

# Critical Video Analysis Lab through the lens of the 7 biomechanical Principles

***Mission: To investigate a specific skill of a sport and critically analyze the skill by comparison of your execution to a professional executing that skill through the lens of the 7 biomechanical principles.***

The format to which this will be presented will be in PowerPoint or keynote

**Also included in the second part of this lab, will be exercise 15.3, 15.5 and 15.9 – You can hand this in separately**

The PowerPoint presentation will have 10 slides outlined as follows

Slide 1 – Title page including your name

Slide 2 – video of you executing the skill

Slide 3 – video of professional executing the skill

Slide 4 – Picture of you at the point a critical point or impact point

Slide 5 – Picture of professional at the critical point or impact point

Slide 6 – As shown in the exercise workbook draw on page 164 overlay or draw lines on yourself to build a free body diagram model of yourself at the execution point

Slide 7 – As shown in the exercise workbook draw on page 164 overlay or draw lines on the professional to build a free body diagram model of them at the execution point

Slide 8 – Show a comparison of the two overlays side by side

Slide 9 – With respect to the comparison graphics where do you see the differences between to the two photos – List these differences on this slide with respect to body part position, joint angles, force exertion, joint sequencing and other biomechanical differences

Slide 10 – On this slide apply the biomechanical principles on how you might improve your action to be more efficient and effective. (If you need to take an 11<sup>th</sup> slide to finish this section – please do)