

TITLE:	Biology	Biology
COURSE NO:	(CP) 0350	(CP) 0350
OFFERED:	1 st Semester	2 nd semester

Teacher: Mr. Doherty

Classroom Number: 2102

Contact Information: email – doher Tyr@tantasqua.org
Voicemail – 1526

Extra-Help Night: Thursday

Course Description: This is an introductory course in the fundamental concepts in biology. Topics covered will include the following: scientific inquiry, biochemistry, cellular biology, evolution, genetics, body systems and ecology. The emphasis will be on inquiry-based learning and lectures. Students will participate in group discussions, demonstrations, group laboratory work, and computer simulation projects.

Academic Expectations from the Mission Statement:

- Assume responsibility for academic achievement.
- Acquire, interpret, analyze, integrate, and apply information in a discerning manner.
- Demonstrate the ability to use technology appropriate to the subject area.
- Exhibit the ability to read, write and communicate.

Reading Materials:

Primary textbook: Glencoe, McGraw Hill; Biology, **The Dynamics of Life**

Course Outline:

Learning Standard's

Chap 1 The Study of Life

Scientific inquiry skills	1.1 What is biology?
	1.2 The methods of biology
4.2	1.3 The nature of biology

Chap 2 Principles of Ecology

6.4/6.3	2.1 Organisms and their environment
6.4/6.3	2.2 Nutrition and energy flow

Chap 4 Population Biology

6.1	4.1 Population dynamics
6.2	4.2 Human Population

Chap 6 Chemistry of Life

- 1.1 6.1 Atoms and their interactions
- 2.1 6.2 Water and diffusion
- 1.2/1.3 6.3 Life substances

Chap 7 A View of the Cell

- 2.1 7.1 The discovery of cells
- 2.1 7.2 The plasma membrane
- 2.1/2.8 7.3 Eukaryotic cell structure

Chap 8 Cellular Transport and the Cell Cycle

- 4.2/2.1 8.1 Cellular transport
- 2.5 8.2 Cell growth and reproduction
- 2.5 8.3 Control of the cell cycle

Chap 9 Energy in a Cell

- 2.2 9.1 ATP in a molecule
- 2.3 9.2 Photosynthesis
- 2.4 9.3 Getting energy to make ATP

Chap 10 Mendel and Meiosis

- 3.5 10.1 Mendel's laws of heredity
- 2.6/2.7 10.2 Meiosis

Chap 11 DNA and Genes

- 3.1/3.2 11.1 DNA Molecule of Heredity
- 3.2 11.2 From DNA to protein
- 3.3 11.3 Genetic changes

Chap 12 Patterns of Heredity and Human Genetics

- 3.4/3.5 12.1 Mendelian inheritance of human traits
- 3.4/3.5 12.2 When heredity follows different rules
- 3.4/3.5 12.3 Complex inheritance of human traits

Chap 14 History of Life

- 5.1 14.1 record of life
- 5.1 14.2 The origin of life

Chap 15 Theory of Evolution

- 5.1 15.1 Natural selection and the evidence for evolution
- 5.2 15.2 Mechanisms of evolution

Chap 17 Organizing Life's Diversity

- 5.3 17.1 Classification
- 5.2 17.2 The Six Kingdoms

Chap 34 Protection Support and Locomotion

- 4.1 34.2 Bones the body's support
- 4.1 34.3 Muscles for locomotion

Chap 35 Digestive System

- 4.1 35.1 Following the digestion of a meal

Chap 36 The Nervous System

- 4.1 36.1 The Nervous System

Chap 37 Respiration and Circulation

- 4.1 37.1 The respiratory system
- 4.1 37.2 The Circulatory system

Grading/Evaluation of Learning:

Expectations: It is expected that students attend class and are prepared for class each day. This means bringing all required materials, homework, books and tools but it also includes arriving rested enough to remain upright and alert for the entire class. It is expected that nightly homework is completed in a neat and organized fashion with all work shown. It is expected that you maintain appropriate behavior and attitude if you wish to remain in class for the lecture.

The school behavior code applies. In addition, disruptions, off-topic interjections, attention-seeking behavior, interfering with lecture and aggressive behavior, including passive aggressive behavior such as refusal to speak, acknowledge a speaker or participate in a teacher initiated conversation are all considered inappropriate in a high school setting, regardless of the day you are having, and will result in disciplinary action. If you are having difficult day, please just let me know and I will do my best to let you work quietly and without undo attention.

I will make it my highest priority to treat every one in our class with respect at all times. I expect the same in return. This includes respect among students. I want to maintain a warm, respectful, and enjoyable atmosphere so that everyone feels safe while we move with purpose through the material.

Grading Policy: Your grade will be calculated in the following manner:

Quarterly Grade:

Homework/Participation	25%
Quizzes/ Labs	25%
Tests	50%

Course Grade:

Quarter Grades	90%
Final Exam/ Midterm	10%

Homework:

Homework will be assigned nightly and will usually be checked at the beginning of class the next day. You should expect to spend at least 30-45 minutes on homework each night. I will record a grade ranging from 0 to 5 for all checked assignments. If you are concerned I will check only on days when you didn't do or finish your homework you should simply finish it every single day.

It is perfectly all right if you don't get every problem on the homework correct. I am looking for proof that you attempted each problem assigned. It is imperative that you try every problem in order to receive full credit. If you cannot figure out how to attempt a problem simply copy down every single word and picture used for the problem and you can still receive credit.

A missed assignment may not be made up, except in the case of excused absence. There is no extra credit work available.

Homework is work that is assigned to be completed in your own time and returned with you by the start of class. If it is not with you when you arrive for class then you have simply not done your homework. I do; however, realize that things come up that legitimately interfere with school work and that people forget things sometimes. I forget things too. In this spirit I will provide two more homework assignments than I count. This will give some protection from honest mistakes and forces that are beyond our control. If the universe is responsible for any further missed assignments, without excused absence, it will also be responsible for damaging your final grade.

Examples of the "universe" include employment, parental permission, family events, chores, athletics, babysitting siblings, baby sitting friends, baby sitting for money, unexpected changes in family plans, and unexpected changes in moving between multiple homes.

Quizzes & Tests:

There will be a quiz or test given approximately every 2- 6 classes. Quizzes will cover a smaller amount of material than exams. Tests will typically be given at the end of each chapter. Calculators may or may not be allowed on quizzes or tests unless a student has obtained academic accommodations which allow their use. Quizzes and tests will be returned in a timely fashion.

Extra Help:

I will be available for extra help after school everyday until approximately 2:30 pm except on my late day Thursdays when I will be available until 3:25pm. You will need to make arrangements on non-late days for a ride or an acceptable place to spend the time from 2:30 till 3:25pm. If you are unable to stay afterschool on Thursday afternoons please come and speak with me so we can work out an alternative, if possible.

Make-up Policy:

If you have an excused absence you will be given as many days as classes missed to make up the material. You are responsible to find out what you missed. If you elect to skip or cut class you will still be allowed to make up any missed work for your own knowledge, but you will not receive any credit for this work. If you do not come up to ask what you are

missing when you return from excused absence I will simply fill in the zero(s) once your grace period has expired for any and all missing materials including exams. I will never approach you to tell you what you missed. You are expected to ask me when you return.

Materials: You are responsible for bringing a notebook, covered textbook, pen, pencil with eraser and necessary handouts/worksheets to class every day. Students who do not bring all required material to this classroom at the start of class will not receive credit for the day's assignments. All students are expected to maintain a neat and organized *portfolio or binder*, divided into four sections: class notes, homework, handouts/worksheets, and returned quizzes/exams. Students are also expected to keep all materials returned until the course is completed. I may ask to see them when working with you or for a grade dispute. If you would like you can leave them in a folder in class to be sure you have them.

Examination Schedule: Everyone has off days. I usually offer a single re-take of one quiz and one test from each marking period. This opportunity is available to anyone who has maintained at least a 60% homework grade up to and since the date of the original quiz or test. The re-take score will be averaged with the original if it is an improvement. If the re-take is a worse grade it will be thrown out and not used in grading. Students have until the second late day after the original test or quiz to make it up. If you are absent on the day of the second late session you will not be able to re-take that assessment.

Academic Integrity: Academic integrity provides the foundation for educational achievement and personal growth within Tantasqua's school community. Integrity guides the choices which lead toward honesty, respect, and responsibility. A student with academic integrity gains knowledge through hard work and honest effort. The result is genuine accomplishment and learning.

Academic Integrity promotes:

- positive relationships based on trust
- work that reflects one's own best effort
- respect for the intellectual property of others
- responsibility for one's own actions
- real learning

Violations of Academic Integrity: Violations of academic integrity include cheating and plagiarism.

Cheating is an unacceptable form of behavior. Real learning stops when cheating begins. It casts a shadow of doubt on the credibility of a student's academic performance preceding the cheating incident, and may have an effect

on how people perceive the student for the consideration of future honors, awards, or letters of recommendation.

Test or homework dishonesty is the use of any means not specifically accepted by the teacher to obtain answers to a test, quiz, or homework assignment. Test or homework dishonesty includes giving, receiving, passing, or using *in any way* specific information about the test, quiz, or homework assignment, whether in oral or written form.

Plagiarism is the use of another person's words, ideas, or facts as if they were your own, without giving credit to the original source. Plagiarism may occur in any medium, including written composition, oral or artistic presentations, and technology. Plagiarism in any form is unacceptable. During the first weeks of school, teachers will clarify their specific policies on plagiarism.

Consequences: A student found in violation of academic integrity may face one or more of the following consequences:

- loss of credit for the assignment/paper/test, and a grade of zero
- notification of parent or guardian
- disciplinary referral to the assistant principal and resulting penalty

Repeated violations of academic integrity will result in:

- a meeting including the student, parent(s) or guardian(s), teacher, counselor, and/or an administrator
- loss of credit and a failing grade for the course

Parents: There are only two scheduled occasions, per quarter, when parents are officially written regarding their child's grades. These two occasions are: progress reports and report cards. As a parent, I have found that I prefer more frequent feedback. In this spirit, I began in spring 2004 to enter all my class grades everyday into a computer program called Gradequick®. If at any time during the course you would like to know where your child stands, please just send me an email or have your child notify me and I will send a categorized breakdown of all graded material up to that point. We can do this weekly if you like. I will ask your child to bring them home and return them to me signed by you. This prevents some miscommunications and "blind-siding." The students have a test on every chapter and do homework just about every night. Students will often begin homework in class but if you are not seeing work being done around the house then a grade check may be helpful.

Also, due to the state required curriculum it may be helpful to state upfront that effort, even extreme effort, does not guarantee a passing or advancing grade in high school coursework. I realize this can be very upsetting to students struggling with the material, and the parents supporting and advocating for them, but it should be mentioned up front. Students should be sure they are placed correctly and have enough free time in their life to attempt the course before the drop/add period ends.

Conclusion:

Students,

This syllabus represents and understanding. I realize that, by nature, these things are very authoritarian and don't make for very friendly copy. I enjoy what I do and I am looking forward working with you. I like to keep an upbeat class but I want to be clear about what is expected from you and that it is expected from you every single day.

Sincerely, Rick Doherty

Student signature

Parent/guardian signature

Date

Date