

IDH3034: The Tao of Sports

Fall 2019 Course

Syllabus

Class room CASE 134

Instructor: Dr. Lichter

Phone: 305-348-6209

Office hours: MW 3-5 or by appointment

Class hours: MW 12:30pm-1:45pm

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A. Course Description

In the “The Tao of Sports”, we will try to make sense of why sports are such a unique and popular human experience. We will study the underlying physical sciences that govern the games we know and love and balance that with the social component and even religious experiences felt by athletes/fans. In terms of physical sciences, we will spend some time looking at the physics of sports (estimating the position, speeds, acceleration, forces, energy and other quantifiable measurements of players/objects associated with soccer, basketball, football, baseball, as well as some of the less popular sports). One of the objectives for this component of the course is an ability to predict (with best possible certainty) outcomes of plays as a result of variables we can measure/observe. We will also look at the biological sciences with respect to general health, energy sources from nutrition, injuries, performance enhancing drugs, and more. In the social sciences component, we will be covering everything from gender, age, race, finances, deviance and violence in sports. Objectives in the social sciences component include an understanding for how sports impacts societies. In terms of how this class can be applied to your future career, students interested in the sports industry might find avenues they would like to consider especially after class discussions and assignments.

The format of the class sessions is going to be a mix of lecture, student centered problem solving, discussions, watching videos, and student led presentations. Students will often be required to watch videos/read textbook before coming to class. It will also be ***Mandatory*** to attend 2 sporting events during each semester for assignment purposes (explained more in detail in the section on assignments). The quizzes and assignments will cover the material that is discussed in the classroom so participation in the course is so critical for both your participation grade and your ability to learn.

B. Pre-requisites

Pre-requisite: IDH1001/1002

C. Learning Outcomes

With respect to the *physical sciences* content in this course, it will be expected that students will be able to:

- Quantify distances, speeds, forces, energies and a variety of other quantifiable analytics of sporting events
- Use the “center of mass” concept to describe the motion and trajectory of sporting objects (i.e. balls and athletes)
- Define hang time and vertical leap using mathematics
- Make estimations of what might happen in a sporting event based on video analysis

- Understand the concept of collisions in sports and how they work
- Quantify the energy consumed in food and expended in sport, and try to evaluate the energy input/output relationship
- Develop an appreciation for the variety of physical principles underlying the sports we watch and play
- Attend sporting events and try to understand the performance of athletes as a function of the physical sciences underlying the sport

With respect to the *social sciences* content in this course, it will be expected that students will be able to:

- evaluate the concept of sports as *sites* for socialization
- analyze the importance of youth sports in terms of social structure and parenting
- investigate the gender inequality found historically in sports
- evaluate the concept of sports as building character and the risk of deviant overconformity
- analyze the prevalence of violence in sports
- look at how race relations have changed through sports
- understand the economics associated with sports, especially when it comes to the building of mega million dollar sports stadiums and how this affects local communities
- argue the idea of sports as a religion, as well as to see how religions have impacted sports over the course of history
- understand such economic principles as opportunity costs, market demands, game theory, supply and demand through fantasy football

The course has quite a few outcomes in mind and given that the course is a 2-semester course, some of the learning outcomes will carry through to the Spring.

D. Text/supplies

Required:

1. *Tao of Sports Textbook* – Can be found in bookstore (\$100) good for both fall and spring semesters
2. Access to Canvas page for access to videos/extra readings
3. calculator (scientific or graphing)

E. Grading Scheme

Students will be graded with the following percentages:

- | | |
|--------------------------|-----|
| 1. Homework | 20% |
| 2. Quizzes | 20% |
| 3. Sporting event papers | 30% |
| 4. Fantasy Football | 10% |
| 5. Infographic | 10% |
| 6. Class Participation | 10% |

Total	20% + 20% + 10% + 30% + 10% + 10% = 100%
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Homework (20%)

There will be homework assignments up on canvas. HW questions will be associated with the readings we will be doing. Due dates will be announced online and in class. Some of the homework questions *may* be used as quiz questions.

Quizzes (20%)

You will be given 4 in-class quizzes (each worth 5% of your total grade). The tentative dates for the quizzes are listed in the calendar and will be verified at least one week in advance in class. The quizzes will consist of a variety of multiple choice, short answer, and essay questions. They will cover the material we discuss in class, the readings, any videos or assigned material.

Sporting Event Papers (15%)

It is MANDATORY to attend 2 sporting events this semester and to report about them.

For each of the events you MUST provide a selfie from the event along with a 1000 word paper.

For the first paper (due week 7) you will be investigating the PHYSICAL sciences.

- Use any formulas and estimations to quantify data from the event you attend. The quantifiable data can be anything you wish. Examples could be the # of dribbles of a ball, the distance a home run is hit, the speed of a serve, the temperature and its impact on the game. But these are just examples and anything is acceptable. Think about what you might want to quantify before you go the event. We will have quite a few physics equations learned by this point in the semester so feel free to use any of those
- Show any calculations to support your claims. You won't be graded so much on your accuracy as much as in your reasoning and the way you present it.

For the second paper (due week 14)

- Observe any of the social components that we have discussed in class. Provide some analysis of the social component of your interest showing that you have thought deeply into the event you attended. This means don't just say: "*There was mostly _____ people.*" If you want to discuss the demographics, give an explanation as to the age, gender, cultural, and other observable backgrounds and even speak to some of the attendees. The social principles we should have discussed to this point will include: **children in sports, deviance, gender, economics, race**. However if you want to discuss something that is not yet talked about in class, that is fine too.

New for 2019!! If you attend an event together with another classmate the two of you can write the paper together and submit for one grade! You must have a selfie together with that person. This can be done for both assignments

Here are a list of events to consider attending. If you choose to attend an event not provided here, please verify with Dr. Lichter that the event qualifies.

- Any FIU sports event: <https://www.fiusports.com/index.aspx>
- Miami Dolphins games: <http://www.nfl.com/schedules/2018/REG/Dolphins>
- Miami Heat games: <https://www.nba.com/heat/schedule>
- Miami Marlins games: <https://www.mlb.com/marlins/schedule>

- Florida Panthers games: <https://www.nhl.com/panthers/schedule/>
- NASCAR championship weekend at homestead: <http://www.homesteadmiamispeedway.com/>
- Local marathons/triathlons/ultramarathons

Fantasy Football (10%)

Throughout the Fall semester we will be using fantasy football to study basic economics (some topics we will discuss include opportunity cost, gains and advantages from trade, supply and demand shocks, consumer surplus, game theory, imperfectly competitive markets and more). Each student will be responsible for drafting a team and participating weekly. Grades will be based on participation and assignments associated with the league.

NCAA Student-athletes are exempt from this assignment. Even though this assignment has no wagering and no betting of any type, a separate assignment for student-athletes who are forbidden to engage in any fantasy football league will be determined between the faculty and the student. The assignment will be economics related and will be discussed between the student and Dr. Lichter

Infographic (10%)

You will be assigned to a group of 3 and will be required to put together an infographic showing the physical science underlying a sport of your choice. The idea is that your group will try to explain something that is not so simple to explain (i.e. the bend to a soccer kick, the difficulty of a half-court shot in basketball, explaining the movements on the half pipe in snowboarding). The graphic will be submitted during finals week. The purpose of this assignment is to help you learn how to present things in a professional, clear manner. These types of infographics are so commonly used in business, research, and science such that is almost as useful for you as a research paper in that area, if not even more valuable for its visual pleasure. You can find more valuable information on how to make an infographic (10 steps to designing one: <http://www.fastcodesign.com/1670019/10-steps-to-designing-an-amazing-infographic>). You will be graded on the infographics presentation, the information presented (accuracy and amount), and your use of sources. Also, while tempting to try and copy an existing infographic from the internet, note that plagiarism is an academic misconduct offense so *do not copy* something already done (you may get inspiration from something already done, but do not copy). This assignment satisfies learning outcomes for your honors portfolio.

Participation (10%)

A big part of this class will be the in-class discussions and your feedback on the readings assigned. Your involvement in the class will be evaluated, so it will be advantageous to be in class every time and to be involved in class discussions or assignments. If you have a valid excuse for an absence (legal, medical, interviews, athletics), you will need to email me with subject "IDH3034 Excused Absence" and then in the message you must include any documentation. If you do not follow these instructions you will not be excused from that class.

F. Tentative Grading Scale

- 90-100 A
- 80-89 B
- 70-79 C
- 60-69 D
- 0-59 F

(+/- grades will be given at the junctions between letter grades)

G. Honor code/Conduct code

In The Honors College, the term “honor” refers both to academic accomplishment and character. Students in Honors should therefore adhere to and be held to the highest standards of personal academic accountability. Academic dishonesty in any form, including plagiarism, is antithetical to the very definition of being an Honors student at FIU. Consequently, an Honors College student found responsible for academic misconduct will be dismissed from the College.

An Honors faculty member may bring charges of academic misconduct against an Honors student if the faculty member suspects plagiarism or other forms of academic misconduct. The faculty member will decide whether to pursue informal resolution, file formal resolution charges, or take no further actions, and will follow the procedures outlined in the Honors College website (<http://honors.fiu.edu/students/policies/#misconduct>) and Academic Misconduct Procedures.

Registration for this course implies an acceptance of and compliance with the Honors College policies for students and the FIU Code of Academic Integrity. Please refer to the following documents for additional information.

H. Disabilities

Students with disabilities who feel they may need accommodations in class should visit the Office of Disability Services (website: <http://drc.fiu.edu>) and ensure the appropriate accommodations. Please be certain to present Dr. Lichter with the documentation as soon as possible. As exam time draws near, it will be the responsibility of the student to arrange a time to take the exam at the DRC.

I. Religious Observances

Every effort will be made, where feasible and practical, to accommodate students whose religious practices coincide with class requirements scheduling. Please make sure to notify your instructor at the beginning of the semester of which dates you will be absent or any anticipated problems with completing course work.

J. Student Portfolios

The Honors College will be using a portfolio method to assess students’ learning outcomes. The portfolio allows for maximum flexibility in gauging student learning. Students decide (with instructor consultation) what “artifacts” or assignments to include for consideration in their portfolios to demonstrate successful achievement of each of five key student learning outcomes over the 4-year Honors experience. Portfolios provide a rich context for students to show what they have learned and to explain their learning process. The purpose of the portfolio is to assess how successfully our curriculum fulfills its goals and is not graded, though it is a requirement for graduation from the Honors College. Because the Honors curriculum is meant to be thought-provoking and reflective, student self- assessment through portfolios will facilitate learning and provide in-depth assessment. Each course will include at least one assignment that could potentially fit portfolio requirements. For more information on the student learning outcomes and constructing a portfolio for your senior year, see www.honors.fiu.edu/portfolios.

K. Honors Citizenship Requirements

Beginning in Fall 2014, Honors College students are required to accumulate at least 20 citizenship points each academic year (Fall and Spring) by attending Honors College activities. Students attending only one

semester (Fall or Spring) are required to accumulate 10 citizenship points.

L. Community Service Requirement

All Honors College students must complete at least 20 volunteer service hours per academic year (fall/spring). An important part of being a member of the Honors College is demonstrating leadership by serving the extended community. The best way to be involved is by working with the City of Sweetwater via our unique Honors College-Sweetwater Partnership. Opportunities there include tutoring, working with the Senior Citizens' Center, offering citizenship classes, and helping the Li'l Abner Foundation's work with children. Other opportunities include working with virtually any non-profit organization and campus fundraising projects. For more information, contact the Coordinator of Student Programs at 305-348-4100. To document your community service hours, log onto MyHonors. Volunteer hours DO NOT count toward the 20 citizenship points.

M. Honors Education in the Arts (HEARTS)

The HEARTS program is designed to give Honors College students opportunities to explore and appreciate different artistic and cultural traditions and modes of artistic expression. HEARTS will also serve as a clearinghouse (and curatorial framework) for our students to experience the arts on campus and in the community by providing them with information about cultural activities and access to performances with free or discounted tickets. See <http://honors.fiu.edu/hearts/>

N. Global Learning Outcomes

Global Awareness: Students will be able to demonstrate knowledge of the interrelatedness of local, global, international, and intercultural issues, trends, and systems.

Course Learning Outcome: Students will demonstrate knowledge of the interrelated global dynamics (social-cultural, political, economic, etc.) that shape aesthetics, values, and authority in diverse cultural contexts.

Global Perspectives: Students will be able to develop a multi-perspective analysis of local, global, international, and intercultural problems.

Course Learning Outcome: Students will be able to analyze multiple global forces that shape their understanding of aesthetics, values, and authority—economic, political, sociological, technological, cultural, etc.

Global Engagement: Students will be able to demonstrate a willingness to engage in local, global, international, and intercultural problem solving.

O. Tentative class calendar

	Topic	Video link/ Chapter	Assignment/Event
Week 1: Aug 26th/28th	Tao Basics, Sports overview, Fantasy Football	Tao	Thursday 8/29: Fantasy Football Draft
Week 2: Sept 2nd/4th	Who plays Sports and Why	12	
Week 3: Sept 9th/11th	Warm up: Basic Science concepts and Racing <i>Mathematically</i> : speed, velocity, acceleration, gravity, vertical leap, hang time	1	Mon 9/9: Quiz 1
Week 4: Sept 16th/18th	Basic sciences continued, Forces in sports started	2	
Week 5: Sept 23rd/25th	Forces in sports: weight, free body diagrams, Newtons 2 nd and 3 rd laws of thermodynamics, Friction	2 & 3	
Week 6: Sep 30th/Oct 2nd	Forces and kinematics continued	3 & 4	Wed 10/2: Quiz 2
Week 7: Oct 7th / 9th	Children in Sports: the culture, the upward mobility, and the impact	13	Wed 10/7: Sporting event paper 1 (physical sciences paper)
Week 8: Oct 16th/18th	Children in Sports continued	13	
Week 9: Oct 23rd/Oct 25th	Deviance in Sports: the idea of deviant overconformity, the widespread acceptance of sports myths ("sports build character") and its consequence	14	
Week 10: Oct 30th/Nov 1st	Deviance in Sports continued: drug testing	14	Mon 10/30: Quiz 3
Week 11: Nov 6th/8th	Gender in Sports	15	
Week 12: Nov 13th/15th	Gender in Sports (continued)		
Week 14: Nov 20th /Nov 22nd	Religion and Sports	21	Mon Nov 20 th : Sporting event paper 2 (social sciences paper)
Week 15: Nov 27th /Nov 29th	Ultra-sports: redefining limits, spirituality in sports, defying concepts of energy, "flow"		Mon 11/27: Quiz 4
Week 16: Dec 2nd /Dec 4th	Infographic workshop		
FINALS WEEK Dec 9th /11th	NO FINAL EXAM		Wednesday 12/11: Infographic (submit to canvas)