

University of Florida
SPORT PERFORMANCE ANALYTICS
SPM 3703 (3 credits), Section SM53
Spring 2025

Course Information

INSTRUCTOR

Berk Uzun, B.Sc., M.Sc.

Office: FLG 206H

Office Phone: 352-294-1679

Preferred Method of Contact: berkuzun@ufl.edu

Expect a response within 24 hours M – F, 48 hours after 4pm Fri, and 48 hours on Sat or Sun.

OFFICE HOURS

Virtual Office Hours via Zoom Conferences (To be scheduled upon request)

MEETING

TIME/LOCATION

This course does **not** have scheduled meeting times. Assignments and quizzes are due on scheduled dates and times. Access course through Canvas on UF e-Learning (<https://elearning.ufl.edu/>) & the Canvas mobile app by Instructure.

1. Course Description

Students are introduced to the dynamic and captivating field of sport analytics, with a strong emphasis on performance analytics. Through a blend of theoretical principles and hands-on practical experience utilizing the R programming language, students will acquire the essential skills and knowledge required not only to proficiently analyze sport performance data but also to leverage these insights to comprehend athletic performance. In addition to mastering data analysis techniques, students will learn how to make data-informed decisions that directly impact sport management strategies and overall performance in the sports world. The course empowers students to actively engage in the ever-evolving realm of sport analytics, contributing to the continuous improvement of athletes and team management.

2. Course Objectives

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

- Develop a solid grasp of sport analytics and its ethical considerations and recognize its significance in the sport business domain.
- Apply data manipulation and visualization techniques using R, with a specific focus on sport consumer behavior, marketing, and management applications.
- Utilize regression analysis for evaluating sport performance and solving sport management problems.
- Describe the historical context and practical implications of the Moneyball revolution in sport analytics, relating it to sport business.
- Integrate knowledge and skills from sport analytics and sport management to make data-informed decisions in sport business scenarios.

3. Prerequisites

- STA 2023 & Sophomore standing & above

4. Materials and Supply Fees

There are no material or supply fees for this course.

5. Software*

The instructor will utilize R and RStudio software and Excel for various data analyses examples throughout the course. Please note that the instructor will only address programming inquiries related to the ones displayed during the class. Since this includes some references to analytics, some lectures will be dedicated to covering fundamental aspects of R, RStudio, and Excel. It is advisable for students to have a basic familiarity with these cost-effective and trending technologies. It is recommended students have RStudio installed on their computers, as the instructor will include some RStudio references and examples throughout the course during lectures and supplementary material. The course will also include Yellowdig for the review and discussion sections of the course including the reading material and podcasts.

How to obtain and install R

1. Go to <http://www.r-project.org>
2. Click on CRAN (left side panel) and select a mirror for download.
3. Select your operational system
4. Click on “Base” to download the program.

How to obtain RStudio.

1. Install R using the instructions above.
2. Go to www.rstudio.org
3. Follow the website’s instructions for downloading and installation.

RStudio and Excel – online

1. RStudio can all be accessed via UF Apps <https://info.apps.ufl.edu/>
2. Excel can be accessed via GatorCloud <https://cloud.it.ufl.edu/collaboration-tools/office-365/>

Yellowdig

1. <https://elearning.ufl.edu/instructor-help/teaching-and-learning-tools/canvas-learning-tools/learning-tools/yellowdig.php>
2. <https://www.yellowdig.co/>

Qualtrics

1. Access Qualtrics via UF eLearning <https://elearning.ufl.edu/supported-services/qualtrics/>

*Software Use

All faculty, staff, and students at the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

6. Required Textbook

There are no required textbooks, but some recommended readings include:

- Winston, W. L., Nestler, S., & Pelechrinis, K. (2022). *Mathletics: How gamblers, managers, and fans use mathematics in sports*. Princeton University Press.
- Chartier, T., & Earle, A. (2022). *Get in the Game: An Interactive Introduction to Sports Analytics (First Edition)*. University of Chicago Press. ISBN: 9780226811147.
- Eager, E., & Erickson, R. (2023). *Football Analytics with Python & R: Learning Data Science Through the Lens of Sports (1st Edition)*. O'Reilly Media. ISBN: 9781492099628.
- Schoenfeld, B. (2023). *Game of Edges: The Analytics Revolution and the Future of Professional Sports*. Norton & Company. ISBN: 9780393531688.

7. Course Format

- **Instructional Methods:** This course consists of asynchronous lectures, readings, and discussions to provide students with a variety of learning methods. You are responsible for observing all posted due dates and are encouraged to be self-directed and take responsibility for your learning.
- **Minimum Technology Requirements:** The University of Florida expects students to acquire computer hardware and software appropriate to his or her degree program. Most computers can meet the following general requirements. A student's computer configuration should include:
 - Broadband connection to the Internet and related equipment (Cable/DSL modem)
 - Microsoft Office Suite installed (provided by the university)
- **Canvas (E-Learning):** Course news, information, syllabus, and class materials can be found online at [Canvas](#). Each student will need to use his or her own Canvas account to log into the class link. If you are new to Canvas, watch the [Canvas Overview video](#) [3:58]. If you have any questions regarding Canvas, refer to the [Canvas Guides](#).
- **Zoom:** Zoom is an easy-to-use video conferencing service available to all UF students, faculty, and staff that allows for meetings of up to 100 participants. You can find resources and help using Zoom at <https://ufl.zoom.us>.
- **Lectures & Assignments:** Students will watch pre-recorded lectures and complete weekly assignments based on assigned due dates.

Course Grades & Grade Determination

Overall Course Points	Letter Grade	List of Determinants	Points	% of Grade
93-100	A	Podcast reflection (10)	50 (5 each)	12%
90-92	A-	Readings reflection (13)	65 (5 each)	16%
87—89	B+	Case review (4)	40 (10 each)	10%
83-86	B	Datacamp (6)	60 (10 each)	15%
80-82	B-	Baseball operations	10	2%
77-79	C+	Survey project	50	12%
73-76	C	Information interview	50	12%
70-72	C-	YellowDig discussion(15)	90 (6 each)	22%
67-69	D+	Overall Course Points	415	100%
63-66	D			
60-62	D-			
0-59	E			

*See current UF Grading Policies at <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/> for further details.

9. Course Assignments (further information and grading rubric will be available on Canvas for each assignment)

- **Podcast reflections**
 - Students will write brief reflections on the podcasts and submit them on Canvas. Reflections will include a brief overview of the podcast, its relevance to the week's topics, and personal thoughts and reflections related to the podcast. Students will also be expected to engage with others' reflections as part of the grade.
- **Reading reflections**
 - Students will write brief reflections on the reading material and submit them on Canvas. Reflections will include a brief overview of the readings, its relevance to the week's topics, and personal thoughts and reflections related to the readings. Students will also be expected to engage with others' reflections as part of the grade.
- **Case review**
 - Each case review will provide unique real-world examples along with applicable skills and insights for organizational and professional development. For each Case Review assignment, students will define the pre-search terms and then watch the set of Sport Business Case Reviews for the module (as described on the module overview page).
- **Datacamp**
 - Students will complete brief introductory assignments on the Datacamp website using different software. Students are not required to complete sections that require payment.
- **Baseball operations questionnaire**

- Complete the questionnaire set up by the Minnesota Twins
- **Survey project**
 - In this assignment students will be required to prepare a fan survey using Qualtrics designed to be conducted at an event or online by existing fans. The topics of the survey can vary but must include potential qualitative and quantitative analyses of the data.
- **Information interview**
 - In this assignment, students will be required to conduct interviews with two sport business professionals whose jobs are associated with one of the sport analytics branches. The interviews should also reflect the type of questions students would like to ask interviewers if they were applying for a position. It is recommended that students begin working on this assignment early on to locate two professionals willing to participate.
- **YellowDig**
 - You will take part in weekly discussions during, centered in a single Yellowdig community. The community board will be a chance for you, the student, to discuss ideas and topics most relevant to you. Prompts will be posted on the board each week by me or the discussion leaders. You will post an initial response to each of the questions/topics, as well as several subsequent posts in response to peer contributions. The point cycle for the community board changes over at 12:00am on Monday each week and will start in the second week and end on week 16. This board is worth a total of 80 points.

Detailed instructions including the grading rubric for each assignment will be posted on Canvas

10. Course and UF Policies

Attendance Policy

You are NOT physically required to be on UF's campus to complete this online course. However, you are required to complete the assignments, discussions, and quizzes on time.

Academic Conduct Policy

UF students are bound by The Honor Pledge which states:

"We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." (<http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/>)

The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

From Regulations of the University of Florida, 4.041 Student Honor Code and Student Conduct Code: Scope and Violations:

Plagiarism. A student shall not represent as the student's own work all or any portion of the work of another. Plagiarism includes but is not limited to:

- Quoting oral or written materials including but not limited to those found on the internet, whether published or unpublished, without proper attribution.
- Submitting a document or assignment which in whole or in part is identical or substantially identical to a document or assignment not authored by the student.
 - From Regulations of the University of Florida, 6C1-4.047 Student Honor Code and Student Conduct Code: Sanctions.

For a violation or violations of the Honor Code, a student may receive any of the sanctions that can be imposed for Student Conduct Code violations, including but not limited to conduct probation, suspension and expulsion as well as any educational sanctions. In addition, students may receive the following:

- Assignment grade penalty. The student is assigned a grade penalty on an assignment including but not limited to a zero.
- Course grade penalty. The student is assigned a grade penalty in the entire course including but not limited to an 'E'."

Office Hour and Contact Information

Virtual office hours are held online, via Zoom Conferences. Use Canvas mail and/or UF email (berkuzun@ufl.edu) ONLY for personal questions related to the course content or of a personal nature, such as grades, special circumstances, and needed accommodations. Expect a response within 48 hours. All online correspondence must have your full name in the message body and contain your course and section number in the subject line.

Make-up Exams and Assignments

Acceptable reasons for make-up quizzes, assignments, and other work in this course are consistent with UF's Attendance Policy: <https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/>.

Technical Issues

If you encounter a technical issue, please contact UF Computing Help Desk or utilize the one of the following self-help resources:

- Video: Canvas Student Overview [7:04].
- Which Browsers Does Canvas Support?
- How Can I Use Canvas on My Mobile Device?
- Canvas Student Guide
- Canvas Video Guide
- Zoom Conferences Student Step-by-Step Guides

Any requests for make-ups due to technical issues MUST be accompanied by the ticket number received from the UF Computing Help Desk when the problem was reported to them. The ticket

number will document the time and date of the problem. You MUST message your instructor within 48 hours of the technical difficulty if you wish to request a make-up.

Accommodating Students with Disabilities

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565), online <https://disability.ufl.edu/get-started/>, or visit the Dean of Students Office by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester. The instructor should be notified of any special accommodation required by the student when they begin their course.

Course Evaluations

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

Student Privacy

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see the Notification to Students of FERPA Rights.

Campus Resources

Resources are available on campus for students having personal problems or lacking a clear career and academic goals which interfere with their academic performance. These resources include

Student Support

- **U Matter, We Care:** If you or a friend is in distress, please contact umatter@ufl.edu or 352 392-1575.
- **Counseling and Wellness Center:** <https://counseling.ufl.edu/>, 352-392-1575.
- **Crisis Lifeline:** 988
- **Sexual Assault Recovery Services (SARS):** Student Health Care Center, 392-1161.
- **University Police Department:** 392-1111 (or 911 for emergencies) <http://www.police.ufl.edu/> .
- **Student Health Care Center:** Call 352-392-1161 for 24/7 information to help you find the care you need or visit shcc.ufl.edu.
- **UF Health Shands Emergency Room/Trauma Center:** For immediate medical care in Gainesville, call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608; ufhealth.org/emergency-room-trauma-center

Academic Support

- **E-learning Technical Support:** UF HELP Desk - 352-392-4357 (select option 2) or by email at helpdesk@ufl.edu. <https://elearning.ufl.edu/student-help/>
- **Career Connections Center, Reitz Union:** 352-392-1601. Career assistance and counseling. <https://career.ufl.edu/>
- **Library Support:** <http://cms.uflib.ufl.edu/ask>. Many ways to receive assistance with respect to using libraries or finding resources.
- **Teaching Center, Broward Hall:** 352-392-2010 or 352-392-6420. General study skills and tutoring. <http://teachingcenter.ufl.edu/>
- **Writing Studio, 302 Tigert Hall:** 352-846-1138. Help with brainstorming, formatting, and writing papers. <http://writing.ufl.edu/writing-studio/>
- **Student Complaints On-Campus:** <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>
- **On-Line Students Complaints:** <http://distance.ufl.edu/student-complaint-process/>

Weekly Tentative Course Schedule

This course schedule below is tentative and might change based on the pace of the lectures and student needs; however, changes will be announced through CANVAS. The instructor bears no responsibility for announcing the changes to each individual student. All times are in Eastern Standard Time (EST).

CRITICAL DATES & UF OBSERVED HOLIDAYS

- January 13: Classes begin (Monday)
- January 20: Martin Luther King Jr. Day (Monday)
- March 15-22: Spring break (Friday)
- April 23: Classes end (Wednesday)

Complete list available here: <https://catalog.ufl.edu/UGRD/dates-deadlines/2024-2025/#spring25text>

Weekly Course Schedule

Week	Dates	Recommended Readings	Assignments (not including reading and podcast reflections) *
#1	<u>Jan 13-19</u>	Careers in Analytics – Business Analytics	<ul style="list-style-type: none"> • Datacamp(1) • Orientation Quiz – Introduce Yourself Assignment • Yellowdig
#2	<u>Jan 20-26</u>	Careers in Analytics – Performance Analytics	<ul style="list-style-type: none"> • SBCR Assignment: Data Science & Content Creation • YellowDig
#3	<u>Jan 27-Feb 2</u>	Data Applications – Applications and Software	<ul style="list-style-type: none"> • Datacamp (2) • YellowDig
#4	<u>Feb 3-9</u>	Data Applications – Visualization	<ul style="list-style-type: none"> • Datacamp (3) • YellowDig
#5	<u>Feb 10-16</u>	Data and Research – Performance Data	<ul style="list-style-type: none"> • YellowDig
#6	<u>Feb 17-23</u>	Data and Research – Fan Demographics	<ul style="list-style-type: none"> • Survey Project • YellowDig
#7	<u>Feb 24-March 2</u>	Sports Performance Analytics – Player Development	<ul style="list-style-type: none"> • Datacamp (4) • YellowDig • Mid-Course Survey (not graded)
#8	March 3-9	Sports Performance Analytics – Scouting	<ul style="list-style-type: none"> • Datacamp (5) • YellowDig
#9	March 10-16	Sports Performance Analytics – Scouting	<ul style="list-style-type: none"> • SBCR Assignment: Dynamic Pricing • YellowDig
#10	March 17-21	Spring Break	-
#11	March 24-30	Sport Business Analytics – Sponsorship	<ul style="list-style-type: none"> • SBCR Assignment: Sponsorship Analytics • YellowDig
#12	March 31-April 6	Sport Business Analytics – Growth and Strategy	<ul style="list-style-type: none"> • SBCR Assignment: 2022 CFP Financial Planning • YellowDig
#13	April 7-13	Decision making – Using data	<ul style="list-style-type: none"> • Datacamp (6) • YellowDig
#14	April 14-20	Decision making – Translating data	<ul style="list-style-type: none"> • SBCR Assignment: Dynamic Pricing • YellowDig
#15	April 21-23	Interview	<ul style="list-style-type: none"> • Baseball Operations questionnaire • YellowDig
#16	April 24-May 2	Final project(s)	<ul style="list-style-type: none"> • Information interview • Yellowdig

*Assignments: Due by the end of the week at 11:59pm.