

# DATA SCIENCES AND OPERATIONS

FALL 2023

## **DSO 578** - *Fundamentals of sports*

*Performance Analytics*

*Section(s) –16301*

### **Professor**

*Lorena Martin*

### **Email**

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### **When**

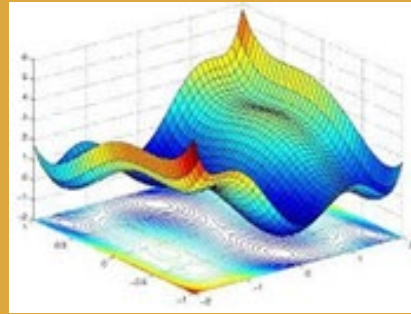
*Wednesdays, 12:30 PM – 1:50 PM*

### **Office**

*BRI 400 C*

### **Units**

*1.5*



## WHO SHOULD TAKE THIS COURSE?

Students wanting to learn the fundamentals of sports performance analytics.

## COURSE OBJECTIVES

- Learn how to code in R and Rstudio.
- Learn the intricacies of each of the major sports.
- Gain knowledge about the sports science data protocol implemented in pro sports teams.
- Examine how sports analytics are applied to performance, player drafts, injury prevention, and trade value of athletes.
- Meet experts in the sports industry field.

## KEY CONCEPTS

- Principles of the measurement model for sports
- Exploratory analysis, correlations, ANOVA, regression models
- Load Management KPIs
- Sports Science Data Collection in Pro Sports

## COURSE DESCRIPTION

This course will provide a basic understanding of the different fields within sports analytics including performance, strategy, salary cap, drafting and scouting.