



## **BIOLOGY COURSE SYLLABUS**

Mr. Decker- TJHS

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### **COURSE DESCRIPTION**

This course covers Life Science/Biology as described by the Federal Way course Expectations and the Washington EALR's. Students will be provided with the knowledge and skills to meet grade level state and local standards in Biology in the following topics: basis of biological diversity, structure and organization of living systems, molecular basis of heredity, human biology, life processes and the flow of matter and energy, biological evolution, interdependence of life and inquiry.

Successful completion of this yearlong course will satisfy 1.0 credits towards the required 2.5 credits in lab science to qualify for graduation.

The class is student, and inquiry centered with a primary focus on laboratory investigations and writing.

All work will be stored in the student portfolios stored in the classroom.

Assessment will be both formative and summative, and not all formative assessment will be graded. Successful completion of a unit will be based on the demonstration of mastery of the standard. Student opportunities to re-do assignments and/or assessments will be dealt with on an individual basis.

Consistent, daily attendance and preparation is crucial to success in this course. You are expected to be present in class, daily, unless severe illness or a family emergency occurs. Being tired, or having a birthday are **NOT** acceptable reasons for absenteeism.

### **FOCUS STANDARDS**

#### **READING:**

1. Demonstrate understanding of main ideas and supportive (major) details. *EALR 2.1*
2. Summarize with evidence from reading. *EALR 2.1*
3. Interpret vocabulary critical to the meaning of text. *EALR 1.2*
4. Understand and apply content/academic vocabulary critical to the meaning of the text, including vocabularies relevant to different contexts, cultures and communities. *EALR 1.3*
5. Apply comprehension monitoring strategies for informational and technical materials, complex narratives and expositions; synthesize ideas from selections to make predictions and inferences. *EALR 2.1*
6. Analyze and evaluate text for validity and accuracy. *EALR 2.4*

#### **MATH:**

1. Understand how to convert units of measure within a system. *EALR 1.2*
2. Apply procedures to solve equations and systems of equations.  
*EALR 1.5*

## UNIT STANDARDS:

### **Unit 1: Evolution: Patterns and Products of Change in Living Systems**

1. GLE 1.1.6 Analyze structural, cellular, biochemical and genetic relationships among organisms.
2. GLE 1.2.1 Analyze systems, including the inputs, outputs and interconnections of a system and its subsystems.
3. GLE 1.2.8 Understand how the human organ systems regulate growth, development, and life functions, including the endocrine, immune, nervous, reproductive and skin systems.
4. GLE 1.3.9 Analyze the scientific evidence used to develop the theory of biological evolution and the concepts of speciation, adaptation, and biological diversity

### **Unit 2: Homeostasis: Maintaining Dynamic Equilibrium in Living Systems**

1. GLE 1.2.1 Analyze systems, including the inputs, outputs and interconnections of a system and its subsystems.
2. GLE 1.2.6 Understand cellular structures and how genes regulate these functions.
3. GLE 1.2.8 Understand how the human organ systems regulate growth, development, and life functions, including the endocrine, immune, nervous, reproductive and skin systems.

### **Unit 3: Energy, Matter and Organization: Relationships in Living Systems**

1. GLE 1.2.1 Analyze systems, including the inputs, outputs and interconnections of a system and its subsystems.
2. GLE 1.2.6 Understand cellular structures and how genes regulate these functions.
3. GLE 1.3.8 Understand how organisms, including cells, use matter and energy to sustain life.
4. GLE 1.3.10 Analyze the biotic and abiotic factors that affect living organisms and ecosystems.

### **Unit 4: Continuity: Reproduction and Inheritance in Living Systems**

1. GLE 1.1.6 Analyze structural, cellular, biochemical and genetic relationships among organisms.
2. GLE 1.2.6 Understand cellular structures and how genes regulate these functions.
3. GLE 1.2.7 Understand how genetic information (DNA) in the cell is encoded at the molecular level and provides genetic continuity between generations.
4. GLE 1.2.8 Understand how the human organ systems regulate growth, development, and life functions, including the endocrine, immune, nervous, reproductive and skin systems.

### **Unit 5: Development: Growth and Differentiation in Living Systems**

1. GLE 1.2.8 Understand how the human organ systems regulate growth, development, and life functions, including the endocrine, immune, nervous, reproductive and skin systems.

### **Unit 6: Ecology: Interaction and Interdependence in Living Systems**

1. GLE 1.2.1 Analyze systems, including the inputs, outputs and interconnections of a system and its subsystems.
2. GLE 1.2.1 Analyze systems, including the inputs, outputs and interconnections of a system and its subsystems.
3. GLE 1.3.8 Understand how organisms, including cells, use matter and energy to sustain life.
4. GLE 1.3.10 Analyze the biotic and abiotic factors that affect living organisms and ecosystems.

## BIOLOGY CONTRACT AND EXPECTATIONS

Outline for the terms and conditions for my participation and success in Biology.

- 1) At all times, I am expected to behave in accordance with the Federal Way School District Policies as outlined in the School Handbook and the attendance guidelines of Thomas Jefferson.
- 2) I will come to class on time, prepared to learn, and have all required materials.
- 3) I will clean up my work area and return any classroom equipment to its proper location before I am excused from class.
- 4) I will attend class with a positive attitude and work cooperatively with all members of the classroom.
- 5) My courtesy and honesty is expected at all times. I will respect the property, rights, and feelings of all members of this classroom.
- 6) I understand that my failure to work during a lab, work apart from my lab partner, or disrupt the work of another lab group may result in a zero for that lab and/or removal from class.
- 7) I will be responsible for taking Cornell notes when information is presented on the board, overhead or orally.
- 8) Walkmans/discmans/iPods/headphones/cell phones and pagers should be neither seen nor heard. I will confiscate them for one week if I see them or they disrupt class.

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**ATTENDANCE:** You are expected to be on time and present. Your attendance in class is mandatory and will contribute to 15% of your final grade. Consistent, daily attendance and preparation is crucial to success in this course. You are expected to be present in class, daily, unless severe illness or a family emergency occurs. Being tired, or having a birthday are **NOT** acceptable reasons for absenteeism.

**TUTORIAL:** The actual start time of school is 7:25 a.m. Tutorial time has been established to provide time within the school day to catch up on work that was missed due to absence or to get remedial help. If you are below passing (70%), you are expected to be in tutorial working on improving your grade. It will be your responsibility to document your attendance during tutorial by obtaining teacher signatures when you enter and leave that day of tutorial.

**TARDIES:** Tardies will be handled by the administration during the tardy sweep.

**LATE WORK:** I will accept late work **only** in the event of an excused absence. All work must be turned in within three school days upon your return. **IT IS THE RESPONSIBILITY OF THE STUDENT TO GET THE WORK AND ARRANGE THE MAKE UP.** Please consult the planning calendar and request this work during the class activity time.

**MAKE UP EXAMS, QUIZZES AND LABS:** It is the students' responsibility to make up within three days. Be prepared to do this during our morning tutorial. Bear in mind that some labs will not be able to be made up and an alternate assignment will be provided. Make sure to establish the appointment with me for your makeup.

**COPYING AND CHEATING:** Copying and cheating is prohibited. If you are caught engaging in this behavior you and the individual who is allowing you to copy will receive a zero for that assignment/test.

**PARTICIPATION AND ATTITUDE:** This is a reflection of your cooperation, quality of work, consistency of work, role and attitude in class. Points for your participation and attitude will be assigned at the end of the trimester. This is designed to be a reward for those actively involved in their education.

**GRADING SCALE:**

Your grade will be comprised by evidence from your work in the following categories:

- Lab work
- Homework
- Tests/quizzes
- Attendance and Participation/Attitude and Inquiry Skills

Scores from your tests and quizzes will have a stronger weight than others. Your grades will be combined as well as the quantity of work submitted and the quality of that work to determine your grade in the grading scale below.

	A = 100-92%	A- = 91-90%
B+ = 89-88%	B = 87-83%	B- = 82-80%
C+ = 79-78%	C = 77-73%	C- = 72-70%
	D = 69-64%	D- = 63-60%
	F = 59% and below	

**LAB JOURNAL**

All students are required to keep all work and notes in their lab journal. You may buy this from the student store or any department store. You must have this during the first week of class. All work, unless otherwise noted will be done and checked off in your journal. In addition, you should have a three ring binder to keep track of handouts.

**PORTFOLIO**

Your working portfolio will be kept in class and will be updated and reviewed regularly. I will instruct you as to which assignments and tests should be placed in the portfolio. Your portfolio will be stored in a place where you will have regular access to it, should you need.

I have read, understood and agree to the contents of this contract. I take full responsibility for my own learning, cooperation, behavior and attendance in this class.

Please sign below and detach. I will keep your signature on file and you keep the contract in the front of your notebook for reference, as needed.

Student Name \_\_\_\_\_  
Printed Signature/date

Parent Name \_\_\_\_\_  
Printed Signature/date