Dartmouth High School
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Contact

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- ✓ Course: Advanced Biology/Biologie avancée 12
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- ✓ Parents and students please to refer to the HRSB *Assessment, Evaluation, and Communication of Student Learning* Policy accessible at http://www.hrsb.ns.ca/

Term Mark: 80% Exam: 20%

Course Introduction

Advanced Biology 12 builds on the fundamental knowledge and skills acquired in Advanced Biology 11. Students will be exploring the concepts of the academic curriculum in more depth and will be able to critically analyze the relationship between all topics as well as various real world applications of the concepts studied. Students will also perform their own research of various biological and evolutionary processes that impact an organism's homeostasis. We will be exploring topics such as cell division, genes and genetics, protein synthesis, homeostasis, chemical and nerve signals in the body while also exploring the evolutionary processes involved from both a modern and historical perspective.

Evaluation

When determining a students' final grade:

- ✓ *No single assessment tool (i.e. presentations, labs, demonstrations, portfolios, debates, written tests/quizzes) will account for more than half of the value of each Gradebook category*
- ✓ *Learning trends over time will be considered, more recent student work and the teacher's professional judgment*
- ✓ *Students will participate in a final cumulative assessment opportunity that allows them to demonstrate an appropriate range of the learning outcomes and process skills involved in the course. This final assessment, whether a written examination or alternative assessment opportunity, will be worth no more than 20%.*

Students in Biology 12 will explore the following units and topics:

Maintaining Dynamic Equilibrium II (20%)

- Nervous System: Neurons, Structure, Disrupting Homeostasis, Sense Organs
- Endocrine System: Maintaining Homeostasis, Feedback Mechanisms

Reproduction and Development: (20%)

- Cell division
- Regulation
- Reproductive Technologies
- Embryonic Differentiation and Development

Genetic continuity: (20%)

- Mendelian Genetics
- Molecular Genetics
- Implications

Evolution, Change and Diversity: (20%)

- Historical Perspectives of Evolution
- Modern Perspectives of Evolution
- Implications

Assessment Practice

Students will be provided with multiple opportunities to demonstrate their progress toward achievement of outcomes.

- ✓ Assessment **for** Learning/Formative Assessment is the ongoing process of gathering and interpreting evidence about student learning for the purpose of determining where students are in their learning, where they need to go, and how best to get there; instructional strategy that takes place while the student is still learning and served to promote learning
- ✓ Assessment **of** Learning/Summative Assessment is the process of analyzing, reflecting upon, and summarizing assessment information and making a judgment and/or decision based upon the information gathered.
- ✓ Assessment will take many forms, and will include observations, conversations, and products.
- ✓ Assessment Tools include, but are not limited to homework probes, quizzes, in-class assignments, group work, in class discussions, tests, projects, and the final exam.

Creating Opportunities for Success (reference school code of conduct)

- ✓ Students are expected to attend class regularly, be punctual, be prepared with appropriate materials, and homework complete.
- ✓ Students are expected to take an active part in their own learning, and follow the DHS school code of conduct (as outlined in the student handbook).
- ✓ Students are expected to demonstrate responsible use of technology.
- ✓ Students are expected to make positive contributions to the learning environment.

Procedural Expectations

Students are responsible for:

- ✓ *Seeking assistance with assignments when required;*
- ✓ *Requesting an extension for assignments in a timely manner when required;*
- ✓ *Completing assignments by specified due dates so that teachers can provide timely feedback;*
- ✓ *Responding to feedback provided during the learning process.*
- ✓ *In the event that a due date for an assignment is missed, it will be at the discretion of the teacher and principal to extend the deadline.*
- ✓ *Students who do not adhere to the extended deadline will have missed that opportunity to demonstrate achievement towards the outcomes addressed in that assignment.*

- ✓ When an assessment is missed due to an absence, students/ parents are asked to communicate with the teacher to arrange for the assessment to be completed before the assessment occurs if at all possible.
- ✓ Students are **able** to exempt the final exam providing that they have met the requirements for Dartmouth High's exam exemption policy.

Communication Tools

Dartmouth High School will use a variety of methods to communicate student achievement throughout the school year.

- ✓ Parents and students are encouraged to monitor progress (as well as lates and absences) using the PowerSchool portal.
- ✓ Assessments may be coded as collected, late, missing, or not included in final grade. There may also be comments listed, such as areas of improvement or dates for negotiated extensions.
- ✓ When assessments start to be categorized in a new strand, these assessments are

initially weighed heavily and may cause significant change in a student's overall grade. This weighting will become more balanced as assessments continue to be included in the new strand.

- ✓ While DHS has a number of scheduled opportunities for communication between home and school (Curriculum Night, Parent-Teacher Interviews, Mid Term Reports, Final Report Cards), parents and students are encouraged to contact the teacher any time during the semester to discuss progress.

Accessing Help

- ✓ Extra-help is available upon request. The best learning opportunities occur during class time so being in class is an essential part of this course. That being said, if you are struggling with a concept please come and see me as soon as you are encountering the issue and we will work it out ☺.

Equipment Needs

- ✓ Textbook: Biology 12 and some of Biology 11 (Nelson) or Biologie 11 and Biologie 12 (Chenlière/McGraw-Hill)
- ✓ Students will need a binder with loose-leaf to use when taking class notes, and completing practice problems.
- ✓ Students will require a duo-tang with paper (lined and white) for lab work.
- ✓ Students will require a separate duo-tang for their formal essay.
- ✓ Other materials for the course include a scientific calculator, pencil, eraser, pen, highlighter, ruler, and graph paper.

Acknowledgement of Receipt of Course Outline from Parent and Student

I have read the communication plan:

Signature of Student: _____ Date: _____

Signature of Parent/ Guardian: _____ Date: _____

If you have any questions about the communication plan, please contact me at the contact information above.