

TOROS ÜNİVERSİTESİ

Faculty Of Engineering
Computer And Software Engineering

Course Information

RUBY PROGRAMMING LANGUAGE					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
CSE213	Fall	3	2	4	4

Prerequisites and co-requisites	None
Language of instruction	English
Type	Elective
Level of Course	Bachelor's
Lecturer	Asst. Prof. Mehmet Ali AKTAŞ
Mode of Delivery	Face to Face
Suggested Subject	None
Professional practise (internship)	None
Objectives of the Course	Students will learn Ruby fundamentals and then dive straight into models, controllers, views, and deployment. Then, students take skills to the next level as build a social networking app with more advanced Ruby tools, such as modules and metaprogramming, and advanced data modeling techniques within Rail's Active Record.
Contents of the Course	Principles behind object-oriented programming. Basic Programming Concepts. Variables, Loops, Control Flow. Object Oriented Programming Fundamentals. Arrays, Hashes and Loops. Blocks and Sorting. Procs, Lambdas and Refactoring. Basic understanding of many ancillary technologies such as databases, XML, web frameworks, and networking. Implementing fully functioning Ruby application.

Learning Outcomes of Course

#	Learning Outcomes
1	Student will learn writing and deploying Ruby applications.
2	Student will learn using Ruby web frameworks.
3	Student will learn work with Ruby libraries and documentation.
4	Student will learn work files and databases.

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Introduction to Ruby	Lecture, discussion, presentation
2	Setting up a Cloud and Integrated Development Environment	Lecture, discussion, presentation
3	Ruby Libraries and RubyGems	Lecture, discussion, presentation
4	Conditional If/Else Comparisons, Variables, Data Types	Lecture, discussion, presentation
5	Arrays, Loops and Hashes	Lecture, discussion, presentation
6	Control Flow in Ruby, Getting User Input and Output	Lecture, discussion, presentation
7	Blocks and Sorting	Lecture, discussion, presentation
8	Refactoring, Procs and Lambdas	Lecture, discussion, presentation
9	Midterm Exam	Exam
10	Files and Databases	Lecture, discussion, presentation

11	Ruby and the Internet	Lecture, discussion, presentation
12	Networking, Sockets and Daemons	Lecture, discussion, presentation
13	Ruby and Object Oriented Programming - I	Lecture, discussion, presentation
14	Ruby and Object Oriented Programming - II	Lecture, discussion, presentation
15	Project Representation	Presentation
16	Final Exam	Exam

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
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Method of Assessment

#	Weight	Work Type	Work Title
1	40%	Mid-Term Exam	Mid-Term Exam
2	60%	Final Exam	Final Exam

Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	Student will learn writing and deploying Ruby applications.	2,3,4	1,2
2	Student will learn using Ruby web frameworks.	2,3,4	1,2
3	Student will learn work with Ruby libraries and documentation.	2,3,4	1,2
4	Student will learn work files and databases.	2,3,4	1,2

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

Work Load Details

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	5	70
2	Course Duration Except Class (Preliminary Study, Enhancement)	0	0	0
3	Presentation and Seminar Preparation	0	0	0
4	Web Research, Library and Archival Work	0	0	0
5	Document/Information Listing	0	0	0
6	Workshop	0	0	0
7	Preparation for Midterm Exam	0	0	0
8	Midterm Exam	1	5	5
9	Quiz	0	0	0
10	Homework	2	5	10
11	Midterm Project	1	5	5
12	Midterm Exercise	0	0	0
13	Final Project	0	0	0
14	Final Exercise	0	0	0
15	Preparation for Final Exam	0	0	0
16	Final Exam	0	0	0
				90

