Welcome to AP Biology! This is a rigorous, full-year course that will provide you with a strong foundation in college-level general biology.

Course Description: The purpose of this class is to introduce you to the wide world of general biology as prescribed by the College Board and the AP exam. We will cover the entire AP Biology curriculum in order to give fully prepare you for the AP Biology exam. The AP Biology exam is scheduled for Monday, May 11, 2020. We will cover the breadth and depth of this curriculum through lectures, extensive readings, videos, assignments, projects, quizzes, tests, and lots of hands-on labs. Some labs will require after-school participation (schedule forthcoming). The full AP syllabus can be found here: https://apstudent.collegeboard.org/apcourse/ap-biology/course-details.

Here is the basic course description from this site:

The AP Biology course is designed to enable you to develop advanced inquiry and reasoning skills, such as designing a plan for collecting data, analyzing data, applying mathematical routines, and connecting concepts in and across domains. The result will be readiness for the study of advanced topics in subsequent college courses — a goal of every AP course.

This AP Biology course is equivalent to a two-semester college introductory biology course and has been endorsed enthusiastically by higher education officials.

The Emphasis on Science Practices
A practice is a way to coordinate knowledge and skills in order to accomplish a goal or task. The science practices enable you to establish lines of evidence and use them to develop and refine testable explanations and predictions of natural phenomena. Because content, inquiry, and reasoning are equally important in AP Biology, each learning objective combines content with inquiry and reasoning skills described in the science practices. The science practices capture important aspects of the work that scientists engage in, at the level of competence expected of you, an AP Biology student.

Organized around Big Ideas:
The key concepts and related content that define the AP Biology course and exam are organized around a few underlying principles called the big ideas, which encompass the core scientific principles, theories and processes governing living organisms and biological systems.

**Big Idea 1: Evolution**
The process of evolution drives the diversity and unity of life.

**Big Idea 2: Cellular Processes: Energy and Communication**
Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis.

**Big Idea 3: Genetics and Information Transfer**
Living systems store, retrieve, transmit, and respond to information essential to life processes.

**Big Idea 4: Interactions**
Biological systems interact, and these systems and their interactions possess complex properties.
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Required Class Materials:
1. $35.00 lab fee
2. At least 2 three-ring binders (minimum 1.5-inch)
3. Notebook paper
4. Pencil and pen

Grading System: no extra credit will be given

- **Tests and Quizzes - 70%**. All tests may include concepts from prior tests. If your test score is below 80%, your test can be corrected, but only up to an 80% score. I will explain how test corrections work after the first test. Test corrections must be done within one week after the tests are handed back. APP time (see below) is the best time to make test corrections. Quizzes will be given one to three times a week near the beginning of class. They will cover the material from the previous day’s class and are a way to see how well you are learning the material.

- **Assignments/Activities - 5%**. These are practice for the tests/quizzes and given to help you understand important concepts. If allowed to work in teams, assignments should be individual and not copies of other students.

- **Labs - 25%**. Labs are an important and exciting part of AP biology. Labs will be graded based on written work as well as safe and successful participation in the lab. It is expected that you will follow instructions, use equipment and materials correctly, and follow safety rules (see safety contract).

Grading Scale: Letter grades will be assigned according to the following scale:

- A (89.5% - 100%)
- B+ (86.5% - 89.49%)
- B (82.5% - 86.49%)
- B- (79.5% - 82.49%)
- C+ (76.5% - 79.49%)
- C (72.5% - 76.49%)
- C- (69.5% - 72.49%)
- D+ (66.5% - 69.49%)
- D (62.5% - 66.49%)
- D- (59.5% - 62.94%)
- F (50% - 59.49%)

Grade Notification/Communication: Hillcrest High School uses Skyward to record grades. Student’s grades are available online at your convenience. Due to this online access, reports are rarely, if ever, sent home. I will contact parents/guardians quarterly using Skyward Messaging Center. Additionally, parents can contact me via email if they have concerns.

Note Taking: Notes will be taken every day and should be kept in your 3-ring binder. You will often receive a guided note sheet that includes learning objectives for the day and summary questions.

Late work: Work is considered late if it is not turned in at the beginning of the period it is due. Late work is accepted until the current grading period (quarter) ends.

Make-up work: Make-up work for an excused absence will be accepted with the possibility of full credit if turned in within one week of the student’s return. Prior to an absence, it is the responsibility of the student to contact me concerning work that will be missed because of the impending absence(s). Due to the nature of some assignments and in-class activities, make-up work may not be possible. However, an alternate assignment may be given. Sudden illnesses and family emergencies are the only legitimate reasons for missing a test without prior discussion and arrangements. Make-up tests are given on specific days, as determined by Mr. Mettler.

Attendance policy: The Hillcrest High School attendance policy will be followed and strictly enforced.

Academic dishonesty: Any student found cheating on a test or assignment will receive a grade of “0” for that test or
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assignment. Cheating includes, but is not limited to, copying another student’s work (with or without their knowledge), allowing another student to copy your work, or using materials during a test other than those allowed. Studying together can be beneficial, but the work each student submits must be their own. Plagiarism is not accepted.

Classroom Rules: To provide a safe environment in which each student feels safe and can work to their full potential.
1. Bring required materials daily and be in your seat and working on the starter when the bell rings.
2. Respect yourself, others and their property, and the classroom materials.
3. Unless otherwise specified, food, drinks (other than water in a closed container) are NOT allowed in this class. It is extremely unsafe to eat or drink in lab, and spills can ruin expensive lab equipment.
4. ALL electronic devices must be silenced and kept out of sight during class unless directed by the teacher. The penalty for the 1st offense will be a warning. On the 2nd offense, the item will be confiscated and the student can collect it at the end of the period. On the 3rd offense, the item will be confiscated and the student can collect it at the end of the day in the Attendance Office.

Consequences: 1st offense: Verbal warning
2nd offense: Conference in the hall; potential contract/lunch detention
3rd offense: Parent/guardian and administrator contact

Severe offenses may result in skipping steps.

Getting Help/APP Time: The best time to get help is before you are desperate! The daily Academic Preparation Period (APP) replaces student support time this year. I expect you to use this time to get extra help from me or class tutors, make up tests/quizzes/assignments, or redo labs/quizzes/assignments. After and before school appointments must be scheduled with me at least one day in advance.

Materials Fee: Please note that this course has a materials fee of $35.00 which must be paid to the main office within the first two weeks of school. If you qualify for a fee waiver, Mr. Mettler needs a copy of your receipt from the office.

Mr. Mettler’s AP Biology Disclosure 2019-2020

Your signature below signifies that you have read and understand the disclosure statement. Please sign this page and then turn it in.

Student Name: ______________________________________________________

Student Signature: ___________________________________________________

Parent/Guardian Signature: ____________________________________________

*Optional - Parent/Guardian email: ______________________________________

Teacher Signature: ____________________________________________________
Welcome (back?) to IB Biology! This course is a full-year, rigorous course that will provide you with a strong foundation in college-level general biology.

**Course Description and Purpose:** The purpose of this class is to introduce you to the wide world of general biology as prescribed by the IB philosophy and curriculum. We will cover the entire IB Biology curriculum in order to give fully prepare you for the IB Biology exam (EA) and the Internal Assessment (IA). The IB Biology exam is scheduled for May 2020. We will cover the breadth and depth of this curriculum through lectures, extensive readings, videos, assignments, projects, quizzes, tests, and lots of hands-on labs. Some labs will require after-school participation (schedule forthcoming). The full IB syllabus can be found here (or just Google “IB Biology curriculum”):

https://ibpublishing.ibo.org/server2/rest/app/tsm.xql?doc=d_4_biolo_gui_1402_1_e&part=1&chapter=1

From the IB Biology website:

Biology syllabus outline:

Higher level (240 hours)
- Internal assessment (individual investigation): 20%
- External assessment: 80%

Standard level (150 hours)
- Internal assessment (individual investigation): 20%
- External assessment: 80%

Key features of the curriculum and assessment models
- Available at standard (SL) and higher levels (HL)
- The minimum prescribed number of hours is 150 for SL and 240 for HL
- Students are assessed both externally and internally
- Biology students at SL and HL undertake a common core syllabus and a common internal
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assessment (IA) scheme.

● While there are core skills and activities common to both SL and HL students, students at HL are required to study the options and some topics in greater depth as well as some additional topics. The distinction between SL and HL is one of breadth and depth.

● A practical approach to the course delivery is emphasised through the interdisciplinary group 4 project and a mixture of both short-term and long-term experiments and investigations.

● Internal assessment accounts for 20% of the final assessment and this is assessed through a single individual investigation. This investigation may involve a hands-on approach, use of data-bases, modelling, simulation or a hybrid. Student work is internally assessed by the teacher and externally moderated by the IB.

The external assessment of biology consists of three written papers. In paper 1 there are 30 (at SL) or 40 (at HL) multiple-choice questions. Paper 2 contains short-answer and extended-response questions on the core (and Additional Higher Level (AHL) material at HL). Paper 3 has two sections; Section A contains one data-based question and several short-answer questions on experimental work on the core (and AHL material at HL). Section B contains short-answer and extended-response questions from each of the four options.

Much of this information is taken directly from the biology subject guide, available to all IB teachers on the Online Curriculum Centre (OCC).

Required Class Materials:
1. $35.00 lab fee
2. A three ring binder (minimum 1.5-inch)
3. Notebook paper
4. Pencil and pen

Grading System: no extra credit will be given

○ Tests and Quizzes - 70%. All tests may include concepts from prior tests. If your test score is below 80%, your test can be corrected, but only up to an 80% score. I will explain how test corrections work after the first test. Test corrections should be done within one week after the tests are handed back. APP time (see below) is the best time to make test corrections. Quizzes will be given one to three times a week near the beginning of class. They will cover the material from the previous day’s class and are a way to see how well you are learning the material.

○ Assignments/Activities - 5%. These are practice for the tests/quizzes and given to help you understand important concepts. If allowed to work in teams, assignments should be individual and not copies of other students.

○ Labs - 25%. Labs are an important and exciting part of IB biology. Labs will be graded based on written work as well as safe and successful participation in the lab. It is expected that you will follow instructions, use equipment and materials correctly, and follow safety rules.

Grading Scale: Letter grades will be assigned according to the following scale:

<table>
<thead>
<tr>
<th>Letter</th>
<th>Percentage Range</th>
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<tbody>
<tr>
<td>A</td>
<td>(89.5% - 100%)</td>
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<tr>
<td>A-</td>
<td>(85.5% - 89.49%)</td>
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<td>B+</td>
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Note Taking: Notes will be taken every day and should be kept in your 3-ring binder. You may receive a guided note sheet that includes learning objectives for the day and summary questions.

Late work: Work is considered late if it is not turned in at the beginning of the period it is due. Late work is accepted until the current grading period (quarter) ends.

Make-up work: Make-up work for an excused absence will be accepted with the possibility of full credit if turned in within one week of the student’s return. Prior to an absence, it is the responsibility of the student to contact me concerning work that will be missed because of the impending absence(s). Due to the nature of some assignments and in-class activities, make-up work may not be possible. However, an alternate assignment may be given. Sudden illnesses and family emergencies are the only legitimate reasons for missing a test without prior discussion and arrangements. Make-up tests are given on specific days, as determined by Mr. Mettler.

Attendance policy: The Hillcrest High School attendance policy will be followed and strictly enforced.

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Classroom Rules: To provide a safe environment in which each student feels safe and can work to their full potential.

1. Bring required materials daily and be in your seat and working on the starter when the bell rings.
2. Respect yourself, others and their property, and the classroom materials.
3. Unless otherwise specified, food, drinks (other than water in a closed container) are NOT allowed in this class. It is extremely unsafe to eat or drink in lab, and spills can ruin expensive lab equipment.
4. ALL electronic devices must be silenced and kept out of sight during class unless directed by the teacher. The penalty for the 1st offense will be a warning. On the 2nd offense, the item will be confiscated and the student can collect it at the end of the period. On the 3rd offense, the item will be confiscated and the student can collect it at the end of the day in the Attendance Office.

Consequences: 1st offense: Verbal warning
2nd offense: Conference in the hall; potential contract/lunch detention
3rd offense: Parent/guardian and administrator contact

Getting Help/APP Time: The best time to get help is before you are desperate! The daily Academic Preparation Period (APP) replaces student support time this year. I expect you to use this time to get extra help from me or class tutors, make up tests/quizzes/assignments, or redo labs/quizzes/assignments. After and before school appointments must be scheduled with me at least one day in advance.

Materials Fee: Please note that this course has a materials fee of $70.00 which must be paid to the main office within the first two weeks of school. If you qualify for a fee waiver, Mr. Mettler needs a copy of your receipt from the office.
HILLCREST HIGH SCHOOL
Mr. Mettler’s IB Biology Disclosure 2019-2020

Your signature below signifies that you have read and understand the disclosure statement. Please sign this page and then turn it in.

Student Name: __________________________________________________________

Student Signature: ______________________________________________________

Parent/Guardian Signature: ______________________________________________

*Optional - Parent/Guardian email: ________________________________

*Optional - Any additional information/questions/concerns that you wish to include:

Teacher Signature: ______________________________________________________
Welcome to Zoology! This course is a half-year, rigorous course that will provide you with a strong foundation in the biology of animals.

Course Description and Purpose: The purpose of this class is to introduce you to the wide world of animals by studying the different invertebrate phyla and vertebrate classes in-depth. You will be responsible for learning the main characteristics of each and be able to identify them based on specimens. You will be expected to handle and dissect real specimens. We are also going to have a lot of fun in this class by observing preserved specimens in the classroom, as well as maybe welcoming visitors and/or taking field-trips to view live specimens. This class also serves as an excellent resource for current and future AP and IB biology students.

Required Class Materials:
1. $10.00 lab fee
2. 1-inch three ring binder, ideally with labeled dividers for the following sections:
   a. Notes
   b. Labs/dissections
   c. Assignments/Quizzes
3. Notebook paper
4. Pencil and pen

Grading System: no extra credit will be given
- Tests, Quizzes, and Projects - 70%. All tests may include concepts from prior tests. If your test score is below 100%, your test can be retaken. Quizzes may be given once or twice a week at the beginning of class. They will cover the material from the previous days class and are a low-stakes way to see how well you are learning the material as we go.
- Assignments/Activities- 5%. These are given to help you understand important concepts. If allowed to work in teams, assignments should be individual and not copies of other students.
- Labs and Dissection Guides - 25%. Labs and dissections are an important and exciting part of zoology. Labs will be graded based on written work as well as safe and successful participation in the lab. It is expected that you will follow instructions, use equipment and materials correctly, and follow safety rules.

Grading Scale: Letter grades will be assigned according to the following scale:
A (89.5% - 100%)  C (72.5% - 76.49%)
There are no A-’s  C- (69.5% - 72.49%)
B+ (86.5% - 89.49%)  D+ (66.5% - 69.49%)
B (82.5% - 86.49%)  D (62.5% - 66.49%)
B- (79.5% - 82.49%)  D- (59.5% - 62.94%)
C+ (76.5% - 79.49%)  F (50% - 59.49%)

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parents/guardians quarterly using Skyward Messaging Center. Additionally, parents can contact me via email if they have concerns.

**Note Taking:** Notes will be taken every day and should be kept in your 3-ring binder. You will receive a guided note sheet that includes learning objectives for the day and summary questions. Notes can be used on all tests and quizzes!

**Late work:** Work is considered late if it is not turned in at the beginning of the period it is due. Late work is accepted until the current grading period (quarter) ends.

**Make-up work:** Make-up work for an excused absence will be accepted with the possibility of full credit if turned in within one week of the student’s return. Prior to an absence, it is the responsibility of the student to contact me concerning work that will be missed because of the impending absence(s). Due to the nature of some assignments and in-class activities, make-up work may not be possible. However, an alternate assignment may be given. Sudden illnesses and family emergencies are the only legitimate reasons for missing a test without prior discussion and arrangements. Make-up tests are given on specific days, as determined by Mr. Mettler.

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**Materials Fee:** Please note that this course has a materials fee of $10.00 which must be paid to the main office within the first two weeks of school. If you qualify for a fee waiver, Mr. Mettler needs a copy of your receipt from the office.

Mr. Mettler’s Zoology Disclosure 2019-2020
Your signature below signifies that you have read and understand the disclosure statement. Please sign this page and then turn it in.

Student Name: ______________________________________________________

Student Signature: __________________________________________________

Parent/Guardian Signature: ____________________________________________

*Optional - Parent/Guardian email: ______________________________________

*Optional - Any additional information/questions/concerns that you wish to include:

Teacher Signature: ____________________________________________________