

**GRANDE PRAIRIE REGIONAL COLLEGE**  
**DEPARTMENT OF PHYSICAL EDUCATION AND ATHLETICS**  
**P.E. 2060 - BIOMECHANICS**  
**COURSE OUTLINE - WINTER 1997**

**INSTRUCTOR:** Leigh Goldie  
Office: K219                      Phone: 539-2978

**CLASS TIMES:** Monday, Wednesday and Friday, 12:00 - 12:50 am.  
Lab/Seminar - Friday, 10:00 - 10:50 pm.

**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 analysis of sports performance.

**TRANSFERABILITY:**

PEDS 206(3) - U. of Alberta  
PHED 263(3) - U. of Calgary  
PHED 3650(3) - U. of Lethbridge

**COURSE OBJECTIVES:**

This 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*, 4th ed. Boston: Allyn and Bacon.

**COURSE EVALUATION:**

Assignment - Skill analysis	40%
Test #1 Wed., Jan. 22	15%
Test #2 Wed., Feb. 12	15%
Test #3 Wed., Mar. 19	15%
Test #4 Wed., Apr. 9	15%
	<u>100%</u>

## COURSE CONTENT AND SCHEDULE:

Jan. 6 - Introduction, course outline, **1** 1-6  
Jan. 8 - **C** 80-89  
Jan. 10 - **D** 91-107  
Jan. 13 - "  
Jan. 15 - **E** 109-128  
Jan. 17 - "  
Jan. 20 - **3** 129-143  
Jan. 22 - **TEST NO. 1 - 1, C, D, E, 3**  
Jan. 24 - **4** 145-166  
Jan. 27 - "  
Jan. 29 - **F** 276-288  
Jan. 31 - "  
Feb. 3 - **G** 290-298  
Feb. 5 - **9** 300-312  
Feb. 7 - **H** 313-324  
Feb. 10 - "  
Feb. 12 - **TEST NO. 2 - 4, F, G, 9, H**  
Feb. 14 - **I** 326-332  
Feb. 17 - Family Day  
Feb. 19 - **J** 335-353  
Feb. 21 - "  
Mar. 3 - **10** 355-366  
Mar. 5 - Video filming and editing  
Mar. 7 - Video filming and editing  
Mar. 10 - **11** 370-384  
Mar. 12 - "  
Mar. 14 - **12** 387-412  
Mar. 17 - "  
Mar. 19 - **TEST NO. 3 - I, J, 10, 11, 12**  
Mar. 21 - **K** 414-426  
Mar. 24 - "  
Mar. 26 - **13** 427-448  
Mar. 31 - "  
Apr. 2 - **14** 451-488  
Apr. 4 - **15** 493-516  
Apr. 7 - **16** 519-534  
Apr. 9 - **TEST NO. 4 - K, 13, 14, 15, 16**