



### **Circle of Life**

#### **Contact Information**

Mr. Harley Young, MS, MAT

**Email:** harley.young@ileadonline.org

**Office:** (218) 302-5075

**Virtual Office:** [Office Space](#)

Please feel free to contact me if you get confused or have any other issues. I will reply within 24 hours on weekdays. I facilitate multiple courses so please include your name and the class name when you contact me.

#### **Course Requirements**

- Be proficient with the basic functions of word-processing software.
- Have access to a computer with internet that has virus-protection software.
- Use an acceptable web browser to access the course: Chrome, Safari or Firefox.
- Have access to your own digital camera or cell phone camera.
- Be able to transfer your images from your camera to your computer.

## **Course Goals**

- Students will develop a foundational understanding of cells, the basic unit of life. (This may be covered in a future semester based on the description but not explicitly mentioned here).
- Students will investigate the process of photosynthesis and its role in plant nutrition and ecosystems.
- Students will explore the concept of ecosystems and their components (biotic and abiotic factors).
- Students will analyze different biomes around the world and their unique characteristics.
- Students will classify organisms based on their feeding habits (carnivores, herbivores, and omnivores).
- Students will trace the flow of energy within ecosystems through food webs.
- Students will develop an awareness of environmental issues impacting ecosystems and explore potential solutions.

**Please note:** The course description mentions the study of cells. If this is covered in Semester A, you would want to add a block specifically for that topic with its own learning goals and activities.

## **Block Goals: Life Science (Semester A)**

### **Block 1: We All Eat**

- Goal: Understand the importance of plants in ecosystems and as food sources for animals (including humans).
- Activities: Discuss the role of plants, complete a "Why Are Plants Important?" assignment.

### **Block 2: Photosynthesis**

- Goal: Explain the process of photosynthesis and its significance for life on Earth.
- Activities: Discuss the mechanics of photosynthesis, complete a "Diagramming Photosynthesis" activity.

### **Block 3: Ecosystems**

- Goal: Define ecosystems and identify their key components (biotic and abiotic factors).
- Activities: Discuss the concept of ecosystems, complete a "Classifying Ecosystems" assignment.

### **Block 4: Biomes**

- Goal: Explore different biomes around the world and their characteristic features.
- Activities: Discuss biotic and abiotic factors, complete a "Biome Comparison Chart" to analyze different biomes.

## **Block 5: Carnivores, Herbivores, and Omnivores**

- Goal: Classify organisms based on their feeding habits (carnivores, herbivores, and omnivores).
- Activities: Discuss the role of civil engineers (may not be directly connected but can be adjusted to focus on building sustainable structures), complete assignments to categorize organisms based on their diet ("Omnivore, Herbivore, and Carnivore Assignments").

## **Block 6: Flow of Energy**

- Goal: Trace the flow of energy within ecosystems through food webs.
- Activities: Discuss the concept of energy flow, complete a "Food Webs and Cycle of Life Assignment" to analyze energy transfer.

## **Block 7 & 8: Environmental Issues in Ecosystems**

- Goal: Investigate environmental issues impacting ecosystems and explore potential solutions.
- Activities: Complete an "Environmental Issues Project" in two parts, allowing students to research and present their findings.

## **Course Description**

Life science is the study of the structure and behavior of living organisms. Expect students in fifth grade to examine cells under a microscope and learn to identify the different parts of the cell, including the cell membrane and nucleus.

## **Course Outline**

### **Semester A**

- Block 1. We all Eat
  - SUBMIT: Why are Plants Important?
  - DISCUSS: Plants
- Block 2. Photosynthesis
  - SUBMIT: Diagraming photosynthesis
  - DISCUSS: How does photosynthesis work?
- Block 3. Ecosystems
  - SUBMIT: Classifying Ecosystems
  - DISCUSS: What are Ecosystems
- Block 4. Biomes
  - SUBMIT: Biome Comparison Chart
  - DISCUSS: Biotic and Abiotic factors
- Block 5. Carnivores, Herbivores, and Omnivores
  - DISCUSS: What do Civil Engineers do
  - SUBMIT: Omnivore, herbivore, and Carnivore Assignments
- Block 6. Flow of Energy

- DISCUSS: Being a Civil Engineer
- SUBMIT: Food webs and Cycle of Life Assignment
- Block 7. Environmental Issues in Ecosystems
  - SUBMIT: Environmental Issues Project
- Block 8. Environmental Issues in Ecosystems
  - SUBMIT: Environmental Issues Project

### **Standards:**

- 5-LS1.C - Organization for Matter and Energy Flow in Organisms
  - 5-LS1-1. Support an argument that plants get the materials they need for growth chiefly from air and water. (Covered in Blocks 1 & 2)
- 5-LS2.A - Interactions in Ecosystems
  - 5-LS2-1. Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment. (Covered in Blocks 3, 5 & 6)
- 5-LS2.B - Cycles of Matter and Energy Transfer in Ecosystems
  - 5-LS2-2. Develop a model to describe the relationship between photosynthesis and cellular respiration. (Covered in Block 2 - Possible connection)
- 5-ESS3.C - Human Impacts on Earth Systems
  - 5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment. (Covered in Block 7)
- Additional Standards:
  - 5-PS3.C - Conservation of Energy and Matter (Covered in Block 6 - Possible connection to food webs)
  - K-ESS3.A - Use evidence to communicate solutions that could reduce human impact on the environment (Covered in Block 8 - Possible application)
  - 5-LS4.D - Biodiversity and Humans (Covered in Block 3 - Possible connection to different ecosystems)

### **Method of Instruction**

This is an online course, and while there is flexibility in how and when you do assignments, it is best to log in and complete work each day according to the posted pacing schedule. Due dates will be clearly stated for each assignment in the course calendar and the weekly schedule. It is highly recommended that learners follow the pacing schedule posted, but work may be submitted late.

This course uses project based learning to encourage an authentic, developed appreciation of the topics covered. That means that while it may include some traditional assessments, the bulk of the coursework focuses on projects that require learners to display their learning in a thorough and creative manner.

If you are struggling to complete your work or you need some assistance with an alternate schedule or workload, please contact me as soon as possible. I am more than happy to help support your success in the class!

### **Learner Expectations**

- Check the course pages for directions and announcements every weekday.
- Check your email every weekday to see if your instructor has emailed you.
- Read the assigned readings on the weekdays you're directed to.
- Use available resources including teacher support.
- Create original work and submit it on time.

### **Discussion Board Posts**

- Discussions are credit/no credit so just participating in them will earn you credit. If you are unable to answer the discussion questions just mention that and then share what you think of the video or ask a question about it. Your opinion matters so feel free to share it. :)
- Note: If you feel uncomfortable interacting with the other learners then please message me directly so I may accommodate you.

### **Netiquette**

Netiquette is a set of rules for behaving properly online. The following bullet points cover some basics to communicating online:

- Use good taste when composing your responses in Discussion Forums. Swearing and profanity is also part of being sensitive to your classmates and should be avoided. Also consider that slang can be misunderstood or misinterpreted.
- Be sensitive to the fact that there will be cultural and linguistic backgrounds, as well as different political and religious beliefs, plus just differences in general.
- Don't use all capital letters when composing your responses as this is considered "shouting" on the internet and is regarded as impolite or aggressive. It can also be stressful on the eye when trying to read your message.
- Be respectful of your others' views and opinions. Avoid "flaming" (publicly attacking or insulting) them as this can cause hurt feelings and decrease the chances of getting all different types of points of view.
- Be careful when using acronyms. If you use an acronym it is best to spell out its meaning first, then put the acronym in parentheses afterward, for example: Frequently Asked Questions (FAQs). After that you can use the acronym freely throughout your message.
- Use good grammar and spelling, and avoid using text messaging shortcuts.
- I expect students to treat fellow students, their instructors, other faculty, and staff with respect. Any student or employee will tolerate no form of "hostile environment" or "harassment."

### **Grading:**

Each assignment is given a specific number of points. The number of points earned by the student is determined and a percentage is calculated. The raw score is recorded in the grade book.

An overall grade in the course will be determined according to your school's grading scale.

### **Scoring Rubric**

90-100	Mastered process and technique Strong composition Appropriate subject-matter Strong creative expression
80-89	Good-Very good process and technique Good-Very composition Shows some creative strength Appropriate subject-matter
70-79	Technique/composition needs improvement Fair quality composition Shows a little creativity or originality
60-69	Poor evidence of technique/composition Lacks creativity or originality Did not follow some directions
0-59	Incomplete Did not follow most or all directions Please redo and resubmit

### **Discussion Rubric**

9-10	Response is long On-topic / relevant / varied structure No grammar / spelling errors
7-8	Response is ok length On-topic / relevant Minor grammar / spelling errors
5-6	Response is short Somewhat on-topic / relevant Many grammar / spelling errors

0-5            Response is too short  
                 Off-topic / not relevant  
                 Please redo

### **Honesty and Plagiarism**

Plagiarism of any sort is prohibited. According to the Merriam-Webster online dictionary, to "plagiarize" means:

- to steal and pass off (the ideas or words of another) as one's own
- to use (another's production) without crediting the source
- to commit literary theft
- to present as new and original an idea or product derived from an existing source

Please review [THIS RESOURCE](#) for more information on plagiarism. Any plagiarized work will be given a zero and referred to your EF/COACH/GUIDE for review.

### **Privacy Policy**

All work submitted is the property of the author and is not available to anyone not in the class. If work is to be submitted or viewed outside of this website, I will obtain permission from the author. [FERPA Info](#)