

Sport Marketing Analytics

SPM 4703

Class # 24205

3 Credits | Spring 2025

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Course Information

INSTRUCTOR

Lydia Yun

Office: Yon Hall 8

Email: lydiayun@ufl.edu (Preferred method of contact)

Expect a response within 48 hours

OFFICE HOURS

Virtual Office Hours via Zoom by appointment

MEETING TIME/LOCATION

All lectures will be recorded and uploaded on Canvas. Assignments and quizzes are due on scheduled dates and times. Access the course through Canvas on UF e-Learning (<https://elearning.ufl.edu/>) & the Canvas mobile app by Instructure.

COURSE DESCRIPTION

This course explores the world of sport consumer analytics within the context of the sport management field. With a strong focus on practical applications for sport consumer behavior research, this course equips students with the essential skills needed to excel in the dynamic landscape of sport business and marketing analytics. By blending statistical reasoning with real-world sport marketing and consumer behavior datasets, students will learn to extract meaningful insights that drive strategic decisions in the sport industry.

PREREQUISITE KNOWLEDGE AND SKILLS

- STA 2023

COURSE MATERIALS

There are no required textbooks for this class. Course materials (including PowerPoint slides and R scripts) will be provided by the instructor. Nonetheless, there are some books that you may find useful for the class.

Grigsby, M. (2022). Marketing Analytics: A Practical Guide to Improving Consumer Insights Using Data Techniques (3rd ed.). Kogan Page.

Grolemund, G., & Wickham, H. (2017). R for Data Science: Import, Tidy, Transform, Visualize, and Model Data (1st ed.). O'Reilly Media.

Paczkowski, W. R. (2022). Business Analytics: Data Science for Business Problems (1st ed. 2021). Springer.

All additional readings will be provided through Canvas.

Software*

The instructor will utilize SPSS, R, and RStudio software for conducting diverse analyses throughout the course. Some assignments involving statistical software usage should include the analysis code. While the course primarily focuses on sport consumer analytics rather than being a comprehensive course on statistical software, essential class time will be dedicated to covering fundamental aspects of SPSS, R, RStudio, and relevant R packages. It is advisable for students to have a basic familiarity with these technologies. Moreover, students are expected to have R and R studio installed on their computers, as the instructor will extensively utilize R throughout the course. For SPSS, you can find at UF Apps.

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.

How to open SPSS.

1. Go to <https://info.apps.ufl.edu/>
2. Login to UF Apps
3. Download Horizon Client, if it is not installed yet.
4. Open with VMware Horizon Client
5. Click UFApps – Regular Applications
6. Search SPSS
7. Open IBM SPSS Statistics

***Software Use**

All faculty, staff, and students of 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.

MATERIALS AND SUPPLY FEES

There are no supply or material fees for this course.

COURSE FORMAT

- Instructional Methods: This course consists of recorded lectures and hands-on applications 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.

- **Lectures** – Introducing key concepts relevant to that week’s topic (All lectures will be uploaded on CANVAS).
- **Hands-on Applications** – Analyzing the data with statistical approaches that are related to that week’s topics vis SPSS or R (All relevant videos will be uploaded on CANVAS).
- **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)
- **Minimum Technical Skills:** To complete your tasks on this course, you will need a basic understanding of how to operate a computer, and how to use word processing software.
- **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](#).

COURSE LEARNING OBJECTIVES:

By the conclusion of this course, students will have developed the skills and knowledge to:

- Analyze and Interpret Sport Marketing and Consumer Behavior Data: Understand the fundamental processes involved in comprehending datasets specific to sport marketing and consumer behavior.
- Employ Key Technical Skills for Sport Business Analytics: Develop the ability to process, clean, and manipulate data, and utilize statistical techniques to extract meaningful information for managerial purposes.
- Apply R Programming Language and SPSS Software: Gain hands-on experience with the R programming language and SPSS program widely used in business analytics.
- Assess Univariate Data Analysis for Predictive Insights: Acquire the skills to employ univariate data analysis techniques for estimating predictive models in the realm of sport consumer behavior.
- Analyze and Interpret Text Data: Develop the capacity to analyze text data via text and sentiment analyses.

Course & University Policies

ATTENDANCE POLICY

You are NOT physically required to be on UF’s campus to complete this online course. However, you are required to watch the recorded lectures and to complete the assignments, quizzes, exam, and group project 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'.**

ASSIGNMENTS GUIDELINES

- Assignments must be typed and double-spaced, using 12-point font, Times New Roman, and 1-inch margins. If applicable, upload assignments to CANVAS using Word and following **APA guidelines** (https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html). Points are deducted if appropriate grammar, spelling, punctuation, and sentence structure are not used. Proofread all assignments. Include citations if you are citing someone else's work.
- Technology problems are not acceptable excuses for late assignments or missed exams.
- Refer to the Course Schedule and/or Canvas for assignment due dates.

OFFICE HOUR AND CONTACT INFORMATION POLICY

Use UF email (lydiayun@ufl.edu) 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 on the message body** and contain **your course (Sport Marketing Analytics) and section number (SPM4703) in the subject line**. Please follow the **formal email format**.

MAKE-UP POLICY

- Acceptable reasons for make-up quizzes, assignments, discussions, and other work in this course are consistent with UF's Attendance Policy:
<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.
- Acceptable reasons for an absence or failure to engage in class include:
 - Documented illness, Title IX-related situations, serious accidents or emergencies affecting the student, their roommates, or their family, special curricular requirements (e.g., judging trips, field trips, professional conferences), military obligation, severe weather conditions that prevent class participation, religious holidays, participation in official university activities (e.g., music performances, athletic competition, debate), and court-imposed legal obligations (e.g., jury duty or subpoena). Other reasons (e.g., job interview or club activity) might be deemed acceptable if approved by the instructor.
 - For all planned absences, a student in a situation that allows an excused absence from a class, or any required class activity must inform the instructor as early as possible prior to the class.
 - For all unplanned absences because of accidents or emergencies, students should contact their instructor as soon as conditions permit.
 - The university recognizes the right of the instructor to make attendance mandatory and **require documentation for absences (except for religious holidays), missed work, or inability to fully engage in class**. After due warning, an instructor can prohibit further attendance and subsequently assign a failing grade for excessive absences.

TECHNOLOGY 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 at 352-392-HELP (4357) 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://accessibility.ufl.edu/>, 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.

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>.

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/>.

CHANGING NAME DISPLAY IN CANVAS

- It is important to the learning environment that you feel welcome and safe in this class and that you are comfortable participating in class discussions and communicating with me on any issues related to the class. If your preferred name is not the name listed on the official UF roll, please let me know as soon as possible by e-mail or otherwise. I would like to acknowledge your preferred name, and pronouns that reflect your identity. Please let me know how you would like to be addressed in class, if your name and pronouns are not reflected by your UF-rostered name. I welcome you to the class and look forward to a rewarding learning adventure together.
- You may also change your "Display Name" in Canvas. Canvas uses the "Display Name" as set in myUFL. The Display Name is what you want people to see in the UF Directory, such as "Ally" instead of "Allison." To update your display name, go to one.ufl.edu, click on the dropdown at the top right, and select "Directory Profile." Click "Edit" on the right of the name panel, uncheck "Use my legal name" under "Display Name," update how you wish your name to be displayed, and click "Submit" at the bottom. This change may take up to 24 hours to appear in Canvas. This does not change your legal name for official UF records.

IN-CLASS RECORDINGS

- Students are allowed to record video or audio of class lectures but NOT other students in the course. Recordings are strictly controlled and must be (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited.
- Students may NOT publish recorded lectures without the written consent of the instructor.
- A “class lecture” is an educational presentation intended to inform or instruct enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course.
- A class lecture does not include lab sessions, student presentations, and clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, and exams), field trips, and private conversations between students in the class or between a student and the faculty or lecturer during a class session.
- **Publication without the permission of the instructor is prohibited.** To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third-party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.”

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: https://registrar.ufl.edu/ferpa/](https://registrar.ufl.edu/ferpa/).

Getting Help

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 e-mail to Learning-support@ufl.edu. <https://lss.at.ufl.edu/help.shtml>
- **Career Connections Center, Reitz Union:** 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:** 392-2010 or 392-6420. General study skills and tutoring. <http://teachingcenter.ufl.edu/>
- **Writing Studio, 302 Tigert Hall:** 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/>

Assignments and Grading

ASSIGNMENT WEIGHTS

The table below provides an outline of all course assignment weights towards the total course grade.

Category	% of Total Grade	Descriptions	% of Grade
Self-introduction	1%	Upload the student profile (1%)	1%
Quizzes	26%	Orientation quiz	1%
		Bi-Weekly quizzes (Total 5 quizzes)	5% each
Weekly Assignments	36%	Hands-on application of statistical analytics related to each week's content (Total 9 assignments)	4% each
Exam	15%	Mid-term Exam	15%
Final Group Project	22%	Final group project presentation	18%
		Feedback on other groups' presentations	3%
		Peer evaluation	1%
	100%		100%

ASSIGNMENT DESCRIPTIONS

- **Student Introductory Assignment:** Getting to know each other in an online course is harder, so let's start with some introductions! Include your major, something that you find interesting about the Sport Marketing Analytics course, and something that you do for fun. Also, tell us what you hope to get from this course! Please upload your profile (discussion section) on Canvas. You may like and reply to your classmates' posts!
- **Orientation Quiz:** Each student is required to review the course syllabus and other important course-related information (such as Week 1 video) and then take the quiz to check their knowledge. Students will have multiple attempts to complete the quiz.
- **Bi-weekly Quizzes:** During the semester, a total of five bi-weekly quizzes will be administered. These quizzes will encompass material from the recent two weeks' lessons or content assigned for specific topics. Quiz formats may include true/false, multiple-choice, and short-answer questions. Please note that there are no provisions for makeup quizzes in case you missed the due dates of the quizzes. The quizzes are designed to gauge your grasp of the current material and encourage consistent engagement with the course content. Make-up quizzes may be allowed by following the [university policies](#).
- **Weekly Assignments:** Throughout the course, you will complete a total of nine assignments that are specifically tailored to the analysis of sport business and consumer behavior data. These assignments are designed to guide you through interpreting results in the domain of sport marketing research and sport consumer analysis scenarios. You will utilize statistical software to carry out the analysis. Your grades for the exercises will be determined based on the accuracy of completed portions of each exercise set. **Any assignments turned in after the designated due date will receive a penalty (50 % of the available points within 24 hours after the due date). Assignments will not be accepted after 48 hours.**
- **Exam:** There will be one mid-term exam and will comprise 15% of your final grade. The examinations will assess lecture content and materials distributed during class sessions. Exam

formats may include a diverse range of question types, such as true/false, multiple choice, short answers, and essay questions. These assessments are designed to gauge your understanding of the course material and your ability to apply critical thinking skills to sport consumer analytics concepts. A make-up exam will be given in the instance where a student has an excused absence as defined by the UF Policy:

<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx> and the instructor is notified of the absence prior to the exam date. In the case of an emergency situation proper documentation must be provided, after which the proper steps will be taken in line with the University Policy.

- **Final Group Project:** Students are required to complete a research project of their own choice on one or two methods covered in this course. These include but are not limited to statistical analysis, text analysis, and sentiment analysis. The premise of the project must be closely related to some aspect of the course material but may explore an avenue that was left unaddressed in class. The group will be determined by the instructor, and each group will consist of 5 to 6 members. Each group will present their PowerPoint presentation for a 20-minute. The presentation should include the main research question and/or hypotheses, detailed methods, and major findings. The final presentation should be recorded via Zoom.

The final presentation must include the following (Total 18 points):

1. Introduction and Background Information: This section should include the motivation and background of your project. Explain the context and why the problem matters. Why are they worth studying? What difference would be knowing the answers make? (3 points)
2. Methods: (A) Dataset- Describe the real, existing dataset that you used (3 points). (B) Data Analysis- Describe how you analyzed the data. (4 points)
3. Results: Present and discuss your research results. Focus in particular on the most interesting, surprising, or important results. Discuss the consequences or implications. Make sure to include tables, graphs, or figures. (4 points)
4. Discussion: Interpret and describe the significance of your findings in light of what was already known about the research problem. Also, include the limitations of your approach. (4 points)

Feedback on other groups' presentations:

Students are required to watch other groups' presentations and provide constructive feedback or ask questions to each of the team. Each reply should be at least 75 words.

***Peer evaluation:**

You will be evaluated by the end of the semester by your team members. This is not a popularity rating but an objective evaluation of the commitment and quality of your efforts and contributions as seen by your team members. An average for both evaluations over the course of the semester will be computed for each team member. The evaluation form will be uploaded on the course Canvas at the appropriate time. All evaluations are strictly confidential. Your average team evaluation at the end of the semester will be used to adjust the amount of team points that you will receive as follows:

Your average evaluation for semester	Your percent of team points received
90% or above	Full points (100%)
85% to 89%	90%

80% to 84%	70%
70% to 79%	50%
69% or below	10%

For instance, let's assume your team performs exceptionally well and earns the maximum number of team points for the semester, which is 18 points. However, if your team feels that you didn't contribute significantly and consequently rates you an average evaluation of 81%, you would receive only 12.6 points (18 * 70%) for all team-based assessments. Conversely, a team member with an average evaluation of 92% would secure the full 18 points for all team-based assessments. This example illustrates how group evaluations can lead to significantly different grades for members within the same team.

Peer evaluation **is not optional**. If you fail to turn in an evaluation for any person on your team at the time that evaluation is due, you will receive **ZERO point for the final group project**.

GRADING SCALE

- Grades will be posted in the CANVAS gradebook. Final grades are based on the accumulation of points the student earns throughout the semester. Total points are converted to letter grades using the grading scale below. Grades will not be rounded up. The grading scale is strictly enforced and unchangeable. The professor will NOT change grades at the end of the semester because the student is unhappy with their academic performance. Asking the instructor for extra credit or special exceptions to these grading policies will be interpreted as an Honor Code violation (i.e., asking for preferential treatment) and will be handled accordingly. More detailed information regarding current UF grading policies can be found here: <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>.

Letter Grade	Percent of Total Points Associated with Each Letter Grade	GPA Impact of Each Letter Grade
A	93.00 – 100.00	4.0
A-	90.00 – 92.99	3.67
B+	87.00 – 89.99	3.33
B	83.00 – 86.99	3.0
B-	80.00 – 82.99	2.67
C+	77.00 – 79.99	2.33
C	73.00 – 76.99	2.0
C-	70.00 – 72.99	1.67
D+	67.00 – 69.99	1.33
D	63.00 – 66.99	1.0
D-	60.00 – 62.99	0.67
E	00.00 – 59.99	0

Weekly Tentative Course Schedule *(Subject to Change)*

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).

Lectures, Activities, Exams & Presentations

Week	Content
1	Course Syllabus & Instructor Introductions Introduction to Business Analytics in Sport
2	Describing Distribution of a Variable
3	Finding Relationships among Variables
4	Hypothesis Testing 1 (t-test)
5	Hypothesis Testing 2 (ANOVA)
6	Regression
7	Mid-term Exam
8	R programming
9	Volume Analysis
10	NO CLASS – Spring Break
11	Text Analysis
12	Sentiment Analysis
13	Case Study (Title: How do fans respond to athlete migration in social media? The Cases of Lionel Messi and Cristiano Ronaldo)

14	<i>Final Presentations</i>
15	NO CLASS – Reading Days (Provide feedback on other groups’ presentations and complete peer evaluation)

Weekly Tentative Dates & Deadlines (*Subject to Change*)

This deadline 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).

Week	Assignment
1	Self-introduction (Upload student profiles) and Orientation quiz Due by 11:59 pm, 1/23
2	Quiz 1 and Assignment 1 Due by 11:59 pm, 1/30
3	Assignment 2 Due by 11:59 pm, 2/6
4	Quiz 2 and Assignment 3 Due by 11:59 pm, 2/13
5	Assignment 4 Due by 11:59 pm, 2/20
6	Quiz 3 and Assignment 5 Due by 11:59 pm, 2/27
7	Mid-term Exam Due by 11:59 pm, 3/6
8	Assignment 6 Due by 11:59pm, 3/13
9	Quiz 4 Assignment 7 Due by 11:59pm, 3/27
10	NO CLASS – Spring Break
11	Assignment 8 Due by 11:59pm, 4/3

12	Quiz 5 and Assignment 9 Due by 11:59pm, 4/10
13	No Assignment
14	<i>Final Presentations</i> Due by 11:59pm, 4/18
15	Feedback on other groups' presentations and Peer evaluation Due by 11:59pm, 4/23