## CIST 005B: Advanced Python

This course offers a continuation of CIST 5A and is intended for students majoring in CIS-Computer Science Option and/or planning to transfer to a 4-year college or university. CIST 5B introduces concepts of abstract data types, Python classes, modules, and information hiding. The course introduces sorting/ searching algorithms and topics in data structures, including collection types, complexity analysis, big-O notation, arrays, linear linked structures, interfaces and implementations, information hiding, polymorphism, stacks, queues, lists, trees, binary search trees, heaps, expression trees, unordered collections, bags, sets, dictionaries, and graphs.

Letter Grade, Pass/No Pass

Units: 4

Lecture Hours: 48 - 54, Lab Hours: 48 - 54

Prerequisites: None Co-Requisites: None

Advisory: CIST 005A, Intermediate Algebra or equivalent, or eligibility for transfer level math

Transferable to both UC and CSU

C-ID: COMP 132 - Programming Concepts and Methodology II