

Fayette R-III

FHS- Curriculum Guide for Advanced Biology

Fayette R-III Mission: To educate all students to be ethical, successful citizens.

The Advanced Biology Learning Goals are based on the Missouri Learning Standards. The Missouri Learning Standards define the knowledge and skills students need to succeed in college, other postsecondary training and careers. This document is designed to make clear what each child should know and be able to do at the end of the course in Advanced Biology.

Course Description: This course encompasses the study of animals that includes characteristics & classification, growth and development, and comparative anatomy. We will also study the habitat, niche and value to mankind of various animals from different phyla.

Course Rationale: The Science Department of the Fayette School District believes that science is a diverse subject that encompasses many fields of investigation and interests. The primary goals of Fayette science courses are to equip students with an understanding of scientific concepts and principles, to develop students' critical thinking and problem solving skills in a variety of contexts, and to foster students' clear communication of their knowledge with others. We recognize that it is important to teach students methods of using current technology and outside resources to research information and help them make informed decisions for the purpose of better participation in the world around them. To accomplish these goals, students will participate in a variety of instructional activities and will develop information gathering, reading, writing, comprehension, and problem-solving skills both as individuals and as group members.

Advanced Biology Student Learning Goals	Standard Alignment
1. Students will develop an understanding of how scientists classify organisms in the animal kingdom.	9-12LS1-A1, LS4-A2
2. Students will classify and develop an understanding of characteristics and behaviors of organisms in Porifera, Cnidaria, Ctenophora.	9-12LS1-A1, LS4-A2
3. Students will classify and develop an understanding of characteristics and behaviors of organisms in Platyhelminthes, Nematoda.	9-12LS1-A1, LS4-A2
4. Students will classify and develop an understanding of characteristics and behaviors of organisms in Mollusca, Annelida.	9-12LS1-A1, LS4-A2
5. Students will classify and develop an understanding of characteristics and behaviors of organisms in Arthropoda.	9-12LS1-A1, LS4-A2
6. Students will classify and develop an understanding of characteristics and behaviors of organisms in Echinodermata.	9-12LS1-A1, LS4-A2
7. Students will classify and develop an understanding of characteristics and behaviors of organisms in Fishes.	9-12LS1-A1, LS4-A2
8. Students will classify and develop an understanding of characteristics and behaviors of organisms in Amphibia, Reptilia.	9-12LS1-A1, LS4-A2
9. Students will classify and develop an understanding of characteristics and behaviors of organisms in Birds.	9-12LS1-A1, LS4-A2
10. Students will classify and develop an understanding of characteristics and behaviors of organisms in Mammalia.	9-12LS1-A1, LS4-A2

Resources: *Animal Diversity*, McGraw Hill

Assessments: Teacher Developed

Board approved: June 21, 2017