

NIQB-IUSE QUANTITATIVE MODULE CURRICULUM MAP

QUANTITATIVE COMPETENCY	COURSE	INTRO BIOLOGY I			INTRO BIOLOGY II			GENETICS		CELL
		Intro to the Scientific Process	Cell Structure and Size	Solute Concentration and Osmosis	Natural Selection	Hardy-Weinberg	Mendelian Genetics	Gene Linkage and Recombination	Enzyme Kinetics	
	MODULE									
	QUANTITATIVE GOAL									
1	Explain dimensional differences using numerical relationships, such as ratios and proportions. Use dimensional analysis and unit conversions to compare results expressed in different systems of units.									
2	Interpret data sets and communicate those interpretations using visual and other appropriate tools [SFFP2]									
3	Demonstrate proficiency with statistical analyses and make inferences [SFFP3]									
4	Demonstrate facility with mathematical models of biological systems and be able to make inferences about natural phenomena [SFFP 5]									
5	Apply algorithmic approaches and principles of logic (including distinction between cause/effect and association) to problem solving [SFFP 6]									
6	Use quantitative language to describe biological phenomena [Ruscetti, et al. (2018)]									

Key

This competency is not a focus

Low level of difficulty

Low to intermediate level of difficulty

Intermediate level of difficulty

High level of difficulty