IDH3034: The Tao of Sports
Fall 2018 Course
Syllabus

Class room PC 425
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A. Course Description

In this course "The Tao of Sports", we will try to make sense of why sports are such a unique and popular human experience. We will study both the underlying physical sciences and balance that with the social component and even religious experiences felt by athletes/fans. In terms of physical science, we will look at things like 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 (i.e. car racing, diving, figure skating, and others). 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 and perform well on exams.

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 *physical 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* and access to Connect online course (ISBN 9781307299960) – Can be found in bookstore ($125) good for both fall and spring semesters
2. Access to Canvas page for access to videos/extra readings
3. i-clicker
4. calculator (scientific or graphing)

E. Grading Scheme

Students will be graded with the following percentages:

1.	Homework	20%
2.	Quizzes	20%
3.	Infographic	10%
4.	Sporting event papers	30%
5.	Fantasy Football Activity	10%
6.	Class Participation	10%
	Total	20% + 20% + 10% + 30% + 10% + 10% = 100%

Homework (20%)

There will be homework assignments up on our online homework system from McGraw Hill (Connect). HW questions will be associated with the readings we will be doing. Due dates will be announced online and in class. Students will have unlimited attempts to get the questions correct. 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.

Infographic (10%)

You will be assigned to a group of 3 and will be required to put together an infographic show 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). It will be presented in class and should be self explanatory. The purpose of this assignment is that infographs are so commonly used in business, research, and science such that is tantamount to a research paper in that area, if not even more valuable for its visual pleasure. You can find more valuable information on how to arrange the infograph (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.

Sporting Event Papers (15%)

It is MANDATORY to attend 2 sporting events this semester and to report about the event. For each of the events you will be required to provide a selfie from the event along with a 1000 word paper that summarizes what occurred and answers the following questions/suggestions:

- What scientific principle did we recently learn about that you were able to see utilized in this sporting event?
- Use any formulas and estimations to quantify data from the event you attend. Show any calculations to support your claims. You wont be graded so much on your accuracy as much as in your reasoning and the way you present it.
- What social principles did we recently learn about that you were able to see at the event you attend?

If you wish to hone in specifically on the physical sciences only or social sciences only, that is acceptable. The key to this assignment is to see whether you can apply what you are learning to sporting events you attend. This assignment satisfies learning outcomes for your honors portfolio.

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 (Dr. Lichter will provide a list on canvas, highly suggested to consider the *Icarus ultramarathon* in Snyder Park in November)

Fantasy Football (10%)

Throughout the Fall semester we will be using fantasy football to study basic economics (covering such topics as 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. The winner of each league will receive a bonus 5% towards the entire course grade.

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	Reading	Assignment/Event
Week 1: Aug 21st /23rd	Overview, Sports overview, Fantasy Football Introduction		
Week 2: Aug 28th/30th	Who plays Sports and Why	Coakley, 3	Tuesday 8/28: **Quiz 1** Thursday 8/30: Fantasy Football Draft
Week 3: Sep 4th/Sep 6th	Warm up: Basic Science concepts and Racing *Mathematically*: speed, velocity, acceleration, gravity, vertical leap, hang time	Lisa, 1&2	
Week 4: Sep 11th/Sep 13th	Forces in sports: weight, free body diagrams, Newtons 2nd and 3rd laws of thermodynamics, Friction	Lisa, 3	
Week 5: Sep 18th/ Sep 20th	Forces in sports: two moving bodies, race cars, Projectile Motion	Lisa, 3 and 4	Thursday 9/20: **Quiz 2**
Week 6: Sep 25th/Sep 27th	Continue Projectile Motion	Lisa, 4	Tues 9/25: **Sporting Event paper 1**
Week 7: Oct 2nd / Oct 4th	Children in Sports: the culture, the upward mobility, and the impact	Coakley, 4	
Week 8: Oct 9th/Oct 11th	Deviance in Sports: the idea of deviant overconformity, the widespread acceptance of sports myths ("sports build character") and its consequence	Coakley, 5	
Week 9: Oct 16th/Oct 18th	Violence in Sports: boxing, MMA, concussions, target violence against sporting events (i.e. Boston marathon bombing, 1972 Munich Olympics)	Coakley, 6	Tuesday 10/16: **Quiz 3**
Week 10: Oct 23rd/Oct 25th	Gender and Sports: *Orthodox gender ideology* and the way sports perpetuates it, progress towards equity, case studies	Coakley, 7	
Week 11: Oct 30th /Nov 1st	Religion in Sports: is sports a religion, how have religions impacted athletes	Coakley, 15	
Week 12: Nov 6th/Nov 8th	Ultra-sports: redefining limits, spirituality in sports, defying concepts of energy, "flow"		Thursday 11/8: **Quiz 4**
Week 13: Nov 13th /Nov 15th	Ultra-sports continued, in class time to work on infographics		
Week 14: Nov 20th/Nov 22nd	**Infographic presentations**		Tuesday 11/20: **Infographics**
Week 15: Nov 27th /Nov 29th	Semester wrap up and look ahead to Spring		Tuesday 11/27: **Sporting Event paper 2**