

Course Description Form	
Course Code and Name	BM101 COMPUTER PROGRAMMING I
Course Semester	1
Catalog 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.
Textbook	C: How to Program, 7th Edition by Paul Deitel, Harvey Deitel, 2012.
Supplementary Textbooks	C Programming Language, 2nd Edition by Brian W. Kernighan, Dennis M. Ritchie, 1988. Programming in C (Developer's Library) 4th Edition by Stephen G. Kochan, 2014.
Credit	5
Prerequisites of the Course (Attendance Requirements)	There is no prerequisite or co-requisite for this course.
Type of the Course	Compulsory
Instruction Language	Turkish
Course Objectives	To be able to recognize descriptions and structures related with algorithm and programming and to be able to use them in programs
Course Learning Outcomes	1. Learning the basic Algorithm Design and programming concepts 2. Solving basic problems by using C. 3. Trace the program code and perform debugging
Instruction Methods	The mode of delivery of this course is Face to face
Weekly Schedule	1. Week Problem solving 2. Week Algorithm development and flow diagrams 3. Week Programming basics concepts 4. Week Variables, data types 5. Week Assignment statements, transactions 6. Week Decision-making structures 7. Week Loops 8. Week Loops 9. Week Functions, parameter transfer methods 10. Week Functions, parameter transfer methods 11. Week Pointers 12. Week Arrays 13. Week Two-dimensional arrays 14. Week User-defined data types, Structures
Teaching and Learning Methods (These are examples. Please fill which activities you use in the course)	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

Assessment Criteria		Numbers	Total Weighting (%)
	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					