

**GRANDE PRAIRIE REGIONAL COLLEGE**  
**DEPARTMENT OF PHYSICAL EDUCATION AND ATHLETICS**  
**P. E. 2060 - BIOMECHANICS**  
**COURSE OUTLINE - WINTER 1999**

**INSTRUCTOR:** Leigh Goldie  
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**CLASS TIMES:** Monday, Wednesday & Friday, 12:00 - 12:50 PM.  
Lab/Seminar - Friday, 10:00 - 10:50 AM

**COURSE DESCRIPTION:** This course is concerned with establishing the role biomechanics can play in the teaching and analysis of sport techniques. Emphasis is placed on those basic biomechanical concepts which are of the greatest importance in the qualitative analysis of sports performance.

**TRANSFERABILITY:** PEDS 206(3) - U. of Alberta  
Jr. KNES(3) - U. of Calgary  
KNES 3650(3) - U. of Lethbridge

**COURSE OBJECTIVES:**

The objective of this course is to provide students with the knowledge to:

1. Identify mechanical principles governing human motion.
2. Identify the critical features of selected sport skills.
3. Design and carry out an observation plan.
4. Determine faults in observed performance.

**COURSE TEXT:** Kreighbaum, E. and Barthels, K.M. 1996. *Biomechanics: A qualitative approach for studying human movement, 4<sup>th</sup> ed.* Boston: Allyn and Bacon.

**COURSE EVALUATION:**

Skill analysis projects	30%
Test #1 - Fri. Jan. 22	15%
Test #2 - Wed. Feb. 17	15%
Test #3 - Mon. Mar. 22	15%
Test #4 - Fri. Apr. 16	<u>25%</u>
	100%

## COURSE CONTENT AND SCHEDULE

Jan. 6 - Introduction, course outline, I 1-6  
Jan. 8 - C 80-89  
Jan. 11 - D 91-107  
Jan. 13 - "  
Jan. 15 - E 109-128  
Jan. 18 - "  
Jan. 20 - 3 129-143  
Jan. 22 - TEST NO.1 - 1, C, D, E, 3  
Jan. 25 - 4 145-166  
Jan. 27 - "  
Jan. 29 - F 276-288  
Feb. 1 - "  
Feb. 3 - G 290-298  
Feb. 5 - "  
Feb. 8 - 9 300-312  
Feb. 10 - H 313-324  
Feb. 12 - "  
Feb. 17 - TEST NO. 2 - 4, F, G, 9, H  
Feb. 19 - I 326-332  
Mar. 1 - J 335-353  
Mar. 8 - "  
Mar. 10 - 10 355-366  
Mar. 12 - 11 370-384  
Mar. 15 - "  
Mar. 17 - 12 387-412  
Mar. 19 - "  
Mar. 22 - TEST NO. 3 - I, J, 10, 11, 12  
Mar. 24 - K 414-426  
Mar. 26 - "  
Mar. 29 - 13 427-448  
Mar. 31 - "  
Apr. 5 - 14 451-488  
Apr. 7 - "  
Apr. 9 - 15 493-516  
Apr. 12 - "  
Apr. 14 - 16 519-534  
Apr. 16 - TEST NO. 4 - K, 13, 14, 15, 16 + PREVIOUS MATERIAL