

Kin 476H: Honors Biomechanics

General Course Description:	Syllabus attached.															
Honors Contract Topic:	<p>Biomechanical Analysis of Steeplechase Technique in Track</p> <p>Student will complete a standard biomechanical analysis from a video analysis of an athlete completing a steeple jump using Kieffer Lab equipment. The information contained in the analysis will require the use of biomechanics principles learned in class as part of the non-honors course. This is a very challenging requirement involving higher-order thinking skills such as analysis and synthesis.</p>															
Methodology/Approach:	<p>Film an athlete completing a steeplechase on the track using Kieffer Lab equipment.</p> <p>Create a video analysis of the steeplechase.</p> <p>Applying biomechanics principles, create a biomechanical analysis of the different aspects of the steeplechase.</p> <p>Include observations and analysis of how the jump changes with proper warm up and fatigue, and possibly differences between athletes.</p> <p>Using biomechanical principles, determine how the athlete may be able to improve his or her performance.</p>															
Resources:	<p>Kieffer Motion Analysis Lab equipment</p> <p>Volunteer athlete(s)</p> <p>Biomechanics text book</p>															
Evaluation:	<p>Non-honors: see syllabus</p> <p>This honors project will be a sixth grade equal to the other five major exams. The grading scale for the course will be the standard 90, 80, 70, 60% included in the syllabus.. As part of the project, I will complete a 12-page report describing the results of my analysis.</p>															
Grade Distribution/Criteria:	<p>Please list the grade breakdown for both non-honors and honors students in the course.</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;"></th> <th style="width: 35%; text-align: center;">Non-Honors (Points or %)</th> <th style="width: 35%; text-align: center;">Honors (Points or %)</th> </tr> </thead> <tbody> <tr> <td>Tests: 5 @ 20%_</td> <td style="text-align: center;"><u>100 %</u></td> <td style="text-align: center;"><u>          </u></td> </tr> <tr> <td>Tests: 5 @ 16.7 %</td> <td style="text-align: center;"><u>          </u></td> <td style="text-align: center;"><u>83.4 %</u></td> </tr> <tr> <td>Honors project including a 12-pg paper &amp; video analysis</td> <td style="text-align: center;"><u>          </u></td> <td style="text-align: center;"><u>16.6 %</u></td> </tr> <tr> <td style="text-align: right;">SUM</td> <td style="text-align: center;"><u>100%</u></td> <td style="text-align: center;"><u>100%</u></td> </tr> </tbody> </table>		Non-Honors (Points or %)	Honors (Points or %)	Tests: 5 @ 20%_	<u>100 %</u>	<u>          </u>	Tests: 5 @ 16.7 %	<u>          </u>	<u>83.4 %</u>	Honors project including a 12-pg paper & video analysis	<u>          </u>	<u>16.6 %</u>	SUM	<u>100%</u>	<u>100%</u>
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