

## Outline for October 22, 2012

**Reading:** *None*

**Assignment due:** October 24, 2012 at 5:00PM

---

1. Turtle graphics
  - a. What turtle is; `import turtle`
2. Drawing a figure: a box with a hat [*tbox.py*]
  - a. Set up the window to draw in: `Screen()`
  - b. Create the turtle: `Turtle`
  - c. Cursor for drawing
  - d. Move cursor forward: `forward`, `backward()`
  - e. Turn cursor: `left()`, `right()`
  - f. Wait for the window to close: `mainloop()`
3. Titles, background, and such [*tfancybox.py*]
  - a. Window
    - i. Color of the window background: `background()`
    - ii. Title of the window: `title`
  - b. Turtle, more properly called “pen”
    - i. Shape of the turtle: `shape()`
    - ii. Speed of the drawing: `speed()`
    - iii. Color of the drawn line: `color()`
    - iv. Thickness of the line (pixels): `pensize()`
    - v. Hide the turtle: `hideturtle()`
4. Plotting points and graphing
  - a. Drawing lines: `penup()`, `pendown()`
  - b. Move turtle: `setpos()`
  - c. Write text: `write()`
  - d. Draw a dot at the current position: `dot()` [*tchaos1.py*]
  - e. Draw a line from the current position to another: `goto()` [*tchaos2.py*]