HTS 3089 Syllabus

Science, Technology, and Sports HTS 3089, Section I, 3 Credits
Summer 2026 (online asynchronous)

Instructor Information

Instructor	Email
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General Course Information

Description

Sport is, of course, a human creation. However, many have come to think of sport as a natural endeavor, and, therefore, as neutral. In this course, we will deconstruct the idea of sport through the lenses of science and technology to better understand how the sport is created by society and how sport conversely co-creates and reinforces elements of human culture.

Course Learning Outcomes

- Students will be able to identify and understand major debates influencing the role of science and technology in sports cultures, including but not limited to those on performance-enhancing drugs and equipment, sex verification, and gambling.
- Students will be able to understand how social, political, and/or economic forces shape the impact of sports-related scientific research and technological innovation.
- Students will be able to apply historical and sociological methods to develop and communicate an evidence-based argument on a contemporary sport, science, and technology issue.
- Students will be able to use written and oral forms of communication to construct compelling arguments. Students will demonstrate that they have met this learning outcome through course discussion and other written work.
- Students will be able to demonstrate a deeper understanding of the course materials through collaborative learning and discussions with peers. Students will demonstrate that they have met this learning outcome through course discussion, and peer feedback.
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Required Course Materials

- David Epstein, "Are athletes really getting faster, better, stronger?" *TED Talk,* April 29, 2014. Available at: https://www.youtube.com/watch?v=8COaMKbNrX0
- Jay Coakley, "Assessing the Sociology of Sport: On Cultural Sensibilities and the Great Sport Myth," *International Review for the Sociology of Sport* 50, no. 4–5 (2015): 402–6.
- David E. Nye, "Can We Define 'Technology'?," in *Technology Matters: Questions to Live With* (MIT Press, 2006).
- Tara Magdalinski, "Introduction," in *Sport, Technology and the Body: The Nature of Performance* (Routledge, 2009).
- "Introduction," in *Game Changer: The Technoscientific Revolution in Sports*, by Rayvon Fouché (Johns Hopkins University Press, 2017).

- Hidden Brain, "What's the Source of Success in Sports?" https://www.npr.org/2015/09/24/443053693/the-hidden-brain-whats-the-source-of-success-in-sports.
- Carter, N. (2012). "Testing times: Drugs, anti-doping, and ethics."
- Patrick Hruby (2016), "The drugs won," *Vice Sports,* https://www.patrickhruby.net/2016/08/the-drugs-won.html
- Tifo, "Messi's Growth Hormones" **https://www.youtube.com/watch?v=d8fd4F2blMM**
- *Steroid Debate: Julian Savulescu 6/14- Intelligence Squared U.S.*, 2008, https://www.youtube.com/watch?v=0hPFMDFacRA.
- "Enhanced Games Aims to Let Athletes Compete without Drug Testing Penalties," NBC News, March 15, 2024, https://www.nbcnews.com/now/video/enhanced-games-aims-to-let-athletes-compete-without-drug-testing-penalties-206709317680.
- Fouché (2017), "Gearing up for the game"
- Alex Hutchinson, "How Nike Attempted Breaking2," *Runner's World*, July 31, 2017, https://www.runnersworld.com/uk/news/a29100149/breaking2/.
- P. David Howe, "Cyborg and Supercrip: The Paralympics Technology and the (Dis)Empowerment of Disabled Athletes," *Sociology* 45, no. 5 (2011): 868–82, https://doi.org/10.1177/0038038511413421.
- "Gearing up for the Game," in *Game Changer: The Technoscientific Revolution in Sports*, by Rayvon Fouché (Johns Hopkins University Press, 2017).
- Deborah Lupton, "Understanding the Human Machine [Commentary]," *IEEE Technology and Society Magazine* 32, no. 4 (2013): 25–30, https://doi.org/10.1109/MTS.2013.2286431.
- David K. Wiggins, "'Great Speed But Little Stamina:' The Historical Debate Over Black Athletic Superiority," *Journal of Sport History* 16, no. 2 (1989): 158–85.
- Brando Simeo Starkey, "Implicit Bias and the NFL Draft," *Andscape*, August 16, 2016, https://andscape.com/features/implicit-bias-and-the-nfl-draft/.
- "Introduction," in *Coming on Strong: Gender and Sexuality in Women's Sport*, by Susan K. Cahn, 2nd ed. (Urbana: University of Illinois Press, 2015), 1–6.
- "Gender and Sports: Is Equity Possible?," in *Sports in Society: Issues and Controversies*, by Jay Coakley, 13th ed. (McGraw Hill, 2020).
- Kathryn Henne, "The 'Science' of Fair Play in Sport: Gender and the Politics of Testing," *Signs: Journal of Women in Culture and Society* 39, no. 3 (2014): 787–812.
- Rayvon Fouché, "Aren't Athletes Cyborgs?: Technology, Bodies, and Sporting Competitions," *Women's Studies Quarterly* 40, no. 1/2 (2012): 281–93.
- Harry Collins, "The Philosophy of Umpiring and the Introduction of Decision-Aid Technology," *Journal of the Philosophy of Sport* 37, no. 2 (October 1, 2010): 135–46, https://doi.org/10.1080/00948705.2010.9714772.
- Samantha King et al., "When Is a Drug Not a Drug? Troubling Silences and Unsettling Painkillers in the National Football League in: Sociology of Sport Journal Volume 31 Issue 3 (2014)," *Sociology of Sport* 31, no. 3 (2014): 249–66.
- Kathleen E. Bachynski and Daniel S. Goldberg, "Youth Sports & Public Health: Framing Risks of Mild Traumatic Brain Injury in American Football and Ice Hockey," *The Journal of Law, Medicine & Ethics: A Journal of the American Society of Law, Medicine & Ethics* 42, no. 3 (2014): 323–33, https://doi.org/10.1111/jlme.12149.
- *Painkillers in the NFL: Nate Jackson on "Hurt" vs "Injured,"* directed by VICE Sports, 2015, 05:18, https://www.youtube.com/watch?v=_PIx6g6G6wI.
- Brian A. Petrotta, "From Prohibition to Promotion: Framing and Sourcing the Legalization of Sports Betting in the U.S.," *Communication & Sport*, August 8, 2023.

- Anna Betts et al., "How Colleges and Sports-Betting Companies 'Caesarized' Campus Life," *The New York Times*, November 20, 2022, sec. Business, https://www.nytimes.com/2022/11/20/business/caesars-sports-betting-universities-colleges.html

Grading Policy:

1000 points total

- Completion rate of lecture questions (10% of grade)
- Reading discussions (20% of grade)
- 5 Writing Responses (25% of grade)
- Test (15% of grade)
- Podcast Assignment (25% of grade)
- End of Semester Reflection Assignment (5% of grade)

Description of Graded Components

- 100 points (10% of grade): Completion rate of lecture questions (based on watching the entire lecture video and answering question correctly)
- 20- points (20% of grade): Weekly reading discussions conducted on Perusall
- 250 points (25% of grade): 5 writing responses for each week, prompt provided (5% each)
- 150 points (15% of grade): Test on science and technology in modern sport, 1500-2000 words (1 week to complete)
- 250 points (25% of grade): Podcast assignment (8-10 minutes) that provides a critical analysis of a current issue, event or thematic story from the intersection of sport, technology/science, and society. I will provide a list of topics you may choose from. You may also propose your own topic, although I reserve the right to veto themes that are not course related. The goal is for you to be a producer of media knowledge as you apply theories, ideas and/or concepts from this class.
- 50 points (5% of grade): The self-reflection assignment will require students to synthesize what they've learned during the semester and reflect on the course using metacognition.

USG Required Course Policies

Attendance and/or Participation

This course is online and asynchronous therefore attendance will not be assessed. Completion of assignments will be used to assess participation, including viewing the entire lecture videos.

Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. Review Georgia Tech's Honor Code and the student Code of Conduct.

Any student suspected of cheating or plagiarism on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Core IMPACTS

This is a Core IMPACTS course that is part of the Social Sciences area.
Core IMPACTS refers to the core curriculum, which provides students with essential knowledge in foundational academic areas. This course will help students master course content, and support students' broad academic and career goals.

This course should direct students toward a broad Orienting Question:
How do I understand human experiences and connections?

Completion of this course should enable students to meet the following Learning Outcome:
Students will effectively analyze the complexity of human behavior, and how historical, economic, political, social, or geographic relationships develop, persist, or change.

Course content, activities and exercises in this course should help students develop the following Career-Ready Competencies:

- Intercultural Competence
- Perspective-Taking
- Persuasion

Additional Georgia Tech Required Policies

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services (404-894-2563) as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Student-Faculty Expectations Agreement

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. The Student-Faculty Expectations articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.

Course Expectations, Policies, and Resources

Pre- &/or Co-Requisites

Not applicable

Collaboration, Group Work, and Use of Generative AI

Students are expected to maintain the highest standards of academic integrity. All work submitted must be original and properly cited. Plagiarism, cheating, or any form of academic dishonesty will result in immediate consequences as outlined in the university's academic integrity policy.

For assignments, you are expected to write using your own words and ideas; however, you can use AI to help brainstorm or outline your papers, which should be properly cited using the questions that you asked ChatGPT and the answers that you received. Using AI like ChatGPT to completely write your papers will result in an automatic zero (0). Do not copy and paste answers from AI generated content into your paper. I will provide more guidance on using AI as a handout during the second week of classes.

We will not be doing collaboration or group work on assignments for this course; however, you are welcome to bounce ideas off classmates if you know them and feel it is appropriate.

Extensions, Late Assignments, & Re-Scheduled/Missed Exams

Late assignments: Normally, the policy for late assignments is that you will need a documented health, funeral, or university sponsored excuse for completing late assignments at full credit. Assignments completed after their due dates without an excuse will receive up to a drop in letter grade (10% of total score) for every two days beyond their due date and receive a 0 if turned in over 7 days late. Even if you have accommodations for a disability, you should still work with me in advance of deadlines to set up appropriate due dates. Any late assignments must be turned in by the last day of class to be graded.

Recordings of Class Sessions and Required Permissions:

Classes and class recordings may not be recorded or distributed by students without the express consent of the instructor unless it is according to accommodations granted by the Office of Disability Services. Class recordings, lectures, presentations, and other materials posted on Canvas are for the sole purpose of educating the students currently enrolled in the course.

Students may not record or share the materials or recordings, including screen capturing or automated bots, unless the instructor gives permission. Digitally proctored exams may require students to engage the video camera, but those recordings will not be shared with or disclosed to others without consent unless legally permitted.

Course Expectations for Students

- Students are expected to keep up with readings from week to week, which are tentatively listed in the course outline. Skimming readings is justifiable when necessary.
- Students attend lectures and participate in discussions when possible. I would expect, on average, between 6-10 hours of work per week (including watching the video lectures). Most importantly, I expect students to put high-quality work into their assignments.

Course Expectations for the Instructor

- I will foster an environment of mutual respect, fairness, and kindness, regardless of the students'

identity and ideological perspective.

- I will do my best to respond to emails from students within 48 hours during Monday to Friday and 72 hours on weekends, except under extenuating circumstances or if I am out of the office.
- I will be prepared for class and typically grade assignments within a week of receiving them, except under extenuating circumstances.