

Advanced Placement Biology 2008 - 2009 Syllabus

This document shows the approximate timeline we will be following in A.P. Biology. Please verify dates on a regular basis. Additional assignments will be given in class, so although you are expected to have completed the work described in this table, it should not be considered a comprehensive list of your responsibilities.

<i>Dates</i>	<i>Topics</i>	<i>Assignments</i>
8/6/08	Policies & procedures, discuss summer reading.	Summer reading.
8/7/08	Scientific method review, emergent properties	Root Word Quiz 1, Ch. 1
8/8/08	Scientific Method lab, lab design	
8/11/08	Darwin's ideas.	Ch. 22
8/12/08	Evolution of populations, Hardy-Weinberg	Root Word Quiz 2, Ch. 23, Prelab AP Lab 8
8/13/08	AP Lab 8	Scientific Method lab writeup
8/14/08	Mechanisms of adaptive evolution, essay writing.	
8/15/08	Mechanisms of speciation	Lab 8 writeup, Quiz on 22-23
8/18/08	Speciation and macroevolution.	Ch. 24
8/19/08	Cladistics, insect synapomorphies	Ch.25
8/20/08	Finish cladistics	Root Word Quiz 3
8/21/08	Early earth & the origin of life	Ch. 26
8/22/08	Review/catchup	

<i>Dates</i>	<i>Topics</i>	<i>Assignments</i>
8/25/08	Evolution Unit Test	Unit Test
8/26/08	Introduction to prokaryotes, Gram staining lab (dress)	Ch. 27, Dress
8/27/08	Finish prokaryotes, discuss test	
8/28/08	Protist anatomy lab	Root Word Quiz 4, Ch. 28
8/29/08	Preying protists lab	
9/1/08	Holiday - No School	
9/2/08	Introduction to plants: common features & land adaptations	Quiz on 27 & 28, Ch. 29
9/3/08	Bryophytes and seedless vascular plants	
9/4/08	Gymnosperms and angiosperms	Root Word Quiz 5, Ch. 30
9/5/08	Monocot and eudicot lab	
9/8/08	Fungi lab	Quiz on 29 & 30, Ch. 31
9/9/08	Finish fungi, invertebrate overview, body plans,	Root Word Quiz 6, Ch. 32
9/10/08	Porifera	
9/11/08	Cnidaria & Platyhelminthes lab, prep nematode kits	Ch. 33
9/12/08	Nematoda & Rotifera lab	
9/15/08	Annelida dissection (dress)	Root Word Quiz 7, dress
9/16/08	Arthropoda dissection and comparison (dress)	Dress

<i>Dates</i>	<i>Topics</i>	<i>Assignments</i>
9/17/08	Wrap up invertebrates	
9/18/08	Chordate challenges and adaptations	Ch. 34
9/19/08	Catchup/review	
9/22/08	Biodiversity Unit Test	Unit Test
9/23/08	Ecology review, prep Winogradsky columns	Ch. 50, bring 2 liter bottles
9/24/08	Biome review, climographs	
9/25/08	Population ecology, human population growth	Ch. 52
9/26/08	Species interactions	Ch. 53
9/29/08	AP Lab 12 (dress)	Dress, Prelab, Ch. 54
9/30/08	AP Lab 12, cont. (dress)	Dress, Quiz on 50, 52, & 53
10/1/08	Lab discussion, primary productivity	
10/2/08	Biogeochemical cycles	
10/3/08	Finish biogeochemical cycles, review/catchup	
10/6/08	Ecology Unit Test	Unit Test
10/7/08	Review/catchup	
10/8/08	Review/catchup	
10/9/08	Final exam	Final exam
10/10/08	No class - finals in periods 4 & 5	

<i>Dates</i>	<i>Topics</i>	<i>Assignments</i>
	Fall Break (Oct. 13 -17)	
10/20/08	Chemical foundations of Biology	Ch. 2
10/21/08	Properties of water	Ch. 3
10/22/08	Mid-term exam discussion	
10/23/08	Properties of carbon	Ch. 4
10/24/08	Properties of carbohydrates lab (dress)	Quiz on ch. 2 & 3, dress, read sect. 5.1 & 5.2
10/27/08	Finish carbohydrate lab , begin lipid lab (dress)	Dress , sect. 5.3
10/28/08	Protein lab (dress)	Dress , sect. 5.4
10/29/08	Protein lab, cont. (dress)	Dress
10/30/08	Nucleic Acids lab (dress)	Dress , sect. 5.5
10/31/08	McMush lab (dress) , review	Dress
11/3/08	Biochemistry Unit Test	
11/4/08	Watson & Crick, replication	Ch. 16
11/5/08	Modeling replication, discuss test	
11/6/08	Transcription & eukaryotic modifications	Ch. 17
11/7/08	Translation	

<i>Dates</i>	<i>Topics</i>	<i>Assignments</i>
11/10/08	Review transcription & translation	
11/11/08	No School - Veteran's Day	
11/12/08	Intro to cells	Quiz on 16 & 17, Ch. 6
11/13/08	Cell lab	
11/14/08	“Inner Life of a Cell” , The cell cycle	Ch.12
11/17/08	Mitosis, AP 3, Part I	Prelab
11/18/08	Control of the cell cycle, cancer, lab discussion	
11/19/08	Finish & review cells.	Lab Writeup, Quiz on Ch. 6 & 12,
11/20/08	Plant growth & development. Tissue lab - plants	Ch. 35
11/21/08	Tissue lab - animals.	Ch. 40
11/24/08	Discuss lab, homeostasis, review	Lab writeup
11/25/08	Cells & Growth Patterns Unit Test	Unit Test
11/26/08	Discuss test	
	Thanksgiving Break (11/27 & 11/28)	
12/1/08	AP Lab 1 (dress)	Prelab, dress, Ch. 7
12/2/08	Finish lab, discuss. Water potential	
12/3/08	Intro to circulatory system	Ch. 42, lab writeup

<i>Dates</i>	<i>Topics</i>	<i>Assignments</i>
12/4/08	Pig heart dissection (dress) , heart attacks	Dress
12/5/08	Virtual Cardiology Lab	
12/8/08	AP Lab 10, parts A & C, vessel microscopy	Prelab
12/9/08	AP lab 10, part B	
12/10/08	Lung capacity lab	
12/11/08	Respiratory system survey & discussion	
12/12/08	Survey of excretory systems, kidney function	Quiz on 7 & 42, lab writeup, Ch. 44
12/15/08	Kidney dissection (dress)	Dress, Ch. 44 questions
12/16/08	Review/catchup	
12/17/08	Review/catchup	
12/18/08	Final Exam	Final Exam
12/19/08	No class (Finals in periods 4 & 5)	
	Winter Break	(DuPont Challenge Essay)
1/5/09	AP Lab 9	Ch. 36, Prelab
1/6/09	AP Lab 9, cont.	
1/7/09	Vascular transport, final exam & lab discussion	
1/8/09	Review/catchup	Lab writeup

<i>Dates</i>	<i>Topics</i>	<i>Assignments</i>
1/9/09	Exchanging Materials Unit Test	Unit Test
1/12/09	Laws of thermodynamics	Ch. 8
1/13/09	AP Lab 2 (dress)	Prelab, dress
1/14/09	AP Lab 2, cont. (dress)	Dress
1/15/09	Photosynthesis	Ch. 10, lab due
1/16/09	AP Lab 4 (dress)	Prelab, dress
1/19/09	No School - Martin Luther King, Jr.	
1/20/09	Discuss lab, Calvin Cycle, C ₄ & CAM plants	Ch. 10 questions
1/21/09	Cellular respiration	Ch. 9, lab writeup
1/22/09	AP Lab 5 (dress)	Prelab, dress
1/23/09	Discuss lab, conclude respiration	Ch. 9 questions
1/26/09	Intro to digestion	Ch. 41, Lab writeup
1/27/09	Digestion, cont., microscopy	
1/28/09	Review/catchup	
1/29/09	Metabolism & Cellular Energetics Unit Test	Unit Test
1/30/09	Intro to the immune system	Ch. 43
2/2/09	“A Bad Reaction” PBL	
2/3/09	Blood typing lab, Virtual ELISA lab, Signal	Ch. 11

<i>Dates</i>	<i>Topics</i>	<i>Assignments</i>
	Transduction activity	
2/4/09	Cellular signaling, cont.	
2/5/09	Endocrine system	Ch. 45
2/6/09	Endocrine system, cont.	
2/9/09	Neural function	Ch. 48, Quiz on 43, 11, and 45
2/10/09	Virtual neurophysiology lab	
2/11/09	Comparative nervous systems	
2/12/09	The senses - touch, smell, taste	Ch. 49
2/13/09	The senses - vision, hearing	
2/16/09	No School - President's Day	
2/17/09	Muscular system, microscopy & models	
2/18/09	Skeletal system	
2/19/09	Types of innate and learned behaviors	Ch. 51, Quiz on Ch. 48 & 49
2/20/09	AP Lab 11	Prelab
2/23/09	Plant responses to the environment	Behavior packets, Ch. 39
2/24/09	sLowlife webquest (short pd. - AIMS)	Lab writeup
2/25/09	Review/catchup (short pd. - AIMS)	
2/26/09	Responding to the Environment Unit Test	Unit Test

<i>Dates</i>	<i>Topics</i>	<i>Assignments</i>
2/27/09	Meiosis	Ch. 13
3/2/09	AP lab 3, Part 2, begin animal reproduction	Prelab , Ch. 46
3/3/09	Methods of animal reproduction, cont.	Permission slips
3/4/09	Human reproduction	
3/5/09	Human reproduction, cont., microscopy	
3/6/09	Embryology	Ch. 47
3/9/09	Embryology, cont.	
3/10/09	Review/catchup	
3/11/09	Review/catchup	
3/12/09	Final Exam	Final Exam
3/13/08	No class (finals in periods 4 & 5)	
	Spring Break (3/16 - 3/20)	
3/23/09	Plant reproduction, begin C-Fern lab	Ch. 38
3/24/09	Flower dissection lab	
3/25/09	Mendelian genetics review, discuss final	Ch. 14
3/26/09	AP Lab 7 (alternate)	Modified Prelab
3/27/09	Inheritance patterns & testing, C-Fern	

<i>Dates</i>	<i>Topics</i>	<i>Assignments</i>
3/30/09	Sex-linked traits & other Non-Mendelian genetics	
3/31/09	Linkage mapping	Ch. 15, lab writeup
4/1/09	No School - Math AIMS	
4/2/09	Nondisjunction, and polyploidy	
4/3/09	C-Fern, Catchup/review	
4/6/09	Heredity Unit Test	Unit Test
4/7/09	Viruses	Ch. 18
4/8/09	Mimivirus, discuss test	Mimivirus article
4/9/09	AIDS, WNV, retroviruses, viroids, & prions	
4/10/09	No School - Spring Holiday	
4/13/09	Gene transfer & recombination in bacteria, Virtual Bacteriology Lab, C-Fern	
4/14/09	Gene regulation in prokaryotes	
4/15/09	Eukaryotic gene regulation	Ch. 19
4/16/09	Cancer, transposable elements, genomic evolution	
4/17/09	Virtual biotechnology	Ch. 20
4/20/09	Virtual biotechnology, cont.	Quiz on Ch. 18 & 19
4/21/09	Sanger method, restriction mapping	
4/22/09	Ethical considerations, review	

<i>Dates</i>	<i>Topics</i>	<i>Assignments</i>
4/23/09	AP Lab 6 (dress)	Prelab, dress
4/24/09	AP Lab 6, cont. (dress)	Dress
4/27/09	Molecular Genetics Unit Test	Unit Test
4/28/09	Review for AP Test	
4/29/09	Review for AP Test	
4/30/09	Review for AP Test	
5/1/09	AP Practice Test - Essay Questions (counts as final exam grade)	AP Practice Test
5/4/09	AP Practice Test - Multiple Choice (counts as final exam grade)	AP Practice Test
5/5/09	Review for AP Test	
5/6/09	Review for AP Test	
5/7/09	Review for AP Test	
5/8/09	Review for AP Test	
5/11/09	AP BIOLOGY TEST!	Get rest, eat breakfast, remain calm! Good luck!
5/12/09	Celebratory breakfast, class photos (photos will be postponed if people are taking AP Chem)	
5/13/09	To be announced	
5/14/09	To be announced	
5/15/09	To be announced	

<i>Dates</i>	<i>Topics</i>	<i>Assignments</i>
5/18/09	To be announced	
5/19/09	To be announced	
5/20/09	“Final Exam”	
5/21/09	No class - finals	