

St. Mira's College for Girls, Pune, India  
and Laguardia Community College, New York, USA

Collaborative course

MILE: Chemistry in Sports

Subject Code:                      Lectures: 30 hours                      Credits: 2

**Objectives and Learning outcomes**

**Objectives**

1. To develop an understanding of how Chemical Changes occur in our bodies while indulging in any Sports activity.
2. To recognize the importance of nutritional food in the field of Sports through an intercultural exchange of thought.
3. To appreciate the inter-connection between the chemistry of body, Nutrition and diet with the performance in Sports.
4. To share and appreciate the knowledge of Sports Chemistry through the intercultural exchange programme.

**Learning Outcomes**

- Ability to explain the chemical changes in the human body during involvement in sports activity.
- Ability to explore the Sports Culture and Diet habits across Countries.
- Ability to develop a global perspective in order to comprehend various forms of diet and nutrition with social equality and diversity
- Ability to familiarize oneself with various interdisciplinary fields using sports culture and foster advanced learning.

**Unit 1: Introduction**

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- Introduction: Pre course interactions- St. Mira's College, Pune & LaGuardia, New York
  - Ice-breakers
  - Asynchronous Discussion and interactions
  - Sharing and Collaboration on the Padlet Application

**Unit 2: : Intercultural activity/ Collaboration**

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- India and New York or other countries Sports Culture exchange (Practice plan, Workout pattern, Diet, Energy Drink Habits and Performance etc.)
  - Preparing videos/ PPTs
  - Synchronous session for disc
  - Comments of Padlet app



*J.D. Satavale*  
Course Coordinator

Unit 3: Chemical Changes in body	5
<ul style="list-style-type: none"> <li>● Lactic Acid Formation in Body</li> <li>● Hormonal Changes in Body while indulging in Sports</li> <li>● Nutritional and Diet (Energy Bar, Energy drinks, Supplements (Creatine))</li> </ul>	
Unit 4: Active Component/ Collaboration with teams	20
<ul style="list-style-type: none"> <li>● Preparing and Presenting Presentations in groups.</li> </ul>	

Other details -

A. Duration of the course- 1<sup>st</sup> March to 30th April 2022.

B. Course Co-ordinators – Dr. Marta Kowalczyk  
Mrs. Ekta Ashok Jadhav

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C. Course Instructor – Dr. Marta Kowalczyk  
Mrs. Ekta Ashok Jadhav

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D. Remuneration to the Instructor – NIL

E. Fees of the course – NIL



*J.S. Satkarvale*

Course Coordinator