

<b>Course Description Form</b>			
<b>Course Code and Name</b>	5281329 Web Mining		
<b>Course Semester</b>	Fall-Spring		
<b>Catalog Content</b>	Data mining association rules, supervised and un supervised learning approaches, information retrieval, web mining web search, link analysis and web crawling.		
<b>Textbook</b>	Web Data Mining: Exploring Hyperlinks, Contents, and Usage Data, Bing Liu, Springer, 2011.		
<b>Supplementary Textbooks</b>	-		
<b>Credit</b>	8		
<b>Prerequisites of the Course ( Attendance Requirements)</b>	-		
<b>Type of the Course</b>	Technical Elective		
<b>Instruction Language</b>	Turkish		
<b>Course Objectives</b>	Students who successfully complete this course: Will be able to produce both theoretical and practical solutions to the problems that may be encountered in data mining. Will learn how to develop web mining applications.		
<b>Course Learning Outcomes</b>	Learning data mining and web mining Learning connection rules Learning supervised and unsupervised learning concepts Learning information extraction Learning web search concept Learning link analysis Learning web crawling		
<b>Instruction Methods</b>	The mode of delivery of this course is face to face		
<b>Weekly Schedule</b>	<ol style="list-style-type: none"> <li>1. Week: Data mining and Web mining</li> <li>2. Week: Association rules</li> <li>3. Week: Ordered patterns</li> <li>4. Week: Supervised learning</li> <li>5. Week: Classification using supervised learning</li> <li>6. Week: Unsupervised learning</li> <li>7. Week: Clustering using unsupervised learning</li> <li>8. Week: Information retrieval</li> <li>9. Week: Information retrieval</li> <li>10. Week: Web search</li> <li>11. Week: Web search</li> <li>12. Week: Link analysis</li> <li>13. Week: Link analysis</li> <li>14. Week: Web crawling</li> </ol>		
<b>Teaching and Learning Methods</b>  <i>(These are examples. Please fill which activities you use in the course)</i>	Weekly Theoretical Course Hours Reading Tasks Studies Report Preparing Preparing a Presentation Presentations Midterm Exam and Preparation for Midterm Exam Final Exam and Preparation for Final Exam		
<b>Assessment Criteria</b>		<b>Numbers</b>	<b>Total Weighting (%)</b>
	Midterm Exams	1	35
	Assignment	6	25
	Application		
	Projects		
	Practice		
	Quiz		
	Percent of In-term Studies (%)		60
	Percentage of Final		40

	Exam to Total Score (%)						
	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						
	Reading Tasks	13	3	42			
	Studies	14	1	14			
	Material Design and Implementation	1	20	20			
	Report Preparing	8	4	32			
	Preparing a Presentation	1	8	8			
	Presentations	1	4	4			
	Midterm Exam and Preperation for Midterm Exam	1	15	15			
	Final Exam and Preperation for Final Exam	1	20	20			
	Other ( should be emphasized)						
	Total Workload			197			
	Total Workload / 25			7.88			
	Course Credit (ECTS)			8			
<b>Contribution Level Between Course Learning Outcomes and Program Outcomes</b>	No	Program Outcomes	1	2	3	4	5
	1	Reaches the expansion of knowledge by conducting scientific research in the field of engineering and evaluation, interpretation and application of information.					X
	2	Has extensive and in depth knowledge including the latest techniques, methods applied and their limitations in engineering.					X
	3	Completes and applies knowledge by using scientific methods by using limited or missing data and integrates information from different disciplines.				X	
	4	Be aware of new and developing practices of the profession, examines and learns when needed.					X
	5	Defines and formulates problems related to the field, develops methods to solve them and applies innovative methods in solutions.				X	
	6	Develops new and / or original ideas and methods, designs complex systems or processes and develops innovative / alternative solutions in their designs.				X	
	7	Designs and applies theoretical, experimental and modeling based researches, examines and solves the complex problems encountered in this process.					X

	8	Works effectively in disciplinary and multidisciplinary teams, leads such teams and develops solution approaches in complex situations, works independently and takes responsibility.			X			
	9	Communicates oral and written using a foreign language at least at the level of European Language Portfolio B2.	X					
	10	Conveys the process and results of the studies in written and oral form in a systematic and clear manner in national and international environments within or outside the field.					X	
	11	Knows the social, environmental, health, security, legal aspects of engineering applications; project management, and business life applications and be aware of the constraints of these engineering applications.	X					
	12	Considers social, scientific and ethical values in the stages of data collection, interpretation and announcement and in all professional activities.		X				
<b>The Course's Lecturer(s) and Contact Informations</b>		Name Surname: Prof. Dr. M. Ali AKCAYOL E-mail address: akcayol@gazi.edu.tr						