

Course Description Form	
Course Code and Name	BM102 COMPUTER PROGRAMMING II
Course Semester	2
Catalog Content	Visual programming, object-oriented programming environments. Class, object, inheritance, polymorphism, abstract class concepts, Windows form applications, simple database applications.
Textbook	Visual C# How to Program (6th Edition) by Paul J. Deitel, Harvey Deitel, 2016.
Supplementary Textbooks	Starting out with Visual C# (4th Edition) by Tony Gaddis, 2016. C# Programming: From Problem Analysis to Program Design 5th Edition by Barbara Doyle, 2015.
Credit	5
Prerequisites of the Course (Attendance Requirements)	BM101 COMPUTER PROGRAMMING I
Type of the Course	Compulsory
Instruction Language	Turkish
Course Objectives	To understand the logic of writing programs. To understand how the definition of arithmetic and logical operations on the computer To write programs in any programming language.
Course Learning Outcomes	1. Be able to develop, design and implement simple computer programs. 2. Understand functions and parameter passing. 3. Understand object-oriented design and programming.
Instruction Methods	The mode of delivery of this course is Face to face
Weekly Schedule	1. Week Introduction to C# 2. Week Variables and Basic Concepts 3. Week Methods and overloading 4. Week Recursive functions 5. Week Regular expressions 6. Week Regular expressions 7. Week Exception handling 8. Week Object oriented programming 9. Week Classes 10. Week Inheritance, polymorphism 11. Week File operations 12. Week Introduction to visual programming 13. Week Windows Forms 14. Week Database application

<p>Teaching and Learning Methods</p> <p><i>(These are examples. Please fill which activities you use in the course)</i></p>	<p>Weekly theoretical course hours: 2 Weekly tutorial hours: 2 Reading Activities Internet browsing, library work Designing and implementing materials Preparation of Midterm and Midterm Exam Final Exam and Preparation for Final Exam</p>		
<p>Assessment Criteria</p>		<p>Numbers</p>	<p>Total Weighting (%)</p>
	Midterm Exams	1	20
	Assignment	4	10
	Application	12	20
	Projects	1	10
	Practice		
	Quiz		
	Percent of In-term Studies (%)		60
	Percentage of Final Exam to Total Score (%)		40
	Attendance		

Workload	Activity	Total Number of Weeks	Duration (weekly hour)	Total Period Work Load			
	Weekly Theoretical Course Hours	14	2	28			
	Weekly Tutorial Hours	14	2	28			
	Reading Tasks	14	1	14			
	Studies	14	1	14			
	Material Design and Implementation	14	1	14			
	Report Preparing			0			
	Preparing a Presentation			0			
	Presentations			0			
	Midterm Exam and Preparation for Midterm Exam	1	14	14			
	Final Exam and Preparation for Final Exam	1	14	14			
	Other (should be emphasized)			0			
	Total Workload			126			
	Total Workload / 25			5.04			
	Course Credit (ECTS)			5			
Contribution Level Between Course Learning Outcomes and Program Outcomes	No	Program Outcomes	1	2	3	4	5
	1	Sufficient knowledge on mathematics, science and computer engineering; ability to apply theoretical and practical knowledge in these areas to model and solve engineering problems				X	
	2	Ability to identify, define, formulate and solve complex engineering problems; ability to choose and apply appropriate analysis and modelling methods for these purposes					X
	3	Ability to design a complex system, process, device, software, algorithm, or product under realistic constraints and circumstances to meet certain requirements; ability to apply modern design techniques for this purpose				X	
	4	Ability to choose, develop and use modern techniques and tools necessary for engineering applications; ability to effectively use computing technologies				X	
	5	Ability to design and implement systems or experiments to solve engineering problems, collect and interpret data to evaluate and analyze the results of solutions				X	
	6	Ability to work effectively in intradisciplinary and interdisciplinary teams or individually			X		
	7	Ability to efficiently prepare, evaluate and interpret reports				X	
	8	Ability to make presentations and conduct effective verbal and written communication in Turkish and English			X		
	9	Awareness of the necessity of lifelong learning; ability to access information, follow scientific and technological developments; ability to perpetually renew oneself				X	
	10	Awareness of professional and ethical responsibility, ability to act in accordance with ethical principles			X		

	11	Ability to apply knowledge on project management, risk management and change management		X			
	12	Awareness of entrepreneurship and innovation, ability to design and build sustainable systems	X				
	13	Ability to devise local and global solutions to contemporary issues considering the effects of engineering applications on health, environment and security	X				
	14	Awareness of the legal consequences of engineering solutions	X				
	15	Ability to apply knowledge on software development process and documentation rules	X				
	16	Knowledge on standards used in engineering applications	X				
	17	Awareness of occupational health and security, information security and privacy	X				
The Course's Lecturer(s) and Contact Information		Lecturer Dr. Oktay YILDIZ oyildiz@gazi.edu.tr					