

# BIOLOGY 11 HELO

## AGS

### Course Outline

#### 1. Welcome to Biology 11 HELO AGS.

This course is divided into 9 units of study and lasts for 4 months from the day you register. However you can complete the course sooner depending on the amount of work you put into it. The Hybrid Electronic Learning Option (HELO) has been designed for students who cannot attend the MEC Math/Sciences Learning Center regularly and prefer to do the majority of the course work electronically.

The units of study are as follows:

Unit 1: The nature of Life

Unit 2: Ecology

Unit 3: Cells

Unit 4: Genetics

Unit 5: Evolution

Unit 6: Microorganisms and Fungi

Unit 7: Plants

Unit 8: Invertebrates

Unit 9: Chordates

#### 2. The text

The text for this course is Prentice Hall "Biology" (2006), by Miller and Levine. This text is required reading (deposit \$100).

#### 3. Participation

Participation (both electronic and Face to face) is crucial and counts for 10% (in combination with your assignments) of the course.

#### 4. Course Evaluation

Participation and assignments	10%
Tests	90%
Total =	100 %

#### 5. Tests

Every unit of study has a number of tests depending on the number of chapters included in it. The tests can be done chapter by chapter, or units based on the course option you choose.

## 6. Assignments

Depending on the option you choose assignments can be done on a chapter per chapter or unit basis. Check your answers with the assignment answer key. Course assignments *must be completed and submitted for credit* before you attempt to write a specific test.

## 7. WEB Resources

Your textbook is a great resource when it comes to visiting the web. Use the web sites and codes your text gives you. It will help you a lot when it comes to animations and simulations of concepts, test reviews, interesting article, videos etc. Also make sure you visit the Biology 11 Super-site.

BIOLOGY 11 AGS  
HELO  
Study Outline

Unit 1: The nature of life

Read: Chapter 1: The science of biology  
Chapter 2: The chemistry of life

Assignments: Chapter 1 and 2 **required**

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Test chapter 1  
Test chapter 2  
Test unit 1

Unit 2: Ecology

Read: Chapter 3: The biosphere  
Chapter 4: Ecosystems and communities  
Chapter 5: Populations  
Chapter 6: Humans in the biosphere

Assignments: Chapter 3, 4, 5, and 6 **required**

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Test chapter 3  
Test chapter 4  
Test chapter 5  
Test chapter 6  
Test unit 2

Unit 3: Cells

Read: Chapter 7: Cell structure and function  
Chapter 8: Photosynthesis  
Chapter 9: Cellular respiration  
Chapter 10: Cell growth and division

Assignments: Chapter 7, 8, 9, and 10 **required**

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Test chapter 7  
Test chapter 8  
Test chapter 9  
Test chapter 10  
Test unit 3

## Unit 4: Genetics

Read: Chapter 11: Introduction to genetics  
Chapter 12: DNA and RNA  
Chapter 13: Genetic engineering  
Chapter 14: The human Genome

Assignments: Chapter 11, 12, 13, and 14 **required**

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Test chapter 11  
Test chapter 12  
Test chapter 13  
Test chapter 14  
Test unit 4

## Unit 5: Evolution

Read: Chapter 15: Darwin's theory of evolution  
Chapter 16: Evolution of populations  
Chapter 17: The history of life  
Chapter 18: Classification

Assignments: Chapter 15, 16, 17, and 18 **required**

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Test chapter 15  
Test chapter 16  
Test chapter 17  
Test chapter 18  
Test unit 5

## Unit 6: Microorganisms and Fungi

Read: Chapter 19: Bacteria and Viruses  
Chapter 20: Protists  
Chapter 21: Fungi

Assignments: Chapter 19, 20 and 21 **required**

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Test chapter 19  
Test chapter 20  
Test chapter 21  
Test unit 6

## Unit 7: Plants

Read: Chapter 22: Plant diversity  
Chapter 23: Roots, stems and leaves  
Chapter 24: Reproduction of seed plants  
Chapter 25: Plant responses and adaptations

Assignments: Chapter 22, 23, 24, and 25 **required**

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Test chapter 22  
Test chapter 23  
Test chapter 24  
Test chapter 25  
Test unit 7

## Unit 8: Invertebrates

Read: Chapter 26: Sponges and Cnidarians  
Chapter 27: Worms and Mollusks  
Chapter 28: Anthropods and Echinoderms  
Chapter 29: Comparing Invertebrates

Assignments: Chapter 26, 27, 28, and 29 **required**

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Test chapter 26  
Test chapter 27  
Test chapter 28  
Test chapter 29  
Test unit 8

## Unit 9: Chordates

Read: Chapter 30: Non-vertebrate Chordates, Fishes and Amphibians  
Chapter 31: Reptiles and Birds  
Chapter 32: Mammals  
Chapter 33: Comparing Chordates  
Chapter 34: Animal Behavior

Assignments: Chapter 30, 31, 32, 33, and 34 **required**

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Test chapter 30  
Test chapter 31  
Test chapter 32  
Test chapter 33  
Test chapter 34  
Test unit 9

**Good Luck!**