

**Oklahoma End-of-Instruction  
Biology I Process Standards**

Standard Type	Code	Standard Strand	Standard Objective Skill
P r o c e s s	1.1	Observe and Measure	Identify qualitative and quantitative changes in cells, organisms, populations, and ecosystems given conditions (e.g., temperature, mass, volume, time, position, length, quantity, etc.) before, during, and after an event.
	1.23	Observe and Measure	Use appropriate tools (e.g., microscope, pipette, metric ruler, graduated cylinder, thermometer, balances, stopwatches, etc.) when measuring cells, organisms, populations, and ecosystems. Use appropriate System International (SI) units (i.e., grams, meters, liters, degrees Celsius, and seconds); and SI prefixes (i.e., micro-, milli-, centi-, and kilo-) when measuring cells, organisms, populations, and ecosystems.
	2.1	Classify	Using observable properties, place cells, organisms, and/or events into a biological classification system.
	2.2	Classify	Identify the properties by which a biological classification system is based.
	3.1	Experiment	Evaluate the design of a biology laboratory investigation.
	3.24	Experiment	Identify the independent variables, dependent variables, controlled variables, and control set-up in an experiment.. Identify a hypothesis for a given problem in biology investigations.
	3.3	Experiment	Use mathematics to show relationships within a given set of observations (e.g., population studies, biomass, probability, etc.).
	3.5	Experiment	Recognize potential hazards and practice safety procedures in all biology activities.
	4.1	Interpret and Communicate	Select appropriate predictions based on previously observed patterns of evidence.
	4.3	Interpret and Communicate	Interpret data tables and line, bar, trend, and/or circle graphs.
	4.4	Interpret and Communicate	Accept or reject hypotheses when given results of a biological investigation
	4.5	Interpret and Communicate	Evaluate experimental data to draw the most logical conclusion
	4.8	Interpret and Communicate	Identify and/or create an appropriate graph or chart from collected data, tables, or written description (e.g., population studies, plant growth, heart rate, etc.).
	4.8a	Interpret and Communicate	Translate quantitative information expressed in words into visual form (e.g., a table, chart, equation) .
	4.8b	Interpret and Communicate	Translate information expressed visually or mathematically (e.g., a table, chart, equation) into words.
	5.1	Model	Interpret a biological model which explains a given set of observations.
5.2	Model	Select predictions based on models (e.g., pedigrees, life cycles) and when appropriate, apply mathematical reasoning to make a prediction.	