

# COSC-015 Introduction to Computer Science Using Ruby

## Spring 2015 Course Schedule

Computer Science Programming Basics in Ruby, Ophir Frieder, Gideon Frieder, and David Grossman

Week	Date	Topic	Chapters	Lecture#	Assignment Due Dates*	Day	Date
	5-Jan				----	Monday	5-Jan
Week 1	7-Jan	Class goals, schedule, syllabus, and administration	Chapter 1 & Supplemental	1		Wednesday	7-Jan
	12-Jan	Introduction to CS, definition, algorithms, languages	Reading	2	HW0 (Due 11-Jan)	Monday	12-Jan
Week 2	14-Jan	Ruby - simple examples, basic user interaction		3	HW1 (Due 13-Jan)	Wednesday	14-Jan
	19-Jan	<i>Holiday: Martin Luther King Day</i>		----	----	Monday	19-Jan
Week 3	21-Jan	Overview of the structure of a computer system	Section 2.1 - 2.4	4		Wednesday	21-Jan
	26-Jan	Data representation, software execution, Ruby	Section 2.5 - 2.8	5	HW2 (Due 25-Jan)	Monday	26-Jan
Week 4	28-Jan	Basics of a programming language - variables	Section 3.1 - 3.3	6		Wednesday	28-Jan
	2-Feb	Basic operations, simple program introduction	Section 3.4 - 3.8	7	HW3 (Due 1-Feb)	Monday	2-Feb
Week 5	4-Feb	Program flow and conditional structures	Chapter 4	8	HW4 (Due 3-Feb)	Wednesday	4-Feb
	9-Feb	Exam Review		9		Monday	9-Feb
Week 6	11-Feb	<b>Exam #1</b>		10		Wednesday	11-Feb
	16-Feb	<i>Holiday: President's Day</i>		----	----	Monday	16-Feb
Week 7	18-Feb	Loop structures (part 1), ranges, 1-diminsional arrays		11	HW5 (Due 17-Feb)	Wednesday	18-Feb
	23-Feb	Characters and strings, string operations	Section 5.1 - 5.5	12	HW6 (Due 22-Feb)	Monday	23-Feb
Week 8	25-Feb	Project #1 Introduction: Federalist Papers		13		Wednesday	25-Feb
	2-Mar	Loop structures (part 2)		14	Project 1, Part 1	Monday	2-Mar
Week 9	4-Mar	General arrays, pictures, strings vs. arrays	Section 6.1 - 6.2	15	HW7 (Due 3-Mar)	Wednesday	4-Mar
	9-Mar	<i>Holiday: Spring Break</i>		----	----	Monday	9-Mar
Week 10	11-Mar					Wednesday	11-Mar
	16-Mar	Sorting (numeric)	Section 7.1	16	Project 1, Part 2	Monday	16-Mar
Week 11	18-Mar	Sorting (numeric) continued	Section 7.1	17	HW8 (Due 17-Mar)	Wednesday	18-Mar
	23-Mar	Collating sequences, sorting of strings, basic file I/O	Section 11.1 - 11.2	18	Project 1, Part 3	Monday	23-Mar
Week 12	25-Mar	Search - numeric and text	Section 7.3	19	HW9 (Due 24-Mar)	Wednesday	25-Mar
	30-Mar	Exam Review, Project #2 Introduction (KJV text)		20	Project 1 Report Due	Monday	30-Mar
Week 13	1-Apr	<b>Exam #2</b>		21		Wednesday	1-Apr
	6-Apr	<i>Holiday: Easter Break</i>		----	----	Monday	6-Apr
Week 14	8-Apr	File I/O (continued)		22	HW10 (Due 7-Apr)	Wednesday	8-Apr
	13-Apr	Classes and objects, encapsulation, scope	Chapter 8	23	HW11 (Due 12-Apr)	Monday	13-Apr
Week 15	15-Apr	Defining classes	Section 9.1 - 9.3	24		Wednesday	15-Apr
	20-Apr	Inheritance, scope of variables	Section 10.1 - 10.2	25	HW12 (Due 19-Apr)	Monday	20-Apr
Week 16	22-Apr	Other topics: TBD		26	Project 2 Report Due	Wednesday	22-Apr
	27-Apr	Class overview, final exam topics		27		Monday	27-Apr
Study Days	28-Apr					Tuesday	28-Apr
	29-Apr	<i>Study Days</i>		----	----	Wednesday	29-Apr
	30-Apr					Thursday	30-Apr
Exam Days	1-May	<b>Exam Days</b>		----	----	Friday	1-May
	2-May					Saturday	2-May
Study Day	3-May	<i>Study Day</i>		----	----	Sunday	3-May
Exam Days	4-May					Monday	4-May
	5-May	<b>Exam Days</b>		----	----	Tuesday	5-May
	6-May					Wednesday	6-May
	7-May	<b>Final Exam 4:00pm - 6:00pm</b>				Thursday	7-May
	8-May	<b>Exam Days</b>		----	----	Friday	8-May
	9-May					Saturday	9-May

\*Course topics, exam dates, and other details listed in this schedule are subject to change. Notice of any changes will be provided in class.