Accelerated (IB) Biology Syllabus
Science

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Grades 9-10
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Course Description:

Accelerated Biology is a full year laboratory course that is a detailed study of living systems as well as the history of nature and science. This course covers content from molecules to ecosystems, focusing on structure, function, and interaction at all organizational levels. There is heavy emphasis on investigative learning through laboratory inquiry, with thorough record keeping and written analysis of results, and oral presentations as they interpret and analyze data. The content and pace of the course are enhanced to be consistent with the IB program and prepare students for further science courses. Accelerated (IB) Biology is a prerequisite for Biology IB SL and it is designed for college-bound students interested in science-related careers.

This course uses inquiry activities in an experimental setting, with strong emphasis on the content and the process of science. Students will explore scientific concepts through both group and individual work. Activities may include lectures, class discussions, demonstrations, hands-on activities, modeling, content reading/research, projects, laboratory experiments, real-world observations, data collection, data analysis and presentations.

Prerequisite:

Accelerated Biology is a required core course in the high school science sequence. It builds on knowledge and skills from previous science courses. It provides preparation for the IB course. It is recommended that students have taken and succeeded (A or B) at Challenge Science 8 prior to taking Biology.

Course Outline:

We will be using the book Biology, published by McDougal Littell, written by Stephen Nowicki. Each student will be assigned a specific textbook for their own use. They are required to return the same textbook in June. We will also be utilizing other resources, sometimes concurrently. This means students will constantly have assignments from their book and other resources to be done independently. Reading and writing will be stressed. Here is the proposed timetable, which may be adjusted to accommodate students' progress:

First Semester: Intro to Biology, Biochemistry, Cells, and Genetics

Second Semester: Genetic Presentations, Evolution, Human Body, Dissection, and Ecology

Course Requirements:

Notebooks: Students are required to have a notebook dedicated to Biology class only! This notebook will be used to record information not in the book, class notes, and assignments. This notebook should be at least 100 pages long. This will be discussed further in class

Safety:

The safety of students is a top priority. All students will receive the Flinn Safety Contract and are expected to sign the contract. All regulations outlined in the safety contract need to be followed. A legal guardian will need to sign the contract as well.

Schedule and Homework:

A weekly schedule detailing the homework due dates and assignments will be posted on the board, along with dates of tests and quizzes. Homework will consist of reading assignments, unfinished class work, lab write-ups, finalizing of lab reports, worksheets, and various projects. All homework is returned to students and they will want to retain it in an organized fashion. Having your homework will make studying for quizzes and tests easier.

When a student is not in class on the day that an assignment is due, provided their absence is excused, they will be expected to hand in the assignment due the day they return. It is the student's responsibility to ask and receive any work they missed while not in class.

Testing:
Tests will be given at the end of each chapter and sometimes during units to insure comprehension is occurring of material. Tests are closed book and are challenging. They follow the IB format and are designed to challenge students to reach a higher level of understanding. Test dates are always provided on the weekly schedules, so keep track to make sure you are preparing properly. Test strategies will be covered during class.

Labs:
Laboratory work is a large part of IB and labs are designed to reinforce class concepts and to give opportunities for investigation. Lab work is typed when it is turned in for assessment. You will be given ample time to prepare final lab reports. Labs have their own rubric and many details are posted online for constant student review. Sample labs are posted in the classroom. This will all be reviewed in class.

Projects:
Each student is required to give an oral presentation to the class in the second semester. More details will follow, but the project will consist of independent scientific research. This is a great opportunity for each student to demonstrate individual creativity and motivation. This project is required.

Grades: All grades will follow the Highland Park grading policy and IB criteria.

Cell Phones: PLEASE NOTE HIGHLAND'S NEW CELL PHONE POLICY

Teacher Expectation of Students and Parents:

I expect your best. Some people may wonder what does that mean?

Your Best at Engagement:
- Come to class everyday with a positive attitude, **ready** to learn
- Ask questions, stay involved with the topic
- Give 100% effort in everything you do. That doesn't mean your perfect but you truly gave it your all.

Your Best at communication:
- If you need help ask!! I'm here to help you learn
- Schedule appointments with me if you need help
- Communicate positively with students from many different backgrounds. I expect respect for all students!
- Show positive non-verbal communication. Is your phone away? Is your posture showing you are ready to learn? Are your eyes tracking the information?

Your Best Self:
- Be Kind
- Be Respectful
- Be Positive
- Be Curious and Inquisitive
- Be Ready to give your best every day.

Thank you.

Matt McKinney