

SCIENCE, TECHNOLOGY, AND RACE

LMC 3306

MW 3:30-445p

Skiles 002

Instructor: Dr. André Brock

office: TSRB 318a

Email: abrock35@gatech.edu

office hours: Wednesdays 1-3 (Spring 26 Office Hours)

This syllabus is subject to change at the instructor's discretion.

General Information

OFFICIAL CATALOG DESCRIPTION:

Beginning from the understanding that information and communication technologies are foundational to our social and cultural infrastructure, this course takes a critical approach to the ways that culture - in the form of race and gender - shapes the uses, design, and deployment of computers, the internet, and artificial intelligence.

Full Course Description

The practice of setting science and technology apart in an effort to distance them from culture (in its broadest sense) is the focus of this course. Grounded in a critical race and cultural theoretic framework, the course explores the systems and practices of scientific inquiry as mediated by Whiteness, imperialism, and modernity. Readings will examine technologies both as they present themselves and as they are represented in our culture. The readings in the course draw on media (film, television, poetry, drama, fiction) from various periods, as well as theoretical texts that address the Western cultural contexts of science. All of the texts—which will include some readings from recent scientific publications—will be considered in the context of the structure, organization, and classification of knowledge (scientia). Part of the function of this course is to help students develop the critical and analytical skills that are needed to make sense of representation of knowledge. In other words, we will look at the way that race and culture shape knowledge, how meanings become imprinted upon technical achievements, and at the way in which communities agree and disagree about what "technology" means.

PREREQUISITE:

Undergraduate semester level ENGL 1102 (English Composition II), minimum grade of D.

COURSE GOALS AND LEARNING OUTCOMES:

- Upon course completion, students will have:
- Developed an understanding of key theories about race, gender, and culture from cultural theory, social science, philosophy of technology, and science and technology studies
- Explored issues surrounding race and technoculture in online and offline venues, social media, and their digital environs

- Increased their awareness of the multiple ways that information technologies impact, extend, or hinder information uses and behaviors based on inferences about identity

Required Materials

You will not need to buy any texts for this course. All readings can be found on the course Perusall site in either PDF or ePub form (but not both). Feel free to buy physical copies to support the authors. The assigned readings are not exhaustive; supplemental readings will be uploaded to Perusall as well

TL; dr: Assignments and Grading

Discussion Portfolio (55% of final grade): comprised of one (1) discussion lead post + 5 of your best Discussion comments

- *Discussion Lead* (60%) Once during the semester, you will prepare a brief presentation (5–10 minutes) that introduces one of the readings for a class period, before leading the class discussion and/or an activity on that reading (this assignment may be done in pairs). The presentation will be posted to Piazza (see assignment for details)
 - Will award extra credit if you lead more than one discussion - either assigned or one you choose (approved by instructor)
- *Discussion Comments* (40%) **If you're not the discussion leader, you must follow, post, and contribute to the Canvas/Piazza "Reading Summaries and Discussion" for the course** *minimum ten (10) comments*. The comments will be posted to Piazza (see assignment for details).

Piazza Comments + Perusall Annotations(20% of final grade)

Technology Autobiography + Reflection (10% of final grade).

Classroom/Online Participation and Community Ethos (15% of final grade): Participating in classroom discussions will form this component of your course grade.

Teaching Style and Expectations

This is a seminar-style course, where discussion is the primary mode of instruction and learning. This requires a different kind of learning style necessitating that YOU have done the readings and approach discussions with a sense of curiosity and inquiry. It also means that you are required to complete all written assignments to the best of your capacity.

Participating in class + Perusall discussion allows you to explore the class readings and concepts with your peers and, in the process, discover meanings and issues that you would not discover on your own. In-class participation challenges you to continuously question, refine, and articulate your own ideas and interpretations.

Please note I do not expect each of you to have fully formed and nuanced understandings of each assigned reading, but I do expect you to engage with each reading to the best of your abilities (e.g. asking questions, applying concepts to your own experiences, thinking of relevant examples, etc.).

If you know you will have personal conflicts or scheduling issues that will interfere with any deadlines, please see me or email me **before the due date** so we can discuss alternate arrangements. Additionally, the [Naugle](#)

[CommLab](#) is an excellent resource for students, offering consultations on writing and speaking projects, as well as job documents, presentations, multimedia, and more.

Attendance and Participation

Participation is essential in this course. **I monitor attendance based on your Perusall annotations and participation + in-class participation.** Come to class prepared to discuss the readings that are due. Plan on expressing your ideas, frustrations, questions, confusions, etc., even if you're not able to articulate them without some hesitation—sometimes, ambivalent or ambiguous remarks spark the liveliest discussions! Although your participation will not be explicitly graded, you will be evaluated on your preparedness for class. *I use my assessment of your participation to manage borderline grades; thus, it will help you to attend class, share your views on readings, and participate in activities.*

If you repeatedly arrive late to class, expect that your grade will also be lowered. If you are concerned about this assessment at any time, you can contact me to request a “snapshot” of your current grade or discuss ways to improve your participation.

While GT doesn't have a formal attendance policy, I offer you six (6) permitted absences regardless of documentation or excuse. If you miss class, you are still responsible for obtaining class notes and completing work you missed. For each absence after six (6), your final course grade will go down 5% (or half a letter grade). Absences will be recorded through the Attendance function on Canvas; it is your responsibility to keep up with your absence count in the class. It is also important to come to class on time. Therefore, if you are more than 30 minutes late to class, you will be marked absent for that class period. If you are absent, you miss valuable class time with your colleagues, as well as instructions for assignments and projects that will help you complete quality work.

Technology Requirements

To participate in course activities, the following technologies are required:

- Sign up for a Piazza account (I'll provide the link when the Canvas site goes live)
- Log into the course Perusall site through Canvas
- A laptop or desktop computer (not all course activities can be completed on a mobile device)
- A high-speed internet connection, which you will access daily for course messages through email, as well as to use Canvas
- A microphone and/or webcam, for video conferencing
- A program that can open PDFs (such as Acrobat or Preview)
- Microsoft Office, Apple Pages or Google Docs (please save documents in .doc, .docx, or .pdf formats)
- It may also be helpful to create a free account on [Canva](#) for designing content for assignments and projects.

When you use technology during class meetings, make sure it is not a distraction to yourself or others. Avoid using technology as a barrier to actively engaging in class. **Do not take phone calls, scroll through social media, shop, catch Pokémon, snap, livestream, or text during class** unless you have made arrangements with me ahead of time (due to an emergency or urgent issue).

Learning Management Technologies

Perusall

This semester, we'll be using **Perusall** to annotate each assigned reading as a class. Perusall is an annotation layer for any online content; this tool is intended to allow y'all to collaborate on your reading, synthesis, and understanding of the reading selections across the semester. I'll send out the invitation link and explain how we'll use this tool during class.

In addition to highlighting snippets of text that you find interesting (or confusing), Perusall also allows the use of images and other multimedia content within your annotations. I am inclined to offer extra credit for those whose annotations include compelling, relevant multimedia content illustrating difficult or interesting concepts in the reading.

Your annotations will count as 20% of your participation grade. To get full participation credit, you must annotate every reading with at least ONE note. Emoji and GIFs are encouraged! ***The syllabus will be posted on Perusall, along with any assignment rubrics.***

Piazza

Piazza will be used to post reading discussions, original posts, and questions for me. The system is highly catered to getting you help fast and efficiently from classmates and myself. Rather than emailing me questions I encourage you to post your questions on Piazza. You should already be enrolled in the class Piazza site; if not, please copy and paste the link below to sign up:

<https://piazza.com/gatech/spring2026/lmc3306i/home>

Canvas

You'll find the Assignment pages on Canvas, including drop boxes for the Autobiography and the Portfolio. I also send class announcements through Canvas, so be sure to keep an eye out for emails. The student discussion leader assignments will be posted to a Canvas announcement once we complete the selection process.

Copyright and Intellectual Property

All videos, documents, and content in this course may only be used in and for this class. No video, document, or content may be downloaded or captured for personal use beyond this class or your time at Georgia Tech. Likewise, please seek permission from the instructor before recording (video or audio) the instructor or any portion of class.

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. See the [Institute Rules and Regulations](#) for an articulation of some basic expectation 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.

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. For information on Georgia Tech's Academic Honor Code, please visit the [Honor Code Policy website](#) or the [Student Code of Conduct](#).

Any student suspected of cheating or plagiarizing 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.

Generative AI Policy (ChatGPT et al.)

This course involves writing, communication, and critical thinking. Generative AI agents such as ChatGPT, DALL-E 2, and others present great opportunities for learning and for communicating. **However, AI cannot learn or communicate for you, and so cannot meet the course requirements for you.**

In this course, using generative AI tools in the work of the course (including assignments, discussions, ungraded work, etc.) is allowed only in instances specified by your professor.

As with any technology, generative AI tools need to be used critically and according to academic and professional expectations. Thus, in instances in which your instructor allows generative AI tool use, you are expected to adhere to these principles:

Responsibility: You are responsible for the work you submit. In instances in which your instructor allows generative AI tool use, this means that any work you submit should be your own, with any AI assistance appropriately disclosed (see “Transparency” below) and any AI-generated content appropriately cited (see “Documentation” below). This also means you must ensure that any factual statements produced by a generative AI tool are true and that any references or citations produced by the AI tool are correct.

Transparency: Any generative AI tools you use in the work of the course should be clearly acknowledged as indicated by the instructor. This work includes not only when you use content directly produced by a generative AI tool but also when you use a generative AI tool in the process of composition (for example, for brainstorming, outlining, or translation purposes).

Documentation: You should cite any content generated by an AI tool as you would when quoting, paraphrasing, or summarizing ideas, text, images, or other content made by other people.

Using generative AI tools at times not allowed by the instructor will be considered an infraction of the Georgia Tech Honor Code subject to investigation by the Office of Student Integrity. Likewise, using generative AI tools in the course without adhering to these principles will be considered an infraction of the Georgia Tech Honor Code subject to investigation by the Office of Student Integrity.

This policy has been adapted from the Georgia Tech Writing and Communication Program (WCP).

Accessibility

If you are a student with learning needs that require accommodation, contact the Office of Disability Services at (404) 894-2563 or via [their website](#) as soon as possible, to make an appointment to discuss your needs and to obtain an accommodations letter. Please also email me as soon as possible in order to set up a time to discuss your learning needs (you don't have to have a documented disability with the Office of Disability Services to do this!).

Mental Health Note

If you or someone you know is feeling overwhelmed, depressed, or in need of support, student mental health services are available. For help, contact the Center for Mental Health Care & Resources at (404) 894-2575 or [its website](#), or through its counselors located at the Charles A. Smithgall, Jr. Student Services Building during business hours.

Basic Needs Statement

Any student who faces challenges securing food or housing and believes this may affect their performance in this course is encouraged to contact the [Office of the Dean of Students](#) (Student Engagement & Well-Being) and/or the Center for Mental Health Care & Resources for support. Additionally, the [Klemis Kitchen](#) (in four locations on campus) offers food pantry services and meals. You can also notify me if you are comfortable doing so; this will enable me to connect with you with any resources I may have access to.

Non Discrimination Policies

The Ivan Allen College of Liberal Arts supports the Georgia Institute of Technology's commitment to creating a campus free of discrimination on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity, or veteran status. We further affirm the importance of cultivating an intellectual climate that allows us to better understand the similarities and differences of those who constitute the Georgia Tech community, as well as the necessity of working against inequalities that may also manifest here as they do in the broader society.

If you or someone you know believes you are experiencing any type of discriminatory behavior, even if none of the above policies have been violated yet, please consider reaching out to the Equity and Compliance team to learn more about possible supportive measures, resolution pathways, and on-and-off campus resources.

The Institute Diversity, Equity, and Inclusion website has more information on [reporting options](#) for students, faculty, and staff, as well as [resources for support](#).

Limits to Confidentiality

Written and spoken materials submitted for this class are generally considered confidential pursuant to the Institute's student record policies. However, students should be aware that Institute employees may not be able to maintain confidentiality when it conflicts with their responsibility to report certain issues to protect the health and safety of GT community members and others. As the professor for this course, I must report the following information to other Institute offices (including the university Title IX Coordinator and Police Department) if you share it with me:

- Suspected child abuse/neglect, even if maltreatment happened when you were a child;
- Allegations of sexual assault, relationship violence, stalking, or sexual harassment; and
- Credible threats of harm to oneself or to others.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared. In almost all cases, it will be your decision whether you wish to speak with that individual. If you would like to talk about these events in a more confidential setting, you are encouraged to make an appointment with the [Center for Mental Health Care & Resources](#). If you or someone you know has been harassed or assaulted, you can find the appropriate resources here:

- [Report an Incident of Sexual Misconduct](#)
- [Georgia Tech's Sexual Misconduct Policy and Procedures](#)
- [Campus and Community Resources for Sexual Assault, Rape, Dating or Domestic Violence, Sexual Harassment, Stalking, and Related Issues](#)

Science, Technology, and Race Reading Assignments and Dates

Week	Day	Readings
1	Mon., Aug. 24	Introduction: Interpersonal and Reading for Class Huber "Shadow Syllabus" Hicks "Reading Tips for History Classes"
	Wed., August 20	Introduction: Technology and Assignments Canvas, Perusall, Piazza "Annotating a Text" Kyla Wazana Tompkins - "How to Ask a Good Question About Theory"
2	Mon., Aug. 31	Reading Discussion Selection Day
	Wed., Sep. 2	Pacey - Culture of Technology pp. 1-34
3	Mon., Sep. 7	Omi and Winant - Ch. 4
	Wed., Sep. 9	Miner - Body Ritual Among the Nacirema
	Mon., Sep. 14	Morning - Everyone Knows Its a Social Construct
4	Wed., Sep. 16	McIntosh - Invisible Knapsack of Privilege"
	Mon., Sep. 21	Dyer - White Part 1
5	Wed., Sep. 23	Chun - Race and/as Technology
	Mon., Sep. 28	Winner - Do Artifacts Have Politics

Week	Day	Readings
6	Wed., Sep. 30	Dinerstein - Technology as Mythos
	Mon., Oct. 5	NO CLASS
7	Wed., Oct. 7	Brock - Chapter 6
	Mon., Oct. 12	Shaw - What is Video Game Culture"
8	Wed., Oct. 14	No Class
	Mon., Oct. 19	Storey - Cecil Rhodes and the Makings of a Sociotechnical Imaginary for South Africa
9	Wed., Oct. 21	"Eglash - Race, Sex, and Nerds
	Mon., Oct. 26	Nelson - DNA
10	Wed., Oct. 28	Menon - Refashioning Race : Chapter TBD
	Mon., Nov 2	Sex Slavery Antebellum South - Intro + Chapter 1 https://www.dropbox.com/scl/fi/2ofy5vvmxrv6pv5ksksk4/Sex-Sickness-and-Slavery--Illness-in-the-Antebellum-South-Marli-F-Weiner-2012.pdf?rlkey=cbr7aesc6k2atfbielg6f7z19&st=7yflg3ln&dl=0
11	Wed., Nov 4	Sex Sickness Antebellum South - Intro + Chapter 4
	Mon., Nov 9	Marvin - Annihilating space, time, and cultural difference
12	November 12	McPherson - US Operating Systems at Mid-Century: The intertwining of Race and Unix
	Mon., Nov 16	"Andreesen - The Technoptimist Manifesto Leek - How Google Maps quietly allocates survival across London's restaurants"
13	November 19	Galloway - Does the Whatever Speak?
	Mon., Nov 23	Fouché - Black Vernacular Technological Creativity
14	Wed., Nov. 25	NO CLASS
	Mon., Nov. 30	Gal - Perspectives and approaches in AI ethics
15	Wed., Dec. 2	Bui and Noble - We're missing a moral framework of justice in AI

Week	Day	Readings
	Mon., Dec. 7	Gebru - Race and Gender

Assignments in detail

Race/Ethnicity Autobiography

Part One (Due August 30):

In approximately 1000 words, write an autobiographical account of your history of, experiences with, and beliefs about your racial and ethnic identity.

Part Two: (Due December 7)

Using your written discussion portfolio as reference and as citations, update your IT bio to reflect upon what you've discovered during this class. If you haven't learned anything, that's fine - but you still need to tell me what you already knew that wasn't enhanced by the readings and discussion

Rubric

As you write, think about how technologies (e.g., social media) and institutions (e.g., church, school) and culture shaped your identity.

This assignment is meant to be a reflection, and as such will not be graded for grammar or style.

Annotations

(Due Every Class - mandatory)

Rubric

These are YOUR notes.

The more you engage with the text, the better your discussion comments - and your overall participation! - will be.

In addition, you can and should mention your annotations in class to expand our discussion.

You **must** read and annotate every reading, using Perusall.

If you have difficulty using Perusall, let me know as soon as possible to troubleshoot

In addition to highlighting snippets of text that you find interesting (or confusing), Perusall also allows the use of images and other multimedia content within your annotations. I am inclined to offer extra credit for those whose annotations include compelling, relevant multimedia content illustrating difficult or interesting concepts in the reading.

Your annotations will count as 15% of your participation grade.

Discussion Leader

You are required to lead a discussion on a reading of your choice. There are multiple aspects to this assignment:

Monday discussion leader posts must be posted by *Friday* at 11:59 PM. Comments to these posts should ideally be made by Sunday at 12 midnight.

Wednesday discussion leader posts must be posted by *Monday* at 11:59 pm. Comments to these posts should ideally be made by Tuesday at 12

Reading Analysis

1. You must provide an analysis of the arguments made in your assigned reading.
2. You must also provide at least ONE discussion question (see below) with your analysis
 - a. Post your analysis and discussion questions to the Canvas/Piazza “Reading Summaries and Discussion” for the course.
3. In class, lead the discussion by offering a (brief) media example that highlights an element or argument found in the reading

Discussion Question(s)

You must write one or more questions to generate discussion for class and to demonstrate mastery.

Your discussion question can/should be based on current (or recently completed) readings. You must also ANSWER your question using your experiences, knowledge of, or reactions to the subject matter of the reading.

Suggestions for Discussion questions:

- What social or cultural theories about science and technology were presented in these readings?
- What ideas did you find the most challenging or provocative? Why?
- Can you map any of the ideas from the readings into your own life or work experiences?
- How comfortable or difficult did you find reading and discussing these topics? Why do you think this is?

Discussion Participation

(Comments)

If you're not the discussion leader, you must follow, post, and contribute to the Canvas/Piazza "Reading Summaries and Discussion" for the appropriate reading.

Rubric

Do not summarize the reading. This isn't a book report.

- if you want to annotate it for future research, that's fine...but don't turn in a summary. Instead, situate your analysis of the reading in what you learned, supported by your annotations. If you have insights from your major, work experience, interests, or hobbies, please share those with us!

What's the field of study or discipline?

- Who are the key thinkers cited? (This will help you answer the next question)

Identify the theoretical frame used and//or the method

- Qualitative or Quantitative research?
- Are they using Political Economy? Critical Race Theory? Foucauldian analysis?
- Is the method archival/Historiography? Discourse Analysis? Interviews? Ethnographic? (Hint: what's the data?)

Find the intervention: what questions are they answering?

Now: write the main arguments.

- 1) Write an analysis and a /gracious/ criticism of method, data, analysis, and//or findings
- 2) How could this apply to your future career or future research?

You must post a MINIMUM of ten (10) discussion comments

Participation online can include:

- Posting questions or responding to other students' forum postings
- Providing examples and counter-examples
- Performing scholarly, constructive criticism of the assigned reading
- Proposing additional literature, websites or resources
- Sharing current news items and media reports that are relevant to class topics

The best comments will respond actively to the topic of discussion, or extend discussions from section or even lecture. Thread-jacking or trolling will not be tolerated and will result in a grade reduction. Comments are not graded here, but instead you'll choose YOUR 5 best comments for the portfolio.

Annotations are mandatory and should inform your comments. –

Your midterm assessment/grade will be based upon your annotations on EVERY reading to that point. I understand that you may miss a few comments here or there, but if you have less than 75% of reading comments, you'll only get half of the grade (half of 20%) for participation.

Discussion Portfolio

Due December 7

Your Discussion Leader post, together with your FIVE best responses to another classmate's forum/post, will comprise your written participation grade. Fulfilling the bare minimum requirements will earn only 60% for written participation.

Discussion comments and reading responses will be assessed based on clarity of argument, skill in framing the issue, and the weight of supporting evidence drawn from course materials and lectures. Attempting to complete this assignment in its entirety in the first few (or the last few) weeks of the semester will be considered SPAM and will result in a reduction of your grade.

NB: Perusall, Piazza, and Canvas track your participation across the semester. Your participation counts will affect your grade. This means that you should not wait until the end of the semester to write comments.