

## Writing Assignment #1

**Objective:** Writing about scientific principles and phenomena is an increasingly important skill in the 21<sup>st</sup> century. This assignment is designed to help you understand a major concept covered in this unit while also helping you develop your science writing skills. One key to effective science writing is explaining how science can be used in everyday life. You'll do this in a 500-600 word paper. You should:

<b>1) Formulate and answer a question</b>	<b>Sample questions</b>
Select a concept that was covered in lecture and formulate a question. Use this question as the title of your essay.	<ul style="list-style-type: none"> <li>• What is gene expression and how is it applied in medical research?</li> <li>• What are mutagens and why are they potentially harmful to DNA?</li> </ul>
<b>2) Explain how this applies to your life</b>	<b>Examples of applications</b>
Write a 500-600 word essay <b>answering this question</b> , and discuss <b>how the information could be useful to you in your own life</b> . Be sure to include some concrete information that was covered in this unit, explaining <i>why</i> the information is relevant to your life and useful for you. Be sure to explain <i>how</i> the information applies to you personally and give examples.	<ul style="list-style-type: none"> <li>• Medical researchers study gene expression patterns to diagnose and treat conditions caused by genetic variants. <b>In your own life</b>, you will have access to more effective treatments for any serious illnesses you develop, thanks to these advances.</li> <li>• Farmers use artificial selection to produce plants and animals with the most desirable traits, which can make crops more resilient. Access to cheaper and more abundant crops can save you money on groceries <b>in your own life</b>.</li> <li>• UV light is a mutagen that damages DNA by causing thymine mutations, which can lead to cancer. You can reduce the chances of damaging your DNA <b>in your own life</b>, by applying sunscreen when in the sun.</li> </ul>

### 3) Structure your essay as suggested below

- State your question in the title.
- **1<sup>st</sup> section:** Give an overview of the answer to your question.
- **2<sup>nd</sup> section:** Provide the scientific details of the answer to your question. Be sure to select the relevant information from class notes and the textbook.
- **3<sup>rd</sup> section:** Make it personal. Explain why this information is relevant to your life or useful for you and give examples.

Since you will be writing about science from a personal perspective, you can use personal pronouns (I, we, you, etc.).

This assignment requires that you formulate your own question and approach, so do not use the sample questions or specific examples provided above for your paper. Great ways to start questions that will help you think deeply in this class include: How do/does \_\_\_\_\_? Why is/are \_\_\_\_\_? What is the difference between \_\_\_\_\_?

For this assignment, work independently and do the best you can; you'll receive feedback on your work after it's turned in.

- Formatting** Your paper should be 500-600 words, double-spaced and saved as a Word document (.doc or docx, no PDFs).
- File Name** To allow for anonymous grading, please only include your Red ID number (do not put your name in the document itself). Blackboard will link your name and ID to your assignment.
- Deadline and Grading** Upload your document by the deadline: 11:59 PM, **Friday, January 26**, to the **Writing Assignment #1** link here in Blackboard. This assignment is worth 10 points and will be graded on the following: the quality of the question related to class content (chapters 16-17, 21-24, 26-27), the quality of the scientific reasoning used to answer the question, and organization of the paper.

NOTE: **Failure to successfully upload the correct document will result in a grade of zero for this assignment.**