

## Biology - Year at a Glance

Course # 2000310

**A Note to Parents:** State standards require your child's science teacher to plan lessons that build knowledge of various scientific concepts, develop the ability to apply these concepts, and engage students in critical thinking. To achieve these goals, students will take part in a range of activities including reading, discussions, writing, lab activities and projects, and more. Safety is paramount in science labs and your child's teacher will ensure a safe learning environment.

### **What is the purpose of this course?**

- Students will explore biological concepts that include molecular and cellular biology, classification, heredity and evolution, and ecosystems.
- A passing grade in this course is required to satisfy state graduation requirements. Students who complete this course will take the state end of course exam which comprises 30% of their grade for the year.

### **What will students be learning in this course?**

	<b>Topics</b>
Quarter 1	<ul style="list-style-type: none"><li>• The Nature of Science</li><li>• Organic Molecules</li><li>• Properties of Water</li><li>• Cell Theory, Structure and Function of all Cell Types</li></ul>
Quarter 2	<ul style="list-style-type: none"><li>• DNA Replication</li><li>• Protein Synthesis</li><li>• Cell Cycle, Mitosis, and Meiosis</li><li>• Genetics</li></ul>
Quarter 3	<ul style="list-style-type: none"><li>• Natural Selection/Evolution</li><li>• Classification</li><li>• Plants</li><li>• Photosynthesis/Cellular Respiration</li></ul>
Quarter 4	<ul style="list-style-type: none"><li>• Food webs</li><li>• Biogeochemical Cycles</li><li>• Populations</li><li>• Renewable/Nonrenewable Resources</li><li>• Circulation, The Brain, Reproductive System</li></ul>

### **Possible Support Resources**

Amoeba Sisters for Biological Topics: <https://www.youtube.com/user/AmoebaSisters>

Student tutorials: <https://www.floridastudents.org/#29|0|0|0>

Bozeman Science videos: <http://www.bozemanscience.com/>

Schoology: the teacher's site will have assignment information

*Courses are designed so that all standards will be learned by the end of the course. This guide represents a recommended timeline and sequence to be used voluntarily by teachers for planning purposes. Specific questions regarding when content will be addressed in a specific course are best answered by the individual teacher.*