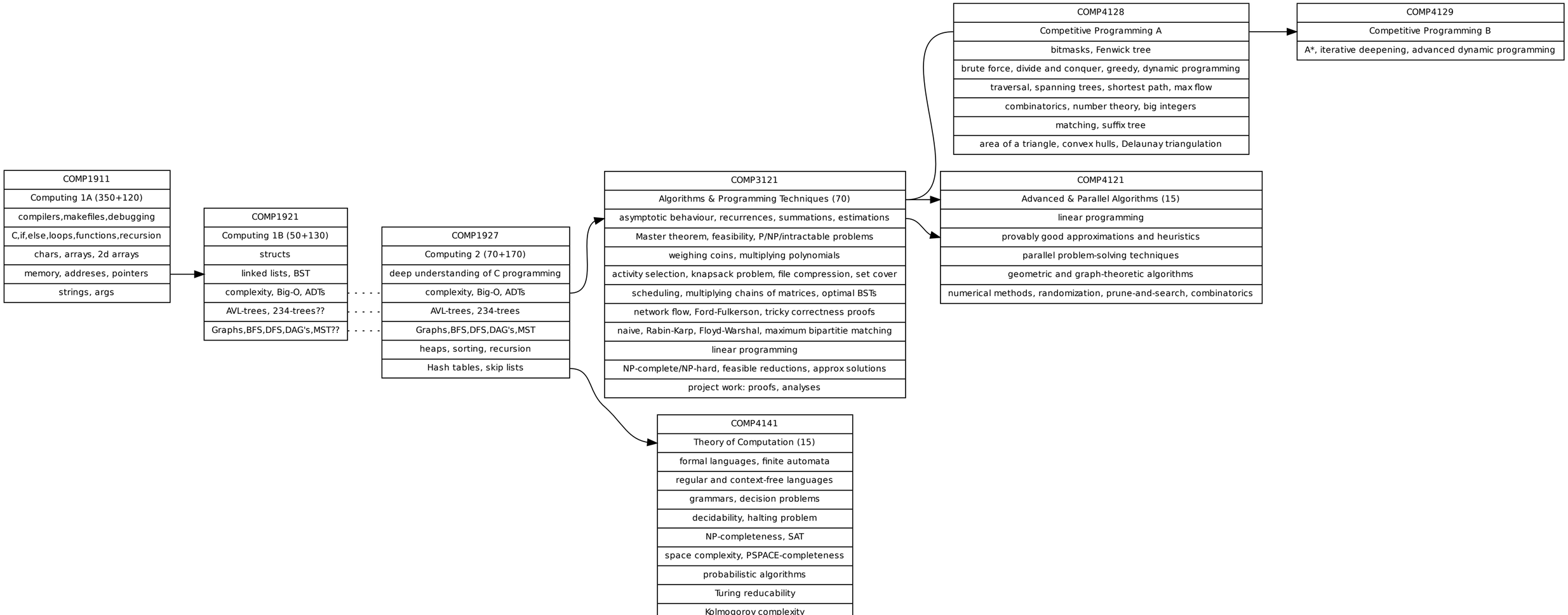

COMP1911
Computing 1A (350+120)
compilers,makefiles,debugging
C,if,else,loops,functions,recursion
chars, arrays, 2d arrays
memory, addreses, pointers
strings, args
COMP1921
Computing 1B (50+130)
structs
linked lists, BST
complexity, Big-O, ADTs
AVL-trees, 234-trees??
Graphs,BFS,DFS,DAG's,MST??
COMP1927
Computing 2 (70+170)
deep understanding of C programming
complexity, Big-O, ADTs
AVL-trees, 234-trees
Graphs,BFS,DFS,DAG's,MST
heaps, sorting, recursion
Hash tables, skip lists
COMP3121
Algorithms & Programming Techniques (70)
asymptotic behaviour, recurrences, summations, estimations
Master theorem, feasibility, P/NP/intractable problems
weighing coins, multiplying polynomials
activity selection, knapsack problem, file compression, set cover
scheduling, multiplying chains of matrices, optimal BSTs
network flow, Ford-Fulkerson, tricky correctness proofs
naive, Rabin-Karp, Floyd-Warshal, maximum bipartitie matching
linear programming
NP-complete/NP-hard, feasible reductions, approx solutions
project work: proofs, analyses
COMP4128
Competitive Programming A
bitmasks, Fenwick tree
brute force, divide and conquer, greedy, dynamic programming
traversal, spanning trees, shortest path, max flow
combinatorics, number theory, big integers
matching, suffix tree
area of a triangle, convex hulls, Delaunay triangulation
COMP4129
Competitive Programming B
A*, iterative deepening, advanced dynamic programming
COMP4121
Advanced & Parallel Algorithms (15)
linear programming
provably good approximations and heuristics
parallel problem-solving techniques
geometric and graph-theoretic algorithms
numerical methods, randomization, prune-and-search, combinatorics
COMP4141
Theory of Computation (15)
formal languages, finite automata
regular and context-free languages
grammars, decision problems
decidability, halting problem
NP-completeness, SAT
space complexity, PSPACE-completeness
probabilistic algorithms
Turing reducability
Kolmogorov complexity