

<b>Course Description Form</b>	
<b>Course Code and Name</b>	CENG213 OBJECT ORIENTED PROGRAMMING
<b>Course Semester</b>	3
<b>Catalog Content</b>	Introduction to OOP, Java Fundamentals, classes and objects, constructors, methods, inheritance, abstract classes, interfaces, polymorphism, static fields and methods, GUI design and implementation
<b>Textbook</b>	Java: How to Program, 9th Edition, by Paul Deitel, Harvey Deitel, 2011.
<b>Supplementary Textbooks</b>	An Introduction to Object-Oriented Programming (3rd Edition), Timothy Budd, 2001.  Object-Oriented Programming in C++ (4th Edition), Robert Lafore, 2001.
<b>Credit</b>	6
<b>Prerequisites of the Course</b> ( Attendance Requirements)	There is no prerequisite or co-requisite for this course.
<b>Type of the Course</b>	Compulsory
<b>Instruction Language</b>	English
<b>Course Objectives</b>	Introducing OOP concepts and thought process. Applying OOP concepts and design principles using Java.
<b>Course Learning Outcomes</b>	1. Ability to solve engineering problems using object oriented programs. 2. Ability to develop extensible and maintainable applications
<b>Instruction Methods</b>	The mode of delivery of this course is face to face.
<b>Weekly Schedule</b>	1. Hafta Introduction to OOP 2. Hafta Introduction to OOP 3. Hafta Java fundamentals 4. Hafta Java fundamentals 5. Hafta Classes and objects 6. Hafta Classes and objects 7. Hafta Constructors 8. Hafta Methods 9. Hafta Inheritance 10. Hafta Abstract classes and interfaces 11. Hafta Polymorphism 12. Hafta Static fields and methods 13. Hafta GUI design 14. Hafta GUI design
<b>Teaching and Learning Methods</b>  (These are examples. Please fill which activities you use in the course)	Weekly theoretical course hours: 3 Weekly practical course hours: 2 Reading Activities Internet browsing, library work Designing and implementing materials Preparation for Midterm and Midterm Exam Final Exam and Preparation for Final Exam

<b>Assessment Criteria</b>		<b>Numbers</b>	<b>Total Weighting (%)</b>				
	Midterm Exams	1	20				
	Assignment	4	20				
	Application	14	20				
	Projects	0	0				
	Practice	0	0				
	Quiz	0	0				
	Percent of In-term Studies (%)		60				
	Percentage of Final Exam to Total Score (%)		40				
Attendance							
<b>Workload</b>	<b>Activity</b>	<b>Total Number of Weeks</b>	<b>Duration (weekly hour)</b>	<b>Total Period Work Load</b>			
	Weekly Theoretical Course Hours	14	3	42			
	Weekly Tutorial Hours	14	2	28			
	Reading Tasks	10	2	20			
	Studies	10	1	10			
	Material Design and Implementation	4	6	24			
	Report Preparing			0			
	Preparing a Presentation			0			
	Presentations			0			
	Midterm Exam and Preparation for Midterm Exam	1	10	10			
	Final Exam and Preparation for Final Exam	1	16	16			
	Other ( should be emphasized)			0			
	Total Workload			150			
	Total Workload / 25			6			
Course Credit (ECTS)			6				
<b>Contribution Level Between Course Learning Outcomes and Program Outcomes</b>	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					
	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					
	9	Awareness of the necessity of lifelong learning; ability to access information, follow scientific and technological developments; ability to perpetually renew oneself					
	10	Awareness of professional and ethical responsibility, ability to act in accordance with ethical principles					
	11	Ability to apply knowledge on project management, risk management and change management					
	12	Awareness of entrepreneurship and innovation, ability to design and build sustainable systems					
	13	Ability to devise local and global solutions to contemporary issues considering the effects of engineering applications on health, environment and security					
	14	Awareness of the legal consequences of engineering solutions					
	15	Ability to apply knowledge on software development process and documentation rules					
	16	Knowledge on standards used in engineering applications					
	17	Awareness of occupational health and security, information security and privacy					
<b>The Course's Lecturer(s) and Contact Information</b>	Asst. Prof. Dr. Mehmet Demirci mdemirci@gazi.edu.tr						