



Find  
Your  
Path

## Biomedical Pathway Offerings at LCB Academy Virtual Instruction Program 2022 – 2023 School Year

Gold  
Diploma Seal  
(1-8)

Silver  
Diploma Seal  
(1-4)

Course Offerings to Get You There:

1. Intro to Biomedical Sciences
2. Intro to Computational Thinking
3. Comparative Anatomy & Physiology
4. Data Manipulation
5. Statistical Reasoning
6. Intro to Psychology (Dual Enrollment)
7. Dual Enrollment General Biology I
8. Calculus I

**\*\*All above courses are 5-Point CPSB Courses**

1. Introduction to Biomedical Sciences: This one-year course covers a large variety of fields in biomedicine. Topics include but are not limited to: sports medicine, pharmacology, psychology, nutrition, veterinary medicine, bioinstrumentation, biomedical engineering, forensic anthropology, parasitology, and speech pathology.
2. Introduction to Computational Thinking: This course introduces students to the basic ideas of computational thinking and its applications to problem solving in STEM fields. Students will create code for simple drawings, animations and simulations.

3. **Comparative Anatomy and Physiology:** This course engages students in rigorous study of the body's physiological systems and then compares these systems across many species in the animal kingdom (both vertebrates and invertebrates). Additionally, this course places an emphasis on public speaking through scientific presentations and independent research to enhance scientific reading and writing skills.

4. **Data Manipulation (2023-2024 Offering):** This course introduces students to the emerging field of Data Science. Instructional units cover the standard practices for effective data manipulation, analysis and interpretation as well as necessary concepts in the three disciplines involved (mathematics, statistics and computing.).

5. **Statistical Reasoning:** This algebra-based course is an introductory-level course that teaches students the basic concepts of statistics and the logic of statistical reasoning. It is designed for students with no prior knowledge in statistics while offering students opportunities to strengthen their understanding of the statistical method of inquiry and stat simulations. Prerequisite: Successful completion of Algebra I, Geometry, and Algebra II.

6. **Introduction to Psychology Dual Enrollment:** This course is a dual enrollment course that awards high school credit as well as college credit from Sowela (Psychology 2010).

7. **Dual Enrollment Biology I:** This course is a dual enrollment course which is intended for non-science majors.

8. **Calculus I:** This course is an initial course in a calculus sequence where students will study basic calculus with applications to problems in physics, chemistry, and engineering. Prerequisite: Successful completion of Math 1110 (or an approved Precalculus w/Trigonometry course).