Bok Academy North Biology 1 Honors - 2000320

2022-2023 SYLLABUS *Subject to change*

**Nature of Science standards are to be woven throughout all lessons.

5 Question Reviews Daily.**

Students will be actively engaged in the following ways:

- Quantitative and qualitative observations
- Investigation of thoughtful questions
- Design and conduct experiments and other types of investigations
- · Collect and organize data
- Make logical predictions and offer reasonable explanations
- Explore possible conclusions
- · Communicate their understanding

STUDENT LAB FEES OF \$20 ARE NEEDED TO BE PAID BY SEPTEMBER

Semester 1

Week 1: Classroom Environment and Culture Building:

<u>History of Bok, Bok Way, 12 Power Words, Vocabulary of Knowledge and Design, 55 Essentials.</u>

PROGRESS MONITORING WINDOW

Week 2: Lab Safety and Inquiry:

All students must read through lab safety rules and obtain a signed permission slip. Beginning labs start with inquiry, how to keep a proper notebook, and expectations of labs.

Intro: Scientific Experiments. Scientific Knowledge.

PROGRESS MONITORING WINDOW

Nature of Science

Module 1: Scientific Method SC.912.N.1.1, SC.912.N.1.4, SC.912.N.1.6, SC.912.N.3.4 (Theory vs. Law)

Molecular and Cellular Biology 35%

Module 2: Properties of Water SC.912.L.18.12

Module 2: Basics of Biology SC.912.L.14.1 Cell Theory and

SC.912.L.14.4 Microscopes.

Module 3: Macromolecules SC.912.P.8.7, SC.912.L.18.2,

SC.912.L.18.3, SC.912.L.18.4

Module 4: Biochemical Reactions **SC.912.L.18.11** Module 5: Cells, Cell Transport, Cell Membrane SC.912.L.14.1, SC.912.L.14.2, SC.912.L.14.3

Module 6: Cellular Respiration and Photosynthesis

SC.912.L.18.9

Semester 2

Organisms, Populations, and Ecosystems 40% and Classification, Heredity

AND Evolution 25%

Module 7: Mitosis, Meiosis, Reproduction SC.912.L.16.17

Module 8: Genetics SC.912.L.16.1 Module 9: DNA-RNA-Protein Synthesis

SC.912.L.16.3

Module 10: Cardiovascular System

SC.912.L.14.36

PROGRESS MONITORING WINDOW

Module 11: The Brain SC.912.L.14.26

Module 12: Reproduction and Development

SC.912.L.16.13

Module 13: Immune System SC.912.L.14.52,

SC.912.L.14.6

Module 14: Plant Kingdom SC.912.L.17.4

Module 15: Evolution SC.912.L.15.1,

SC.912.L.15.8, SC.912.L.15.13, SC.912.L.15.10

Module 16: Ecology SC.912.L.17.5, SC.912.L.17.9

SC.912.L.17.20

FSA TESTING WINDOW and SCIENCE REVIEW

Please Take Note

Biology 1 Honors is a High School course that has an EOC that will count for 30% of the student's overall grade. Students must maintain an overall grade of 80% and turn all assignments in on time.