A Comparison of Biology and Honors Biology Expectations and Assessments  
(NVHS 2012)

1. **HOMEWORK:**

   BIOLOGY HW is usually narrow in scope while building connections between concepts. Often, guided practice in class is offered to better ensure successful task completion outside of class. The foundations for college level study habits are established by focusing on vocabulary and skill development exercises. Homework of this type may include worksheets, note taking from the text, Internet exploration, review exercises, and vocabulary exercises. Reading quizzes are often included in the HW portion of the grading system. Finally, lab reports and special research projects are normally assigned for completion outside of class. In summary, there are generally more frequent HW assignments in regular biology. These assignments closely parallel the day's instruction, and require less independence to complete. In biology, homework is usually weighted as 10% of a student’s grade.

   HONORS BIOLOGY HW is very student directed, independent, and focuses on development of college level study habits. Homework of this type rarely consists of worksheets. Study preparation is stressed; suggested activities may include taking notes from the text using Guided Reading Questions, use of the text CDROM, accessing the Black Board course server, Internet exploration, concept mapping, Venn diagrams, and self-quizzing. Occasionally, worksheet assignments may be assigned and graded. Finally, lab reports and special research projects are normally assigned for completion outside of class. In summary, there are generally fewer "assigned" tasks in honors biology, but they are usually more in depth, stress independent preparation, and require more responsibility of the student. In honors biology, homework is generally not graded for points. Class preparation (having guided reading questions and other assignments completed) is a small component of a student’s overall grade (5%). However, class preparation directly affects performance on other assessments.

2. **LABS AND PROJECTS:**

   BIOLOGY LABS are often inquiry based and require good scientific reasoning skills. There are many informal lab experiences, and 1-2 formal lab reports written by students in regular biology. These labs build skills involving data collection and interpretation, and stress a hands-on approach to biological principles. Laboratory skills may include measurement, graph construction and interpretation, microscope technique, gel electrophoresis, use of palm computers and probes, and basic dissection techniques. Special projects may include problem-based learning units, power point presentations, and posters or other visual displays. In biology, labs and projects are usually weighted as 30% of a student’s grade.

   HONORS BIOLOGY LABS are often research or inquiry-based, and require strong scientific reasoning skills. These labs incorporate data collection and interpretation, and require independent Internet research of the underlying concepts to formulate an explanation of the data. Laboratory skills may include measurement and graphical analysis, microscope technique, microbiological techniques, gel electrophoresis and other biotechnology, use of palm computers and probes, and basic dissection techniques. Special projects may include problem-based learning units, power point presentations, peer-teaching exercises, posters or other visual displays, and designing interactive power point tutorials. In honors biology, lab conclusions and culminating unit projects help measure mastery of concepts that are difficult assess using a traditional exam and are usually weighted as 30% of a student’s grade.

3. **QUIZZES AND TESTS:**

   BIOLOGY assessments also consist of smaller quizzes, larger unit tests, and final exams. In general, quizzes occur more frequently and consist of matching, multiple choice, or short answer questions. Unit tests are more infrequent (perhaps 2-3 per quarter), and assess the student's grasp of the concepts learned. Scientific reasoning and data interpretation questions are frequently included. These assessments carry the greatest weight in calculating a student's grade. In preparing for these evaluations, students are expected to use as the notes they take during lectures. Initially, note-taking skills are developed using prepared note outlines; later students are encouraged to take notes independently. Reading notes from the text are also important as well as any review guides supplied by the instructor. In summary, these assessments measure a student's recall of basic facts as well as their ability to analyze and think critically. Scientific reasoning skills are also developed and assessed periodically. In biology, quizzes and tests are usually weighted as 60% of a student’s grade.

   HONORS BIOLOGY assessments consist of smaller mastery quizzes to measure initial mastery of specific concepts within the unit, comprehensive unit tests, and final exams. In general, mastery quizzes are designed provide authentic practice for the unit exam, and to diagnose strengths and weaknesses. Generally, these types of assessments mastery quizzes contribute 10% to the student’s overall grade. Unit tests are more infrequent (perhaps 4-5 per semester), and not only assess the student's grasp of the concepts learned, but also their scientific reasoning and data interpretation abilities. In preparing for these evaluations, students are expected to revise notes they take independently from readings and discussions, review labs and projects, and access resources such as web-based animations or tutorials and other documents posted on Black Board. In summary, these unit assessments measure not only a student's recall of basic facts, but also their abilities to think critically, analyze data, and reason scientifically. The unit tests contribute significantly (55%) to the student’s overall grade.
Typical Student Course Sequences
Neuqua Valley High School Science Department

Freshman

Additional electives available……..

Sophomore
- Astronomy (1 semester)
- AP Environ.
- Anatomy/Phys.

Junior
- Astronomy
- AP Environ.
- AP Chemistry
- AP Biology
- Horticulture
- Genetics & Biotechnology
- Anatomy/Phys.

Senior
- Same as above
  AND
- AP Physics
- Greenhouse Management and Floral Design