Syllabus Mapping:

NYS Living Environment Regents Exam

Science and the Living Environment

JoVE Core Chapter 1: Scientific Inquiry

- 1.3 The Scientific Method

JoVE Science Education: Lab Manual — Introductory Biology

- Scientific Method

Mechanisms of Genetics

JoVE Core Chapter 1: Scientific Inquiry

- 1.1: What is Biology?

JoVE Core Chapter 2: Chemistry of Life

- 2.15 pH

JoVE Core Chapter 3

- Macromolecules

JoVE Core Chapter 4

- Cell Structure and Function

JoVE Core Chapter 7

- Metabolism

JoVE Core Chapter 8

- Cellular Respiration

JoVE Core Chapter 9

- Photosynthesis

JoVE Science Education: Lab Manual — Introductory Biology

- Physiology of the Circulatory System
- Cell Structure
- Enzyme Activity

Homeostasis and the Human Body

JoVE Core Chapter 12: Circulatory and Pulmonary Systems

- 12.14 Sex-linked Disorders

JoVE Core Chapter 17

- Nutrition and Digestion

JoVE Core Chapter 20: Musculoskeletal System

- 20.1 What is the Skeletal System?

JoVE Core Chapter 22

- Circulatory and Pulmonary Systems

JoVE Core Chapter 24

- Immune System

JoVE Science Education: Lab Manual — Introductory Biology

- Physiology of the Circulatory System

Reproduction

JoVE Core Chapter 10

- Cell Cycle and Division

JoVE Core Chapter 11

- Meiosis

JoVE Core Chapter 25

- Reproduction and Development

JoVE Science Education: Lab Manual — Introductory Biology

- Cell Division
- Microbial and Fungal Diversity

Genetics

JoVE Core Chapter 13

- DNA Structure and Function

JoVE Core Chapter 14

- Gene Expression

JoVE Core Chapter 15: Biotechnology

- 15.1 What is Genetic Engineering?

JoVE Science Education: Advanced Biology — Genetics

- An Overview of Gene Expression

- Genetics of Organisms

Evolution

JoVE Core Chapter 1: Scientific Inquiry

- 1.1 What is Biology?
- 1.7 Taxonomy
- 1.8 Phylogeny

JoVE Core Chapter 30

- Speciation and Diversity

JoVE Core Chapter 31

- Natural Selection

JoVE Science Education: Lab Manual — Introductory Biology

- Genetics of Organisms
- Artificial Selection
- Evolutionary Relationships
- Extinction
- Microbial and Fungal Diversity
- Animal Diversity
- Plant Diversity

Ecology

JoVE Core Chapter 27

- Ecosystems

JoVE Core Chapter 28

- Population and Community Ecology

JoVE Core Chapter 29

- Biodiversity and Conservation

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- Energy Dynamics