

HST 3089 Sport, Science, & Technology Spring 2019

Tuesday & Thursday, 1:30 – 2:45 PM
Skiles 270

Instructor: Dr. Sarah Barnes

Office Hours:

Tues 3:15pm – 4:45pm and by appointment

Contact Information:

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Course Description

This course investigates the cultural intersections of sport, science, and technology and draws heavily on theoretical and methodological insights connected to the sociology of sport. We will build upon the assumption that sport is a mass-cultural phenomenon shaped by historical, economic, scientific, and technological factors. We will also take the view that the intersections of sport, science, and technology represent historical sites where power is circulated in ways that shape dominant conceptions of human difference, performance, and potential. In-class discussions, assigned readings, and assignments will explore a variety of areas including scholarly debates around performance enhancement, doping, cyborg athletes, health and safety, wearable devices, and the role of technology in both supporting and contesting social inequalities in sport and society.

Learning objectives and outcomes:

- To become familiar with the theoretical concepts and methodological approaches that scholars have used to study the intersections of sport, science, and technology.
- To gain an understanding of sport, science, and technology as key sites for the circulation of power and the reproduction of social inequalities without losing sight of the potential of sport to foster liberatory forms of cultural expression.
- To conduct primary and secondary research related to sport, science, and technology.
- To develop skills related to scholarly practices of reading, writing, analysis, and speaking.

Course Format

There are no exams or midterm tests in HST 3089. This course is organized around a project-based curriculum that requires students to complete multiple individual/group assignments and actively participate in classroom discussions. Students will read academic journal articles as well as key pieces drawn from the popular press. Students are also responsible for leading a classroom discussion and are expected to complete in-class activities, conduct a self-tracking project, write research papers, and create a verbal presentation. Students may have multiple projects due around the same time or be required to work on them simultaneously. Although tests are not a major component of this course, students are still expected to be familiar with assigned readings

prior to class, be prepared to discuss them (e.g. take notes, prepare questions), and complete periodic in-class quizzes (see below). Course readings will be provided on Canvas.

Grading and Requirements

The following is an overview of course assignments and their contributions to the final course grade. Please see Canvas for complete descriptions and criteria for each of the course assessments.

Course grades are made up of the following components:

Attendance and Participation: 15%

Group Discussion Lead: 10%

Reading Quizzes: 10%

Cyborg Tournament: 15%

Quantified Self Project: 15%

Literature Review: 20%

3MT Presentation: 15%

Grading Scale:

A: 90 - 100%

B: 80 - 89%

C: 70 - 79%

D: 60 - 69%

F: 59% and below

Attendance and Participation – 15%

Attendance Grade: 5%

Attendance at all classes is mandatory and the instructor will take attendance during each class. Students are expected to arrive on time and be prepared to discuss assigned readings, participate in class activities, and actively listen.

Participation Grade: 10%

Success in this course depends upon your preparation and active in-class participation. Participation grades will be calculated based on in-class engagement, contributions to class discussions, and completion of other small assignments corresponding to specific topics throughout the term. Instructions for these requirements will be discussed in class and posted to Canvas.

Attendance Policy

As stated in the Institute's attendance policy, "students are responsible for all material covered in their absences, and they are responsible for the academic consequences of their absences" (<http://studentlife.gatech.edu/content/classattendance>). Students missing classes because of documented personal emergencies or participation in Institute-approved activities (e.g. class field trip, athletic events) are permitted to make up work missed during class time, but will be expected to attend class in all other circumstances. Please let the instructor know as soon as possible when you will miss a class due to a personal emergency or participation in an Institute-approved activity so that appropriate arrangements can be made.

Group Discussion Lead: 10%

Over the course of the semester, each student will work in groups of three to lead a short class discussion based on a video (less than 5 mins) related to that day's topic. Students will play and contextualize the video for their classmates, make connections to 4 course readings, and facilitate a short class discussion (approx. 10 mins) based on a set of prepared questions.

In-Class Reading Quizzes: 10%

The instructor will administer 6 short quizzes throughout the term to assess students' level of engagement and familiarity with the assigned reading(s) for that class. The dates of these in-class quizzes will not be posted in advance; thus, students should come to each class prepared to complete a quiz to the best of their ability based on their knowledge of assigned readings. Each quiz will be graded out of 2 with each student's lowest grade being dropped from final grade calculations. The formats of these quizzes will vary, with more details being provided in class.

Cyborg Tournament: 15%

February 7 and 12

Following Howe's (2011) definition of a cyborg as "a hybrid body resulting from fusion of a live organism and man-made technology" (p. 868), students will be randomly assigned a cyborg identity from the world of sport (e.g. Oscar Pistorius). Students will apply course concepts and content to prepare a biography and election-style presentation explaining why their individual provides the best insight into the potentials and limits of the sports cyborg. Students will then go head-to-head in a two-day debate-style Cyborg Tournament to be held in class.

Quantified Self Project: 15%

February 28, March 7, & March 14,

Students will participate in a body-focused Quantified Self project during the term. Mirroring the principles of the Quantified Self movement, students will engage with a digital health/fitness self-tracking app of their choice and write weekly reflections that respond to guiding questions provided by the instructor. For more on the Quantified Self movement, visit:

www.quantifiedself.com

Literature Review: 20%

Friday, March 30

Students will complete an 8 page (typed, double-spaced) review of scholarly literature that expands upon one of the course topics. Students will be expected to locate, and provide support from, at least 3 academic sources in addition to relevant course readings. Approval of the topic is based on a description and preliminary bibliography that will be submitted through Canvas by **March 15** for instructor feedback. A class release research day will also provide students time to develop, research, and write this assignment. Students are also encouraged to meet with the instructor for help and seek assistance from professionals at the GT library.

3MT Presentation: 15%

Presentations begin on **April 19**

Choosing a topic that connects sports to their major discipline, students will prepare a

Three Minute Thesis (3MT) presentation. The presentation is limited to three minutes 5 (with one static PowerPoint slide) and should explain how sociology of sport and/or science and technology studies perspectives can supplement (or even disrupt) the dominant approaches to research/problem solving from your major discipline. The presentation will demonstrate how your major is connected to the world of sports, provide a specific example of this connection, and offer some future directions for sports-related work in your discipline. More details and examples will be provided in class. For more about the Three Minute Thesis format, see: <https://threeminutethesis.uq.edu.au/>

Extra Credit Opportunities

The following extra credit opportunities will be available throughout the course:

Documentary Film Screening and Panel of “Black and Blue” on **Wednesday, January 23** at 7:30 pm. The event will be held at Georgia Tech’s Global Learning Center, Room 236. Students can attend the film screening and panel discussion and then complete a small assignment. Students will earn an extra 2% towards their participation grade. More details will be provided in class.

Course Expectations

Academic Honesty:

Students in this class will be expected to abide by the Georgia Tech honor code. Academic misconduct of any kind will not be tolerated. All students are responsible for understanding and complying with Georgia Tech rules. For further information, go to: www.honor.gatech.edu

General Courtesy Guidelines:

Students are expected to be on time for class, refrain from being disruptive, and silence their electronic devices before class begins. Sleeping in class, text messaging, or using a computer for any purposes other than in-class research or taking notes will negatively impact your participation grade. I reserve the right to ask students to leave the class if they are engaging in distracting or inappropriate behaviors.

Accommodations for Students with Disabilities:

If you have a disability that may require assistance or accommodation, or you have questions related to any accommodations for testing, note takers, readers, etc., please speak with the instructor as soon as possible. Students may also contact the Office of Disability Services, located in the Office of the Dean of Students (ODS). The ODS phone number is 404-894-2563.

Course schedule

Week 1

Tuesday, January 8 - Intro to Course

Thursday, January 10 – Science, technology, and sport: Key definitions and concepts
Readings:

- 1) Magdalinski, T. (2009). Introduction: Sport, the body and performance technology. In T. Magdalinski, *Sport, technology and the body* (pp. 1-13). New York: Routledge.

Week 2

Tuesday, January 15 - What is “performance enhancement?”

Readings:

- 1) Arthur (2017), “The World Series baseballs sure seem juiced;”
- 2) Carter, K. (2016), “Does ‘cupping’ do Olympic athletes any good?”
- 3) Caesar (2017), “The epic untold story of Nike’s (almost) perfect marathon”

Thursday, January 17 – Documentary Screening: *Icarus* (2017, Fogel) – Part I

Reading:

- 1) Ruiz (2017), “Olympic doping diaries.”

Week 3

Tuesday, January 22 – Documentary Screening: *Icarus* (2017, Fogel) – Part II

Reading:

- 1) Hruby (2016), “The drugs won”

Thursday January 24 – Modifying Athletes from Within

Reading:

- 1) Carter (2012), “Testing times”

Week 4

Tuesday January 29 – **National Football League Player’s Association**

Thursday January 31 – Tuesday – Modifying Athletes from Without

Readings:

- 1) Fouché (2017), “Gearing up for the game;”
- 2) Trevallion (2012), “Fast suits and Olympic swimming”

Week 5

Tuesday February 5 – Thursday – Posthuman Prosthetics

Reading: Howe (2011), “Cyborg and SuperCrip”

Thursday February 7 – Cyborg Tournament: Day One

Week 6

Tuesday February 12 — Cyborg Tournament: Day Two

Thursday February 14 – Rendering the Athletic Body

Readings:

- 1) Maguire (2011), “Human sciences, sports sciences...;
- 2) Oaklander (2016), “The New Science of Exercise;”
- 3) Robinson et al (2016), “Perfect, freaky Olympic bodies”

Week 7

Tuesday February 19 – #YourBody: Health, Fitness, and the Quantified Self

Reading:

- 1) Lupton (2013), “Understanding the Human Machine”

Quantified Self project begin.

Thursday, February 21- Documentary Screening & Class Discussion: Race, Power and American Sport (2012, Young et al.)

Week 8

Tuesday February 26 Deconstructing the “Natural” Black Athlete

Readings:

- 1) Wiggins (1989), “‘Great speed but little stamina’;”
- 2) Starkey (2016), “Implicit bias and the NFL Draft”
- 3) Blackistone, K. (2018, July 27). Serena Williams may be singled out for drug testing. The question is why. *The Washington Post*.

Thursday February 28, - Sports Technology and Gendered Bodies

“Reading:”

- 1) Flanagan (2017), “The Athletic Brassiere” [podcast]

Quantified self – Submission #1 due

Week 9

Tuesday March 5 Gender Verification in sport

Reading:

- 1) Henne (2014), “The ‘Science’ of Fair Play in Sport”
- 2) Karkazis, K and Jordan- Young, R (2018, April 26). The Treatment of Caster Seymánya shows athletics’ bias about women of colour.

Thursday March 7 Literature Review Intro and Work Day

Quantified self-Submission #2 due

Week 10

Tuesday March 12 – Sleep and the athlete

Mah, C. D., Mah, K. E., Kezirian, E. J., & Dement, W. C. (2011). The effects of sleep extension on the athletic performance of collegiate basketball players. *Sleep*, 34(7), 943-950.

Thursday March 14 – In-class work period for literature review Quantified self – submission #3 due

***** SPRING BREAK Week 11 March 18-22, 2019*****

Week 12

Tuesday March 26 Sport, technology, and the environment

Readings

- 1) Bunds, K., & Casper, J. (2018). Sport, Physical Culture, and the Environment: An Introduction. *Sociology of Sport Journal*, 35(1), 1-7.
- 2) Millington, B., & Wilson, B. (2013). Super intentions: Golf course management and the evolution of environmental responsibility. *The sociological quarterly*, 54(3), 450-475.

Thursday March 28 Video games and esports I

Reading:

- 1) Jenny et al (2017), “Virtual(ly) athletes”

Week 13

Tuesday April 2, Marketing, science, and sport

Readings:

- 1) Gibson (2012), “Knight’s Children;”
- 2) Eden (2016), “The secret lab where Nike invented the power-lacing shoe of our dreams”

Thursday, April 4 – Food and production of athletic performance

Reading:

- 1) Ventresca, M., & Brady, J. (2015). Food for Thought: Notes on Food, Performance, and the Athletic Body. *Journal of Sport and Social Issues*, 39(5), 412-426.

Week 14

Tuesday, April 9 – Group presentations

Thursday, April 11- Group presentations

Week 15

Tuesday April 16 – Group presentations

Thursday April 18 – Group presentations

Week 16

Tuesday April 23 – Course wrap up