

37:575:313 New Technology and Work

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Course Overview

This 3-credit course serves as an engagement, education, and interaction on the topics of new technologies and the changing nature of work and employment. In this course, we will gather insights from diverse academic disciplines and explore a broad spectrum of topics related to technological innovations, labor markets, and the workforce. For example, we will discuss emerging issues such as automation and job loss, digital platforms and the gig economy, and algorithmic management. We will also discuss the implications of these changes for workers, employers, and the larger society.

This course is listed as "Asynchronous content". See Rutgers University's explanation on asynchronous courses here: (https://rlc.rutgers.edu/node/442). That is, this course will have a regular schedule of work and assignments due throughout each week, but it will not require you to be online at a particular time. Rather, I will provide materials—readings, videos, assignments, and exams—and you can access these materials and satisfy the course requirements within specified time frames.

One of the key advantages of remote, asynchronous courses is **inclusion** and **flexibility**. Students can learn and complete assignments anytime and anywhere they want, including in any time zone. In addition, asynchronous courses can help increase cognitive engagement, because students will have more time to engage with and explore the course materials. For those who are interested in the benefits and challenges of taking asynchronous courses, here is a nice summary: https://rlc.rutgers.edu/node/442.

Learning Goals

This course is designed to meet the following SMLR and LSER Learning Goals:

- I) Theoretical Perspectives Demonstrate an understanding of relevant theories and apply them given the background context of a particular work situation.
 - Demonstrate an understanding of the practical perspectives, theories and concepts in their field of study
 - o Evaluate and apply theories from social science disciplines to workplace issues
- II) Understanding Context Evaluate the context of workplace issues, public policies, and management decisions
 - o Analyze the degree to which forms of human difference shape a person's experience of and

- perspectives on work
- Analyze a contemporary global issue in their field from a multi-disciplinary and intersectional perspective
- o Analyze issues related to business strategies, organizational structures, and work systems
- o Analyze issues of social justice related to work across local and global contexts (LSER)

VII) Professional Development – Demonstrate an ability to interact with and influence others in a professional manner, and to effectively present ideas and recommendations

- o Develop effective presentation skills appropriate for different settings and audiences
- o Develop career management skills to navigate one's career
- o Develop capabilities to work and lead in a multicultural and diverse environment
- o Work productively in teams, in social networks, and on an individual basis
- o Develop cultural agility competencies
- o Demonstrate lifelong personal and professional development skills

Course Materials



This course has received an 'Open and Affordable Textbooks (OAT)' award from Rutgers University Libraries. The OAT Program supports textbook affordability at Rutgers by encouraging courses to adopt educational material that are freely available, available at a low cost (compared to similar courses) or part of Rutgers University Libraries' electronic collections, and thereby **free of charge** to Rutgers University students.

All course readings will be available via the Canvas course website. Readings will draw from academic articles, popular press articles, book excerpts, and business cases. Please check Canvas at least twice a week.

As a student in this course, you will be asked to provide feedback on this initiative at the end of the semester.

Student Responsibilities

Completing synchronous courses requires a high level of discipline, dedication, and time management skills. While remote, asynchronous learning offers you flexibility and convenience to learn, you are still expected to:

- Have access to a reliable computer, and access to the Internet
- Log in to Canvas for your course on a daily basis
- Check for any announcements, syllabus updates, assignments, and/or discussions and respond accordingly
- Actively participate in the Discussion Forum
- Complete the assigned readings and multimedia, exercises and quizzes
- Adhere to all due dates

Make sure you have an alternative plan of access to your Canvas course in case your computer crashes (it happens). An extra computer at home, your employer's computer, or computer at your

local library can be some alternatives. Additionally, be sure to backup your important documents and assignments on a flash drive or other external device.

Evaluation Methods

Weekly discussion forum=140Tech focus assignment=60Mid-term and final open-book exams=200Final reflection paper=100

Total points = 500 points

Respect for Diversity, Equity, and Inclusion

It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated.

Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. If you have already established accommodations with Student Accessibility Services, please communicate your approved accommodations to me at your earliest convenience so we can discuss your needs in this course.

Rutgers Academic Integrity

Students in this class and in all courses at Rutgers University are expected to uphold the highest standards of academic integrity. Cheating, plagiarism in written work, receiving and providing unauthorized assistance, and sabotaging the work of others are among the behaviors that constitute violations of the Academic Integrity Policy. You are expected to be familiar with this policy. If you have questions about specific assignments, be sure to check with the instructor. The Academic Integrity Policy defines all forms of cheating and the procedures for dealing with violations. You should be familiar with this policy. The trust between the instructor and the class depends on your acceptance of this essential principle of behavior in the University. Do your own work and do not provide unauthorized assistance to others and you will find this course more rewarding.

Course Schedule (Tentative)

::	Alli.	Required Video: Kochan & Mindell Discussion on Industrial Revolutions and Work Sep 8		
ii	A.	Required Reading: Technology, Jobs, and the Future of Work Sep 8		
ii	illi.	Optional: Glossary of automation technologies and techniques		
::	ē,	Academic Integrity Contract - read, sign, submit (mandatory) Sep 8 10 pts		
::		Bonus forum: Meet your learning community Sep 12		
::	Ę.	Weekly forum 1 : Will ChatGPT Take Your Job? Sep 10 10 pts		
ii		Unit 1 Tech focus assignment: generative Al Sep 10 5 pts		
::		Required Video: The big debate about the future of work, explained Sep 15		
::		Required Reading: Elliott, S.W., 2018. Artificial Intelligence, Robots, and Work: Is This Time Different? Sep 15		
::		Weekly forum 2 : Trucking and the Rise of Autonomous Vehicles (AV) Sep 17 10 pts		
::	₽ P	Unit 2 Tech focus assignment: Autonomous driving Sep 17 5 pts		
::	All:	Required Reading: A future that works. Sep 22		
ii	-lill	Required video: Mapping Automation-Proof Jobs and Skills (30-min video) Sep 22		
::		Weekly forum 3 : Robots in the Workforce: The Case of Amazon Robotics Sep 24 10 pts		
::		Unit 3 Tech focus assignment: Robotics Sep 24 5 pts		

Required Video: Will automation take away all our jobs? David Autor (20 min video) Sep 29				
Required Reading: Roose. 2019.A Machine May Not Take Your Job, but One Could Become Your Boss Sep 29				
Unit 4 Tech focus assignment: IoT Oct 1 5 pts				
Reading: Moretti, E. 2012. The New Geography of Jobs. Oct 6				
Required Video: How covid-19 is boosting innovation Oct 6				
Required Reading: Companies Invest in Partnerships, Workforce Training to Bridge Skills Gap Oct 13				
Required Video: Why job seekers don't land jobs? Oct 13				
Unit 6 Tech focus assignment: Blockchain Oct 15 5 pts Oct 15 5 pts				

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#		Required Reading 1: BLS. Career Outlook. Working in a gig economy Oct 27			
#	alli.	Required reading 2: Plugging Into the Gig Economy, From Home With a Headset Oct 27			
ii	allih.	Required Video: How to Thrive in the Gig Economy. Jerry Davis 3 min video Oct 27			
::		Unit 8 forum : With food-delivery apps like Uber Eats, who's actually making money? PBS Video. Oct 29 15 pts			
ii	ē,	<u>Unit 8 Tech focus assignment - platform ecosystems</u> Oct 29 6 pts			
ii					
#	alli.	Required 1. Business perspective: Uber's plan to get more people into fewer cars Travis Kalanick (18 min video) Nov 3			
::		Required 2. Workers' perspective: Rosenblat, A., 2018. Uberland: How algorithms are rewriting the rules of work			
ii		Unit 9 Tech focus assignment - The Economics of Uber Nov 5 6 pts			
::		Optional reading: Greenhouse, S., 2015. Uber: On the road to nowhere. The American Prospect.			
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iii		Required Reading 1: Mateescu & Nguyen. 2019. Algorithmic Management in the Workplace Nov 10			
::		Required reading 2: Rosenblat, A., 2018. When your boss is an algorithm. New York Times. Nov 10			
::	ALL:	Required video: Inside Amazon: The Rugeley warehouse Nov 10			
::		Weekly forum 10: On Amazon's Time			

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::	alli.	Required reading 1: Your boss is going to start using Al to monitor you—and labor laws aren't ready. Nov 17			
ii	Allı.	Required reading 2: New forms of work and policy implications for labour regulations Nov 17			
ii	Alli.	Required Video: Workers rights in the age of surveillance capitalism Nov 17			
ii	ē)	Weekly forum 11 : Finland's Universal Income Experiment Nov 19 10 pts			
ii	allt.	Optional Video: Prof. Paul Oyer, "The Gig Economy: Threats and Opportunities for Workers and Employers"			
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::		Required Reading 1: What is worker voice and why it is so important Dec 1			
ii		Required Reading 2: Hundreds of Google Employees Unionize, Culminating Years of Activism Dec 1			
::		Required Video 1: Why Google's union is a big deal (8-min video) Dec 1			
::		Required Video 2: Hundreds of New York Times Tech Staffers Vote to Unionize (WSJ. March 2022) Dec 1			
ii	Ę,	Weekly forum 13 : Alphabet Workers Union Dec 3 10 pts			

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ii	ÎIII.	Required reading 1: Union Organizing in Amazon warehouses Dec 8			
ii	Îll.	Required video1: Alabama Amazon Warehouse Could Become First To Unionize For Company Dec 8			
::		Optional reading 1: How Amazon Is Resisting Unions in Two Upcoming Elections			
::		Optional reading 2: Here's How We Beat Amazon			
ii	ill.	Required reading 2: More Starbucks stores want to unionize. These workers are leading the push. Dec 8			
ii	fill.	Required video 2: How the Starbucks Union vote may impact the restaurant industry. Dec 8			
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