



IDH3034: Tao of Sports Fall 2021 Course Syllabus



Class hours: MW 12:30pm – 1:45pm

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A. Course Description

In the “Tao of Sports”, we analyze the unique and popular human experience broadly referred to as *SPORTS*.

What makes something a sport? What makes someone good at a sport?

Why and how do people get into playing sports?

What are the benefits and consequences of sports?

What do we learn about human behavior and life through Sports?

The main outcome for this course is a better understanding of human behavior as well as principles from disciplines in the STEM fields (biology, chemistry, neuroscience, and others) and the social sciences (sociology, anthropology, political science, religion and more).

This semester in particular we will be honing in on three important (and timely) concepts within sports: (1) exercise, (2) nutrition and (3) gender.

The main goal of each of the three modules will be to understand with greater acuity just what these three concepts entail, what objective truths (if any) can be surmised, and how to know what information can be trusted and valued. Lots of questions, myths, sub-concepts within these 3 major modules will be tested, questioned and verified if possible.

One additional fun and challenging component of this course will be your own ability to rise to a physical challenge of endurance by taking on a 10K run/walk. This experiential assignment has the potential to be both physically and mentally rewarding, depending on how into it you are.

Why will you benefit from this class? This class should force you to think about sports with more depth than your average conversation with friends. You have chosen to take this course because you either like sports or want to know more. As your professor, I hope to create the space and opportunity to go deeper into the topic, in a manner that values truth and evidence in an effort to develop good understanding of sports and all the disciplines therein.

B. Pre and Co-requisites

Pre-requisite: IDH1001/1002

C. Learning Outcomes

Given the modular arrangement of the course the following are the learning outcomes per module

Exercise

- Identify what makes something a sport
- List the causes for what brings people to start playing a sport
- Distinguish various types of sports and how they challenge their athletes differently
- Evaluate the myth that humans have evolved to exercise
- Identify the structural components of skeletal muscle (myofibrils, sarcomeres, myofilaments, mitochondria, fat droplets, glycogen)
- Distinguish between the 2 types of muscle fibers (type 1 and type 2) and whether it is possible to train to improve the workings of either type
- Describe the relationship between exercise intensity/duration and the bioenergetic pathways that are most responsible for the production of ATP
- Show how oxygen reaches the muscles
- Explain the concept of $VO_2\text{max}$
- Explain the concept of a “running economy” and how it can be improved
- Determine the role of sleep in being an athlete
- Evaluate the myth that “8 hours of sleep” is the preferred amount
- Evaluate the concept of speed and endurance in particular with the myth that “Humans trade off Speed for Endurance”

Nutrition

- Identify macro and micro nutrients and what they are used for during exercise
- Quantify the energy consumed in food and expended in sport, and try to evaluate the energy input/output relationship
- Identify the popular diets used by athletes
- Experience a popular diet for a week and provide personal account of the experience
- Critically evaluate the health benefits touted by popular diets
- Propose which of the diets investigated in the course would be best for which athletes interested in power sports, endurance sports, and other sports covered

Gender

- Trace the roots of a binary gender ideology and compare with the concept of a spectrum or multiple gender ideologies
- Identify primary and secondary sexual characteristics
- Map out the process by which a person develops sexual characteristics
- Map out the process by which intersex can occur in people
- Review the history of transgender studies
- Define hormones and identify what hormones exist in human beings
- Identify the role of hormones in biological processes
- Critically evaluate the concept of transgender playing sports

The course will also cover the following global learning outcomes:

- Conduct a multi-perspective analysis of local, global, international, and intercultural problems.
- Demonstrate knowledge of the interrelatedness of local, global, international, and intercultural issues, trends, and systems.
- Demonstrate willingness to engage in local, global, international, and intercultural problem solving

D. Required Texts

1. [Exercised: Why Something We Never Evolved to Do is Healthy and Rewarding by Daniel Lieberman. Pantheon; 1st edition. 2021, ISBN: 978-1524746988](#)
2. [T: The Story of Testosterone, the Hormone that Dominates and Divides Us by Carole Hooven. Henry Holt and Co. 2021, ISBN: 978-1250236067](#)

E. Grading Scheme

Students will be graded with the following percentages:

1. Quizzes	15%				
2. Homework		15%			
3. Running paper			20%		
4. Nutrition presentations				20%	
5. Gender in Sports paper					20%
6. Participation					10%
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> Total 15% + 15% + 20% + 20% + 20% + 10% = 100% </div>					

Quizzes (15%)

You will be given 3 schedule quizzes throughout the semester. The expected dates for the quizzes are listed in the calendar on the last page, and will be verified at least one week in advance in class. The quizzes will consist of short answer problems, drawings, diagrams, essay questions and more. They will cover material we discuss in class, readings, any videos or assigned material.

Homework (15%)

There will be homework assignments posted on canvas. Due dates will be announced online and in class. The homework assignments will vary in length and style. If you miss an assignment due date, you will be allowed to submit late with a penalty of 10% for each day late (that includes weekend days). If you miss an assignment after 10 days it will no longer be allowed to be submitted.

Running paper (and running) (20%)

Considering the first few weeks of the class we will be discussing exercise physiology and the biology and biochemistry of running, you will be **required to run/walk 10k (or more, see below)** and write about the experience. You will be required to show evidence that you did walk/run the event. If you choose to do an actual 10k or half marathon or marathon event you will be able to submit the event results with your paper. If you do it on your own, you will be asked to download an app (examples could be runkeeper, mapmyrun, strava, onthego) and show evidence. Upon completing the run you will be asked to consider the following questions to be written up in 1000 words.

- Discuss the training regimen you used and whether you thought it was successful
- What zone of your heart rate were you running during your run? (If you have a watch with a HR monitor it should tell you regularly; if not you may want to find a phone app that you can use while running or check your pulse the old fashioned way)
- Were you “economical” with your run? (Relate this to the concept of “running economy”)
- How did the environmental factors affect your run? (heat, cold, humidity, sun, wind, rain, etc.)
- How did your body respond to the run?
- Any evidences of nutrient deficiency? Glycogen depletion? Dehydration? Did you bring nutrition with you? why did you choose the nutrition you did?
- describe the thoughts you had throughout the run.
- Did you experience any difficulties and how did you navigate them?
- What was your VO₂MAX calculated from this run and how did you do it?
- Did you find this to be a valuable experience altogether.

Extra credit opportunity: The **or more** part suggests the following. If you run/walk a 10k you will get credit and can write the paper about your experience. However, your paper will be graded on a regular grading scale. If you run/walk a half marathon (13.1 miles), the lowest grade you can receive on the paper is a B. If you run a full marathon, the lowest grade you can receive on the paper is an A-. Caution to anyone that is planning to do a half marathon or a marathon, you will want to execute a training plan so that you do not hurt yourself in the process. Please discuss with Dr. Lichter if you intend to do the half or full marathon for extra credit.

If you have a medical condition that you think precludes you from being able to take part in this assignment, please discuss with Dr. Lichter privately and an alternative assignment will be given to you.

Nutrition Presentation (20%)

In groups of 2, you will provide a 10-15 minute presentation explaining one of the more popular diets around today. During the presentation you will highlight the following:

- What are the dietary guidelines
- The health implications both benefits and consequences. This includes but not limited to: weight loss, athletic performance, hormone and blood lipid changes, hair loss/rejuvenation, mental processes, life expectancy. Provide any evidence in the form of research if any exists.
- Given our discussion on exercise metabolism, **how this diet will impact an athlete during exercise.**
- Any research that has been done on this specific diet, and if there has NOT been any research done, you will need to explain that as well
- How similar or dissimilar is this diet with other popular diets? (take a look at the list of diets to be evaluated and be sure you check to see if any of them overlap? Especially for those doing the veganism, vegetarianism and plant based: how do those differ?)
- The economics underlying the diet (is there a company profiting over this? And how?)

Extra credit on nutrition presentation: *follow the diet for two weeks leading up to your presentation and provide evidence and personal account of your experience with the diet!!*

The diets you will be assigned may include one of the following:

<i>Paleo</i>	<i>Plant based diet</i>	<i>Veganism</i>	<i>Vegetarianism</i>
<i>Low carbohydrate High Fat diet</i>	<i>Prolon (fasting mimicking diet)</i>		<i>Intermittent Fasting</i>
<i>Weight watchers</i>	<i>South Beach diet</i>	<i>Noom</i>	<i>Volumetrics diet</i>
<i>Raw foods diet</i>	<i>Kosher</i>	<i>Whole 30 diet</i>	<i>Alkaline diet</i>
<i>DASH</i>	<i>Mediterranean diet</i>	<i>Flexitarian diet</i>	<i>Keto</i>

Transgender in sports paper (20%)

The international Olympic committee agreed in 2004 to allow for transgender men and women to compete in the Olympics as long as they had (1) undergone hormone treatment, (2) legally changed to the gender they identify with, as well as (3) surgical anatomical changes to remove the biological sex organs for which they no longer associate with.¹

Given the more favorable environment in the last few decades for transgender people, there have been statistical reports that have shown nearly a 3x increase in the number of people in the USA identifying as transgender just within the last decade.² But not all those who undergo the transformation choose to do either or both the surgical change or the hormone treatment. So should they still be able to participate in sports without conforming to IOC rules? Are the IOC rules fair?

As to be expected with the last decade there have been quite a bit of both nationally and internationally publicized cases of high school athletes, college athletes, professional athletes who are trans-gender and wanting to participate in sports in the gender they identify with (Examples include: Cece Telfer³, Laurel Hubbard⁴)

For your final paper of the semester you will compose an evidence-based paper to suggest how transgender should either be allowed or forbidden to compete in sports in the gender they associate with. This paper should not be driven by your emotional or gut response, but by evidence. You must have at least 5-7 sources cited within this paper and those citations should help drive your paper's position. You will not be graded differently on whether you choose to oppose or allow, your grade on the paper will be on how compelling your argument is and how well you use the evidences to support your argument.

Participation (10%)

Like so many of your honors courses, this class **DEPENDS** on class discussions and involvement. Therefore you will be given a grade based on your everyday involvement in the class both in the classroom and any assignments on canvas where there might be discussions. So it will be advantageous to be in class every time and to be involved in class discussions and online discussions.

¹ "IOC approves consensus with regard to athletes who have changed sex". International Olympic Committee, 17 May 2004 <https://olympics.com/ioc/news/ioc-approves-consensus-with-regard-to-athletes-who-have-changed-sex>

² Meerwijk EL, Sevelius JM. Transgender Population Size in the United States: a Meta-Regression of Population-Based Probability Samples. *Am J Public Health*. 2017;107(2):e1-e8. doi:10.2105/AJPH.2016.303578

³ "Transgender runner CeCe Telfer is ruled ineligible to compete in US Olympic Trials". Jill Martin, June 25, 2021. CNN. <https://edition.cnn.com/2021/06/25/sport/transgender-athlete-cece-telfer-trials-olympics-spt/index.html>

⁴ "Trans weightlifter Laurel Hubbard set to become first transgender Olympic athlete at Tokyo 2020" Sky Sports June 5, 2021. <https://www.skysports.com/olympics/news/15234/12298053/trans-weightlifter-laurel-hubbard-set-to-become-first-transgender-olympic-athlete-at-tokyo-2020>

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 action, and will follow the procedures outlined in the Academic Misconduct Procedures available at <https://studentaffairs.fiu.edu/get-support/student-conduct-and-academic-integrity/academic-integrity/index.php>.

Please refer to the following documents for additional information:

FIU Student Handbook: <https://studentaffairs.fiu.edu/about/student-handbook/index.php>

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. 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 Honors College course

includes at least one assignment that could potentially fit portfolio requirements.

<http://honors.fiu.edu/current-students/portfolio/>

K. 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/>

L. Panthers Care & Counseling & Psychological Services

If you are looking for help for yourself or a fellow classmate, Panthers Care encourages you to express any concerns you may come across as it relates to any personal behavior concerns or worries you have, for the classmate's well-being or yours; you are encouraged to share your concerns with FIU's Panthers Care website.

Counseling and Psychological Services (CAPS) offers free and confidential help for anxiety, depression, stress, and other concerns that life brings. Learn more about CAPS at caps.fiu.edu. Professional counselors are available for same-day appointments. Don't wait to call 305-348-2277 to set up a time to talk or visit the online self-help portal.