

IB Biology 2 Guidelines and Syllabus

Purpose: The design of Science courses for the International Baccalaureate seeks to incorporate recent scientific thinking in many countries. Curriculum content is continuously changing as the world's scientists continue to expand on our understanding of science. The emphasis in all courses is on providing students with ample opportunities for search and discovery, for it is through personal experience in the scientific method that student's best develop an understanding of it. Biology is the study of living organisms, applying the techniques and approach of the experimental sciences. This study is undertaken at a variety of levels from the molecular to that of the biosphere. By the end of the course the student should have developed an appreciation of the interactions between these levels, and of organisms as functioning entities within the biosphere. The major goal of IB Biology is learning the information in the syllabus in order to pass the HL IB Biology exam. I will try to enrich your learning whenever possible. Everyone is responsible for each other's learning and achieving the most in this class. We are a team, working together, to meet the worthy challenges and goals set forth by IB. Students will be expected to work to the best of their abilities.

Curriculum

1st Semester

IB Biology lab skills
Inorganic Chemistry
Organic Chemistry
Cell Biology
Cell Respiration
Mitosis

2nd Semester

Genetics
Molecular Genetics
Evolution
Photosynthesis
Plant Science
Ecology

Student Engagement

The class is centered on a first year college textbook written by Campbell, Reece & Mitchell. The text includes a CD-ROM: Interactive Study Partner that has many helpful explanations, animations, & practice tests. The text also has a web site & related web links. Go to www.phschool.com/access follow the directions for registering as a student using the following access code: SSNAST-FLUFF-BLAND-HENNA-RIGOT-GLEES **Reading and good note taking is very important in this class, (Cornell) notes, unit guide questions, and some proof of study (complete C-notes, flashcards, flow charts, reading notes, etc) will be checked at the end of each unit.** The many concepts covered in the book are supplemented with lab experiments and exercises, cooperative learning activities, projects, animations, discussions, fieldtrips, text questions, outlines and lectures. Please use my Canvas homepage and modules for links to helpful Biology review websites, readings, assignments, and lecture PowerPoint's.

Assessment for Student Learning

Assignments: Unit Questions, labs and various activities

1. All work must be neat and legible, please use pen or word process.
2. Assignments will be posted with their due dates. Unless otherwise noted, assignments will only be accepted at the beginning of class. Assignments, which are turned in at the end of class, the end of the day or the next day will receive partial credit. All others will receive no credit (they still must be completed and turned in if any extra credit is to be earned). Remember turning

in partially completed work is better than no work at all. **Let me know right away if a due date conflicts with other due dates from other classes, I am usually pretty flexible.**

3. If absent (excused), you have the equivalent number of days to make up your work unless arranged differently by me.

Quizzes: will be periodically given to check on how well you understand the material. Most will be announced, some will not. You will be allowed to drop 3 quiz grades each semester. Quizzes account for 10% of semester grade. Quizzes missed due to an absence can only be made up prior to the quiz being passed back. If you know you are going to miss a quiz, arrange for a time to take it before the rest of the class.

Exams: The exams will mimic the type of exam you will take during the IB exam. Possible essay questions will be discussed to help you focus your study. Success on these exams will require more than a “one-night cram session”. **You will not be able to retake any exam, there are no test improvements.**

Grading: Students enrolled in IB courses will earn the full range of grades on all tests, essays, projects, etc. throughout the term. This will give each student a realistic picture of their competencies compared with students of like skills – a “real-world” picture of the quality of their performance. I acknowledge the difficulty of the IB course; therefore, I will make an effort to adjust grades by various means, such as curving tests and formal labs and offering extra credit. You will be graded on a point system. Point totals will be converted to the following percentages to determine a letter grade:

A 92-100% A- 90-91% B+ 88-89% B 82-87% B- 80-81% C+ 78-79% C 72-77% C- 70-71%
D 60-69%

Approximately 50% of your score is based on tests/quizzes and 50% on labs and homework.

Skyward grade book – All assignments and tests are continually entered in the grade book. Student feedback is a priority. If there are any questions or if I make a mistake in entering a grade please notify me immediately.

Extra credit: you may take advantage of the opportunity to increase your overall percentage up to 3% each semester. In order to qualify for extra credit, the student must have all assignments for the semester completed, and not have more than 3 unexcused tardies for the semester. Students may not turn in extra credit the last week of the semester. Students may write up science lectures, science articles, science trips, science shows, science activities (Science Bowl, Science Olympiad, etc), and science labs. See extra credit handout on my website. I will provide various extra credit suggestions each unit. Quality is emphasized over quantity. Typically, one must have 8-10 turned in each semester to receive the maximum of 3%.

Classroom Environment and Culture

Class Materials: Bring pens, especially **RED**, pencils, paper, flash drive and class work to class daily. You should purchase a 3 ring binder for your Biology work. You will keep unit guide questions, Cornell notes, labs, review activities, quizzes, etc. This Notebook will come in handy when you review for your semester finals as well as the IB exam.

Attendance: Attendance is critical for academic success in this class. The CR attendance policy will be followed regarding excused & unexcused absences. It is critical that you determine what you missed and arrange makeup work with me. Contact a fellow classmate or email me (kelly.cameron@vansd.org) if you will miss more than a day.

Tardies: A tardy is defined as not being seated and ready to begin class when the class begins. I also ask that you remain in your seat until the final bell rings or you are excused by me. Frequent tardies (more than 2 per quarter) will result in lost extra credit opportunities and Cameron duty.

Honor: Be proud of who you are and what you can do. Prepare yourself to the best of your ability. Cheating & plagiarizing on any test, quiz, lab, assignment, etc merits a failing grade for that test, quiz or assignment. Please cite all resources with MLA guidelines and use a works cited page. Laboratory methods for planning labs are to be your design and not to be taken from Internet sites verbatim. Data analysis should not be done by one lab partner and Xeroxed off for other partners to use. Data should always be your own and not fabricated. Honor will be addressed in more depth in the letter of integrity.

Respect: Be respectful to yourself, others and your teacher. Listen with open minds; speak with kind words and no inappropriate language. Abusive language or put-downs will be met with push-ups or put-ups. Be responsible for your actions. Clean up your lab materials and work area. Please do not write on your desk, or eat food in the classroom.

Safety Contract

I understand and agree to the following:

1. Laboratory safety is extremely important, both for me, and for my classmates. Failure to follow the lab rules could result in serious injury to myself or someone else.
2. By not following the lab rules, I am willfully and deliberately putting myself and those around me in danger.
3. If I choose to break a lab rule, I may be immediately removed from the lab area of the classroom, and forfeit the rest of the experiment. Furthermore, I will receive a zero grade for the remainder of the lab, including post-lab write-up.
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4. I will abide by the following rules:
 - a. Safety goggles must be worn when instructed to do so.
 - b. Loose clothing and open-toed shoes should not be worn during lab. Long hair should be tied back with a ribbon or hair elastic.
 - c. The unauthorized mixing of any chemicals is strictly forbidden. Only those reagents which have been approved by the teacher or within the laboratory procedure should be combined.
 - d. All specimens to be cut with a scalpel will be done on the desk and not in the hand. Extra care will be used when using a scalpel.
 - e. No unapproved experiments will be permitted at any time.
 - f. Students are not allowed in the prep room without express consent of the teacher.
 - g. Rough-housing or other goofing-type behaviors will not be tolerated. Respect will be shown to animals/organs to be dissected. The laboratory is a place where serious work

should occur, and serious consequences for not acting appropriately will be enacted by the teacher.

- h. Report any injury, spill or broken equipment immediately to the teacher. Place broken glass and other lab materials in the directed containers.
- i. No eating or drinking during labs.
- j. Thoroughly clean lab area, put away materials as requested and wash hands at the end of class.

Communication

Parents and students if at any time you have questions or need to contact me please email me at Kelly.cameron@vansd.org I will respond to your email within 24 hours.

Parents: Thank you for taking the time to read the IB Biology guidelines and syllabus. I look forward to the opportunity to teach your son or daughter this year and hope to see you at open house and or parent teacher conferences.

Sincerely,

Mrs. Kelly Cameron
