

Physics 142

How Do We Sense, Think and Move? Research Paper

This module explores the fundamental aspects of physics needed to understand how the human body is able to send messages back and forth to its appropriate parts.

We now believe that the internal signals in our bodies that control our sensing, our thinking and our moving are electrical signals. So we need to understand the fundamental aspects of electricity and magnetism to understand these signals.

Your research topic for this module needs to involve some aspect of electricity and magnetism and their relationship to human beings. So you need to include **both** some aspect of electricity and magnetism **and** some aspect of human beings in your research paper and in your oral report.

For full credit on your oral report, you need to use two overhead transparencies. One on the aspect of electricity and magnetism that you discuss in your research paper and one on the aspect of human beings that you discuss in your research paper.

The research papers are due in recitation class on Tuesday, October 31st.

You will prepare a two-to-four page paper (1" margins, double-spaced, 12-point font) on your topic, with an additional page of references. Your intended audience is the other students in this course.

You must consult and reference **at least** three different original sources for each research paper. You may use your textbook as a reference but it does not count as one of the three required references. At least, one reference **must** be from a printed source and not from the web, i.e. you must actually use a library to find one of your references. On your reference page, along with each bibliographic entry, describe the search scheme you used to find each entry.

Please use the American Psychological Association (APA) format for your paper and references (http://owl.english.purdue.edu/handouts/research/r_apa.html).

You may not choose a research topic already chosen by someone else. You must check the electronic list of topics already chosen before you select your own topic. The electronic blackboard contains an up-to-date list and we will also post it on our class website. Prof. Fuller will send you an electronic notice approving your topic.