Course Syllabus

Code - Course Title	**AYG218 - Software Project Management**
Course Type	IV. SEMESTER
Laboratory + Practice	2+1
ECTS	**3.0**
Language of Instruction	Türkçe
Course Type	Area Elective Courses
Course Instructor(s)	ÖĞR. GÖR. AHMET MÜCAHİD ARVASİ

Mode of Delivery	Face to face
Prerequisites	There are no prerequisites or corequisites for this course.

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Fundamentals of Project Management: Software Development Life Cycle (SDLC) Models (Waterfall, Agile)	
Week - 2		Scope Management, Requirement Analysis, and Effective Stakeholder Communication	
Week - 3		Risk Analysis, Estimation, and Risk Mitigation Strategies in Software Projects	
Week - 4		Agile Software Development: Scrum Framework, Roles, Events, and Artifacts	
Week - 5		Agile Planning: Kanban Boards, Sprint Planning, and User Stories Management	
Week - 6		Version Control Systems 1: Git Architecture, Basic Commands, and Repository Management	
Week - 7		Version Control Systems 2: Branching Strategies (GitFlow), Conflict Resolution, and Code Merging Processes	
Week - 8		Midterm Exam	
Week - 9		Task and Bug Tracking: Using Jira/Trello Tools, Workload Distribution, and Bug Prioritization	
Week - 10		Team Performance: Agile Metrics (Velocity, Burndown Charts) and Performance Measurements	
Week - 11		Continuous Integration and Deployment (CI/CD): Pipeline Design, Automation Tools, and Release Management	
Week - 12		Back-End Application Management 1: API Lifecycle and Server Configurations	
Week - 13		Back-End Application Management 2: Database Migration Processes and Rollback Strategies	
Week - 14		Documentation Processes: API Documentation, Architecture Decision Records (ADR), Technical Debt Management, and End-of-Term Presentations	

Learning Outcomes

#	Learning Outcome
1	Upon successful completion of this course, students will gain the competence to apply Agile methodologies like Scrum and Kanban in projects by understanding software development life cycle models and project management fundamentals; execute version control and branching strategies with the Git architecture; integrate automation tools into their projects by designing continuous integration and deployment (CI/CD) pipelines; effectively manage task/bug tracking, API lifecycles, and database migration processes; and professionally manage a software project end-to-end by minimizing risks and maximizing intra-team collaboration through the preparation of comprehensive documentation processes such as architecture decision records (ADR) and technical debt management in accordance with standards.

Sustainable Development Goals

No content has been provided.

Course Theme

No content has been provided.

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	0	0	0
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	0	0	0
Ödevler	0	0	0
Proje - Rapor - Sunum Hazırlama	0	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	0	0	0
Final Sınavı Hazırlığı (sınav süresi dahil)	0	0	0
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0	0	0
Staj Uygulaması	0	0	0
		Calculated ECTS	**0**

Assessment Method and Passing Requirements

No content has been provided.