CS141 Learning Objectives

Students will achieve initial mastery in fundamentals of programming in Java. They will be fluent with the following elementary programming concepts.

Problem solving techniques
- Count things
- Draw a picture
- Adopt a different perspective
- Stepwise refinement
- Add/remove constraints
- Solve a similar but smaller/simpler problem

Debugging strategies
- Analysis
- Insert diagnostic output
- Unit testing
- Use debugger

Java fundamentals
- Variables
- Classes
- Accessors
  - public String toString()
  - public static void main(String[] args)
  - public void paint(Graphics)
- Conditional statements
- Iterative statements
- Elementary Event handling

GUI design/implementation
- Frame
- Button
- TextField
- TextArea
- Graphics
- Simple Images