ROCHESTER COMMON COURSE OUTLINE

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