



USABO Training Course

Course Objective

Qualify for the USABO semifinal exam from the open exam.

Course Description

Animal and plant anatomy and physiology, which make up of nearly 50% of the test content of USABO, are not required in college board AP biology exam and is not taught in most high school AP biology classes. So, many students entering the USABO usually lack adequate preparation of these materials.

Our USABO fall session offers intensive coverage of animal and plant anatomy and physiology to assist students to master these materials.

Course Topics

1. An overview of Animal Diversity
2. Animal Nutrition
3. Circulation and Gas Exchange
4. The Immune System
5. Osmoregulation and Excretion
6. Hormones and Endocrine System
7. Animal Reproduction
8. Animal Development
9. Neurons, Synapses, and Signaling
10. Nervous System
11. Sensory and Motor Mechanism
12. An overview of Plant Diversity
13. Plant Structure, Growth, and Development
14. Resource Acquisition and Transport in Vascular Plants
15. Soil and Plant Nutrition



16. Angiosperm Reproduction and Biotechnology
17. Plant Responses to Internal and External Signals

Course Schedule

Duration: September 4, 2023, to January 29, 2024 (no class on 12/25/2023 and 1/1/2024)

Session: Every Monday afternoon 4:30 to 6:30

20 sessions (40 hours) total

Textbook

Campbell Biology, the 9th edition and above

Homework

Homework is assigned after each class and to be completed and turned in at the beginning of the next class.