

AI for an Open Society

course 2026

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Lecturer Experimental Psychology

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AI for an Open Society

AI for an Open Society

- What are different types of AI?
- How are they used?
- Which problems are we trying to solve using these AI techniques?

Not:

- How do these techniques work (in detail)?

AI for an **Open Society**

AI for an **Open Society**

- What is an Open Society?
- How is the research into Open Societies structured at UU?
- What kind of problems do we try to solve related to Open Societies?

IOS: institutions for Open Societies

Central strategic research theme across UU



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Are our institutions equipped for the challenges of an open society's future?

Are existing formal and informal institutions able to cope with challenges such as growing socio-economic inequality, the power of 'big tech', the climate crisis, terrorism and discrimination and distrust in government and science? And, if current institutions fail, how can they be adapted and improved to better contribute to open and resilient societies? [Read more about IOS.](#)

How are open societies transforming and what is our role therein? In the new [IOS Position Paper](#), the authors Flor Avelino, Carolina Castaldi, Rutger Claassen and Anna Gerbrandy renew and refine the notion of open societies and relate it to a diversity of normative perspectives and processes of institutional transformation. Engage yourself in this critical dialogue by emailing to ios@uu.nl!



IOS is a platform to tackle **societal issues** of the 21st century.

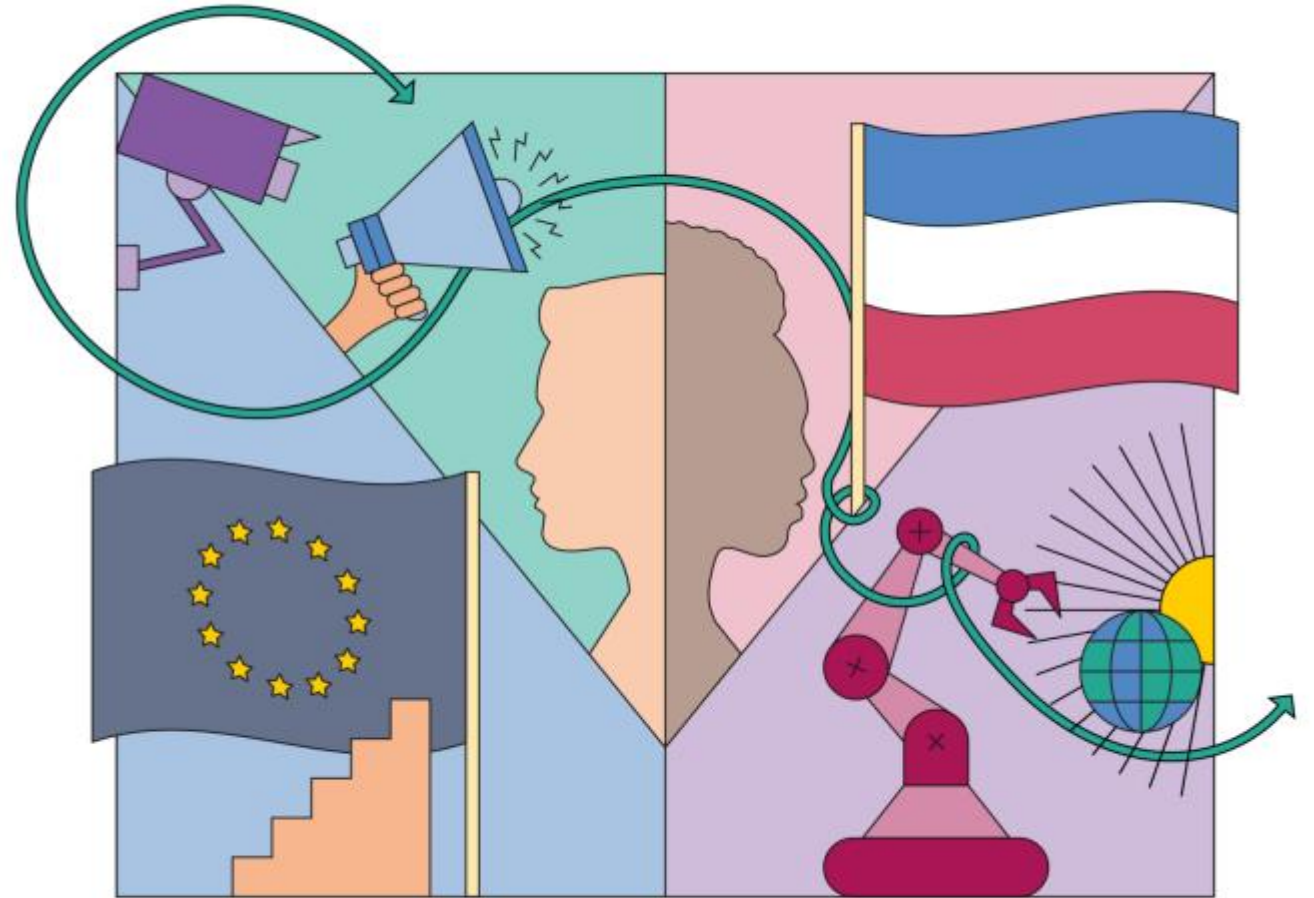
Question:

Which societal issues are you worried about?



Societal issues:

- Distrust in government, media, science
- Housing
- Growing socio-economic divide
- Growing power of 'big tech'
- Climate
- Migration
- Geopolitical upheaval
- Pressures on democracy, rule of law, free speech



Question:

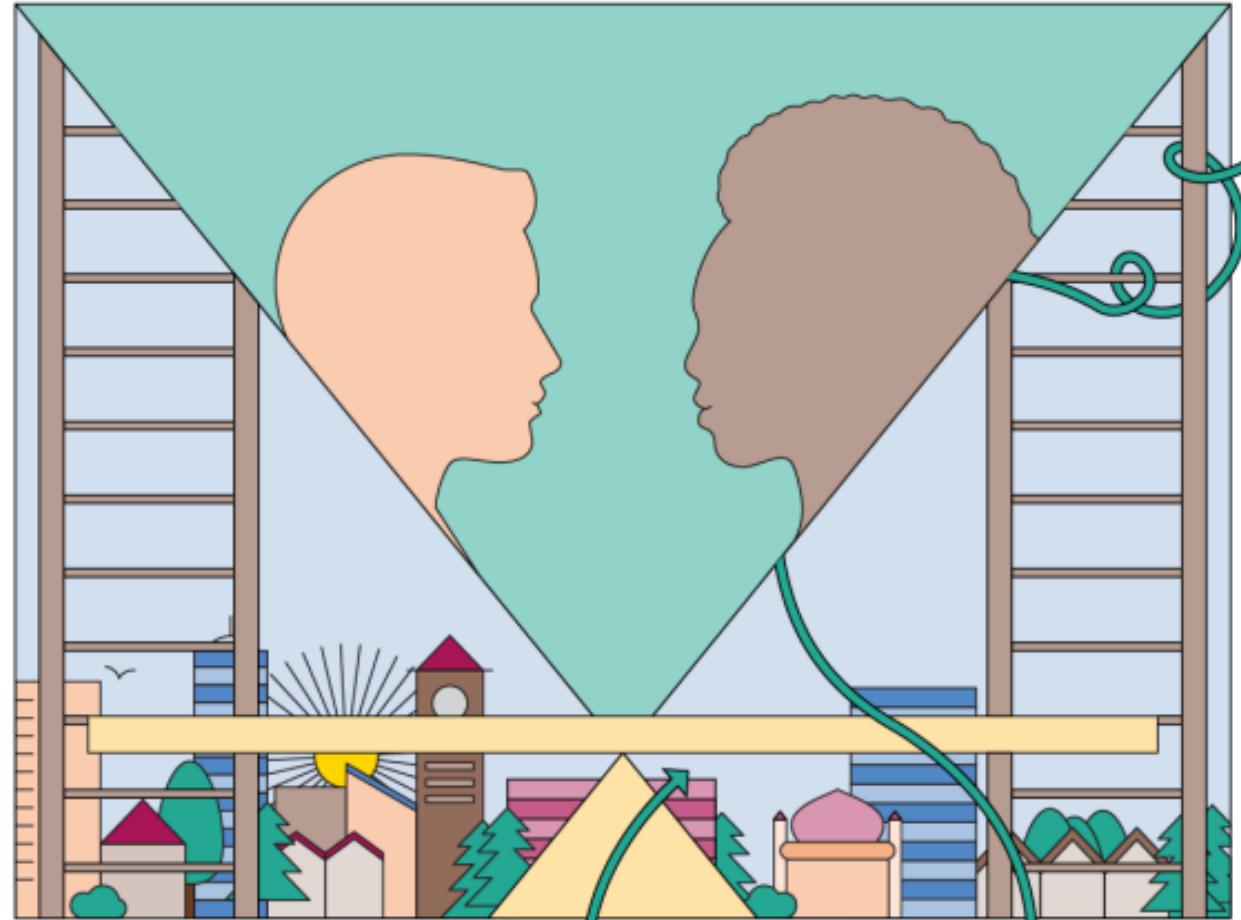
- **How are these issues for an open society?**
- **What is an open society?**



An open society

Based on

- Open towards diversity of knowledge (science, arts, cultural)
- Openness towards emancipatory movements & respect for individual rights
- Constitutional democracy & rule of law
- Contestable markets & open borders



Question:

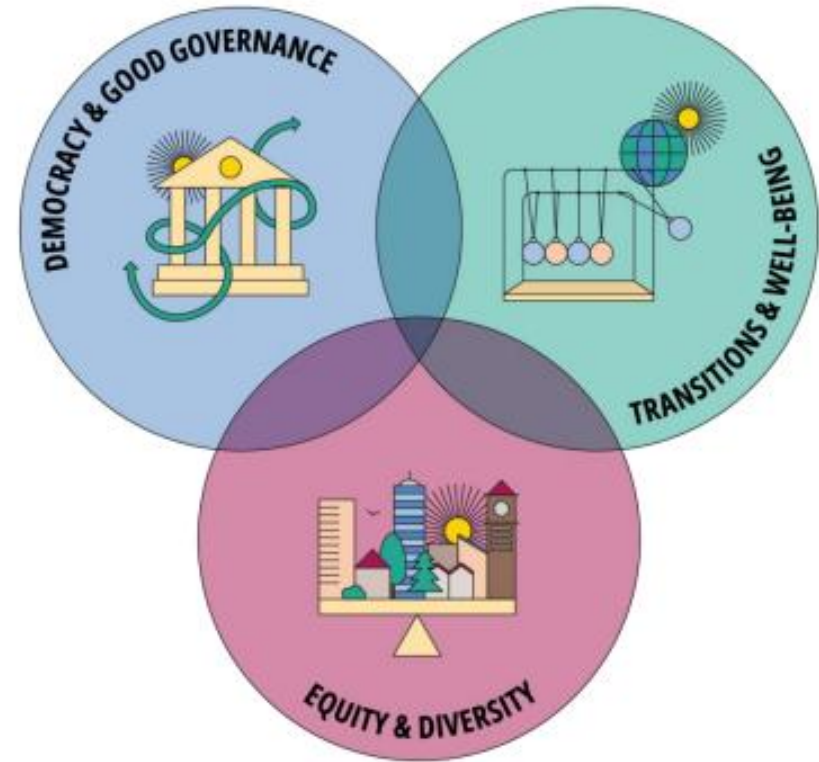
- **What are institutions?**



Institutions

Institutions are the building blocks of society.

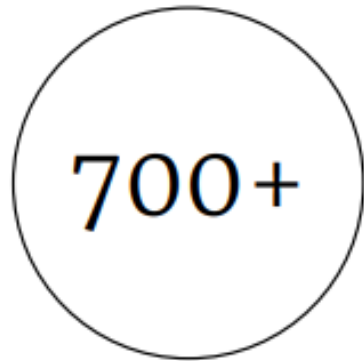
The 'rules of the game', the written rules and associated organisations, but also unwritten rules & networks



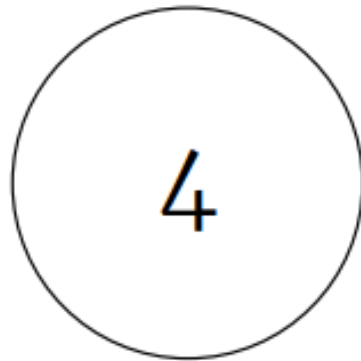
IOS:

- **How are societal issues related to the institutions for open society?**

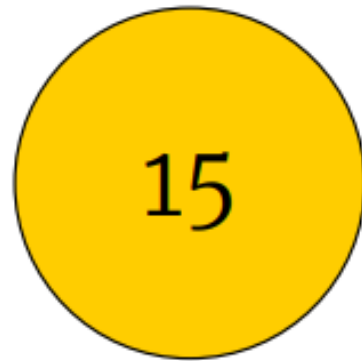




researchers



faculties

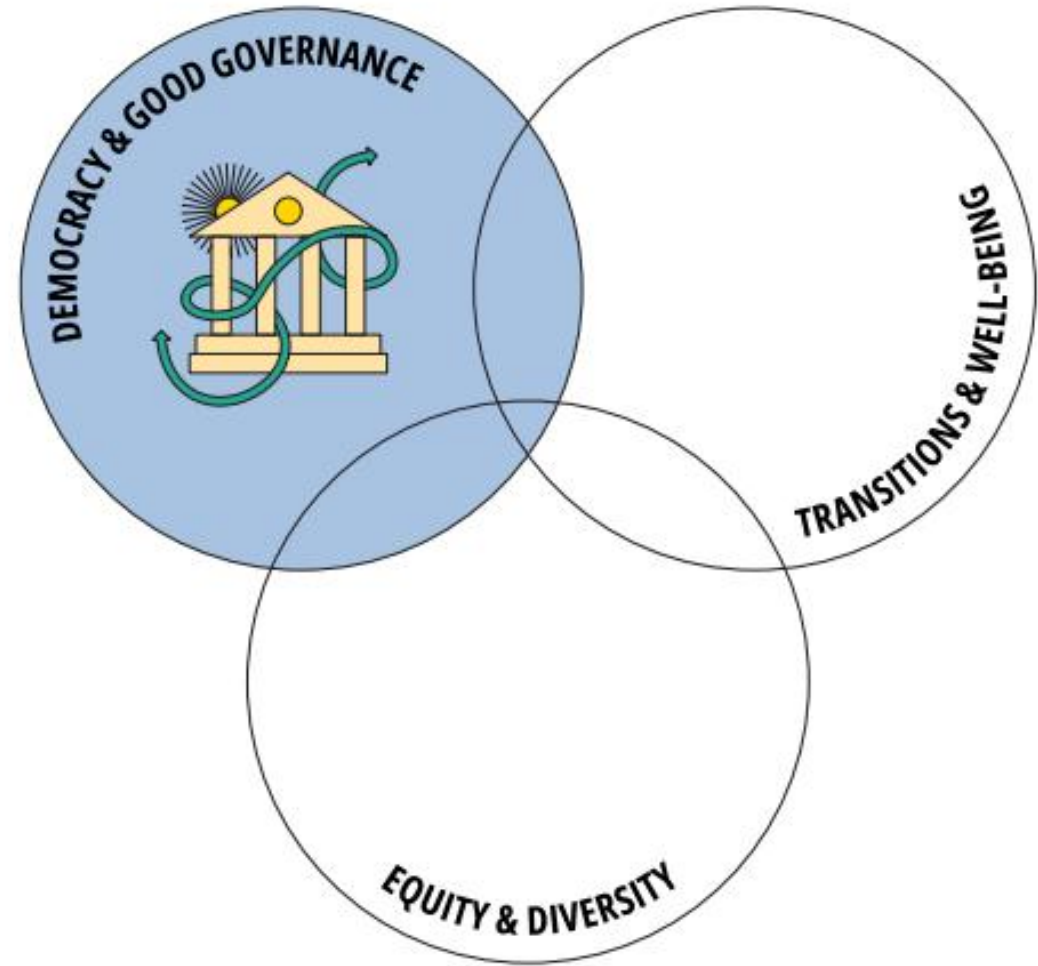


platforms

At IOS, we combine expertise from various fields such as economics, history, public administration, culture, law, sociology, social psychology, language and communication, ethics, innovation studies and geography.

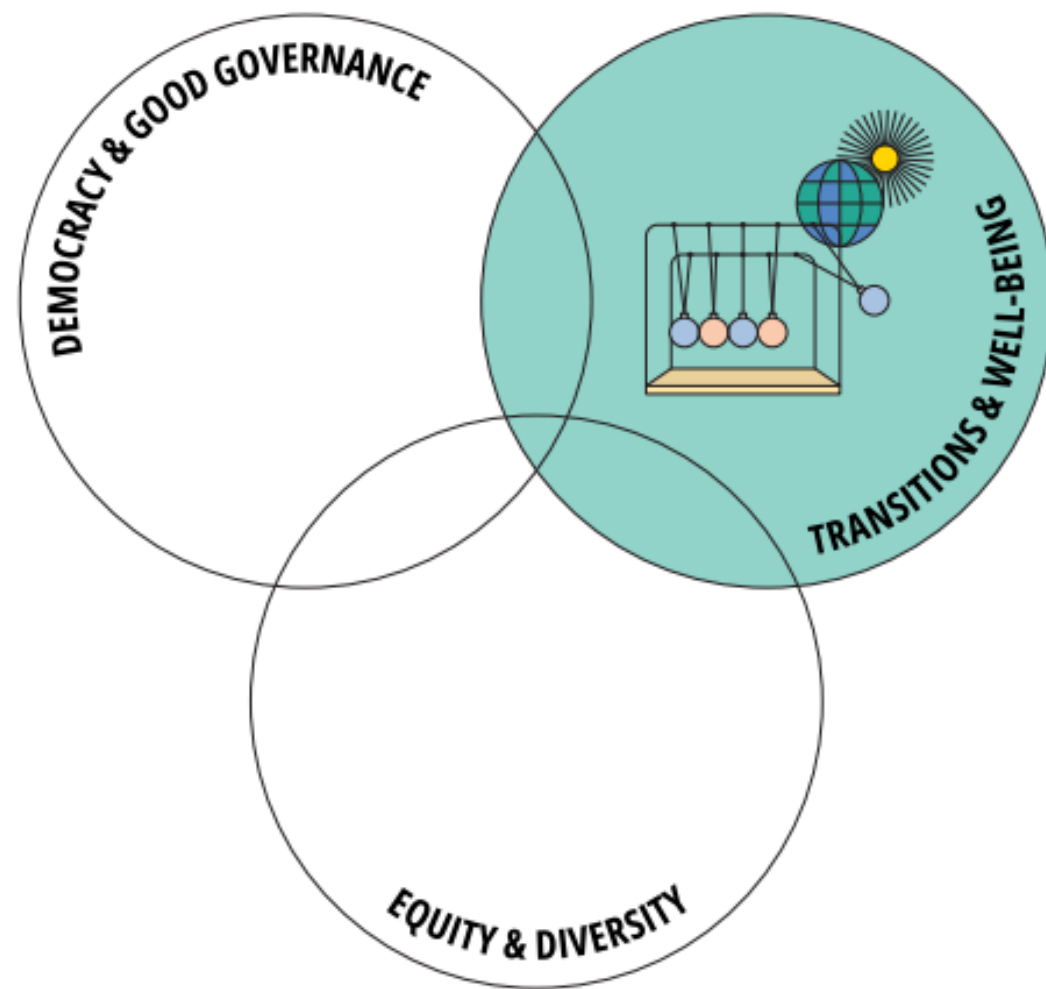
Democracy and Good Governance

- Contesting governance
- EU Platform
- Futures of democracy
- Markets and corporations
- Openness challenged: The university at risk?
- Security in open societies



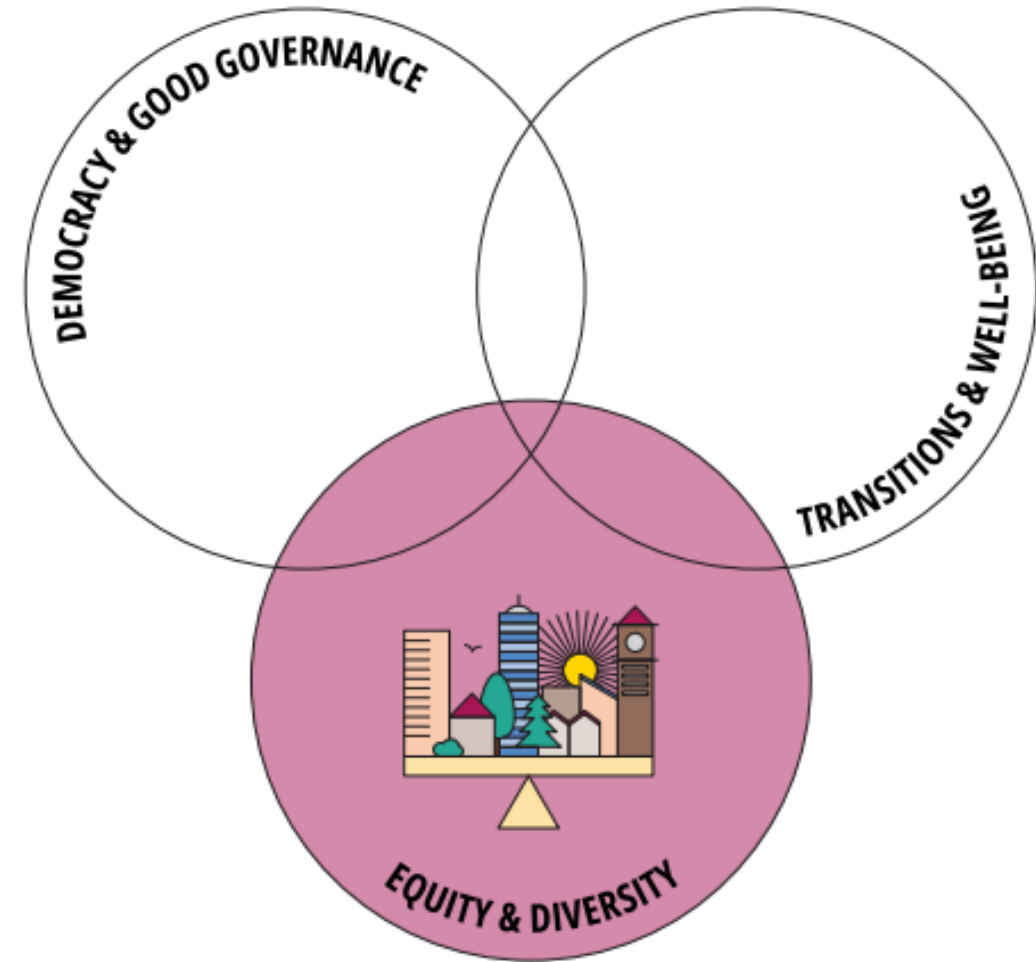
Transitions and Wellbeing

- Behaviour and institutions
- Bottom-up initiatives for societal change
- Fair transitions
- Future of work
- Longtermism and institutional change
- The transactional state as an institution for good



Equity and diversity

- Gender, diversity and global justice
- (In)equality
- Open cities



AI for an **Open Society**

Self study

- Which societal issues are you interested in?
- Which IOS platforms are those issues associated with?
- What kind of research is already done around that IOS platform?

AI for an **Open Society**

Self study

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During the second half of the course, we will use these issues/topics to construct new research proposals.

AI for an Open Society

AI for an Open Society:

*How can we apply AI
methods, techniques and
lessons to contribute to the
formation and flourishing
of open societies?*

How do developments in AI shape the possibilities and threats towards open society?

AI in media

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AI could pose 'extinction-level' threat to humans and the US must intervene, State Dept.-commissioned report warns



By [Matt Egan](#), CNN

🕒 6 minute read · Updated 8:38 PM EDT Tue March 12 2024

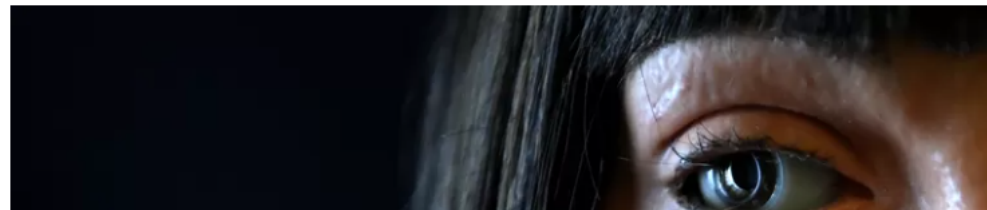




IMAGE CREDITS: KIRILL KUDRYAVTSEV/AFP / GETTY IMAGES

Snap is cutting 1,000 jobs, 16% of its workforce

Aisha Malik — 6:54 AM PDT · April 15, 2026

Snap is laying off roughly 16% of its global workforce, impacting around 1,000 full-time employees, according to a [memo](#) sent to staff from Snap CEO Evan Spiegel on Wednesday. The company cites advancements in AI for the cuts.

StrictlyVC powered by 

April 30 | San Francisco, CA

US Air Force debuts operational AI wargame system

By [Cristina Stassis](#)

Apr 15, 2026, 11:47 PM





Marine officers conduct a wargaming scenario aboard the Amphibious Assault Ship USS Kearsarge in 2021. (Yvonna Guyette/U.S. Marine Corps)

Trump deletes image of himself as Jesus-like saviour after backlash

Trump draws criticism from church leaders and conservatives over AI-Jesus image and pope remarks.

 Listen (6 mins)  Save  Share

 Add AI Jazeera on Google 



Backlash extended beyond church leaders, with conservative figures also criticising the AI-generated image of US President Donald Trump [Reuters]

AI for an Open Society

- AI is on the forefront of societal change
- Different types of AI applications are used/studied in different contexts
- At the UU, a range of different researchers employ AI methods in their daily research

Setup of this course: learning goals

Learning goals

At the end of this course, students:

1. *Understand* how different disciplines, models, and theories contribute to AI for an open society. Particular emphasis will be placed on theories from the social and behavioral sciences, humanities, and governance.
2. Can *analyze* and *evaluate* concrete problems related to formal or informal institutions with an eye for how the aforementioned disciplines, models, and theories can contribute to it, and where opportunities are for multi- and interdisciplinary research.
3. Can *create* a research proposal to investigate a societal relevant problem. This proposal will require the application of AI techniques through a multi- and interdisciplinary perspective, as well as articulating its relevance to formal and/or informal institutions.

Setup of this course: lectures

1: Lectures: 6 lectures by specialists in different AI fields from the UU, given their perspectives on the use of AI in an Open Society

The course set-up is as follows. In *methodological* lectures, students gain an understanding of the available tools to study the impact of AI on IOS themes. In *thematic* lectures, students are provided with examples of how AI solutions impact society, and how these impacts can be mitigated. In *practical* working groups, these models and theories can be applied in a grant proposal.

Setup of this course: schedule part 1

Schedule

The color coding refers to the lecture type: **Methodological**, **thematic**, or **practical**.



Lecture				Literature	Professor	
	Date	Time	Week			
1	Wed 22-04	13:15 – 15:00	17	Introduction & IOS	1	Van Rooij
2	Fri 24-04	11:00 – 12:45	17	<u>Modeling individual decision making</u>	2	Van Maanen
3	Wed 29-04	13:15 – 15:00	18	Autonomy, psychology of interaction with AI systems	3	Hortensius
4	Fri 01-05	11:00 – 12:45	18	Emergence of collective patterns in relation to norms	4	Klein
5	Wed 06-05	13:15 – 15:00	19	Attitude & Linguistic Models	5	Van der Vegt
6	Fr 08-05	11:00 – 12:45	19	Trust in AI	6	<u>Grimmelikhuijsen</u> + Liefoghe
7	Wed 13-05	13:15 – 15:00	20	Medical AI / Digital Twins	7	Van Rooij + Bontje
8	Wed 20-05	13:15 – 15:00	21	Putting everything together and future outlook		Van Rooij
	Fri 29-05	11:00 – 13:00	22	<u>Mid-term exam</u>		

Lectures:

Lecture 2

Dr. van Maanen: Models of perceptual decision making

- How cognitive models can be used to explain decision making in humans
- Influence of AI on an individual level: how do different people make decisions?
- Potential relevance for topics like selection/training on the workforce, consumer behavior

Lectures:

Lecture 3

Dr. Hortensius: Psychology of interaction with AI systems

- Improving man-machine interaction by better modelling of human thought/behavior
- Influence of AI on an individual level
- Potential relevance for all topics dealing with user interface (e.g. Netflix, Amazon algorithms)

Lectures:

Lecture4

Dr. Klein: Emergence of collective patterns

- Using models like the bounded confidence model to explain behavior of groups of people.
- Influence of AI on a group level
- Potential relevance for topics like crowd control, consumer behavior, inclusivity, diversity and security in open society

Lectures:

Lecture 5

Dr. van der Vegt: Attitude & Linguistic Models

- Computational linguistics & NLP's

Lectures:

Lecture 6

Stephan Grimmelikhuijsen & Dr. Liefhooge: Ethics & Trust in AI

- Ethics of decision making by algorithms
- Trust in AI: what is trust, and how do humans learn to trust AI and AI expertise?

Lectures:

Lecture 7

Dr. van Rooij & Floor Bontje: AI in medical research/practice & Digital Twins

- Using Machine Learning to predict medical outcomes
- Risks and Rewards of using these methods, and how this will shape medical practice in the future
- Use of digital twins to explain and predict (pedestrian) behavior

Lectures:

Lecture 8

Daan van Rooij: (Mock exam) + Putting everything together and future outlook

Mock exam:

- Remindo exam, can be done from home
- One question about each lecture
- Discussion about exam questions
- Discussion about possible IOS topics!

Setup of this course: IOS platforms & proposal

2: IOS platforms: 15 key research platforms targeted by the UU for further research and development.

Self study by students to identify research topics and targets of interest

3: Grant assignment: writing a grant proposal, integrating the lectures and IOS themes.



**Utrecht
University**

Security in Open Societies

Future of Work

22-4-2026

Bottom-up Initiatives
for Societal Change

Open Cities

Behaviour and Institutions

Transitions and well-being

**Democracy and
good governance**

Fair Transitions

IOS-Themes: 15
platforms

Longtermism and Institutional Change

Contesting Governance

Futures of Democracy

Markets and Corporations

The Transactional State
as an Institution for Good

Gender, Diversity and Global Justice

Openness challenged: the university at risk?

In/Equality

Equality and diversity



Utrecht University

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Future of Work

22-4-2026

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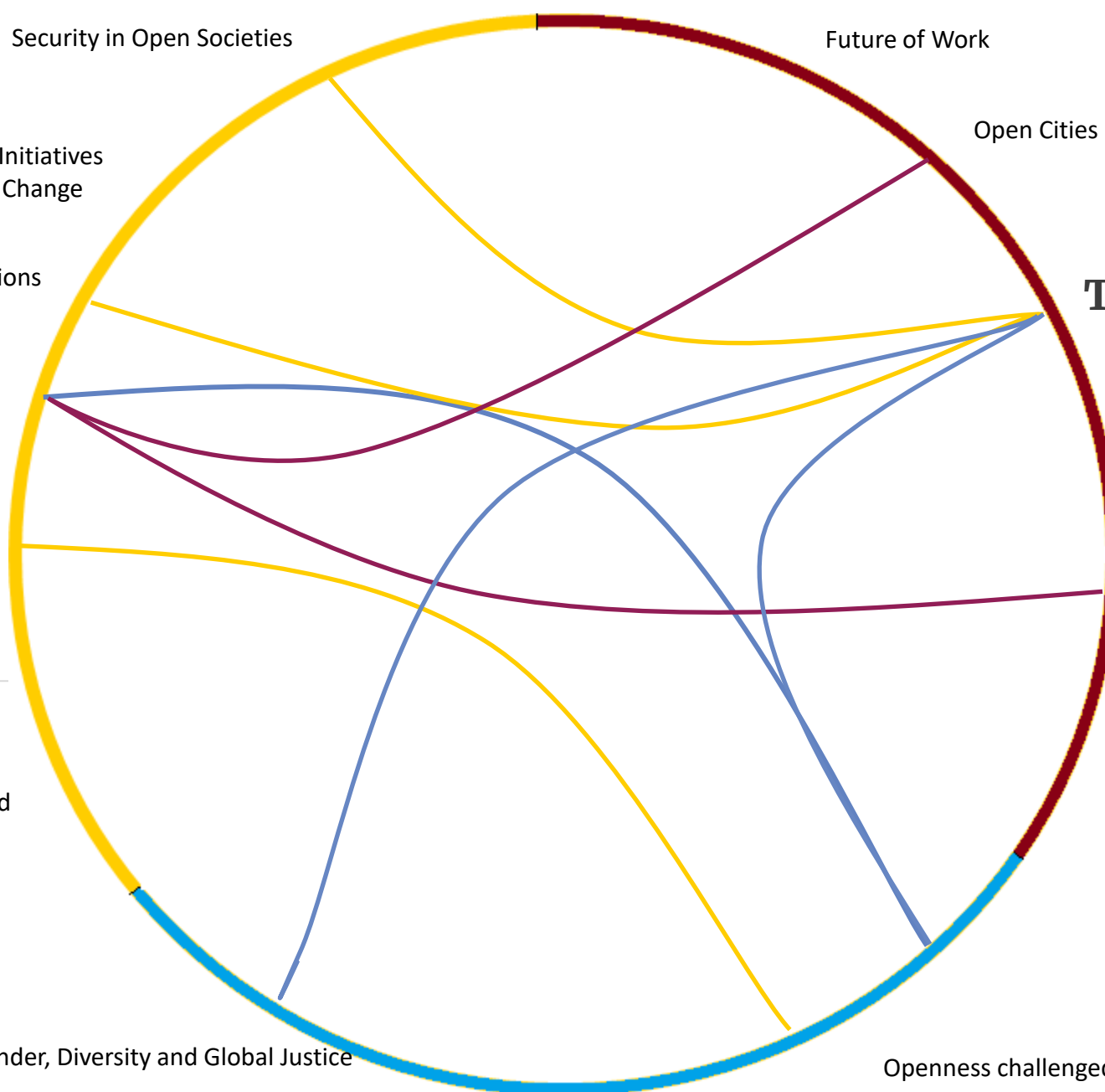
Markets and Corporations

Gender, Diversity and Global Justice

Openness challenged: the university at risk?

In/Equality

Equality and diversity



Setup of this course: schedule part 2

8	Fri 05-06	11:00 – 15:00	23	Workgroup		Van Rooij, Van Maanen, Liefoghe, v/d Vegt, Klein
9	Fri 12-06	11:00 – 15:00	24	Pitches + Workgroup		Van Rooij, Van Maanen
10	Fri 19-06	11:00 – 15:00	25	Workgroup		Van Rooij, Van Maanen
	Fri 26-06		26	Workgroup		Homework group, no location
	Sun 28-06		26	Deadline proposal 23:59		

1



Grant assignment: what are grants?

Main method for obtaining research funding

- 1st revenue stream is government based (linked to department or position)
- 2nd & 3^d revenue streams are grant based



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Find Funding

Each year, NWO invests almost 1 billion euros in curiosity-driven research, research related to societal challenges and research infrastructure.

Researchers and research institutions can submit an application for funding for research projects, large equipment and databases as soon as NWO publishes a call for project proposals. Here you find all funding opportunities that NWO offers.

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Grant assignment: who receive grants?

Different types of grants are possible:

- Grants for departments (to fill a certain position, e.g. PhD position)
- Grants for projects
 - consortium grants
 - personal grants

Open Competitie - Nieuwsgierheidsgedreven onderzoek
Talentprogramma - Nieuwsgierheidsgedreven ongebor
Kennis- en Innovatieconvenant (KIC) - Projecten of progr
Nationale Wetenschapsagenda (NWA) - Bevorderen dat
Wetenschappelijke infrastructuur - Realiseren van groot

[Financiering vinden](#) > [Binnenkort verwacht](#) > [NWO-Talentprogramma](#)

NWO-Talentprogramma

Het NWO-Talentprogramma bestaat uit drie financieringsvormen (Veni, Vidi, Vici), afgestemd op verschillende fasen in de wetenschappelijke carrière van onderzoekers. Het financieringsinstrument maakt het mogelijk onderzoek naar eigen keuze te doen. Zo krijgt vernieuwend onderzoek een impuls en wordt de doorstroom bij wetenschappelijke onderzoeksinstellingen bevorderd. De bedragen die aangevraagd kunnen worden variëren van maximaal 280.000 euro voor Veni, 800.000 voor Vidi en voor Vici 1,5 miljoen. Er zijn afzonderlijke beoordelingen voor Veni, Vidi en Vici. Ga naar de callpagina van Veni, Vidi of Vici van het domein waar u een aanvraag wil doen.

- Personal grants can be subdivided by size
 - e.g. veni, vidi, vici

Grant assignment: why is this important?

Grant offer opportunities in your research career:

- Grants can fund your PhD position
- Some grants can be (more or less) freely used
- Grant acquisition are a main measure of career success in academia

But!

- Grants are very competitive, often only a small chance of receiving a grant after writing a proposal.

Grant assignment: structure

1. Title of the proposal
2. Summary of the proposed research
3. Keywords
4. Main body
 - Background
 - Objective
 - Scientific relevance & Novelty
 - Approach / Experimental design
5. Budget and Feasibility of your research
6. Proof of Concept

Data simulation showing how your algorithm or model would work

An experimental setup, testing your AI solution on a small number of test subjects.

Preliminary data analysis of an existing dataset using your proposed method

A prototype algorithm demonstrating its functionality

7. Impact of the research

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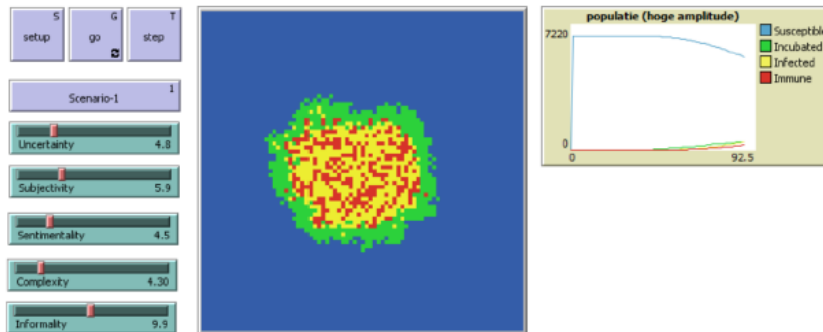
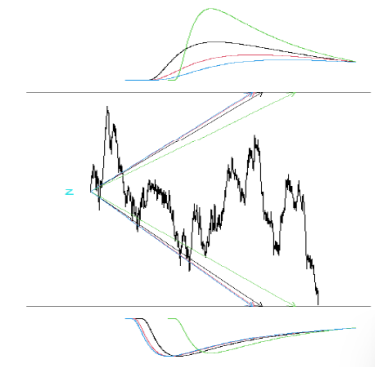
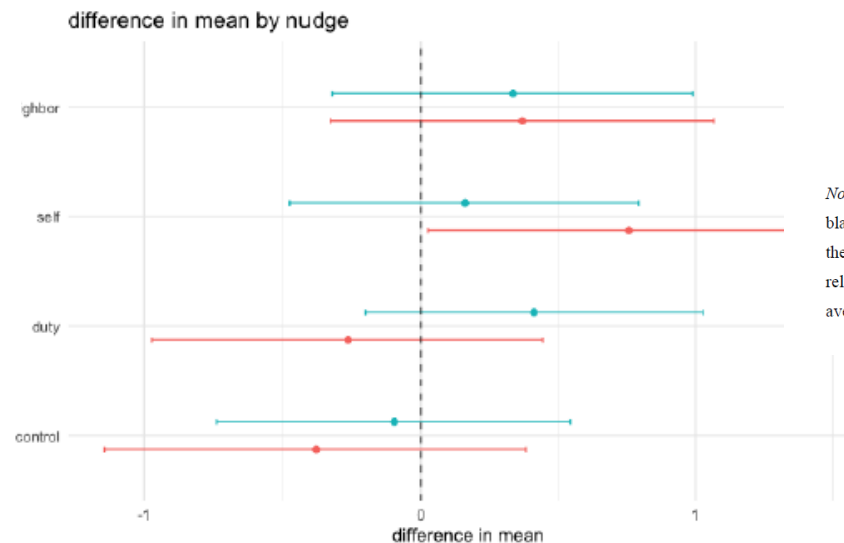


Figure 2: The spreading starts to speed up. The 'incubated' nodes have a larger total amount of adjacent nodes.



Note. DDM was created by simulating the differences in DDM parameters between the conditions. The black line represents the control group, the green one represents the timed group, the red one represents the awareness group, and the blue one represents the deliberate group. The Z in the figure depicts the relative starting point, the colored lines at the top and the bottom depict the density and the arrows the average drift rate.

Grant assignment: groups

Groups of 4 students per grant assignment

Groups will be generated *after* the mid-term exam

Grant assignment: reading material wk1

Read about the IOS platforms here:

<https://www.uu.nl/onderzoek/instituten-voor-open-samenlevingen>

Read the first two parts about this think paper on IOS hubs perspectives:

<https://www.uu.nl/sites/default/files/IOS%20Think%20Paper%20Series%20%231.pdf> (page 1-16)

Read the following paper by Elliot et al. on the role of IA in corporate society:

Elliott, K., Price, R., Shaw, P., Spiliotopoulos, T., Ng, M., Coopamootoo, K., & van Moorsel, A. (2021). Towards an equitable digital society: artificial intelligence (AI) and corporate digital responsibility (CDR). *Society*, 58(3), 179-188.

(<https://link.springer.com/article/10.1007/s12115-021-00594-8>)

Grant assignment: reading material wk1

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Elliott, K., Price, R., Shaw, P., Spiliotopoulos, T., Ng, M., Coopamootoo, K., & van Moorsel, A. (2021). Towards an equitable digital society: artificial intelligence (AI) and corporate digital responsibility (CDR). *Society*, 58(3), 179-188.

(<https://link.springer.com/article/10.1007/s12115-021-00594-8>)

"If we permit AI to make life-changing decisions, what are the opportunity costs, data trade-offs, and implications for social, economic, technical, legal, and environmental systems?"

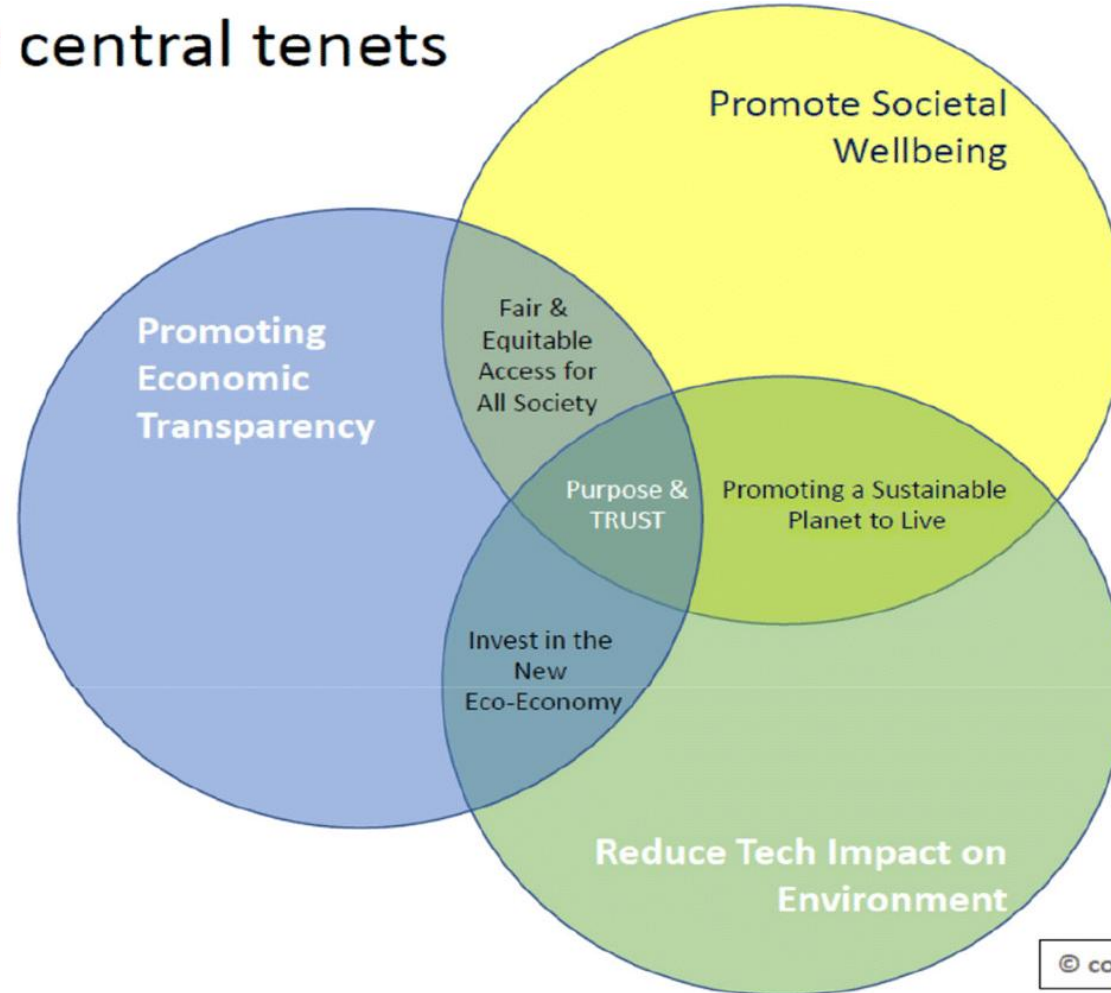
Grant assignment: reading material wk1

TRUST requires transparency, responsibility, understanding, stewardship, and truth:

Transparency being clear about what it is you are doing and why . . . the opportunities and risks. . . **Responsibility** being reputable and accountable for what it is you do; **Understanding** . . . you provide [customer] services to understand what outcome they can expect and how it will impact them...and society; **Stewardship**...a good custodian of the data . . . in line with the kind of society we all want to create; **Truth**, validating the accuracy of data, the insight and inferences made . . . are beneficial and not harmful.

Grant assignment: reading material wk1

CDR: central tenets



Questions?