**Biology Spring 2025 Course Syllabus**

**Welcome & Course Description**

Hello and welcome to Biology for this Spring 2025 semester. In this course, we will study living things from the smallest unit of life to the mosaic ecosystems that make up our world and the impact we as humans have on it. Biology will feature laboratory assignments, both virtual and hands-on, and a variety of tasks including reading and creating scientific writings. Successful completion of this semester-long course will result in credit and progress towards graduation.

Please review the information involving class policies and materials, unit topics and more. There will also be many opportunities for extra credit over the semester including here in this packet.

**Course Objectives**

Students will:

* Analyze and compare the smallest units of life - cells
* Understand essential molecules such as lipids and carbohydrates
* Summarize the structure and importance of DNA
* Track inheritance across generations
* Study and create phylogenetic trees during evolution investigations
* Simulate various ecological hierarchies between organisms
* Explore man’s impact on Earth and its biomes

**Classroom Rules and Expectations**

1. Be on time. JCHS policy governs the consequences for tardiness.
2. Be respectful. Treat others as you would like to be treated. The classroom is to be regarded as a safe and supportive learning environment.
3. Be prepared. Review unit syllabi at least once a week to stay up to date with the course. Please have materials and assignments completed and ready to turn in.
4. Be resourceful. Please refer to materials given physically and on Schoology. Email me with questions or schedule an afterschool time to meet on Calendly.

**Accommodations & Madison City Schools Laptop Utilization**

* Course accommodations may be requested through email or a scheduled meeting.
* Madison City Schools provided laptops should:
  + Not be hard-wired to the network or have print capabilities
  + Not be used with discs, flash drives, jump drives, or other USB devices
* *Neither the teacher, nor the school is responsible for broken, stolen, or lost laptops. Laptops and other electronic devices will be used at the individual discretion of the teacher. Students are responsible for charging their laptops and bringing their laptop charger.*

**Grading Policy**

* Test and project grades will account for 70% of the 9-weeks grade, with the remaining 30% being determined by daily grades.
* Grading Scale: A (90-100%), B (80-89), C (70-79), D (65-69), and F (below 65).
* The final exam counts for 20% of the final grade.

**Absences & Assignments**

* Missing assignments will be entered as a 0 on PowerSchool until submitted.
* Late work will receive 5 points off for each day until submitted.
* In the case of absences, assignments may be completed without penalty.
* ***Makeup tests will need to be scheduled with me.***

**Course Materials**

* 1 inch binder with the following dividers: *Unit 0, Unit 1, Unit 2, Unit 3, Unit 4*
* Writing utensils and accessories (ex: erasers, lead, etc.)
* Madison City Schools supplied laptop and charger

**Course Communications & Platforms**

The course will be relying on three platforms for assignments and communication.

* Schoology
  + Schoology will be used to house online resources, announcements and some assignments such as Bellringers and projects.
* Calendly
  + Calendly will be used to schedule meeting times for make up work, tutoring, etc. as needed. Please note that there will be a cut off point to how late appointments can be scheduled. Availability cannot be guaranteed, but I will do my best!
    - Link to schedule: [calendly.com/kmdubyk](https://calendly.com/kmdubyk)
* Remind
  + Remind will be used to share course announcements and other messages. Please find the class code in the list below to join based on your schedule:
    - Block 1: 2g63gk
    - Block 2: fa27d6
    - Block 4: 2e976a4
* Extra Credit Opportunity!
  + Once joined on Remind, please message me there with your favorite ice cream flavor. 🙂

**18 Week Plan**

| *Week 1* | Course & Unit Introductions |
| --- | --- |
| *Week 2* | Simple Scientific Skills |
| *Week 3* | Cell Theory & Cell Types |
| *Week 4* | Essential Cellular Processes & DNA |
| *Week 5* | DNA Replication & Mutations |
| *Week 6* | RNA, Transcription & Translation |
| *Week 7* | Chromosomes & Basic Human Genetics |
| *Week 8* | Tracking Genetics |
| *Week 9* | Genetic Engineering |
| *Week 10* | Introduction to Evolution |
| *Week 11* | Human Evolution |
| *Week 12* | Human Evolution Continued |
| *Week 13* | Biomes & Ecosystems |
| *Week 14* | Symbiosis & Population Dynamics |
| *Week 15* | Energy Sources & Fossil Fuels |
| *Week 16* | Global Warming & Climate Change |
| *Week 17* | Final Unit Closing |
| *Week 18* | Course Closing |

* *This syllabus serves as a guide for both the teacher and student; however, during the term it may become necessary to make additions, deletions or substitutions.*