

CS 106A Calendar

Monday	Wednesday	Friday
January 4 Administration CS and the Honor Code Meet Karel the Robot	6 Simple Karel programs Extending the <code>Karel</code> class The concept of inheritance Control structures in Karel Read: Karel, Chapters 1-3	8 Problem-solving in Karel Program decomposition The idea of an algorithm Read: Karel, Chapters 4-6
11 Programming by example Classes and objects The <code>Program</code> hierarchy Simple graphical objects Read: Java, Chapters 1 and 2	13 Variables and values Arithmetic expressions Common idioms Read: Chapter 3	15 Control statements Boolean data Simple animations Read: Chapter 4 Due: HW #1 (Karel)
18 Martin Luther King, Jr. Day Optional film: Dr. King's 1963 speech "I Have A Dream"	20 Methods The role of parameters Read: Chapter 5 Due: Karel contest	22 Objects and classes Constructors Inheritance Read: Chapter 6 Due: HW #2 (Simple Java)
25 The <code>acm.graphics</code> package Responding to mouse events The Java listener model Read: Sections 9.1-9.2 Sections 10.1-10.3	27 Graphical structures <code>GPolygon</code> and <code>GCompound</code> Creating compound objects Read: Section 9.3-9.4	29 Character data Using Java's <code>String</code> class Read: Sections 8.1-8.4
February 1 String manipulation Problem-solving with strings Read: Section 8.5	3 Cryptography Overview of Assignment #4 Due: HW #3 (Breakout)	5 The <code>ArrayList</code> class The <code>HashMap</code> class Read: Draft chapter handout

Monday	Wednesday	Friday
February 8	10	12
Debugging strategies	Data representation	Arrays
<div>Midterm exam Tuesday, February 9 9:00 A.M. or 3:00 P.M.</div>		
Due: Graphics contest	Read: Chapter 7	Read: Section 11.1-11.4
15	17	19
Presidents' Day (no class)	Multidimensional arrays Pixel arrays Image manipulation Read: Sections 11.6-11.7 Due: HW #4 (Cryptography)	Swing interactors The JComponent hierarchy Action listeners Read: Sections 10.5-10.7
22	24	26
Using data files Read: Section 12.4	Java collection classes Iterators Read: Chapter 13	Large-scale data structures Data-driven programs Due: HW #5 (ImageShop)
29	March 2	4
Overview of Adventure! Read: Adventure handout	Sorting and searching Algorithmic analysis Read: Sections 12.1-12.3	Layout managers Designing GUIs Read: Sections 10.5-10.8
7	9	11
Looking ahead: Recursion Concurrency Programming patterns Read: Chapter 14	Frontiers of computing (optional) Due: HW #6 (Adventure) Due: Adventure contest	<div>Review Session Sunday, March 13 7:00–9:00 P.M.</div>
<div>Final Exam Monday, March 14 8:30–11:30 A.M.</div>		