

Java - USACO Bronze

Bronze 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 Leve I & Level II first to have solid programming still before starting USACO competition route

Prerequisite

- Finish our Java Level 1& 2 course, Bronze Core course.
- **OR,** Intermediate Programming level. Students to be comfortable writing code in Java using functions, conditional statements, loops and array, and enjoy logical thinking and problem solving.
- OR, take our entry test by emailing <u>usacocoach2018@gmail.com</u>
- Pre-algebra level math is required

Course Description

- **Bronze Core Course** is designed to focus on learning basic Algorithms. Provide intro level algorithm problem solving skill. Class time is 90 minutes/lesson
- Bronze 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
- **Bronze Mock Course** is designed to focus on most challenging USACO contest questions and provide best solution while learning algorithm. Class time is 90 minutes /lesson
- Bronze Enhance Course is designed to focus on most challenging USACO contest questions and provide best solution while learning algorithm. Class time is 90 minutes /lesson

Bronze Practice Course Syllabus

- 1. Loop
- 2. Array
- 3. More Array
- 4. String
- 5. Data Structure
- 6. Search
- 7. Simulation 1
- 8. Simulation 2
- 9. Recursive Method
- 10. 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 <u>www.usaco.org</u>