



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Seminars 3

2324-3-I0201D148

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#### Aims

- Definition of the competencies of the sports physiotherapy field.
- Development of basic knowledge on prevention models, rehabilitation models and return to sport for the main MSK injuries in sports practice ( with focus on youth injuries)
- Development of basic knowledge of the quality standard of injury risk profile, screening and readiness in the youth athlete.
- Development of basic knowledge about the role of support in the decision making of athletes and technical staffs.

#### Contents

- Introduction to the Main competencies of the sports physiotherapist from IFSPT guidelines
- Prevention models and injury risk profiles
- Characteristics of the youth athletes
- Screening and assessment modalities (anamnestic, structural and functional)
- Return to sports models and multidisciplinary approach

#### Detailed program

-The competencies of sports physiotherapist in athlete management, lifestyle promotion, professional formation, innovation and EBM practice

-Knowledge of the historical evolution of the injury prevention models, use of epidemiological data, generic risk index and individual risk index.

Knowledge of basic prevention programs, the multifactorial approach and their efficacy

-Anatomical, physiological, pathophysiological and psychological characteristic in the youth athlete and the impact of early specialization.

-Technical exercise and assessment of the athlete in anamnestic, structural and functional areas aimed to recognize the multifactorial nature of injuries etiology

-Theoretical models of management of injuries through the return to sport process, from injury to return to performance.

-Review of the scientific evidence and contextualization of common sports rehabilitation practices with some practical demonstrations (es. Taping, joint mobilization and recovery strategies and the multidisciplinary approach

-Antidoping policy promotion based on WADA and AIS ( Australian Institute of sports) Guidelines.

## Prerequisites

## Teaching form

## Textbook and teaching resource

-American College of Sports Medicine. (2000). *ACSM's guidelines for exercise testing and prescription*. Philadelphia :Lippincott Williams & Wilkins,

-Brukner, P., Khan, K., & Brukner, P. (2012). *Brukner & Khan's clinical sports medicine*. Sydney: McGraw-Hill

-Haff, G., & Triplett, N. T. (2016). *Essentials of strength training and conditioning. Fourth edition*. Champaign, IL: Human Kinetics.

<http://ifspt.org/wp-content/uploads/2012/04/SPTCompetenciesStandards-final-draft.pdf>

-Joyce, D., & Lewindon, D. (2016). *Sports injury prevention and rehabilitation: integrating medicine and science for performance solutions*. Abingdon, Oxon ; New York, NY: Routledge.

-Gokeler A, Seil R, Kerkhoffs G, Verhagen E. A novel approach to enhance ACL injury prevention programs. *J Exp Orthop*. 2018 Jun 18;5(1):22. doi: 10.1186/s40634-018-0137-5. PMID: 29916182; PMCID: PMC6005994.

-James O'Brien, Caroline F. Finch, Ricard Pruna & Alan McCall (2019) A new model for injury prevention in team sports: the Team-sport Injury Prevention (TIP) cycle, *Science and Medicine in Football*, 3:1, 77-80, DOI:

-Bird, Stephen & Wilson, Greg & O'Connor, Donna & Baker, Daniel & Jones, Julian. (2008). Resistance training for children and youth: A position stand from the Australian Strength and Conditioning Association (ASCA) Part 1.

Journal of Australian Strength and Conditioning.. 16. 35-42.

## **Semester**

2nd semester

## **Assessment method**

frequency

## **Office hours**

by appointment

## **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING

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