

CS 106A Syllabus

(subject to change at any time by the management)

Monday	Wednesday	Friday
September 24 Welcome to CS106A Administrivia Meet Karel the Robot	26 Programming with Karel Control structures in Karel Read: Karel, Chapters 1-3	28 Problem-solving in Karel Program decomposition The idea of an algorithm Read: Karel, Chapters 4-6
October 1 Introduction to Java Classes and objects The <code>Program</code> class hierarchy Read: Java, Chapters 1-2	3 Variables, values, and types Arithmetic expressions Read: Chapter 3	5 Control statements Boolean expressions Read: Chapter 4 Due: Assignment #1
8 Methods Using parameters Read: Chapter 5	10 More parameters Pseudorandom numbers The <code>RandomGenerator</code> class Read: Chapter 6	12 Creating classes Stylistic expectations Using <code> javadoc </code>
15 The <code>acm.graphics</code> package The collage graphics model Read: Chapter 9.1-9.3 Due: Assignment #2	17 More graphics Event driven programming Read: Chapter 9.4 Chapter 10.1–10.4	19 Character data The Java <code>String</code> class Read: Chapter 8.1-8.4
22 String manipulation Problem-solving with strings Read: Chapter 8.5	24 Objects and memory More on parameter passing Read: Chapter 7 Due: Assignment #3	26 File processing Exception handling Read: Chapter 12.4

Monday	Wednesday	Friday
29 Arrays and ArrayList Read: Chapter 11.1-11.8	31 Arrays and ArrayList (continued)	November 2 Midterm recovery day (<i>No class</i>)
Tuesday, October 30 7:00-9:00pm: Midterm		
5 Debugging strategies Due: Assignment #4	7 Java collections framework The HashMap class Iterators Object-oriented design Read: Chapter 13	9 Swing interactors The JComponent hierarchy Action listeners Read: Chapter 10.5–10.6
12 Graphical user interfaces Interactors Read: Chapter 10.7–10.8	14 Component listeners Data structure design Due: Assignment #5	16 Sorting and searching Algorithmic analysis Read: Chapter 12.1-12.3
19 Thanksgiving recess (<i>No class</i>) <i>Be happy to be on break...</i>	21 Thanksgiving recess (<i>No class</i>) <i>Enjoy the break...</i>	23 Thanksgiving recess (<i>No class</i>) <i>Realize break is over soon...</i>
26 Programming in the large Software engineering	28 Social networks Additional topics Due: Assignment #6	30 Standard Java The main method
December 3 Life after CS106A (is there any?)	5 Review for Final Exam	7 Dead Day: our token attempt at Dead Week (<i>No class lecture;</i> <i>sections meet as usual</i>) Due: Assignment #7 (<i>No late days on Assign. #7</i>)

Final Examination: Monday, December 10th, 8:30am to 11:30am