

Name: \_\_\_\_\_ Student/Lobo ID: \_\_\_\_\_  
Course/Sec: \_\_\_\_\_ TA Name: \_\_\_\_\_



**Critical thinking:**  
**Examining controversial “pop-science” issues in STEM**



**Essential Academic Skill Enhancement (EASE) workshop series**

This workshop discusses how to recognize and cultivate clear, logic-based analyses of controversial scientific topics in the context of modern political and popular culture.

This workshop takes current events discussed in mainstream science journals, politics and public forums (e.g., climate change, stem cell research) and investigates students’ preconceptions about topics, and introduces critical thinking in small group discussions of these topics. A low-key, informal, and fun format, this workshop enables students to develop the skills of reading and understanding the media’s portrayal of scientific findings, allows them to discuss with peers, and critically evaluate their thought process in comparison with their peers. Critical thinking is fundamental to developing independent opinions and the ability to fully understand and participate in scientific debate.

After completing this workshop Students Should Be Able To:

- Understanding the problem or question at hand
- Recognizing evidence through observation
- Recognizing unstated/stated biases, assumptions and values
- Understanding context: isolate problem from context
- Unbiased interpretation of data and arguments
- Defining criteria for judgment
- Defining method for making judgment
- Conceptualizing, analyzing, synthesizing, evaluating information to reach a conclusion
- Evaluate their thought process
- Understand the importance of critical thinking in completing a STEM degree



**Assessment (use the back of this paper if more space is needed):**

1. What is your initial thought on the meaning of “critical thinking”?
2. Regarding the giraffe and the fridge: was your answer more complicated than it needed to be?
3. Connect the dots following the rules stated in the presentation: Is there any other way to connect the dots?
4. Regarding the beggar: were you influenced by the image?
5. Regarding pop-science and media: Why do you think they get more attention than “true” science?
6. Regarding vaccines: What are some critical thinking strategies you can use?
7. Regarding the hypothetical cancer: How much was your initial reaction in response to the initial statistic? After hearing the actual occurrence, did your opinion change?

