

QR: Mathematics and Computing using Python

Texts: Understanding Math Patterns in Nature by Greenleaf (Math); Python Visual Quickstart Guide (Pyth)

Week	Lecture Topics	Text Refs
	1 Intro to Python: operations with integers, floats and strings	Pyth p. 1-17
	2 Variables, assignment, input and output	Pyth p. 18-40
	3 Boolean logic, if statements, indentation	Pyth p.41-53
	4 For and while loops	Pyth p.41-49
	5 Functions, scope and parameters	Pyth p.54-77
	6 Review and first midterm	
	7 Geometric progression, growth and decay	Math sect 2.1
	8 Compound interest	Math sect 2.2
	9 Exponential and logarithm functions	Math sect 2.4
	10 Review and second midterm	
	11 Trigonometry	Math sect 3.4
	12 Counting problems	Math sect 4.1
	13 Probability	Math sect 4.2
	14 Review	

Supplementary Reading

Math Sect 1.1

Math Sect 1.2

Math Sect 1.3