, synthesis and evaluation of the problem, from the responses prepared by the student to the question posed. .* *Activity in the class means the student's engagement in dealing with the issues discussed in the class, during the lectures.* *Project (30%), group assessment: it is an activity in which students apply the acquired knowledge in a concrete project. It is carried out in groups of 2 or 3 students who are obliged to carry out the activity, document and present it to the subject professor.* *For the form of realism and documentation of the activity, all members of the group will be evaluated with the same point (20%), while the evaluation of the presentation skills of the activity is individual and includes 10%.* *Rating:* *91-100 points - evaluated with a grade of 10 (ten)* *81-90 points - evaluated with a grade of 9 (nine)* *71-80 points - evaluated with a grade of 8 (eight)* *61-70 points - evaluated with grade 7 (seven)* *51-60 points - evaluated with grade 6 (six)* *0-50 points - The student repeats the exam.*
Literature	
Basic Literature:	1. *Helene G. Kershner, Computer Literacy, (Second Edition), D.C. Heath & Co.* 2. *Agni H.Dika, ALGORITMET njohuri themelore me programe në C++, Prishtinë 2002, 2007.* 3. *C# Fundamentals via ASP.NET Web Applications, DevU* 4. *ECDL(MS Word, MS Excel, MS Access, MS Power Point, MS Outlook)*
Additional Literature:	1. *Connie Marrison, Dolores Wells and Lisa Ruffolo, "Computer Literacy BASICS: A Comprehensive Guide to IC3 5th Edition"*

	2. *C# Programming: From Problem Analysis To Program Design-Barbara Doyle* 3. *Libra tjerë që trajtojnë veglat e MS Office* 4. *Libra online: https://introprogramming.info/english-intro-csharp-book/*
The ratio of theory and practice	*Theory: 80%; Practice: 20%*

Designed learning plan	
Week:	**Lectures and exercises to be held**
Week one:	*Objective of the course - Syllabus;*
Week two:	*Introduction to Informatics; Computers; Security;*
Week three:	*History of computers, Operating System and Application software; First steps toward using computer and functions of Operating System (MS Windows 10).*
Week four:	*Computer networks and Internet*
Week five:	*Algorithms*
Week six:	*Algorithms*
Week seven:	***Test 1***
Week eight:	*What is a program, machine language; assembly language); High Level languages.* *How to write, compile and execute (interpret) a code in C #.*
Week nine:	*Elements of C# language (Basic Syntax)* *Basic concepts; Understanding flow of execution of code; Understanding of code style; Namespace; Keyword using in C#; Standard data types; Identifiers; Variables; Constants; Operators; Comments.*
Week ten:	*Basic programming.* *Writing a simple program; Reading of inputs from the console; Variables, declaration and initialization; Arrays, declaration and initialization.*
Week eleven:	*Basic programming.* *Data type and their conversion*
Week twelve:	*Basic programming.* *Operators*
Week thirteen:	***Test 2***
Week fourteen:	*Study visits to a company*
Week fifteen:	*Presentation of projects.*

Academic policies and rules of conduct
Regular attendance of lectures and exercises is necessary, as well as active participation with discussion and solution of tasks. Not impeding the progress required for learning using mobile phones turned off or in silent mode.