

# DATA SCIENCES AND OPERATIONS

SPRING 2025

DSO 499

## **Sports Data Science and Management**

Section – 16197

Professor: Lorena Martin, PhD

**Email**

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**When**

*Mon/Wed 4:00 PM - 5:50 pm*

**Office**

*BRI 400 C*

**Units**

*4*



## WHY TAKE THIS COURSE?

Want to work in pro sports? Interested in working in a sports team?

If you want the experience from the former Director of Sports Performance Analytics of the Lakers on how to manage and analyze data, this is the course for you!

## COURSE OBJECTIVES

1. Apply data science principles to enhance decision-making and management processes within the sports industry.
2. Evaluate the application and advantages of wearable technology in enhancing sports performance.
3. Analyze and draw conclusions from sports-specific data to refine performance and inform strategic decisions.
4. Exhibit leadership and management strategies effectively within the context of the sports industry. Assess the global trends and implications of sports and performance metrics.

## KEY CONCEPTS

Key Performance Indicators in Sports

Sports Science Data Protocol

Basics of Python Coding

Statistical Analysis applied to Sports

## COURSE DESCRIPTION

Sports Data Science and Management is a comprehensive course designed for students interested in the intersection of sports, data science, and management. This course focuses on data science principles, wearable technology, data interpretation, leadership, and management within the sports industry, both traditional and esports. The course leverages the burgeoning field of sports analytics to provide students with a unique set of skills that are increasingly relevant in today's data-driven sports industry.