General Syllabus

Primary topics are:

• Overview of computers, programs, and java

• Data types, variables, and operators (includes numeric, char, string, and boolean data types, input/output, and casting)

• Controlling the flow of your programs (conditionals, if/switch statements, and loops)

You should also be familiar with all the unix commands used in the first three labs.
Tasks on the exam will include

• Defining a selection of basic terms
  (see next slide for possible terms)

• Evaluating the behavior of java expressions, small blocks of java code, and small java programs
  including identifying and correcting syntax, runtime, and logic errors

• Writing your own java statements, blocks of java code, or java programs
  For java programs, the first portion of the source file (up to at least the first line of the main method block) will be provided.
Be able to define:

- Hardware
- Software
- Compiler
- High-level language
- Machine language
- Source code
- Bytecode
- Pseudocode
- Algorithm
- Syntax error vs. runtime error
- Identifier
- Keywords
- Variable
- Datatype vs. primitive datatype
- Literal
- Encoding
- Declare (variables)
- Assignment
- Casting, widening a type, narrowing a type
- Expression
- Operator (also binary vs unary)
- Boolean expression, boolean value
- Comparison operator
- Conditional operator
- Operator precedence
- Operator associativity
- Fall-through behavior
- Short-circuit operator
Your preparation should include

- Review your homework, quizzes and labs
- Study past exams, take at least one as a practice exam
- Reviewing salient sections of the text (based on what you feel you need to refresh or clarify based on your experience with the quizzes and past semesters’ exams)

It would also be a good idea to

- Make an outline or idea-web of the exam material and write down any questions you have!
- Discuss your questions with fellow class mates
- Bring your questions to UTAs’ or Instructor’s office hours