CP Syllabus

**sieve** - bitwise sieve, segmented sieve, linear sieve, divisor count, phi, sum of divisor

modular inverse with power, with ex euclid

Floyd Warshall

Bellman Ford

heapsort - heap

counting sort, radix sort, bucket sort

order statistics

Hash Table

Binary Search Tree

Balance Binary Search Tree - Treap / AVL Tree

DP - Matrix Chain Multiplication, Knapsack, CoinChange

Greedy - task scheduling

Max Flow - Ford Fulkerson

String Matching - KMP, Rabin Karp(hashing)

Suffix Array

Strongly Connected Component

CRT - ex euclid

FFT \*

quicksort\*

DSU\*

MST\*

Dijkstra\*

DFS\*

BFS\*

Red – done by jamai

Blue – done by bou (not code, only theory)