# Outline for April 22, 2014

**Reading:** *none* **Assignment due:** May 2, 2014

1. Program: Fibonacci numbers [*fib.py*]
2. Calculating $\pi$ using a Monte Carlo method
   a. How you do it
   b. `random` module
   c. Building program in modules, including testing routines
   d. First step: computing co-ordinates of dart toss [*mc1.py*]
   e. Second step: see if a point falls within the unit circle [*mc2.py*]
   f. Third step: read in a positive integer, with error checking [*mc3.py*]
   g. Fourth step: out it all together and print the results [*mc4.py*]
   h. Fifth step: plot the points [*mc5.py*]