

**ANKARA YILDIRIM BEYAZIT UNIVERSITY – DEPARTMENT OF MANAGEMENT INFORMATION SYSTEMS
COURSE SYLLABUS**

Course Code	Course Title	Course Type	ECTS Credits	Prerequisite Information	Date of Preparation
MIS303	SOFTWARE DEVELOPMENT	Compulsory	5	None	20.10.2025
Instructor of the Course & E-Mail Address	Prof.Dr. Ömür AKDEMİR oakdemir@aybu.edu.tr				
Office Hours & Office Room					
Course Content and Objectives	The objective of this course is to ensure that students master the entire software development life cycle, including ethical and legal issues.				
Textbook(s)	Software Engineering (9th Edition) 2010. Ian Sommerville				
Teaching Methods and Techniques	Face to Face				
Course Learning Outcomes	1	Explain what software development is and why it is important.			
	2	Describe why the development of different software systems may require different software development techniques.			
	3	Explain key ethical and professional issues that are important in software development.			
	4	Explain the concepts of software processes and software process models.			
	5	Describe the fundamental process activities of software engineering, including requirements engineering, development, testing, and evolution.			
	6				
	7				
Program Outcomes Contributed by the Course	Program Outcomes (PO)				
	1	Understands the fundamental principles, stages, and methodologies of software development.			
	2	Demonstrates the ability to analyze user requirements and design appropriate software solutions.			
	3	Applies structured and object-oriented programming techniques in software implementation.			
	4	Uses modern tools, frameworks, and version control systems to support software development processes.			
	5	Evaluates software quality through systematic testing, debugging, and documentation practices.			
	6	Demonstrates awareness of ethical, professional, and social responsibilities in software engineering.			
	7	Works effectively as part of a team in planning, developing, and managing software projects.			
Contribution of the Course to Field Instruction	This course equips students with both theoretical knowledge and practical skills necessary to design, develop, and manage software systems. It contributes to the Management Information Systems field by emphasizing the integration of programming, system analysis, and project management in software development processes. Students learn to transform business and user requirements into functional software applications, bridging the gap between technical implementation and organizational needs.				

	Furthermore, the course strengthens students' understanding of software process models, quality assurance, and ethical standards, ensuring that they can contribute effectively to technology-driven business environments.		
Topics Covered in the Course	1. Week	Introduction (General Overview)	
	2. Week	Software Processes	
	3. Week	Agile Software Development	
	4. Week	Requirements Engineering	
	5. Week	System Modeling	
	6. Week	Architectural Design	
	7. Week	Design and Implementation	
	8. Week	Midterm Exam	
	9. Week	Software Testing and Development	
	10. Week	Software Project Management and Planning	
	11. Week	Software Project Management and Planning (continued)	
	12. Week	Quality Management and Configuration Management	
	13. Week	Project Presentation	
	14. Week	Project Presentation	
	15. Week	Introduction (General Overview)	
Course Evaluation Criteria	In-Term Studies	Quantity	Percentage %
	Mid-terms	1	%50
	Quizzes		%
	Assignments		%
	Attendance		%
	Practice		%
	Project		%
	Final examination	1	%50
	Total	2	100%
Disability Policy	<p>If you have a documented disability (e.g., visual, hearing, or physical impairment, etc.) that may influence your performance in this course, it is recommended to meet with the Engelsiz AYBU (https://aybu.edu.tr/engelsiz/content_list-327-yildirim-beyazit-universitesi-engelsiz-universite-birimi-yonergesi.html) to arrange for reasonable conditions (such as accommodation, etc.) to ensure an equitable opportunity to meet all the requirements of this course. You may also contact the local authority of the Faculty of Humanities and Social Sciences. You should communicate your needs to the course instructor as soon as possible to ensure that any course needs concerning exams, lecture materials, etc. are met.</p>		