

AP Biology

starts **Fall 2018** at Xilin NW Chinese School

- ❖ *Do you have a gifted child who can be future Biology Olympiads candidate?*
- ❖ *Does your child love life science and is interested in the medical field?*

AP Biology is a great academic advancement & challenge!

- A typical 11th, 12th grade rigorous science course
- Aims **7th-10th grade gifted youth**
- Learn ahead of regular school curriculum
- Prepare for advancement to **Biology Olympiads Competition**
- Enhance reading skills in scientific texts & critical thinking skills
- Use the same textbook & learning resource as Biology Olympiads Competition
- Prerequisite: Algebra

Teacher: Ms. WenHua Deng, an experienced high school science teacher; holds Illinois Teaching License in secondary science & endorsed in all 3 core content areas: Biology, Chemistry, and Physics; College Board trained AP Biology and AP Chemistry instructor; Master of degree Education from University of Illinois, and Educational Leadership Certificate from Graduate School of Education of Harvard University.

Tuition: \$620 per semester

Textbook: CAMPBELL BIOLOGY, Reece, Urry, Cain, Wasserman, Minorsky, Jackson. Pearson Publications, 9th edition or newer.

Schedule: Sunday 3:00-4:50 pm

Fall 2018	Spring 2019
Unit 1: The Chemistry of Life Matter, elements & compounds, bondings, macromolecules	Unit 5: Molecular Genetics DNA, RNA, replication, transcription, translation, Gene expression & regulation
Unit 2: The Cell Cellular structures, cellular regulations, cell cycle Mitosis & Meiosis	Unit 6: Mechanisms of Evolution Genomes & their evolution, Darwinian Descent with Modification
Unit 3: The Energy of Life metabolism of organisms, enzyme regulations, photosynthesis (Light reaction, Calvin, & CAM cycles)	Unit 7: Evolutionary History of Life Diversity & phylogeny
Unit 4: Mendelian Genetics Chromosomal inheritance & Mendelian genetic traits	Unit 8: Plant Forms and Function
	Unit 9: Animal Forms & Function
	Unit 10: Population Ecology Biosphere, Ecology, Ecosystem

Material requirement: textbook, notebook, binder, scientific calculator, pencils & highlighters

Weekly homework: Homework is important in this course, which includes textbook reading & notes taking, worksheets, lab & project reports

Course Assessment: Unit test after each unit, final exams for both semesters