

Discussion Sections: Instructions to Leaders and Participants

Although the discussion is worth only 10% of your final grade, I view it as an essential component of this course because this is where you will learn to communicate and debate scientific concepts and current topics in biology. Importantly, the discussion section will also help to prepare you for writing your final paper. I have chosen several topics that I think are important and have received a lot of media attention over the last months or years, but if you are interested in other topics not included in our schedule, we can incorporate those as well. Each week I will assign one or two short articles (either news articles or scientific reviews of the topic) for everybody to read prior to discussion.

Discussion Leaders

A sign-up sheet will be passed around in class so that everybody has a chance to pick what day and which topic they would like to present. Every student in the class must serve as a discussion leader at least once and this will count for 5% of your final grade. The responsibilities of the discussion leaders include:

- (1) Read the assigned article carefully and do research to find 2-4 additional articles on the topic. The additional articles must come from reputable news sources and/or scientific magazines/journals, such as *The New York Times*, *The New Scientist*, *Scientific American*, *Discover*, *National Geographic*, *Science*, or *Nature*.
- (2) Together, the discussion leaders will write a one-page paper (single or double-spaced) highlighting the key terms and concepts. The paper is due the day of discussion and must be submitted with references (including copies of the articles used as additional sources). I suggest the following format for this short paper:
 - A. Introduce the topic, give enough background so that the key concepts are clear (your additional articles will be helpful in this section and make sure that you reference your sources).
 - B. Define the scientific terms used in the assigned article (again, reference your sources) and relate them to the material we have covered in class.
 - C. Identify the main questions, problems, or issues discussed in the assigned article.
 - D. Address the possible outcomes and solution to the identified problem or question.
 - E. State your own opinions, if any, on the assigned article and the topic in general.
- (3) Organize and prepare a short oral presentation (10-15 min) on the topic using the same format described above and give it to the class after the quiz. Think of questions or activities to involve the class and start a discussion (such as making two 'teams' and having an official debate, etc). For each topic, we should end the discussion with a clear understanding of how the problem or issue affects both society and the biosphere (or the environment).

Discussion Participants

The rest of the class is responsible for (1) carefully reading the assigned article, (2) taking a reading quiz (about 5 questions) at the beginning of class, and (3) being prepared to *discuss* the topic (ask questions about terms or concepts you do not understand, make comments on points with which you agree or disagree, debate the possible impact on society and the environment, or bring in other articles that you have read that are relevant to the topic and tell the class about them). Your quiz grades and participation also count for 5% of your final grade.