Ecological Biology Content Calendar

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| **UNIT** | **≈ WEEK RANGE** | **TOPICS** | **Textbook Chapter Coverage** |
| **Biology Overview** **& Scientific Method** | 1 | Introductions & Class InformationInteractive Notebook & Note skillsCharacteristics of LifeScientific Methods | 1.31.1-1.2, Appendix B: A8-A9 |
| **Systematics I** | 2-3 | Systematics & ClassificationTaxonomyDichotomous KeysDomains & KingdomsVirusesDomain Eubacteria & ArchaebacteriaKingdom ProtistaKingdom FungiKingdom Plantae Structure & FunctionKingdom Plantae – 4 main groups Kingdom Plantae – Angiosperms | 19.1-19.219.119.1 (pg 616)19.2, DOL 4 & 521.1, 21.2 (pgs 696-697), 1.3 (pg 24)21.2, 20.3 (pgs 586-588), DOL 6-921.3, DOL 10-15 & 2121.4, DOL 16-1922.1, 23.1-23.322.2, 22.3, DOL 20, 22-2922.3 |
| **Systematics II** | 4-6 | Kingdom Animalia Overall  Structure & Function  --Digestion: -food processing -mouth parts -digestive tracts --Respiration: -gills, lungs & tracheal tubes --Circulation: -open circulatory system -closed circulatory system -patterns of circulation --Excretion: -salt vs freshwater  -nephridia, malpighian tubes & kidneys --Nervous: -invertebrate -vertebrate -sense organs (invert) -sense organs (vert) --Skeletal/Muscular: -invert skeletal options -vert skeletal options -muscular sys --Reproductive: -sexual vs asexual -reproductive cycle -internal vs external fertilization -patterns of reproduction -metamorphosis -amniotic egg & mammal --Thermoregulation --BehaviorKingdom Animalia – InvertebrataKingdom Animalia –  Nonvertebrate Chordata Kingdom Animalia – Vertebrata | 24.1, 24.2, 25.1 25.225.3 25.426.126.226.326.424.4DOL 31-45DOL 46-47DOL 48-64 |
| **Theory of Evolution by Natural Selection** | 6-8 | Fossil Types Index Fossils & Fossil DatingGeologic Time Scale Voyage of the BeagleTheory of Evolution by Natural SelectionArtificial SelectionSupportive Evidence of Natural SelectionPatterns of Natural SelectionPatterns of Theory of Evolution by  Natural SelectionOrigins of Life on Earth | 20.120.1 (pgs 644-645)20.1 (pgs 646-647), 17.117.2, 17.317.1 (pg 554)17.3 (pgs 558-559), 17.420.220.220.3 |
| **Ecology**  | 8-11 | Terminology & RelationshipsTrophic LevelsFood Chains & WebsCycles of MatterBiomes – AquaticBiomes – TerrestrialPopulation DynamicsBiodiversity, Ecosystems &  ResilianceHumans & Global Change --Ecological Footprint --Causes & Effects of Global  Change --Measuring & Responding to  Change --Sustainability | 3.1, 3.2, 6.14.1, 4.24.2 4.33.33.35.1-5.36.3 7.17.27.37.4 |