

AAC Biology (Advanced Academic Biology)

Challenge your child today. Empower their success tomorrow

Dr. Hao earned his M.D. from China Medical University and his Ph.D. in Pharmaceutical Sciences from Texas Tech University. As a former university faculty member, he has extensive experience teaching both undergraduate and graduate students. Since 2021, he has successfully taught CBE Mathematics, High School Biology, and Geometry, helping students build strong academic foundations and achieve excellence in science and mathematics.

Inspire Curiosity. Build Knowledge. Prepare for Success.

Success in biology begins with understanding—not memorization.

AAC Biology (Advanced Academic Biology) is a rigorous, college-preparatory course designed for academically motivated students in **Grades 7–9** who are eager to explore the fascinating world of life sciences. Going far beyond the standard high school biology curriculum, this course challenges students to think critically, ask meaningful scientific questions, and develop a deep understanding of the principles that govern living organisms.

Whether your child plans to pursue **AP Biology**, advanced science courses, science competitions, or a future in medicine, biotechnology, engineering, or other STEM fields, AAC Biology provides the knowledge, confidence, and academic skills needed to excel.

Why Choose AAC Biology?

A Strong Head Start in Advanced Science

Students gain a deeper understanding of biology before entering high school or AP-level coursework, making future science classes more manageable and less stressful.

Learn Beyond Memorization

Rather than simply memorizing facts, students learn to analyze biological processes, solve complex problems, and make connections across different areas of biology. This approach cultivates scientific reasoning and lasting understanding.

Develop Critical Thinking Skills

Through engaging discussions, real-world examples, and inquiry-based learning, students strengthen analytical thinking, problem-solving abilities, and scientific communication—skills that extend well beyond biology.

Prepare for Future Academic Success

The course establishes a solid foundation for AP Biology, upper-level high school science courses, college-level biology, and future STEM studies.

What Makes This Course Different?

✓ Accelerated Curriculum

Explore biological concepts in greater depth and with greater rigor than a traditional high school biology course.

✓ Small-Class Learning Environment

Students benefit from personalized instruction, active participation, and meaningful interaction with the instructor.

✓ Concept-Based Teaching

Lessons emphasize understanding biological principles rather than memorizing isolated facts, enabling students to apply knowledge confidently in new situations.

✓ College-Preparatory Approach

Students develop the study habits, scientific thinking, and analytical skills expected in advanced high school and college science courses.

✓ Future STEM Readiness

Ideal preparation for students interested in medicine, biomedical sciences, biotechnology, engineering, neuroscience, pharmacy, and other STEM disciplines.

Course Topics

Students will explore major areas of modern biology, including:

Cell Biology

- Cell structure and function
- Biomolecules
- Membrane transport
- Photosynthesis and cellular respiration
- Cell division and the cell cycle

Genetics

- DNA structure and replication
- Gene expression
- Transcription and translation
- Mendelian and molecular genetics
- Biotechnology and genetic engineering

Molecular Biology

- Protein synthesis
- Cell signaling and communication
- Molecular mechanisms within living cells
- Applications of molecular biology in medicine and biotechnology