

Student Presentations of a Scientific Article for Physiology

Objectives

1. To search for scientific articles directly related to human physiology.
2. To read and understand the details and the findings of the study.
3. To explain this paper to everyone in class and answer questions about its content.

1. Finding an Article

- ◆ Each person must find their own article, students can choose a similar subject or the same author, but the papers must be different.
- ◆ The topic of the paper selected must be related to **human physiology**. This may include studies that examine animal models, as they make extrapolations of their data to humans. For example, the rats testing the effects of saccharin were used to examine the implications on human health.
- ◆ It is suggested that you look for a topic that **you find interesting**, as long as it is relevant. The minimum length of the paper should be about 1,500 words.
- ◆ It is useful to know how to identify a **Scholarly** or **Peer Reviewed Journal** from other sources of information. There are very good resources on the college website. The useful “Library Research: Tools & Assistance” link is: <https://sdmiramar.edu/services/library> (e.g., it has PROQUEST)
- ◆ Please show me the article you have selected beforehand so we can confirm its suitability. I can help you if you are unsure about a topic, or how to find a paper - please ask me, I am happy to assist.

2. Reading the Article

- ◆ It is sometimes difficult and confusing when first reading an involved scientific paper. It may require several readings and it is also very useful to make notes while reading it.
- ◆ After you have read it and think you understand it, try explaining it to someone else, preferably before your presentation. One of the best ways to understand an issue is to try to explain it to someone else.
- ◆ Critically evaluate the content of the paper. This means examine the **strengths** and potential **weaknesses** of the article. You must train yourself to ask questions about the article you have read. Get into the habit of questioning all aspects of it. For example, for a hypothetical paper you could ask the following: Why only young or old subjects? What were the subject’s background? Could that be important? Why was 50 mg of caffeine the only dose used? Why was walking chosen as an exercise and not running? Etc.
- ◆ By asking many questions, you can make an assessment of what you think the researchers actually achieved in the study you have read. It is good to think critically of these papers.

3. Presenting the Article

- ◆ When presenting information to anyone, it is most effective when the presentation is clear and well organized. This is not a formal speech, however, it is a presentation exercise for which you will be evaluated and awarded points. Therefore, it should be taken seriously and I encourage every student to be prepared for it.
- ◆ There is no written paper or presentation to be handed in. If you want to create written work in order to prepare for this exercise, that is fine, but it's not required and will not be graded.
- ◆ The talks will be spread over the lab sessions in the same week. These presentations cannot be made up at any other time and students who do not show up will receive a zero for the exercise.
- ◆ **Talk:** Your presentation should be 5 minutes in duration. You will be timed with a stop watch and you will have a maximum of 5 minutes. Points will be deducted for **exceeding** or **falling too short** of the time limit. Please try not to read the paper to the class. This is not an exercise in public reading! It is an opportunity for you to inform the class and guide a discussion on a topic that is of interest to you.
- ◆ **Accessories:** Think of how visual or other material has helped you to understand issues in the past. You can use pictures, slides, examples, or graphs etc. to better explain the paper, this option is entirely up to the individual. Also remember that the best type of preparation for a talk is *knowing* the material.
- ◆ **Question Time:** During the course of the paper presentation, and especially at the end of it, there will be times when I will ask questions of the presenter. There will also be an opportunity for any other student to ask questions regarding the article and topic.
- ◆ **Evaluation:** This assignment is worth 20 points.

Each student presentation will be evaluated for the following:

- 1) The quality and suitability of the article/topic selected.
- 2) Comprehensible explanation and presentation of the material.
- 3) Appropriate use of the set time frame.
- 4) The ability to answer questions posed by those in attendance.
- 5) Participation during other talks by asking questions.