

Class project: Biomechanical Comparison of Two Conditions

Proposal Assignment: Write a two-page (maximum, excluding references), single-spaced, proposal summarizing the experiment you would like to carry out.

The proposal must contain the following parts:

1. Header: Project title, team name, team members, date (1%)
2. Introduction (5%)
Introduce the general idea behind your experiment and WHY it is interesting or useful. Look in the literature or reputable web sites to support your argument, but all sources must be published, peer-reviewed literature. State specifically what question you want to answer - what is the AIM of this experiment. You must include at least 3 references.
3. Proposed Methods (5%)
Describe, in simple terms, how you will go about answering your question. Consider using diagrams or pictures to help illustrate your idea. Your analysis should include video-based motion capture.
4. Ground reaction force data (5%)
The task that you choose must include ground reaction force data from the literature. You will need this to be able to complete the calculations later on. Include a reference and figure from the literature that has the ground reaction forces you will use.
5. Roles (1%)
Identify the responsibilities of each member of the group.
6. References (1%)
Mandatory – this should be a well-informed proposal. Use your imagination, but make sure there is substance behind the idea.
Mendeley is a free reference manager software that can help you cite and write. Check the library website: <http://uiuc.libguides.com/mendeley>

Your write-up **must be typed**. Supporting information (calculations, etc.) may be handwritten. All handwritten work must be written neatly. Use ink or dark pencil. (2%)

Proposals due: March 17 (11:59pm), uploaded to Compass

Ask yourself:

1. Does the question deal with a topic or issue that interests me enough to spark my own thoughts and opinions?
2. Is the question easily and fully researchable?
3. What type of information do I need to answer the research question?
--> should lead to needing to collect kinematics and EMG data
4. Is the scope of this information reasonable (e.g., can I really answer this question doing an experiment?)
5. Given the type and scope of the information that I need, is my question too broad, too narrow or okay?
6. What sources will be able to provide the information I need to justify my research question (journals, books, Internet, government documents, people)?
7. Can I access these sources?
8. Given my answers to the above questions, do I have a good-quality research question that I actually will be able to answer by doing research?