



C++ - USACO Gold

Gold level class is rigorous, intensive and specifically designed to target USACO competition, and focuses on problem solving, algorithms and data structures, and consistently delivers more advanced topics and contents. For students who wants to continue pursue USACO path, we strongly suggest taking our Silver courses first to have solid programming skill before starting USACO competition route

Prerequisite

- Finish our **Silver** courses.
- **OR**, Advanced Programming level. Students **passed USACO Silver level, be comfortable writing code in C++ using Dynamic Programming, Tree Algorithm, Binary Index Tree, and enjoy logical thinking and problem solving.**
- **OR**, take our entry test by emailing usacocoach2018@gmail.com
- Algebra level math is required

Course Description

- **Gold Core Course** is designed to focus on learning basic Algorithms. Provide intro level algorithm problem solving skill. Class time is 90 minutes/lesson
- **Gold Practice Course** is designed to focus on most challenging USACO contest questions and provide best solution while learning algorithm. Class time is 90 minutes /lesson
- **Gold Mock Course** is designed to focus on mocking test on recent USACO contest questions and provide the best solution while learning algorithm. Class time is over 90 Minutes/lesson
- **Gold Enhance Course** is designed to focus on mocking test on latest USACO contest questions and provide the best solution while learning algorithm. Class time is over 90 Minutes/lesson

Gold Core Course Syllabus

1. Time Complexity
2. Game Simulation
3. Binary Search
4. Disjoint Set
5. Binary Index Tree
6. Dynamic Programming 1
7. Dynamic Programming 2
8. Dynamic Programming 3
9. Tree
10. String and Graph

Course Details

- Use ZOOM for online video platform
- Class homework and video will be shared through google account. Student Gmail account is required
- Homework will be emailed to students after the lesson. Homework is required to submit through USACO official website www.usaco.org