

First Quarter	SCOPE AND SEQUENCE - Computer Math	2007-2008
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Introduction	"Karel J Robot" by Bergin - online
Unit 1 Lab 00	File management. Introduction to .java and .class files, naming conventions, objects and constructors
Unit 1 Lab 01	Method Calling, object identifiers, dot notation
Unit 1 Lab 02	References vs Objects, introduction to Primitive Data, simple inheritance, Instance Methods
Unit 1 Lab 03	Class Methods, passing Objects to Methods
Unit 1 Lab 04	Pseudocode, call to " super() "
Unit 1 Lab 05	"for" loops
Unit 1 Lab 06	Boolean Logic, simple conditional, "while" loops, non "void" methods and "return" statements
Unit 1 Lab 07 / 08	Polymorphism
Unit 1 Lab 09	Problem Solving
Unit 1 Lab 10	Complex conditionals

Second Quarter	SCOPE AND SEQUENCE - Computer Math	2007-2008
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Unit 1 Lab 11	Using abstract classes
Unit 1 Lab 12	Using Interfaces
Unit 1 Lab 14	Threads - if time permits
Unit 2 Lab 00	JPanels , JFrames , drivers and resources
Unit 2 Lab 01	Graphics methods
Unit 2 Lab 02	Static methods and fields, problem solving
Unit 2 Lab 03	Problem solving using multiple algorithms with the same data
Unit 3 Lab 00	GUI vs Graphics, introduction to Listeners, API investigation
Unit 3 Lab 01	JTextFields , JButtons , JLabels
Unit 3 Lab 02	Multiple Objects, Multiple Listeners, static Math class
Unit 3 Lab 03	Primitive data and Wrapper classes

Third Quarter	SCOPE AND SEQUENCE - Computer Math	2007-2008
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Unit 3 Lab 04	Black Box concept
Unit 3 Lab 05	Generating random values
Unit 3 Lab 06	Incorporating images, using switch , more non-void methods
Unit 3 Lab 07	Helper methods and Applets (writing .html files)
Unit 3 Lab 08	LayoutManagers - FlowLayout , GridLayout , BorderLayout and BoxLayout
Unit 3 Lab 09	Listeners and introduction to DecimalFormat class
Unit 3 Lab 10	Complex Layouts
Unit 3 Lab 11	System class and loops
Unit 4 Lab 00	Arrays of primitive data, JOptionPane and Wrapper classes
Unit 4 Lab 01	Array manipulation - min, max, sum and average
Unit 4 Lab 02	Arrays, input and output, numeric calculations, more decimal formatting
Unit 4 Lab 03 / 04	Using text files and source files and output files

Fourth Quarter	SCOPE AND SEQUENCE - Computer Math	2007-2008
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Unit 4 Lab 05	Inheritance of Abstract classes
Unit 4 Lab 06	Polymorphism, Arrays of Abstract objects and dynamic binding
Unit 4 Lab 07	Input files of unknown length and encryption
Unit 4 Lab 08	do ... while loops and nested looping
Final Project	Independent project