



# BIOLOGY 22

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Insert Teacher Name

Insert Room Number

Full year

Period

Insert Email Address

## COURSE DESCRIPTION

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This course will provide students with a broad knowledge and appreciation of the concepts of biology. The course uses an ecological approach to biological concepts. Topics will be illustrated through the following themes that will recur throughout the course: evolution; structure and function; energy relationships; reproduction and inheritance; unity and diversity; and stability and patterns of change. The course is designed for students who have well-developed study skills and note-taking ability.

## COURSE OBJECTIVES

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Students will understand that:

- due to its unique chemical structure, carbon forms many organic and inorganic compounds.
- fundamental life processes depend on the physical structure and the chemical activities of the cell.
- similarities in the chemical and structural properties of DNA in all living organisms allow the transfer of genes from one organism to another.
- in sexually reproducing organisms, each offspring contains a mix of characteristics inherited from both parents.
- evolution and biodiversity are the result of genetic changes that occur over time in constantly changing environments.
- microorganisms have an essential role in life processes and cycles on Earth.
- living organisms have the capability of producing populations of unlimited size, but the environment can support only a limited number of individuals from each species.
- the use of resources by human populations may affect the quality of the environment.

## UNITS OF STUDY

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- Introduction: Biological Processes
- Energy Flow
- Population Ecology
- Organic Compounds
- Cytology(with Micro intro)
- Energetics
- DNA
- Cell Division & Meiosis
- Genetics Patterns of Evolution & Speciation
- Natural Selection
- Taxonomy
- Microbiology
- Plant and Animal Evolution
- Plant and Animal Evolution

## COURSE POLICIES AND REQUIREMENTS

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### GRADING

Summative Assessments:	<b>90%</b> Insert Categories/Weighting (ie. Papers – 30%)
Formative Assessments:	<b>10%</b> Insert Categories/Weighting (ie. Quizzes – 50%)
Behavioral Characteristics:	<b>0%</b> Insert Categories/Weighting (ie. Particip. - 90%)
Insert Additional Grading Information Here	

### MATERIALS

Insert Course Materials Here (ie. Textbook, Binder, Calculator, Highlighters)

### EXPECTATIONS OF STUDENTS

Insert Course Expectations Here

### EXTRA HELP

Insert Additional Information Here