

I plan to incorporate this assignment into my Biology 180 course. In this course we begin to cover the topic of homeostasis. Homeostasis is defined as the body's ability to maintain the internal conditions needed to remain alive. To me, this means human physiologic sustainability. What I am assigning is a paper that will ask students to critically analyze the connection between human physiologic sustainability and broader environmental sustainability. Through this paper, I hope to achieve the following:

1. A student's ability to define sustainability
2. A student's ability to relate sustainability to the functioning of the human body
3. A student's recognition of how environmental factors (pollution, processed food, toxic chemicals) affect the functioning of the human body
4. What they can do to reduce those factors

Here are the 9 requested items Michelle asked for:

1. Greening Your Curriculum
2. Peter W. Porter Biology 180
3. Assignment: Human Sustainability
4. Course Learning outcomes:
 - Understand the importance of basic physiological mechanisms in maintaining homeostasis.
 - Explain how heredity and environment interact in normal growth and development.
 - Build upon knowledge in more advanced courses in the health sciences.
 - Define **homeostasis** and its components including: **variable**, **set point**, and **normal range**.
5. Students will critically analyze the connection between sustainability efforts inside the human body and broader environmental sustainability.
6. Students will be required to use critical thinking in this assignment
7. In this assignment, students will have to describe how environment affects the functioning of the human body. This will hopefully promote a greater awareness of the importance of environmental and ecology sustainability efforts. Students will also be asked to describe how they may reduce those environmental factors that alter human functioning. This may provide a roadmap for helping the student to personally involve themselves in broader sustainability efforts.
8. And 9. Assignment and assessment on next page.

Assignment: Human Sustainability

(15 points)

The human body strives to remain sustainable. Physiologic sustainability is required for survival. Likewise, environmental factors can affect the physiologic functioning of the body. In this paper, you will be asked to examine the topic of sustainability and how it relates to the human body. You will investigate two major points: the importance of human physiologic sustainability, and how environmental factors affect the functioning of the human body. You are asked to write a paper of 1-2 pages in length.

This paper should answer the following questions:

(1 pts) What does sustainability mean?

(2 pts) What do you think human physiologic sustainability means?

(4 pts) Describe how the human body maintains its sustainability (physiology). Give three examples of sustainability in the human body.

(4 pts) How do environmental factors affect the functioning of the human body. Give three examples of specific environmental factors and how they affect human sustainability.

(3 pts) What can you do to reduce the environmental factors you listed above.

(1 pt) You will be required to use at least two sources (textbook, article, internet site) when writing this paper.

This paper should be a single spaced and typed (not hand written). Grammar and organization of the paper will be accounted for when grading this paper.

This paper will be due _____. Late papers will not be accepted.