

Course discipline/number/title: PHED 1194: Speed, Agility and Quickness Training for Baseball and Softball Athletes

A. CATALOG DESCRIPTION

1. Credits: 1
2. Hours/Week: 2
3. Prerequisites (Course discipline/number): None
4. Other requirements: None
5. MnTC Goals (if any): NA

B. COURSE DESCRIPTION: This course is designed to guide the pre-season baseball/softball athlete in techniques of strength, agility, and quickness that will prepare the athlete for the upcoming baseball/softball season. The student will also be exposed to basic anatomy/physiology principles regarding warm up, stretching and body musculature. Proper biomechanics education will be provided for overhead throwing, sport specific pitching mechanics, hitting, multidirectional movement, fielding, and base-running techniques.

C. DATE LAST REVISED (Month, year): May, 2020

D. OUTLINE OF MAJOR CONTENT AREAS:

1. Active warm-up for the baseball/softball athlete, including proper biomechanics on how to prepare for multidirectional movements which include components in throwing, sprinting, rotational and linear movement
2. Safe and effective plyometric, speed, agility, multidirectional, and quickness training techniques that are specific for baseball/softball, focusing on quick lateral movement, explosive yet safe
3. Flexibility and stretching techniques, including pre and post exercise principles in dynamic and static stretching to prepare for skill-related movements
4. Safe and effective weightlifting techniques that are sport specific, focusing on dynamic balance, and utilizing Olympic weight-lifting systems
5. Running mechanics training to minimize hamstring and groin injury
6. Shoulder "pre-habilitation" for the prevention of rotator cuff related injuries
7. Ankle and knee "pre-habilitation" for linear and multi-directional requirements of baseball and softball athletes
8. Core stability training to prevent injury to back, hips and ankles due to explosive rotational movements associated with sport specific movement
9. Proper hydration for optimal performance during off-season, pre-season, and in-season activities

E. LEARNING OUTCOMES (GENERAL): The student will be able to:

1. Demonstrate proper biomechanics of the throwing skill to increase velocity and accuracy, while decreasing the chance of shoulder injury.
2. Demonstrate the proper biomechanics of all running associated with baseball/softball to increase speed, explosion and quickness while incorporating proper acceleration/deceleration techniques.
3. Demonstrate a proper active warm- up routine that serves to prepare the athlete for a dynamic stretching routine that is beneficial to the softball/baseball athlete.
4. Demonstrate a pre-exercise, sport specific dynamic stretching routine that promotes flexibility for overhead extension, spinal extension, rotation and flexion, and safe range of motion through the hip, knee and ankle joints.
5. Demonstrate a post-exercise, sport specific dynamic and static stretching routine that translates to increased flexibility of above-mentioned motion serving to decrease chances of injury.
6. Demonstrate the proper care, strengthening and prevention of rotator cuff muscles to avoid injury by working through a prescribed program.
7. Demonstrate proper Olympic weightlifting techniques that serve to increase strength, speed, stability and explosive power.
8. Demonstrate safe and effective plyometric, speed, and agility training techniques that serve to improve multidimensional movement, quickness, short explosive movement, and reaction time to assure prevention of, or a decrease of, incidents of hamstring/groin related injuries.



- E. LEARNING OUTCOMES (GENERAL): The student will be able to: Continued. . .
 - 9. Demonstrate proper sprinting mechanics to increase efficiency and reduce or prevent hamstring/groin injuries during acceleration and deceleration phases.

- F. LEARNING OUTCOMES (MNTC): NA

- G. METHODS FOR EVALUATION OF STUDENT LEARNING: Methods may include but are not limited to:
 - 1. Participation
 - 2. Pre and Post Fitness Test
 - 3. Performance Activity Log
 - 4. Written Evaluation

- H. RCTC CORE OUTCOME(S). This course contributes to meeting the following RCTC Core Outcome(s):
Personal and Professional Accountability. Students will take responsibility as active learners for achieving their educational and personal goals.

- I. SPECIAL INFORMATION (if any): None