

**STATE UNIVERSITY OF NEW YORK
COLLEGE OF TECHNOLOGY
CANTON, NEW YORK**



COURSE OUTLINE

HEFI 410: Applied Strength and Conditioning

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**SCHOOL OF SCIENCE, HEALTH, AND CRIMINAL JUSTICE
HEALTH AND FITNESS PROMOTION
APRIL 2017**

- A. **TITLE:** Applied Strength and Conditioning
- B. **COURSE NUMBER:** HEFI 410
- C. **CREDIT HOURS:** 4
- D. **WRITING INTENSIVE COURSE:** No
- E. **COURSE LENGTH:** 15 weeks
- F. **SEMESTER(S) OFFERED:** Spring
- G. **HOURS OF LECTURE, LABORATORY, RECITATION, TUTORIAL, ACTIVITY:**
 1 hour of direct team meeting with faculty/other members of class per week
 7-9 hours of applied learning activities working with assigned varsity athletic team per week
- H. **CATALOG DESCRIPTION:**
 Students directly apply the knowledge and skills learned in HEFI 402: Strength and Conditioning to design and implement safe and effective strength and conditioning programs specifically for an athletic team. The focus of the course is on designing an off-season foundational program for fall and winter teams, and/or an in-season maintenance program for spring teams. Programs are geared towards sport specificity in regards to bioenergetics, aerobic needs, and muscular strength/power requirements of the sport. Students are assigned 1-2 athletic teams to design a program for, and will directly work with the athletes and coaching staff of those teams.
- I. **PRE-REQUISITES/CO-REQUISITES:**
 a. Pre-requisite(s): HEFI 402; must be of senior status in HEFI program
- J. **GOALS (STUDENT LEARNING OUTCOMES):**
 By the end of this course, the student will be able to:

<u>Course Objective</u>	<u>Institutional SLO</u>
a. Compile a needs analysis of assigned sports teams, including movement, injury, and physiological components.	2. Crit. Thinking 3. Prof. Competence
b. Administer appropriate sports-specific tests to athletic teams and interpret results.	1. Communication 2. Crit. Thinking 3. Prof. Competence 4. Inter-intrapersonal
c. Develop a training program that demonstrate understanding of periodized programming appropriate for the sport, and the time of the sport's season	2. Crit. Thinking 3. Prof. Competence
d. Schedule and administer appropriate programming with athletes on designated teams each week.	1. Communication 2. Crit. Thinking 3. Prof. Competence 4. Inter-intrapersonal

K. TEXTS:

Haff, G., Triplett, N. (2016). *Essentials of Strength Training and Conditioning*. Champaign, IL: Human Kinetics.

National Strength and Conditioning Association. (2016). *Exercise Technique Manual for Resistance Training*. Champaign, IL: Human Kinetics.

L. REFERENCES:

Other texts used throughout HEFI curriculum.

M. EQUIPMENT: Exercise equipment available in the fitness center and field house will be used for athletic team sessions. Basic assessment tools from the PTA/HEFI laboratory may also be utilized. (i.e. blood pressure cuffs, body composition tools)

N. GRADING METHOD: A-F

N. MEASUREMENT CRITERIA/METHODS:

- Participation
- Weekly written reports to faculty overseeing course regarding team progress and periodized program design
- Final case study(ies)

P. DETAILED COURSE OUTLINE:

- I. Team Initial Assessment
 - A. Needs analysis
 - B. Intake forms
 - C. Tests and measures
- II. Team Programming
 - A. Periodized training calendar
 - B. Analyze test and measure results
 - C. Write general outline for periodized programming
- III. Applied Sports-Specific Programming
 - A. Resistance—largest focus here
 - B. Aerobic
 - C. Flexibility/mobility
- IV. Team Reassessment
 - A. Midterm reassessment
 - a. Use test and measure results to assist in modifying/changing program design
 - B. Final reassessment
 - a. Compare ending test and measure results to beginning
 - b. Case study write-up

Q. LABORATORY OUTLINE: N/A