PT 384 Movement Analysis Project

- Course Assignment
- COMPUTER-BASED MOVEMENT ANALYSIS PROJECT
- Work in groups of 3-4 and select a sports movement or activity of your choice (must have instructor approval). This activity must involve at least 3 major joints of the body. Limit the scope of the paper to 3 joints in one specific motion. (Example: Analysis of the hip, knee, and ankle joints during an instep soccer kick; Analysis of the shoulder, elbow, and wrist joints during an overhead baseball throw) Try to break down the activity into phases for analysis (Example: for a jump, you might have a preparatory phase, a take-off phase, and a landing phase)
- The project should include a video clip of the activity. Video cameras and video editing equipment and assistance are available in the media commons lab in the library. The text should be well-organized and reference the video clip often. Still pictures form the clip or from other sources may be included in the document to help illustrate certain points. All films should be posted to YouTube and papers should submitted to the instructor via Canvas by the specified due date.

user id: PT384Projectpassword: XXXXXXXX

Be sure to include the following:

- 1. **Title page:** include the name of the sport or activity and the authors' names.
- 2. **Still pictures** of the phases of the activity. Be sure images are labeled and referred to in the body of the text. If images copied from another source, be sure to reference the source.
- 3. **Description of the starting position**. Be precise and use anatomical terms where appropriate.
- 4. **A brief description of the complete activity** from beginning to end, discussing the entire body movement.
- 5. Muscular analysis of 3 joints which work sequentially or synergistically, including:
- 6. Agonists or prime movers
- 7. Type of contractions (isometric, isotonic, concentric, eccentric)
- 8. Synergists and/or fixators (if appropriate)
- 9. **Very brief summary** or concluding statement.
- 10. **Bibliography** of at least 3 sources, one of which may be the course text.
- 11. **Video clip** must be accessible to instructor and fellow students. Video clips should be posted on YouTube prior to paper being turned in to instructor.
- ALL OUTLINES, VIDEOS, AND COMPLETED PROJECTS ARE DUE ON DATES SPECIFIED ON THE COURSE SCHEDULE. EACH PRELIMINARY ASSIGNMENT IS WORTH 10 POINTS TOWARD THE TOTAL HOMEWORK/QUIZ GRADE.
- Students will provide a brief (< 10 min) presentation of their project to the class on the day the projects are due.
- Grades for the project will be determined using the following form. Students will grade themselves and their partners on cooperative effort and the instructor will grade the quality of the project.

PT 384 Movement Analysis Rubric

"Criterion	 Possible Score	Student Score
"Video/Diagrams: show phases of movement; correlate to text; "are clear; are referenced if copied	 10	11
	 10)(
Description of starting position: anatomical terms; clear and accurate	10	
Inclusion of 3 joints: joints are clearly defined; joint movements are clear and correct	 15 	
Muscular action: prime movers identified; type of contraction is clear and correct; synergists included, if appropriate		11
Spelling, grammar, neatness	 10	
 Bibliography)
Presentation	 15)(
Cooperative effort	 10	
Total	 100)(

• COMMENTS: