

# SCIENCE PRACTICES CONTINUUM

Common Goals	Vision & Change	AP <sup>®</sup> Biology Curriculum Framework	Next Gen Science Standards
UNDERGRADUATE ←————→ K-12			
BROAD THEMES ←————→ DETAILED OUTCOMES			
The application of science that includes information literacy, formulating questions and hypotheses, appropriate experimental design and execution, and evaluation of data to make logical conclusions.	Apply Process of Science	Questioning/Investigations	Asking Questions
		Data Collection	Investigations
		Data Analysis	Analyzing and Interpreting Data
		Scientific Explanation	Constructing Explanations
The application of mathematics, algebra, calculus, and statistics to interpret and visualize data.	Quantitative Reasoning	Mathematics	Using Mathematics
The understanding of how models are used in biology, the interpretation and construction of conceptual and mathematical models.	Modeling and Simulations	Models and Representations	Developing Models
The communication of science and scientific findings to scientists and society using evidence-based reasoning.	Communication		Communicating
The impact of science on society and the impact of society on science practices. This includes using evidence-based reasoning to further public understanding of science.	Science and Society		Argumentation
The integration of multiple concepts within biology and across other disciplines and fields of study. This includes the application of science to address social and global problems.	Interdisciplinary Focus	Connections	