



The following lectures are covered on the first exam.

The following lecture schedule contains links to the book sections from [Biology](#) from OpenStax College ([CC-BY 4.0](#))

Week	Lectures	Topic with link to Openstax pages	Openlab Supplement
I	1.	BASICS Introduction to the Course Definition, Characteristics and Hierarchy of Life Scope of Ecology: Habitat, Population, Community, Ecosystem The Scientific Method Evolution and Classification Systematics, taxonomy, phylogeny	Biology Basics
	2.	THE ORIGIN & EVOLUTION OF LIFE Darwin & Evolution The Origin of Life The Geological Time Scale Cellular History Kingdoms and Domains	Evolution and Geological Time
II	3.	INORGANIC CHEMISTRY I Definition, Classification and Properties of Matter Atomic Structure The periodic Table Isotopes Electrons and Energy Energy Chemical Reactions: Exergonic and endergonic Activation Energy Oxidation and Reduction	Chemistry



[INORGANIC CHEMISTRY II](#)

4. Elements, Compounds, Molecules and Mixtures
Bonds: Weak and Strong

[WATER & pH](#)

- III 5. Importance and Properties of H₂O
Acids, Bases, pH, Buffers

[Water](#)

[ORGANIC CHEMISTRY](#)

6. Importance of Carbon
Organic vs. Inorganic Compounds
The Hydrocarbons
Functional Groups
Isomers

[Organic
Chemistry](#)

- IV 7. **Examination I** (Lectures 1-6 inclusive)