

KIN 412/512 Review and Critique of a Research Article

Fall 2005

The purpose of this assignment is to become more familiar with the research literature in biomechanics and to help you develop critical thinking and evaluation skills. You will be assigned one or more articles to review and critique. Your written reports must be typed, double-spaced, and include complete bibliographic citation of the articles being reviewed. Normally this is done at the beginning of the report so the reader knows which article you are referring to right up front. You should number your pages (a commonly forgotten step)! Your paper must consist of two parts:

1. Review. In this part you summarize the article (in your own words), including the purpose, methods, results, and conclusions. This review should take approximately 2 pages for all students. Do not make this part excessively long.
2. Critique. In this part, you critically evaluate the article and comment on both the strong and weak points (if any). Discuss its most important findings (“what does this all mean?”) and how they may apply to human health, well being, and/or performance (if at all). Comment on the strengths and weaknesses (if any) of the article. This should take approximately two pages for the EPE 412 students. [For EPE 512 students, your critique should be expanded to be approximately 3-5 pages long. You must obtain and read *at least* one additional article, closely related to the primary article, preferably one cited by it (or one that cites it). Include in your critique a discussion of this additional article and try to include conflicting viewpoints and/or findings.]

Example article. Read the following article and read the example summary/critique of the article, both available to download from the class web page.

Rubin, C.T. & Lanyon, L.E. (1984). Regulation of bone formation by applied dynamic loads. *Journal of Bone and Joint Surgery*, 66-A, 397-402.

Note: The example critique of this article *does not* include the expanded discussion for EPE 512 students. Do not write up or turn in a critique of this article. You will, however, be responsible for the information presented in the article for an upcoming exam and/or quiz.

First article assignment (summary/critique due Thursday, September 15, 10:40 AM):

Trebackz, H. (2001). Disuse-induced deterioration of bone strength is not stopped after free remobilization in young adult rats. *Journal of Biomechanics*, 34, 1631-1636.

A copy of this article has also been placed on the class web page. Alternatively, you can find this article on line through the ASU library.