

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



MASTER SYLLABUS

COURSE NUMBER – COURSE NAME
SPMT 246 - Health Sciences for Coaching

CIP Code:

For assistance determining CIP Code, please refer to this webpage
<https://nces.ed.gov/ipeds/cipcode/browse.aspx?v=55>
or reach out to Sarah Todd at todds@canton.edu

Created by: D.PARA & C. NORMANDIN

Updated by:

School of Science, Health, and Criminal Justice

Department: SPORTS MANAGEMENT

Semester/Year: SPRING 2025

- A. TITLE: Health Sciences for Coaching
- B. COURSE NUMBER: SPMT 246
- C. CREDIT HOURS: (Hours of Lecture, Laboratory, Recitation, Tutorial, Activity)

Credit Hours: 3
Lecture Hours: 3 per week
Lab Hours: per week
Other: per week

Course Length: 15 Weeks

- D. WRITING INTENSIVE COURSE: Yes No
- E. GER CATEGORY: None: Yes: GER
If course satisfies more than one: GER
- F. SEMESTER(S) OFFERED: Fall Spring Fall & Spring

G. COURSE DESCRIPTION:

This 15-week course is part of the Interscholastic Coaching Micro-Credential and part of the NYSED required course for Interscholastic Coaching Certification. This course will cover selected principles of biology, anatomy, physiology, and kinesiology as they relate to coaching. Emphasis placed on the mechanics, recognition, prevention, and proper care of athletic injuries including concussion management. Other risk management topics related to safety and health for coaches will also be discussed along with NYSED selection and classification of athletes; age and maturity of athletes.

- Note 1: For NYSED certification, students must also complete an approved Red Cross First Aid and CPR class. Course fee is the responsibility of the student.
- Note 2: For NYSED certification students must also enroll in successfully complete SPMT 244 and SPMT 245 offered in the fall semester. SUNY Canton sports management majors will need to successfully complete SPMT 244 and SPMT 203.

- H. PRE-REQUISITES: None Yes If yes, list below:

CO-REQUISITES: None Yes If yes, list below:

I. **STUDENT LEARNING OUTCOMES:** (see key below)

By the end of this course, the student will be able to:

<u>Course Student Learning Outcome</u> [SLO]	<u>Program Student Learning Outcome</u> [PSLO]	<u>ISLO & SUBSETS</u>	
Understand selected principles of biology, anatomy, physiology, kinesiology related to coaching including training principles and nutrition	3. Critical Thinking	2. Critical Thinking	CA IA
Understand the mechanics and recognition of athletic injuries and understand preventive measures and proper care of athletic injuries including concussion management	3. Critical Thinking	2. Critical Thinking 5. Industry, Professional, Discipline-Specific Knowledge and Skills	CA O T
Identify risk management issues related to coaching in relation to health and safety and apply risk management measures.	2. Application of knowledge and skills	5. Industry, Professional, Discipline-Specific Knowledge and Skills 5. Industry, Professional, Discipline-Specific Knowledge and Skills	O W

KEY	<u>Institutional Student Learning Outcomes [ISLO 1 – 5]</u>
ISLO #	ISLO & Subsets
1	Communication Skills Oral [O], Written [W]
2	Critical Thinking Critical Analysis [CA], Inquiry & Analysis [IA], Problem Solving [PS]
3	Foundational Skills Information Management [IM], Quantitative Lit./Reasoning [QTR]
4	Social Responsibility Ethical Reasoning [ER], Global Learning [GL], Intercultural Knowledge [IK], Teamwork [T]
5	Industry, Professional, Discipline Specific Knowledge and Skills

J. **APPLIED LEARNING COMPONENT:** Yes No
If YES, select one or more of the following categories:

K. **TEXTS:** Successful Coaching, 3 rd or 4 th Edition, 2012. Human Kinetics.
ISBN: 9781450400510 SUPPLIED BY INSTRUCTOR

L. REFERENCES:

NYSPHAA Coaching Standards, National Association for Sport and Physical Education Coaching Standards. NYS AAA Handbook for Athletics; NYSPHAA Handbook, 2006-2008; NOAA, www.lightningsafety.noaa.gov; "Concussion Guidelines" and Recommendations for Hydration to Prevent Heat Illness;" National Federation of High Schools, Sports Medicine, www.nfhs.org; "Heads Up;" Concussion in High School Sports, Dept. of Health and Human Services, Center for Disease Control and Prevention; www.cdc.gov; WebMD, <http://www.webmd.com/skin-problems-and-treatments/tc/default.htm>; Female Athlete Triad: An Awareness & Prevention Program for physically active females, NYSPHAA, Inc., ADA and Dairy Council, Inc., NYSED, Student Support Services Team

M. EQUIPMENT: None Needed:

N. GRADING METHOD: A-F

O. SUGGESTED MEASUREMENT CRITERIA/METHODS:

Case Studies/Lectures: write ups & questions will be addressed in class for discussion. Real world examples of chapter readings will be evaluated and determine a course of action for conflict resolution and or social impact.

QUIZZES: will consist of multiple choice, true/false, short answer, and essay questions.

Class Participation/Performance: Regular active participation in class discussions, postings, and activities. This is a cumulative portion of grade and participation is fully expected.

Learning Strategies:

- Video Lectures -via links to the NFHS modules
- Real-time quizzes to assess immediate comprehension of coaching principles.
- Projects and activities including planning forms, checklists, and other administrative coaching materials

P. DETAILED COURSE OUTLINE:

Specific topics to be covered:

- I. Orientation and Introduction to the course
- II. Philosophy related to health sciences
 - A. NASPE National Standards for Sport Coaches –
 - Domain 2 – Safety and Minimizing the Risk of Injury
 - Domain 3 – Physical Conditioning
 - Domain 4 – Growth and Development
 - B. NFHS Code of Conduct –
- III. Psychology of coaching
 - A. Coaching Diverse Athletes
 - B. Principles of Behavior
 - C. Psychological Impact on Athletes
- IV. Physiology: the body systems related to sport activity
 - A. The Skeletal System in relation to athletic competition
 - B. The Nervous System in relation to athletic competition
 - C. The Muscular System in relation to athletic competition
 - D. Functions of the Other Major Systems of the Body in relation to athletic Competition
 - E. Discussion Topics
 1. Using the sport you coach, discuss how the body systems work together to produce optimum performance.
 - Does one system dominate?
 - What would be the result if a system shut down? Examine each system. separately and the results if they shut down.
 2. How can intense athletic performance negatively impact the female reproductive system?

- V. Physical Fitness
 - A. Physical fitness for sport vs. physical fitness for daily living
 - B. Components of Fitness
 - C. Coaches Role in Developing Fitness of Athletes

- VI. Fundamentals of Conditioning
 - A. Training for Energy Fitness
 - B. Energy demands of your sport and implications for training
 - C. Measuring Energy Fitness
 - D. Designing an Energy Fitness Training Program

- VII. Sport Specific Training & Conditioning
 - A. Develop a philosophy statement for your sport on training & conditioning to share with your athletes and parents.
 - B. Annual Training Plan – include specifics on training for energy and muscular fitness for each.
 - C. Fitness Testing Schedule
 - D. Design a form/chart that can be used to develop fitness and conditioning training plan for an athlete that may need individualized attention. Include all items that you may deem necessary for athlete evaluation and training program items.

- VIII. Nutrition and Weight Management
 - A. The Coach's Role
 - B. Nutrition Basics
 - 1. Six Basic Nutrients
 - C. Discussion – Self Evaluation: How do you rate?
Discuss how well you meet your nutritional needs on a daily basis:
 - D. The Athlete's Diet
 - 1. Serving sizes, caloric intake
 - 2. Food groups:
 - 3. Seven Rules for Eating Right
 - E. Vitamins and Minerals – Key role in processing calories from food
 - F. How Much Should Athlete's Eat?
 - G. Energy Balance = Energy Intake + Energy Expenditure
 - H. When and What to Eat
 - I. The Importance of Fluids
 - 1. How much is enough?
 - 2. Fluid goals for athletes
 - J. Dietary Risk Factors

- IX. Supplements, Ergogenic Aids, and Substance Abuse
 - A. Supplements & Ergogenic Aids– what you see is not always what you get
 - B. Key Points on Supplements & Ergogenic Aids
 - C. Substance Abuse
 - 1. Illicit Drugs
 - 2. Banned Performance Enhancing Drugs by IOC, NCAA, and USOC
 - 3. The Coach's Role in Drug Prevention
 - 4. When Athletes Have a Drug Problem
 - 5. Life of An Athlete – Chemical Health Program of the NYSPHSAA

- X. Current and On-Going Health Issues
 - A. Guidelines for Management of Head Trauma in Sports (NYSPHSAA card)
 - 1. Problems in brain function
 - 2. Speed of brain function
 - 3. Unusual behaviors
 - 4. Problems with balance and coordination
 - 5. Sideline management of acute head injury:
 - 6. Medical Clearance RTP Protocol

- B Skin Disorders
 - 1. MRSA - Methicillin resistant Staphylococcus aureus
 - 2. Athlete's Foot – fungal infection
 - 3. Molluscum Contagiosum
 - 4. Ringworm
 - 5. Prevention of skin disorders:
 - C. Climate Related Health Issues
 - 1. Heat: cramps, fatigue, exhaustion, and stroke
 - 2. Cold: frostbite and hypothermia
 - 3. Managing risks:
 - C. Lightning/Thunder
 - 1. NOAA Facts:
 - 2. NYSPHSAA Thunder & Lightning Policy
 - 3. Plan Ahead
 - D. Blood Borne Pathogens - HIV, HPV and other Blood Bourne Pathogens
 - E. The Female Athlete Triad: Disordered Eating, Amenorrhea, and Osteoporosis
- X. Administrative Procedures & Risk Management
- A. Legal Implications for Coaches
 - 1. Negligence
 - 2. Determining negligence
 - 3. AED Law
 - 4. First Aid and CPR requirement
 - B. Risk Management Process
 - 1. Identify the risks
 - 2. Evaluate the risks
 - 3. Select an approach to manage the risk
 - 4. Implement the approach
 - C. Coaches' Legal Duties
 - 1. Properly plan the activity
 - 2. Provide proper instruction
 - 3. Warn of inherent risks
 - 4. Provide a safe physical environment
 - 5. Provide adequate and proper equipment
 - 6. Match you athletes appropriately
 - 7. Evaluate athletes for injury or incapacity
 - 8. Supervise the activity closely
 - 9. Provide appropriate emergency care
 - D. Other Duties
 - 1. Keep adequate records
 - 2. Provide safe transportation
 - 3. Follow due process
 - 4. Pursue proper training
 - E. Discussion: Litigation in Athletics
 - F. Risk Management: Emergency Plans – Review your schools plans/bring in for discussion
 - G. Risk Management: Facilities and Equipment
 - H. Risk Management: Responsibilities
 - I. Risk Management: School District Forms
 - J. Risk Management: Injury Recognition
 - 1. Visual and auditory clues
 - a) Immediate first aid/CPR when necessary
 - 2. Medical kits
 - a) Utilized by certified personnel
 - b) Adequate and up-to-date supplies
 - c) Injury reporting forms
 - 3. Contacting Emergency Medical Services
 - a) Procedure/policy established
 - b) Telephone and/or cell phone availability

Q. LABORATORY OUTLINE: None Yes