Bio 113/114 Goals

Develop a foundational understanding of the key concepts in biology: information, evolution, cells, emergent properties, and homeostasis.

Assemble overarching themes of biology (e.g. structure/function, surface area to volume, signal amplification, noise, etc.) that span more than one key concept and all size scales.

Apply the process of science to answer questions about nature.

Employ and understand quantitative analysis and mathematic reasoning with experimental data.

Utilize mathematical modeling and simulations to enhance understanding of biology.

Integrate different science and math disciplines to provide a more holistic understanding of biology.

Communicate with a wide audience and collaborate with science and math colleagues.

Connect biology with everyday world and society.

Recognize that biology is not divided into two sizes as represented by common course divisions.

Evaluate public policy in light of scientific evidence.

Distinguish biology as a science based on experimental questions and data analysis rather than a discipline of vocabulary words.