113 Lab Learning Objectives

Week 8: synthetic lab #7
Learning Objectives for Promoter Discovery
Skills
• Produce graphical data for oral and written presentations.

Cognitive
• Employ a scientific approach to answering biological questions and test hypotheses.
• Analyze experimental data and reach logical conclusions.
• Synthesize experimental results for oral and written presentations.

Week 8: Information and Natural Selection lab #4
Learning Objectives for Environmental Information and Natural Selection
Skills
• Read DNA sequence and search for SNPs using ApE software.
• Determine your PTC tasting phenotype and compare with prediction.

Cognitive
• Analyze experimental data and reach logical conclusions.
• Connect environmental information to evolution using lab experiment as example.
• Explain what TAS2R38 has to do with taste and natural selection.
• Predict PTC tasting capacity and text experimentally

Week 8: Information and Evolution Lab #1
Learning Objectives for Bacterial Evolution
Skills
• Pipet accurately.
• Work with bacterial cells using sterile technique.
• Make dilutions of stock solutions.

Cognitive
• Employ a scientific approach to answering biological questions and test hypotheses.
• Describe the big idea of evolution based on lab experiences.
• Explain how antibiotic resistant bacteria can appear quickly in the population.