

Course Title-Course Code: Programming Languages-I – BTÖ203							Name of the Programme: Computer Education and Instructional Technologies		
Semester	Teaching Methods						Credits		
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
Fall	42	28				105	175	4	7
Language	Turkish								
Compulsory / Elective	Compulsory								
Prerequisites	None								
Course Contents	General information about programming languages, Compiler and interpreter concepts, Variables and data types in Pascal, Values assignment, Arithmetical, logical and conditional operators, Write-Writeln, Read-Readln commands, Conditional statements, Loops, Sub programs, Text files.								
Course Objectives	Developing of mathematical and algorithmic thinking, problem solving abilities using Pascal.								
Learning Outcomes and Competences	Students will be expected to solve any algorithmic problem using Pascal programming language within its fundamental functions at the end of the course.								
Textbook and /or References	1. Turbo Pascal-Problem Solving and Program Design, Elliot B. Koffman, Bruce R. Maxim, Addison-Wesley, 1993. 2. Pascal Programming: A Beginner's Guide to Computers and Programming, Chris Hawksley, Cambridge University Press, 1986.								
Assessment Criteria								<i>If any, mark as (X)</i>	Percent (%)
	Midterm Exams							X	%40
	Quizzes								
	Homeworks								
	Projects								
	Term Paper								
	Laboratory Work								
	Other								
	Final Exam							X	%60
Instructors	Assist.Prof.Dr.Tolga GÜYER								
Week	Subject								
1	General information about programming languages								
2	Turbo Pascal 7.0 editor								
3	Variables and data types in Pascal, Write and Read commands								
4	Conditional statements								
5	Loops and recursion								

6	CRT unit
7	Arrays
8	Sub programs
9	Menu designs based on sub programs
10	Operations on string types
11	Standard procedures and functions
12	Text files
13	Examples on text files
14	Applications

Course Title-Course Code: BTÖ205 Material Usage in Education							Name of the Programme: DEPARTMENT OF COMPUTER AND INSTRUCTIONAL TECHNOLOGIES TEACHING		
Semester	Teaching Methods						Credits		
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
3	42	0				108	150	3	6
Language	Turkish								
Compulsory / Elective	Compulsory								
Prerequisites	None								
Course Contents	In this lesson, animation usage in Education, tweening concept, creating graphics, symbols, publishing, creating buttons, integrating audio and video, script concept, object-oriented programming, variables, functions, events, components, working with text, data integration, integration of web programming and streaming concepts, etc. will be mentioned.								
Course Objectives	<ul style="list-style-type: none"> • To acknowledge the importance of usage animation in education • To comprehend usage animation in education • To create tweening, graphics and buttons in an animation program • To use symbols in an animation program • To import graphics, audio and video in an animation program • To use simple scripts in an animation program • To write simple program codes in an animation program • To acknowledge foundations of object-oriented programming • To acknowledge that data integration between an animation program and text files or data bases through web programming 								
Learning Outcomes and Competences	In this lesson, students will be able to develop instructional animation software by using an animation program.								
Textbook and /or References	<p>Knowledge> Solutions> Mastery Macromedia Flash MX Professional 2004 Unleashed. David Vogeeler ve Matthew Pizzi. Sams. Indianapolis, I 2004</p> <p>Macromedia Flash MX 2004 for Rich Internet Applications. Phillip Kerman. New Riders. Indianapolis, I 2004</p> <p>Macromedia Flash MX 2004 ActionScript 2.0 Dictionary. Macromedia Press. Berkeley, Calif 2004</p> <p>Macromedia Flash MX 2004 Application Development. Jeanette Stallons. Macromedia Press. Berkeley, Calif 2004</p> <p>Web Sites : Flash MX 2004: http://www.kirupa.com/developer/index.htm</p>								

Assessment Criteria		<i>If any, mark as (X)</i>	Percent (%)
	Midterm Exams	X	40
	Quizzes		
	Homeworks	X	10
	Projects	X	50
	Term Paper		
	Laboratory Work		
	Other		
	Final Exam		
Instructors	Instr. Dr. Serçin KARATAŞ (sercin@gazi.edu.tr)		
Week	Subject		
1	Introduction to lesson		
2	Introduction to Animation		
3	Introduction to Animation		
4	To create interaction in an animation program		
5	Programming in an animation program		
6	Programming in an animation program		
7	Programming in an animation program		
8	Programming in an animation program		
9	<i>Approximately mid-term exam week</i>		
10	Animation program – extern applications		
11	Animation program – extern applications		
12	Instructional animation applications		
13	Instructional animation applications		
14	General evaluation of the semester		

Course Title-Course Code: BTO207 - Foundations of Computer Assisted Instruction							Name of the Programme: Computer Education and Instructional Technologies		
Semester	Teaching Methods						Credits		
	Lecture	Recite	Lab.			Other	Total	Credit	ECTS Credit
3	42	-	-			83	125	3	5
Language	Turkish								
Compulsory / Elective	Compulsory								
Prerequisites	-								
Course Contents	History of CAI, the importance of educational theories in the development of educational software, the criteria for the evaluation of educational software, human-computer interaction, usability of software, the software development models.								
Course Objectives	Students will be aware of the history of CAI, CAI applications in world and Türkiye, Students will be able to define the relationship between CAI software and educational theories, Students will be aware of the CAI software evaluation criteria, The students will be able to define the factors effecting human computer interaction, The students will be able to define the factors effecting the software usability, The students will be able to define the software development models								
Learning Outcomes and Competences	The students will be able to criticize the existing educational software using various educational theories, The students will be able to evaluate the existing educational software to show their usability using the human computer interaction criteria, The students will be able to decide the software development model for a given project.								
Textbook and /or References	Dr. Salih UŞUN: Dünyada ve Türkiye’de BDE; Dr. Yavuz AKPINAR: BDE ve Uygulamalar; various course notes compiled by the instructor.								
Assessment Criteria							<i>If any, mark as (X)</i>	Percent (%)	
	Midterm Exams						x	40	
	Quizzes								
	Homeworks								
	Projects								
	Term Paper								
	Laboratory Work								
	Other								
	Final Exam						x	60	
Instructors	Dr. Selçuk ÖZDEMİR								
Week	Subject								

1	The history of CAI.– CAI applications inWorld and Turkiye.
2	CAI and instructional theories relationships.
3	CAI and instructional theories relationships.
4	Development and evaluation criteria of educational software
5	Development and evaluation criteria of educational software
6	Human-computer interaction
7	Human-computer interaction
8	Midterm
9	Usability of software
10	Effectiveness, efficiency and satisfaction for usability.
11	Software development models
12	Software development models
13	General evaluation of the term
14	Final