

## Course Material

- Lecture notes (posted on the class Web site)
- Required textbooks: *The Practice of Computing Using Python (2<sup>nd</sup> edition)*, by William Punch and Richard Enbody

## Course Schedule

Date	Readings and pre-class assignments	Sessions
1/13		Session One - Course Introductions
1/14	Read section 0.8	Lab One - Getting Started in the lab
1/15	Read sections 0.1-0.7	Session Two - Understanding the history and basics of computers
1/17		Session Three - Problem solving and computational thinking
1/20	MLK, Jr. Day - NO CLASSES	
1/21	Read 1.1-1.8	<a href="#">Lab Two – IDLE and Basics of Python Programming</a>
1/22	Read 1.9	Session Four - Lab Debrief and Chapter 1 review <a href="#">Homework 1- First Program</a>
1/24		Session Five - Basic problem solving in python
1/27		Snow Day
1/28	Start section 2.1 (pp 81-90)	<a href="#">Lab Three - Conditionals and Selection Statements</a>
1/29		Session Six - More with data and types Session Seven - Debrief Lab Three <a href="#">Homework 2- Selection Statements- Responding to Customer Requests</a>
1/31	Read section 2.2 (pp 103- top 113, and 114-120)	Session Eight - Multi-way conditionals
2/3	Finish section 2.1 (pp 90-103) Finish section 2.2 (pp113 and 121-137)	Session Nine - Introducing Repetition
2/4		<a href="#">Lab Four - Exploring Repetition</a>
2/5		Session Ten - Debrief and Practice <a href="#">Homework 3- Iteration</a>
2/7		Session Eleven - More loop practice
2/10		Session Twelve - Nested looping
2/11		<a href="#">Lab Five- Stars and Triangles</a>
2/12	Sections 3.1-3.5	Session Thirteen - Lab Debrief Homework 4: Additive and Multiplicative Persistence
2/14		Session Fourteen- Algorithms and Program Development
2/17	Read 4.1 and 4.2	Session Fifteen - Introduction to Strings
2/18	Read 4.3 and 4.4	<a href="#">Lab Six - Strings</a>
2/19	Read 4.5 and 4.6	Session Sixteen - Working with Strings <a href="#">Homework 5- A Game!</a>
2/21	Read 4.7	Session Seventeen - More with Strings - Methods
2/24		Session Eighteen - More with Strings - Penny Math
2/25		<a href="#">Lab Seven - Caesar Cypher- Strings, Conditionals, Loops</a>
2/26		Session Nineteen - Lab Debrief
2/28		Session Twenty- Exam prep, various examples, and wrap up
3/3		In-class Exam #1 (Chapter 1-4)
3/4		In-lab Exam #1 (Chapters 1-4)
3/5	Read 5.1-5.6	Session Twenty One- Introduction to Files

3/7	Read 5.7	Session Twenty Two - More with Files
3/10	Read Chapter 6	Session Twenty Three - Defining your own functions <a href="#">Homework 6- Examining Olympic Medal Counts</a>
3/11		<a href="#">Lab Nine- Functions</a>
3/12		Session Twenty Four - Lab09 Debrief, more on functions
3/14		Session Twenty Five - Function wrap up, new design docs and comments
3/24	Read 7.1-7.5	Session Twenty Six - Introducing Lists <a href="#">Homework 7- Pig Latin</a>
3/25	Read 7.6-7.9	Lab Ten - List Lab
3/26	Finish Chapter 7	Session Twenty Seven - Lists and Tuples
3/28	Chapter 8	Session Twenty Eight - More Lists and Tuples
3/31	See class handouts	Session Twenty Nine – Intro to Functional Decomposition <a href="#">Homework 8- Tracking the Greats of the NBA (Design Version)</a>
4/1		Lab Eleven – Design Lab
4/2		Session Thirty – More Design
4/4		Session Thirty One – Design Wrap-Up
4/7	Read Chapter 9.1-9.3	Session Thirty Two - Introduction to Dictionaries <a href="#">Homework 9- Tracking the Greats of the NBA</a>
4/8		<a href="#">Lab Twelve – “Green Eggs and Ham”- Using Lists for Text Analysis</a>
4/9		Session Thirty Three - Debrief Lab and Memory
4/11	Read 9.4-9.6	Session Thirty Four - Memory
4/14		Session Thirty Five - Sets
4/15		<a href="#">Lab Thirteen – Sets and Dictionaries to Analyze Movies</a>
4/16	Read 11.5-11.9	Review of Lab Thirteen <a href="#">Homework 10: Analyzing Debates- Creating Word Tags/ Clouds of a Speech</a>
4/18		Session Thirty Six - Intro to Searching
4/21		Session Thirty Seven - Intro to Sorting
4/22		<a href="#">Lab Fourteen - Analyze Customer Data</a>
4/23		Session Thirty Eight - More with Sorting
4/25	Read Chapter 16	Session Thirty Nine - Intro to Recursion
4/28		Session Forty - More with Recursion
4/29	Study Guide	In-Lab Exam #2
4/30		Session Forty One - Finishing up Recursion
5/2		Session Forty Two – Final Review
5/6	Final Exam, Tuesday 10:00-11:50am	