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Fall 2021

# STS 342-451: Gender, Technology and Society

Nancy Steffen-Fluhr

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# STS 342-451: GENDER, TECHNOLOGY & SOCIETY

## How We Think About Identity—Now

## Fall 2021

# **Course Description:**

STS 342 focuses on the intersection of gender, sexual identity, race, and ethnicity in the world today. Using a variety of print and digital materials--including SF films, video games, and web content in all its forms--we'll explore the ways in which gender and ethnic/racial identity are being contested today...in politics, in mass media, and high-tech workplaces.

# Course topics include...

- the social construction of gender and race
- transgender identities
- the interrelationship between sexism, homophobia and racism;
- the historical contributions of women and underrepresented minorities in STEM;
- communication in the workplace between people of different cultures and identities.

#### This course will help you...

- To increase your appeal to prospective employers by demonstrating that you have been trained to work with diverse populations;
- To increase your understanding of how gender and race shape change in high-tech workplaces;
- To enhance your ability to communicate easily with people who differ from you in their gender, sexual, and/or ethnic identity.

# INSTRUCTOR: Dr. Nancy Steffen-Fluhr

Associate Professor, Humanities (Science, Technology & Society Division) Director, Murray Center for Women in Technology

OFFICE: The Murray Center (265 Campus Center) and Online via Webex

WebEx Office: http://njit.webex.com/meet/steffen

OFFICE HOURS: Wednesdays, 5 to 6 pm & by appointment

LIVE MINI-CLASS (Optional): Wednesdays, 4:30 to 5:00 pm [See below for details] PHONE: Cell: 201-919-4018 Landline: 973-208-9015

EMAIL: <u>steffen@njit.edu</u>

COURSE CANVAS: https://njit.instructure.com/courses/19092

COURSE DELIVERY MODE: This is an online course. It will take place primarily within NJIT's CANVAS learning management system: <a href="mailto:canvas.njit.edu">canvas.njit.edu</a>. The course is largely asynchronous. That is, the entire class will never meet together "live." However, I will hold live office hours, via WebEx or f2f in the Murray Center. In addition, some of the assignments require that you work on project/ have a discussion with a subset of your fellow students, and your group may decide to do this synchronously via Zoom, WebEx, or a chat room. You will also be asked to record very short selfie-style videos each week on assigned topics and share those videos with the class via an app called Flipgrid. (See "Tools" below for more detail.) In addition, students who like live interaction (as do I!), will sometimes be able to choose to attend a 30-minute synchronous ("live") discussion session ("Mini-Class") instead of submitting a Flipgrid for the week. These recorded Mini-Class discussions will generally be held on Wednesdays from 4:30 to 5:00 pm, via WebEx. So, even though we will never see each other's faces all together in one room, we will be able to see and hear each other asynchronously, and that will help us build a sense of community over the course of the semester. Or so I hope! [For more info, see <a href="FAQs for Online Courses at NJIT">FAQs for Online Courses at NJIT</a>.]

**WEEKLY SCHEDULE:** Each week's assignment includes several readings and often video clips or feature films as well. You will be required to take a short quiz, post responses to questions about the readings/films, and to respond to other students' posts. You need to complete these tasks **each week by 11:59 pm Sunday night**, at the latest.

#### TOOLS:

- REQUIRED: A computer, webcam, mic, and a reliable internet connection (preferably hard-wired)
- RECOMMENDED: In addition to your main computer, you will probably want to have a smartphone or tablet, with a reliable internet connection, that you can use to make Flipgrid videos. (If you don't have a smartphone, you can make Flipgrid videos from your desktop/laptop, as long as you have a webcam and mic.)

#### APPS:

- CANVAS MOBILE APP: You can access Canvas directly from your desktop/laptop by going to <a href="mailto:canvas.njit.edu">canvas.njit.edu</a> and logging in with your UCID. If you want to access Canvas from your smartphone or tablet, however, you will first have to download an app. <a href="Here's how">Here's how</a>: Go to the App Store on your iOS device or the Play Store on your Android device. Once you have downloaded the app, open it, tap \*Find My School\*, and then type in \*New Jersey Institute of Technology\*. When the full name appears in the search list, tap the name. The name of the university should appear in the search list. If it does not, then enter the following URL: <a href="mailto:niit.instructure.com">niit.instructure.com</a>.
- FLIPGRID MOBILE APP: Each week, I will ask you to respond to discussion questions about the assigned readings and films. Some of your responses will be in written form; however, I will also ask you to speak some of your responses, as if we were in a face-to-face class. To do this, you will use a simple but powerful app called Flipgrid. The app is already embedded in our STS 342 Canvas, so you don't need an individual Flipgrid account; however, if you are going to use a smartphone or tablet to record your videos, you will need to download the mobile version of the app. It comes in both IOS and Android flavors. Here are instructions:

https://blog.flipgrid.com/gettingstarted

**REQUIRED TEXTS:** There is only one book to buy for this course:

Walter Isaacson. The Code Breaker: Jennifer Doudna, Gene Editing, and the Future of the Human Race. New York: Simon and Schuster, 2021.

All of the other required readings are available in our course Canvas either as downloadable files or URLs.

**REQUIRED FILM VIEWING:** You are expected to see the assigned films/video clips on your own, at home or in your dorm. Some of the films/videos are available for free at the URLs indicated in the syllabus. The others are widely available for a small rental fee on YouTube, Netflix, Amazon Prime Video, iTunes, and/or Vudu, among other sources. If you have trouble finding a given film, please contact me.

# **COURSE GRADING SCALE**

GRADE	POINTS
A	90-100
B+	88-90
В	80-87
C+	78-80
C	70-77
D	65-70
F	Below 65

# **COURSE REQUIREMENTS/ GRADING:**

Weekly Online Discussion Forums	35 points total	(See Point Score Grid in Canvas for breakdown)
Quizzes		
Required Forum/Flipgrid posts		
Reponses to Others' Posts		
Midterm exam: October 17	20	
One analytical essay on an assigned topic		
Due: November 24	25	
Final Assignment: <b>December 13</b>	20	
TOTAL	100 points	

**GROUPS:** At the beginning of the semester, I will divide the class, arbitrarily, into four groups, each consisting of five (5) students. Many of your discussion assignments will take place within your group. The advantage of this arrangement is that you will have fewer posts to read and respond to each week—and a chance to really get to know other students; however, many of the discussion topics in this class generate strong, sometimes defensive feelings—race, gender, sexuality, social justice, etc. So, you will need to make sure that your group creates, and follows, a set of community guidelines to ensure that everybody gets heard and nobody gets dissed. (I'll ask your group to create its guidelines during the first week of class.) You also need to follow the basic rules of "netiquette' (below).

**NETIQUETTE:** Throughout this course, you are expected to behave courteously to classmates by being a polite, active participant. You should respond to discussion forum assignments promptly so classmates have adequate time to reply. Respect opinions, even those that differ strongly from your own, and avoid using offensive language.

**ACADEMIC INTEGRITY:** "Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at:

http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf. Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu"

PROCTORING OF OUTTES AND EXAMS: All guizzos and everys are alread book, already needs a paride Non are

PROCTORING OF QUIZES AND EXAMS: All quizzes and exams are closed book, closed notes, no aids. You are required to use Respondus for the online quizzes and exams. (See below.)

# **Using Respondus LockDown and a Webcam for Online Exams:**

Respondus LockDown Browser is a locked browser for taking exams in Canvas. It prevents you from printing, copying, going to another URL, or accessing other applications during a test. If a Canvas quiz requires that LockDown Browser be used, you will not be able to take the assessment or quiz with a standard web browser.

You will be required to use the LockDown Browser with a webcam (Respondus Monitor), which will record you during this course's online midterm and final exams.

The webcam can be built into your computer or can be the type that plugs in with a USB cable. Watch **this short video** to get a basic understanding of LockDown Browser and the webcam feature. A student **Quick Start Guide (PDF)** is also available.

a) Download and install LockDown Browser from this link:

# http://www.respondus.com/lockdown/download.php?id=264548414

- b) Once your download has finished, locate the "LockDown Browser" shortcut on the desktop and double-click it. (For Mac users, launch "LockDown Browser" from the Applications folder.)
- c) You will be brought to the Canvas login page within the LockDown Browser, click "Login with your UCID" to log in with your NJIT UCID and password and then click Login.
- d) Under "My courses," click on the course in which you have to take the exam that requires the LockDown Browser.
- e) After you enter the course, find the exam and click on it.
- f) A confirmation prompt will appear, click the "Start attempt" button. Once a quiz has been started with LockDown Browser, you cannot exit until the Submit all and finish button is clicked.
- g) If you are required to use a webcam (Respondus Monitor), you will be prompted to complete a Webcam Check and other Startup Sequence steps.

# **WEEKLY SCHEDULE (Overview)**

You need to complete the assigned readings/film screenings and all of the Module assignments—quizzes, forum/Flipgrid posts, etc.—by 11:59 SUNDAY each week. The schedule below provides a basic outline of each week's readings/films. See our Canvas course modules for detailed weekly assignments.

# JUMP-START September 1-5 COURSE OVERVIEW & INTRODUCTIONS

- 1. Complete the Flipgrid "Who Are You" Assignment
- 2. Do the short "The Bem Gender-Role Inventory" exercise
- **3.** View my Jump-Start Module PowerPoint Slides: Course objectives; course structure; the meaning of *gender*; the social construction of norms; changing images of the 'womanly body'.
- 4. See the feature film: Zootopia (2016) [Amazon, Disney+, Vudu, YouTube, iTunes, 1 hour, 48 minutes]
- **5.** Complete the *Zootopia* Flipgrid Assignment (1.0 point)
- 6. Meet with your group (online) and develop a "community agreement" about discussing hot topics honestly & respectfully.

# MODULE 1 September 6-12 THE SOCIAL CONSTRUCTION OF GENDER--part 1

## **READINGS:**

1a. Messner, Mike. "Ah, Ya Throw Like A Girl!" In *Race, Class, and Gender in the United States: An Integrated Study*, (4<sup>th</sup> ed.) ed. Paula Rothenberg, 46-48. New York: St. Martins, 1998. CANVAS

**1b.** Kimmel, Michael. *The Gendered Society* (6th ed. 2017). New York: Oxford UP, 2000. [Hereafter "Kimmel"] "KIMMEL EXCERPT #1" CANVAS

1c. Fausto-Sterling Anne. "Where Does Gender Come From?" in Kimmel, Michael and Amy Aronson. CANVAS

#### SHORT FILMS (click to view):

"Playing with Gender"

"Implicit Bias/ Concepts Unwrapped"

SHORT EXERCISE: Take the GENDER-SCIENCE IAT test at: https://implicit.harvard.edu/implicit/selectatest.html

VIEW MODULE 1 POWERPOINT SLIDES (See Canvas Module) including video clip of runner Kay Switzer: <a href="https://www.youtube.com/watch?v=fOGXvBAmTsY">https://www.youtube.com/watch?v=fOGXvBAmTsY</a>

**DISCUSSION TOPICS:** the social construction of gender; implicit bias. (See Canvas Module)

MODULE 2 September 13-19 THE SOCIAL CONSTRUCTION OF GENDER--part 2

#### **READINGS:**

2a. Bem, Sandra L. "In a Male-Centered World, Female Differences Are Transformed into Female Disadvantages," CANVAS

2b. Hyde, Janet. The Gender Similarities Hypothesis" American Psychologist (September 2005): 581-592. CANVAS

2c. Kimmel. "KIMMEL EXCERPT 2" CANVAS

2d. Rippon. Gender and Our Brains CANVAS

SHORT FILM: Out (2020) [Disney+, 12 minutes]

If you don't have Disney +, watch the <u>trailer</u> and then <u>this video</u> of a gay couple watching the film, with the film itself cut into a window. It works, kind of...

# **VIEW MODULE 2 POWERPOINT SLIDES (See Canvas Module)**

MODULE 3 September 20-26 THE SOCIAL CONSTRUCTION OF GENDER & WORK

## **READINGS:**

3a. KIMMEL EXCERPT #3 CANVAS

3b. Willer, Robb et. al. "Overdoing Gender: A Test of the Masculine Overcompensation Thesis." In Kimmel & Aronson.

3c. P. Carl. "Becoming a Man." New York Times Magazine. 22 January 2020. CANVAS

3d. Ely Robin and Debra Meyerson. "Unmasking Manly Men." In Kimmel & Aronson. CANVAS

**FEATURE FILM:** *North Country* (2005) [Amazon, Vudu, iTunes, 2 hours, 6 minutes] **SHORT FILM** (click to view): "Who Are You?"

# **VIEW MODULE 3 POWERPOINT SLIDES (See Canvas Module)**

**DISCUSSION TOPICS:** The social construction of gender and work in *North Country* and in our country; masculinity; transgender identity

MODULE 4 SEPTEMBER 27-October 3 THE SOCIAL CONSTRUCTION OF RACE

## **READINGS:**

4a. Omi, Michael and Howard Winant. "Racial Formations" in Rothenberg: 13-22. (excerpt) CANVAS

**4b.** Smedley, Audrey and Brian Smedley. "Race as Biology Is Fiction, Racism as a Social Problem Is Real: Anthropological and Historical Perspectives on the Social Construction of Race." *American Psychologist* (January 2005): 16-26. **CANVAS 4c.** Jen, Gish. "An Ethnic Trump." In Rothenberg, 284-86. **CANVAS** 

**4d.** Subramaniam, Banu. "Snow Brown and the Seven Detergents: A Meta-Narrative on Science and the Scientific Method." In Women, Science, and Technology, ed. May Wyer, Mary Barbercheck, Donna Giesman, Hatice Orun Ozturk, Marta Wayne, 36-41. New York: Routledge, 2001. **CANVAS** 

**4e.** Rutherford. *How to Argue with a Racist: What Our Genes Do (and Don't) Say About Human Difference*. Amazon/ The Experiment, 2020. (excerpt) **CANVAS** 

**FEATURE FILM:** *Hidden Figures* (2016) [Amazon, iTunes, Vudu, 2 hours, 7 minutes]

SHORT FILM: (click to view): <u>Lunch Date</u> (1990) DOCUMENTARY: <u>Race: The Power of an Illusion</u>

**VIEW MODULE 4 POWERPOINT SLIDES (See Canvas Module)** 

**DISCUSSION TOPICS:** The social construction of race; racism in *Hidden Figures* and *Lunch Date*—and in our world today; the "Alt-Right"; microaggressions

# MODULE 5 October 4-10 WOMEN IN SCIENCE: Then and Now

FEATURE FILM: Picture a Scientist (2020) [Amazon Prime, Netflix, PBS]

**VIEW MODULE 4 POWERPOINT SLIDES (See Canvas Module)** 

DISCUSSION TOPICS: Gender and racial inequities in STEM; responding to sexual harassment

October 11-17 MIDTERM EXAM (October 18)

# MODULE 6 October 18-24 GENDER, SCIENCE AND HOLLYWOOD

FEATURE FILM: Contact (1997) [Amazon, Vudu, iTunes, YouTube, 2 hours, 30 minutes]

**VIEW MODULE 6 POWERPOINT SLIDES (See Canvas Module)** 

# MODULE 7 October 25-31 SCIENCE AND GENDER (Then and Now)

# **READINGS:**

7a. Barrett, Andrea. "Rare Bird." In Ship Fever. 59-79. New York: Norton, 1996. CANVAS

**7b.** Le Guin, Ursula. "Sur." In *The Norton Anthology of Literature by Women*, ed. Sandra M. Gilbert and Susan Gubar, 2008-2022. New York: W.W. Norton, 1985. **CANVAS** 

7c. Asimov, Isaac. "Introduction" and "Liar," *I. Robot*. New York: Bantam Books, 1991 [1950]: vii-xi and 111-135. CANVAS 7d. Moss-Racusin, Corinne A., John F. Dovidio, Victoria L. Brescoll, Mark J. Grahama, and Jo Handelsman. "Science faculty's subtle gender biases favor male students." PNAS October 9, 2012 vol. 109 no. 41 16474-16479 CANVAS

DISCUSSION TOPICS: Explicit and implicit bias in science; the Old Maid stereotype; the Imposter/Perfect Girl Syndromes; the 80%-20% rule

**VIEW MODULE 7 POWERPOINT SLIDES (See Canvas Module)** 

# NOVEMBER 2 IS ELECTION DAY: Vote as if Your Life Depended on It!

MODULE 8 November 1-7 CASE STUDY 1: ROSALIND FRANKLIN AND THE NOBEL PRIZE

**FEATURE FILM:** The Race for the Double Helix [aka Life Story] (1987) [97 minutes]

PART I: <a href="https://www.dailymotion.com/video/xitlyu">https://www.dailymotion.com/video/xitlyu</a> PART II: <a href="https://www.dailymotion.com/video/xitmu3">https://www.dailymotion.com/video/xitmu3</a>

DOCUMENTARY FILM (click to view): NOVA "The Secret of Photo 51" [56 minutes]

VISUAL HISTORY (click to view): "17 Rare Images Tell the Real Story of Women in Tech."

Online Video: Virginia Valian. "Remedying the (Still) Too Slow Advancement of Women" (2016): <a href="https://www.youtube.com/watch?time\_continue=2&v=yVhlVGqPylU&feature=emb\_logo">https://www.youtube.com/watch?time\_continue=2&v=yVhlVGqPylU&feature=emb\_logo</a>

## **VIEW MODULE 8 POWERPOINT SLIDES (See Canvas Module)**

#### OPTIONAL READING FOR THIS CASE STUDY:

Brenda Maddox. *Rosalind Franklin. The Dark Lady of DNA* (Paperback). Harper Perennial (October 1, 2003). James Watson. *The Double Helix*. New York: Mentor NAL, 1968.

# MODULE 9 November 8-14 CASE STUDY 2: JENNIFER DOUDNA AND THE NOBEL PRIZE

#### **READINGS:**

**9a.** Isaacson. *The Code Breaker: Jennifer Doudna, Gene Editing, and the Future of the Human Race.* New York: Simon and Schuster, 2021.

9b. New York Review of Books Interview with Doudna. CANVAS

Video Clip to View: Doudna on the day she won the Nobel Prize:

https://news.berkeley.edu/2020/10/07/jennifer-doudna-wins-2020-nobel-prize-in-chemistry/

# **VIEW MODULE 9 POWERPOINT SLIDES (See Canvas Module)**

MODULE 10 November 15-21 GENDER AND LEADERSHIP...in OUTER SPACE

## **READINGS:**

10a. Women Spacefarers (Wikipedia)

10b. Space Station Commander Peggy Whitson (Wikipedia)

#### TV EPISODE:

Star Trek OS: "Turnabout Intruder" (1969): Vudu:

https://www.vudu.com/content/movies/details/Star-Trek-The-Original-Series-Season-3/265586; also at Dailymotion.

# **FEATURE FILM:**

Arrival (2016) starring Amy Adams [Amazon, Vudu, iTunes, 2 hours]

**Group Choice**—Pick your favorite Female Leader in Outer Space movie. [If you can't think of one, check out "Commander "Kate Bowman" and her computer "Lucille" in *Red Planet* (2000)]

# **VIEW MODULE 10 POWERPOINT SLIDES (See Canvas Module)**

#11 November 22—28 CAREER SUCCESS STRATEGIES: Communication & Negotiation

# **NOVEMBER 24: ESSAY IS DUE!**

# **NOVEMBER 25--HAPPY TURKEY DAY!**

# **READINGS:**

11a. Aries Elizabeth. "Women and Men Talking: Are They Worlds Apart?" In Walsh: 91-100. CANVAS 11b. Rosalind Barrett and Caryl Rivers. "Men and Women are from Earth." In Kimmel & Aronson. CANVAS

#### **ONLINE AUDIO:**

Deborah Tannen discussing her book *Talking 9 to 5*: <a href="https://www.youtube.com/watch?v=UCMmTmD-OJI">https://www.youtube.com/watch?v=UCMmTmD-OJI</a>
Sara Laschever discussing her co-authored book *Women Don't Ask: Negotiation and the Gender Divide* (2003): <a href="https://www.youtube.com/watch?v=N4JET-Xsvis">https://www.youtube.com/watch?v=N4JET-Xsvis</a>

# VIEW MODULE 11 POWERPOINT SLIDES (See Canvas Module)

MODULE 12 November 29--December 6 CAREER SUCCESS STRATEGIES: (Work/ Life Balance)

## **READINGS:**

12a. Williams, Joan. "Hitting the Maternal Wall." *Academe*. Washington: Nov/Dec 2004. 90(6): 16-31. CANVAS 12b. KIMMEL EXCERPT #5. CANVAS

12c. England, Paula. "The Gender Revolution: Uneven and Stalled." In Kimmel & Aronson. CANVAS

#### ONLINE VIDEO:

Joan Williams. "What Works for Women at Work" https://womensleadership.stanford.edu/whatworks

## **VIEW MODULE 12 POWERPOINT SLIDES (See Canvas Module)**

MODULE 13 December 13

**FINAL ASSIGNMENT DUE** 

# RESOURCES FOR NJIT ONLINE STUDENTS

#### **IST Service Desk**

The IST Service Desk is the central hub for computing information and first point of contact for getting help and reporting issues related to computing technology at NJIT. Students can put in a ticket with the service desk:

https://servicedesk.njit.edu/CherwellPortal/IST or call (973) 596-2900 Monday - Friday from 8:00am - 9:00pm

# **Academic Advising Success Center**

"...assist in the advisement of students who are undecided in their major, transitioning into another major at NJIT, and those students who need additional support to graduate successfully and in a timely manner."

# **Academic Support and Student Affairs**

"From questions about becoming a student at NJIT – to student engagement – to searching for information on career development, the Division of Academic Support and Student Affairs Staff is here to help."

## **Additional Tutoring Centers**

# Math Learning Center; Chemistry Learning Center; The Writing Center; ECE Study Groups Bookstore

"Show your New Jersey Institute Of Technology pride all year long with our authentic assortment of New Jersey Institute Of Technology collegiate apparel...Plus, our selection of <u>textbooks</u>, <u>computers</u>, and <u>supplies</u> will ensure every New Jersey Institute of Technology student is prepared for success."

# Center for Counseling and Psychological Services

"The NJIT Center for Counseling and Psychological Services (C-CAPS) is committed to assisting students in the achievement of their academic goals as well as benefiting from their personal experience on campus. College life can be personally challenging and stressful at times. We believe that the educational process is an important component of the development of the individual as a whole person. Our goal is to optimize the college experience and improve the quality of the lives of our students by promoting their mental health and facilitating students' personal, academic and professional growth."

# **Disability Support Services**

"The Disability Support Services office works in partnership with administrators, faculty and staff to provide reasonable accommodations and support services for students with disabilities that have provided our office with documentation to receive services."

# **The Learning Center**

"Our mission is to assist students both in the classroom and beyond by providing tutorial services, academic coaching, academic and personal enrichment workshops and staff and peer support so students can meet the demands of their coursework and are prepared for life after graduation."

## Canvas Help Page

Tutorials for students.

# Robert W. Van Houten Library

"The Van Houten Library offers electronic and print resources essential to the mission of New Jersey's science and technology university, including a core collection of academic books, databases, and journals, as well as research and consultation services."

## **Student Financial Aid Services**

"Student Financial Aid Services (SFAS) at NJIT is committed to providing you with every opportunity to obtain funding to support your undergraduate educational costs at NJIT."