

Biotechnology Pacing Guide and Reading Matrix

<i>Daugherty Reading</i>	<i>Module Covered</i>	<i>Labs in unit</i>
Chpt: 1, 2,	Module 1 <ul style="list-style-type: none"> • Course Info, lab orientation, lab books, and equipment and safety • Practicing Safe Science Video 	Safety, Lab Book Methods Pipetting, Names of tubes, tips, etc...
Chpt 3	Module 2 <ul style="list-style-type: none"> • Basic Skills and Math, Micropipets, Washing, Labels, Autoclave, Calculations. 	Lab Calculations, Washing Glassware Autoclave operation
Chpt 3	Module 3 <ul style="list-style-type: none"> • Solution Making, Molar, Compound Molar, Dilutions, 	Percent Solutions, Molar Solutions, Compound Molar, and Small Volume Dilute Solutions.
Chpt 4 page 99-109	Module 4 <ul style="list-style-type: none"> • Microbiology, Making Agar, Compound Agar, Additives to Agar, Streak Plate, Gram Stain, Aseptic Technique 	Making Agar, Compound Agars, Pouring plates, Aseptic Technique, Streak Plate, Gram Stain.
Chpt 7, Chpt 8: page 215-233	Module 5 <ul style="list-style-type: none"> • Transformation and Minipreps 	Bacterial Transformation, Miniprep, Liquid Cultures, Smart Spec Quantification. Electroporation
Chpt 4: 116-121	Module 6 <ul style="list-style-type: none"> • DNA Analysis, Electrophoresis, Gel Making, Restriction Analysis with Bioinformatics, Quantitation 	Pouring Gels, Restriction Digests, Semilog graphing, Software Analysis, Nebcutter/Bioinformatics, Smart Spec, Southern Blot Intro
Chpt 13: 354-361	Module 7 <ul style="list-style-type: none"> • Polymerase Chain Reaction, Chelex Extractions, Analysis of Results, Intro to q-PCR 	Instagene Extractions PCR Alu PV-92 Mt. PCR
Chpt 5 Chapt 14 page 382-385	Module 9 <ul style="list-style-type: none"> • Protein Analysis • Chromatography • Electrophoresis and Extractions • Quantitation 	Protein Extractions (Laemmli) P.A.G.E. Bradford and Smart Spec Intro to Western Blots
Chpt 14: 380-382	Module 10 <ul style="list-style-type: none"> • Antibodies and Uses • ELISA 	ELISA Ochterlony Test
	Module 11 <ul style="list-style-type: none"> • Project 	