Topic: A comparison of jump techniques: 1. Give an account of underlying mechanical principles relevant to human movement. 2. Explain human movement in terms of anatomical and biomechanical principles. 3. Give an account of how the neuromuscular system controls movement. 5. Conduct a set of laboratory exercises relevant to the module, and write reports of these in appropriate scientific style. 6. Use theoretical principles to analyse and evaluate sporting technique in the context of injury prevention and performance enhancement. Assessment details: A key sporting skill is the ability to produce maximal force to jump as high as possible. In this coursework, you will be analysing two different jump techniques (squat jump and countermovement jump) to determine which produces the greater height. This coursework is a comparison of the two techniques and will be written as a lab report. It must contain the following sections: Title Keep the title short and concise, no more than twelve words. The title should capture the aim of the practical. Introduction (10%) Give an introduction to key terms including an explanation as to why it is useful to be able to maximise jump height in sport or dance. Give a background of the sport/dance movement you are interested in and how this relates to the performance in your sport/dance. Include aim/hypothesis of study (H0 and H1 format). Method (10%) (Participants / Protocol / Calculations) Your methodology is complete if someone else could repeat the experiment in the same way that you carried it out. Calculation section only describes the calculations that were performed (e.g. repeated measures T-test), not the numbers or results of the calculations. Results (20%) Either as tabular or graphical format – not both. Must include a short note of points of interest. Do give the means and standard deviation of data that are reported. Do not discuss the results in this section. All of the data for this coursework have been stored in a class spreadsheet in Weblearn. Your coursework must be written based on the data from the whole class. Discussion (30%) Explanation of results. Assume that the reader has knowledge of the area but is not an expert. The explanation should make reference to the information provided in the introduction, particularly the hypothesis. Any interpretation of the results should refer to the findings of previous investigations in the area. It is often necessary to include further references to support points that you are attempting to make. As with the introduction your discussion should lead your reader through the discussion in a logical order. It may be helpful to start by discussing the participant group and how the group relates to the participants in previous studies. Remember, the key focus of this study is to examine any effect SSC has on jump height when comparing a squat jump with a countermovement jump. Conclusion (10%) Summarise study, relating the main findings to the aims of the study and the hypothesis. References (10%) Full references must be given for any factual information, statements, quotes, diagrams or data that have been reported or reproduced, either partially or in full. Reference style to be used is Harvard format. Writing Style / Structure (10%) (See Marking Scheme for details) Instructions to students including submission guidance: The report should be 1500 +/-150 words in length. It is possible to roughly proportion the word count of each section according to the percentage of marks each attracts. The Introduction attracts 10% of the marks and should, therefore, consist of around 150 words. The discussion, however, is worth 30% of the marks and, accordingly, should consist of around 450 words. The report should be written in the third person past tense. Example: “The cycle ergometer was set up to suit the subject.” – and not – “I set up the cycle ergometer to suit the subject.” Notes: ⦁ Please ensure the work is submitted with the following: ⦁ Page 1+2 = marking scheme – do NOT include student id or name ⦁ Page 3 = cover page which must include MODULE CODE, TITLE, WORD COUNT ⦁ Page 4 onwards – your report ⦁ Ensure you include headings for each section: “INTRODUCTION”, “METHOD”, “RESULTS”, “DISCUSSION”, “CONCLUSION”, “REFERENCES”