

COURSE DESCRIPTION FORM														
Course Code and Name	BM101 COMPUTER PROGRAMMING													
Course Semester	1													
Catalogue Data of the Course (Course Content)	Algorithm development and flow diagrams, Basic concepts of programming, define variables, data types, assignment statements, transactions, decision-making structures, loops, functions, parameter transfer methods, pointers, arrays and user-defined data types.													
Course Textbooks	C: How to Program, Global Edition by Paul Deitel, Harvey Deitel, 2015.													
Supplementary Textbooks	C Programming Language, 2nd Edition by Brian W. Kernighan, Dennis M. Ritchie, 1988													
Credit (ECTS)	5													
Prerequisites for the Course (Attendance Requirements)	There is no prerequisite or co-requisite for this course.													
Course Type	Compulsory													
Language of Instruction	Turkish													
Course Objectives	To be able to understand the principles and stages required to solve a problem, to make the necessary algorithms and flow charts to solve a problem, to understand the structure of a programming language and use it using the C programming language.													
Course Learning Outcomes	<ol style="list-style-type: none"> 1. Learns the basic concepts of algorithm design and programming 2. Gain the ability to solve basic problems with C 3. Monitors a written program and finds errors 													
Instruction Method (Face-to-face, Distance education etc.)	The mode of delivery of this course is face to face													
Weekly Schedule of the Course	Week 1: Problem solving Week 2: Algorithm development and flow diagrams Week 3: Variables, data types, Operators Basic I/O Week 4: Program Control Structures Week 5: Loops Week 6: Functions Week 7: Functions Week 8: Arrays Week 9: Arrays Week 10: Pointers Week 11: Pointers Week 12: Structs Week 13: File operations Week 14: Introduction to Object Oriented Programming													
Teaching Activities (The time spent for the activities listed here will determine the amount of credit required)	Weekly theoretical course hours: 2 Weekly practical course hours: 2 Reading activities Internet search and library work Designing and implementing materials Midterm and revision for midterm Final exam and revision for final exam													
Assessment Criteria	<table border="1"> <thead> <tr> <th></th> <th>Number(s)</th> <th>Weight (%)</th> </tr> </thead> <tbody> <tr> <td>Midterm exam</td> <td>1</td> <td>30</td> </tr> <tr> <td>Assignment</td> <td>4</td> <td>30</td> </tr> <tr> <td>Application</td> <td></td> <td></td> </tr> </tbody> </table>			Number(s)	Weight (%)	Midterm exam	1	30	Assignment	4	30	Application		
	Number(s)	Weight (%)												
Midterm exam	1	30												
Assignment	4	30												
Application														

Project		
Practice		
Quiz		
Final exam	1	40
Total	6	100

Workload of the Course	Activity	Number of Weeks	Duration (Weekly Hour)	End of Semester Total Workload
	Weekly theoretical course hours	14	2	28
	Weekly practical course hours	14	2	28
	Reading activities	14	1	14
	Internet search and library work	14	1	14
	Designing and implementing materials	4	8	32
	Making a report			
	Preparing and making presentations			
	Midterm and revision for midterm	1	10	10
	Final exam and revision for final exam	1	10	10
	Total workload			136
	Total workload/ 25			5,44
	Course Credit (ECTS)			5

Contribution Level between Course Outcomes and Program Outcomes	No	Program Outcomes	1	2	3	4	5
	1	Knowledge of mathematics, science, basic engineering, computing, and computer engineering; ability to use this knowledge in solving complex engineering problems.				X	
	2	Ability to define, formulate and analyze complex engineering problems using basic science, mathematics and engineering knowledge and considering the UN Sustainable Development Goals relevant to the problems addressed.			X		
	3	Ability to design creative solutions to complex engineering problems; ability to design complex systems, processes, devices, software, algorithms or products to meet current and future requirements, considering realistic constraints and conditions.			X		
	4	Ability to select, use and develop appropriate techniques, resources and modern engineering and informatics tools, including estimation and modeling, for the analysis and solution of complex engineering problems while being aware of their limitations.			X		
	5	Ability to use research methods to examine complex engineering problems or research topics in computer engineering, including reviewing the literature, designing experiments, conducting experiments, collecting data, analyzing and interpreting results.		X			
	6	Knowledge of the effects of engineering practices and the standards used in these				X	

		practices on society, health and safety, economy, sustainability and environment within the scope of the UN Sustainable Development Goals; awareness of the consequences of engineering solutions in the fields of information security and law.					
	7	Acting in accordance with engineering professional principles and knowledge on ethical responsibility; awareness of acting impartially, without discrimination on any issue, and being inclusive of diversity.		X			
	8	Ability to work effectively individually and as a team member or leader in intradisciplinary and multidisciplinary teams (face-to-face, remote, or hybrid).					
	9	Ability to conduct effective verbal and written communication on technical issues in Turkish or English, prepare reports, make effective presentations and prepare software documentation, considering the various differences of the target audience (such as education, language, profession).					
	10	Knowledge of business practices such as project, risk and change management and economic feasibility analysis; awareness of entrepreneurship and innovation.					
	11	Lifelong learning skill that includes the ability to learn independently and continuously, to adapt to new and developing scientific practices and technologies, and to think inquisitively about technological changes.					
Lecturer(s) and Contact Information	Lecturer's First/Last Name: Asst.Prof. Dr. Hüseyin Temuçin E-mail address: huseyintemucin@gazi.edu.tr						