



# PIPER HIGH SCHOOL

## BIOLOGY SYLLABUS *“The Year of Mission I’Mpossible”*

Instructor’s Name:	<b>Shane Stoby</b>
Course Title:	<b>Biology I</b>
Course Location:	Piper High School, Room 560
Contact Information:	<i>Feel free to contact me for any reason.</i> Phone: 754-322-1700 ext. 582-3137 Email: <a href="mailto:Shane.Stoby@browardschools.com">Shane.Stoby@browardschools.com</a> Remind 101 texts: Will be given on the 1 <sup>st</sup> day
Electronic Resources:	<b><i>Pinnacle Gradebook:</i></b> <i>It is recommended that you (student and parent) check Pinnacle <b>regularly</b> for attendance and grades.</i> <a href="http://gb.browardschools.com/pinnacle/gradebook">gb.browardschools.com/pinnacle/gradebook</a> <a href="https://browardschools.instructure.com">https://browardschools.instructure.com</a> has powerpoints & practice quizzes. NewsELA <a href="https://newsela.com/">https://newsela.com/</a>
Availability:	Best <b>method</b> to reach me is <b>email</b> , I check it regularly. <i>Please include the student’s name on the subject line.</i>  Best <b>time</b> to reach me by phone is: <i>Weekdays immediately after school (2:40pm)</i>
Course Materials:	<ul style="list-style-type: none"> <li>• HOLT McDOUGAL Biology. Nowicki, Holt McDougal, 2012.</li> <li>• One 5-subject notebooks (to be used <b>daily</b>).</li> <li>• Blue or black ink pens (either color).</li> <li>• #2 Pencils for assessments &amp; labs</li> <li>• Colored pencils</li> </ul>
Objectives:	<ul style="list-style-type: none"> <li>• Students will develop a better understanding of biological theories, practices, and methodologies.</li> <li>• Students will gain an understanding of and develop an appreciation for the biological sciences and how it is a vital part of their lives.</li> <li>• To successfully prepare student for Biology EOC.</li> </ul>
<b>Assignments/Schedule:</b> <i>Notice not all chapters nor sections will be covered</i>	

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FIRST QUARTER	SECOND QUARTER	THIRD QUARTER	FOURTH QUARTER
<p><b>Chapter 1 – Biology in the 21<sup>st</sup> Century</b></p> <ol style="list-style-type: none"> <li>3. Scientific Thinking &amp; Processes</li> <li>4. Biologists’ Tools &amp; Technology</li> </ol> <p><b>Chapter 2- Chemistry of Life</b></p> <ol style="list-style-type: none"> <li>2. Properties of Water</li> <li>3. Carbon Based Molecules</li> <li>4. Chemical Reactions</li> <li>5. Enzymes</li> </ol> <p><b>Chapter 3-Cell Structure &amp; Function</b></p> <ol style="list-style-type: none"> <li>1. Cell Theory</li> <li>2. Cells Structure &amp; Function</li> <li>3. Cell Membrane</li> <li>4. Diffusion &amp; Osmosis</li> <li>5. Active Transport</li> </ol>	<p><b>Chapter 4-Cells and Energy</b></p> <ol style="list-style-type: none"> <li>1. Chemical Energy &amp; ATP</li> <li>2. Photosynthesis Overview</li> <li>4. Cell Respiration Overview</li> <li>6. Fermentation</li> </ol> <p><b>Chapter 21-Plant Structure and Function</b></p> <ol style="list-style-type: none"> <li>1. Plant Cells &amp; Tissues</li> <li>2. The Vascular System</li> <li>3. Roots and Stems</li> <li>4. Leaves</li> </ol> <p><b>Ch.22-Plant Growth/Reproduction</b></p> <ol style="list-style-type: none"> <li>2. Reproduction in Flowers</li> </ol> <p><b>Chapter 5: Cell Growth and Division</b></p> <ol style="list-style-type: none"> <li>1. Cell Cycle</li> <li>2. Mitosis and Cytokinesis</li> <li>3. Regulation of the Cell Cycle</li> <li>4. Asexual Reproduction and Multi- cellular Life</li> </ol> <p><b>Chapter 6 –Meiosis and Mendel</b></p> <ol style="list-style-type: none"> <li>1. Chromosomes &amp; Meiosis</li> <li>2. Process of Meiosis</li> <li>3. Mendel &amp; Heredity</li> <li>4. Traits, Genes &amp; Alleles</li> <li>5. Traits &amp; Probability</li> <li>6. Meiosis &amp; Genetic Variation</li> </ol>	<p><b>Chapter 7 –Extending Mendelian Genetics</b></p> <ol style="list-style-type: none"> <li>1. Chromosomes &amp; Phenotype</li> <li>2. Complex Patterns of Inheritance</li> <li>4. Human Genetics &amp; Pedigrees</li> </ol> <p><b>Chapter 8 –From DNA to Proteins</b></p> <ol style="list-style-type: none"> <li>1. Identify DNA: genetic material</li> <li>2. Structure of DNA</li> <li>3. DNA replication</li> <li>4. Transcription</li> <li>5. Translation</li> <li>6. Gene expression &amp; regulation</li> <li>7. Mutations</li> </ol> <p><b>Chapter 10 – Principles of Evolution</b></p> <ol style="list-style-type: none"> <li>2. Darwin’s observations</li> <li>3. Theory of natural selection</li> <li>4. Evidence of evolution</li> <li>5. Evolutionary Biology</li> </ol> <p><b>Chapter 11-Evolution of Populations</b></p> <ol style="list-style-type: none"> <li>1. Genetic variations within populations</li> <li>2. Natural selection in populations</li> <li>3. Other mechanisms of evolution</li> <li>5. Speciation through isolation</li> </ol> <p><b>Chapter 12 –The History of Life</b></p> <ol style="list-style-type: none"> <li>3. Origin of life</li> <li>4. Early single-celled organisms</li> <li>6. Primate evolution</li> </ol> <p><b>Chapter 17 –Tree of Life</b></p> <ol style="list-style-type: none"> <li>1. Linnaean System of Classification</li> <li>2. Classification based on evolutionary relationships</li> <li>4. Domains &amp; Kingdoms</li> </ol>	<p><b>Chapter 13 Principles of Ecology</b></p> <ol style="list-style-type: none"> <li>2. Biotic and Abiotic Factors</li> <li>3. Energy in Ecosystems</li> <li>4. Food Chains &amp; Food Webs</li> <li>5. Cycling of Matter</li> <li>6. Pyramid Models</li> </ol> <p><b>Chapter 14 Interactions in Ecosystems</b></p> <ol style="list-style-type: none"> <li>3. Population Density &amp; Distribution</li> <li>4. Population Growth Patterns</li> <li>5. Ecological Succession</li> </ol> <p><b>Chapter 15-The Biosphere</b></p> <ol style="list-style-type: none"> <li>1. Life in the Earth System</li> <li>2. Climate</li> <li>4. Marine Ecosystems</li> </ol> <p><b>Chapter 16-Human Impact on Ecosystems</b></p> <ol style="list-style-type: none"> <li>1. Human Population Growth &amp; Natural Resources</li> <li>2. Air Quality</li> <li>3. Water Quality</li> <li>4. Threats to Biodiversity</li> <li>5. Conservation</li> </ol> <p><b>Chapter 29, 30, 31, 34 –Human Body Systems</b></p> <ol style="list-style-type: none"> <li>29. Central Nervous System</li> <li>30. Blood Vessels and Transport</li> <li>31. Immune System and Disease</li> <li>34. Reproduction and Development</li> </ol> <p><i>Review for EOC: 2-3 weeks</i></p> <p><i>EOC: May</i></p>
<p><b><i>Class Work and Homework Policy:</i></b></p>	<p>Students are expected to keep up with the material by <i>reading at home</i>. Homework is given <i>often</i> and usually consists of section assessments.</p> <p>Due dates are announced in class and noted in Pinnacle gradebook. Check Pinnacle often.</p> <p>See <b>late work</b> criteria below.</p>		
<p><b><i>Quizzes:</i></b></p>	<p>Quizzes are given regularly and include new material as well as material from the past. At the end of the school year, students will be taking a state mandated <b>EOC exam</b>. The exam is <b>cumulative</b>, so retaining information is</p>		

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	necessary.		
<b>Tests:</b>	<p>A test will be given after every quiz (or sooner if it is a short chapter). Tests will be announced in class and on Pinnacle gradebook.</p> <p>Tests are mostly multiple choice but may also be fill in the blank, free response, etc.</p>		
<b>Late Work:</b>	<p>If a student is absent, he/she may turn in late work up to <b>48 school hours</b> after returning to school. After 48 hours, it will NOT be accepted.</p> <p>It is the <b>student's responsibility</b> to ask for late work and to check <i>pinnacle</i> and <i>showbie.com</i> regularly to see what he/she has missed.</p> <p>If a student is absent on the day of an <b>exam</b> (quiz/test), the student has <b>48 hours</b> to make up that exam. <i>Exams can be made up only during STUDY HALL!</i></p>		
<b>Class Rules:</b>	<p>The school discipline guidelines will be followed including calls home, detentions and/or administrative referrals.</p> <ol style="list-style-type: none"> <li>1. Come to class prepared with supplies and completed assignments.</li> <li>2. Be on time, in your seat, with work on your desk.</li> <li>3. Tardiness is a disruption to the entire class &amp; will not be tolerated; as per school policy: 3<sup>rd</sup> tardy = detention, 4<sup>th</sup> tardy= referral.</li> <li>4. Broward County School dress code will be enforced in class at ALL times.</li> <li>5. No talking unless you are called on.</li> <li>6. Remain in your seat at <b>all</b> times.</li> <li>7. <b>LISTEN</b> to and follow all directions the <i>first</i> time they are given.</li> <li>8. Keep all personal belongings, including book bags and purses, under the desk or on the floor.</li> <li>9. Refrain from using profanity, vulgar language, or gestures.</li> <li>10. Absolutely <b>NO</b> eating or drinking in class. You may bring a water bottle that contains a <b>lid</b>.</li> </ol>		
<b>Weighting of Assignments:</b>	<ul style="list-style-type: none"> <li>• Tests 100 points</li> <li>• Quizzes 50 points</li> <li>• Homework 20 points</li> <li>• Class work 20 points</li> <li>• Laboratory Reports 100 points</li> <li>• Projects 40-100 points</li> </ul>		
<b>Grading Scale:</b>	<p><i>Broward County's Grading Scale</i></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>90 – 100 = A</td> </tr> <tr> <td>80 - 89 = B</td> </tr> </table>	90 – 100 = A	80 - 89 = B
90 – 100 = A			
80 - 89 = B			

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	70 - 79 = C
	60 - 69 = D
	59 and below = F
<b>Academic Honesty:</b>	<i>As a student of Piper High School I vow to not plagiarize and to never give or receive assistance on assessments.</i>
<b>Attendance:</b>	All students will follow the guidelines set forth by Broward County Public Schools, the Code of Student Conduct Handbook, and Piper's attendance policy.
<b>Cell phones :</b>	<p>Prior to the start of class, students must turn their cell phones <b>off</b> to avoid unnecessary classroom disruptions.</p> <p>Cell phones must remain off until the <b>end</b> of class.</p> <p>Violation of these rules will result in confiscation of cell phone, detention, and/or referrals.</p> <p>Phones and any unapproved electronic devices are not permitted in class. If seen, they will be confiscated and given to administration. Parents will have to pick up devices.</p>

Refer to this syllabus throughout the year. Syllabus is subject to change.

The following pages must be signed by BOTH students and parents, and returned to the SCIENCE teacher by the first week of school.

\_\_\_\_\_  
Student Name


\_\_\_\_\_  
Student ID #

\_\_\_\_\_  
Period

This page must be returned to your **SCIENCE** teacher by the first week of school.

Go to <http://piper.browardschools.com> for the complete syllabus.

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## Science Syllabus Confirmation Page

I \_\_\_\_\_ (CLEARLY print **student name**) have read through and discussed this course syllabus with my teacher today in class. I understand what exactly is expected of me in this class and what my responsibilities are for this semester. I know and understand what the academic policies and procedures that I am to follow are. I am aware of and understand how I am going to be evaluated and assessed in this course and how my final grade will be calculated. I am aware of and understand that tardiness is not tolerated and can negatively affect my class grade. I know that if I need extra help or have concerns I should speak with my teacher as soon as possible. \*I have reviewed any additional resources given to me by my teacher.

Student Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Parent Signature: \_\_\_\_\_

Date: \_\_\_\_\_


*How can we contact you? Please write below:*

Student Email Address: \_\_\_\_\_ @ \_\_\_\_\_

Parent Email Address: \_\_\_\_\_ @ \_\_\_\_\_

Parent Phone Number: \_\_\_\_\_

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## Safety in Science Student Laboratory Contract

I have been instructed in the necessary safety procedures required in this course. I agree to abide by the following guidelines:

1. Safety apparel will be worn when specified by the instructor.
2. Long or loose hair will be tied back. Excessively loose clothing or jewelry will not be worn.
3. All safety rules and regulations will be followed.
4. There will be no drinking or eating in the laboratory.
5. Experiments will be done in the specified order with the prescribed quantities of chemicals.
6. Only the chemicals specified by the teacher will be used. No unauthorized experimentation will be done.
7. The proper use of safety equipment and correct evacuation procedures will be followed.
8. Wash hands thoroughly before beginning and after completing an experiment.
9. Contact lenses will not be worn during specified experiments.
10. Horseplay or other inappropriate behavior will not be tolerated during laboratory experiments.
11. Never taste chemicals or smell them directly.
12. Never pick up broken glass with bare hands.
13. Report all accidents, no matter how minor, to the teacher.
14. Never work without teacher supervision in the lab.
15. Do not remove any chemicals or equipment from the lab without the teacher's permission.

**Failure to follow these guidelines may result in reduction in grade, disciplinary action, and/or exclusion from laboratory activities.**

\_\_\_\_\_  
Student Name

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Parent Name

\_\_\_\_\_  
Parent Signature

\_\_\_\_\_  
Date

**Emergency Contact Information:**

Does student have any allergies?  Yes  No

If yes, please list: \_\_\_\_\_  
\_\_\_\_\_

	Mother/Guardian	Father/Guardian
Name:		
Home/Cell Number:		
Alt. Number:		
Email:		

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