

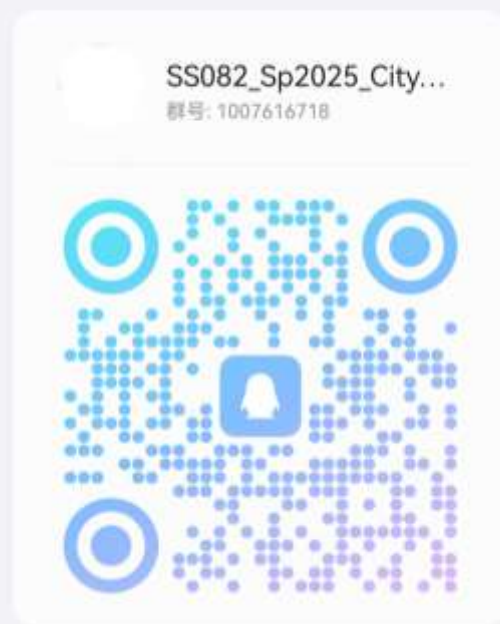


SUSTech, Fall 2025

THE CITY AND TECHNOLOGY

Instructor: Dr. Lili Wang
Center for Social Sciences





CONTENT OF TODAY'S CLASS

1. THOUGHT EXPERIMENTS AND COURSE RATIOANLITY

What are the technologies that shape your everyday life living in Shenzhen?

3. SOME USEFUL TOOLS

How to search and cite resources?

How to use AI tools?

2. COURSE INTRODUCTION

Course objectives

Course approaches and learning materials

Assessment

Class involvement

Communication

Course space on Blackboard

Academic integrity

Course structure



ABOUT ME

I am Dr. Lili Wang

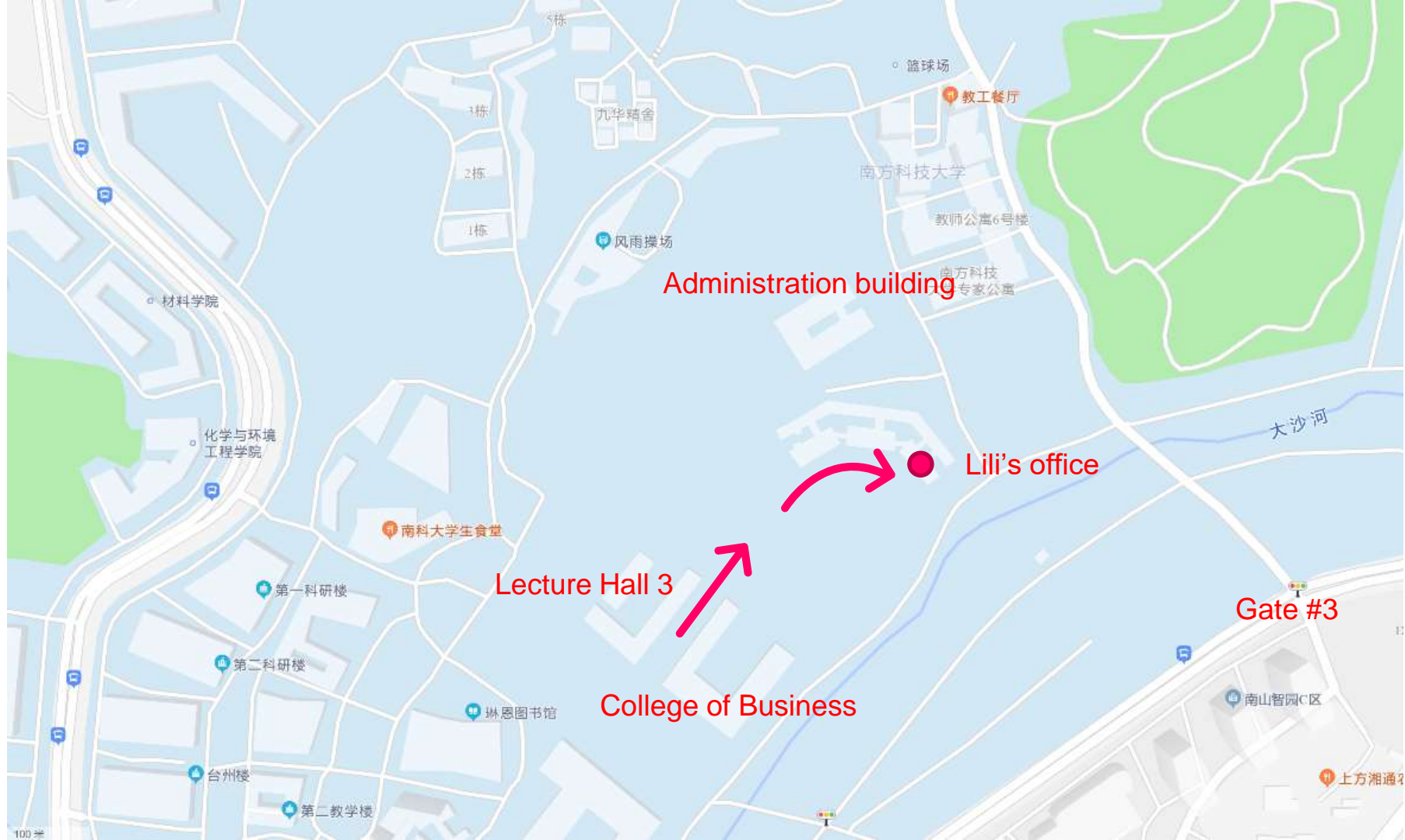
Hope we will have a great semester together.

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Office hours: 7:30 – 9:30 pm, Wednesdays, or, by appointment





Administration building

Lili's office

Lecture Hall 3

College of Business

Gate #3



1.

THOUGHT EXPERIMENTS AND COURSE RATIONALE

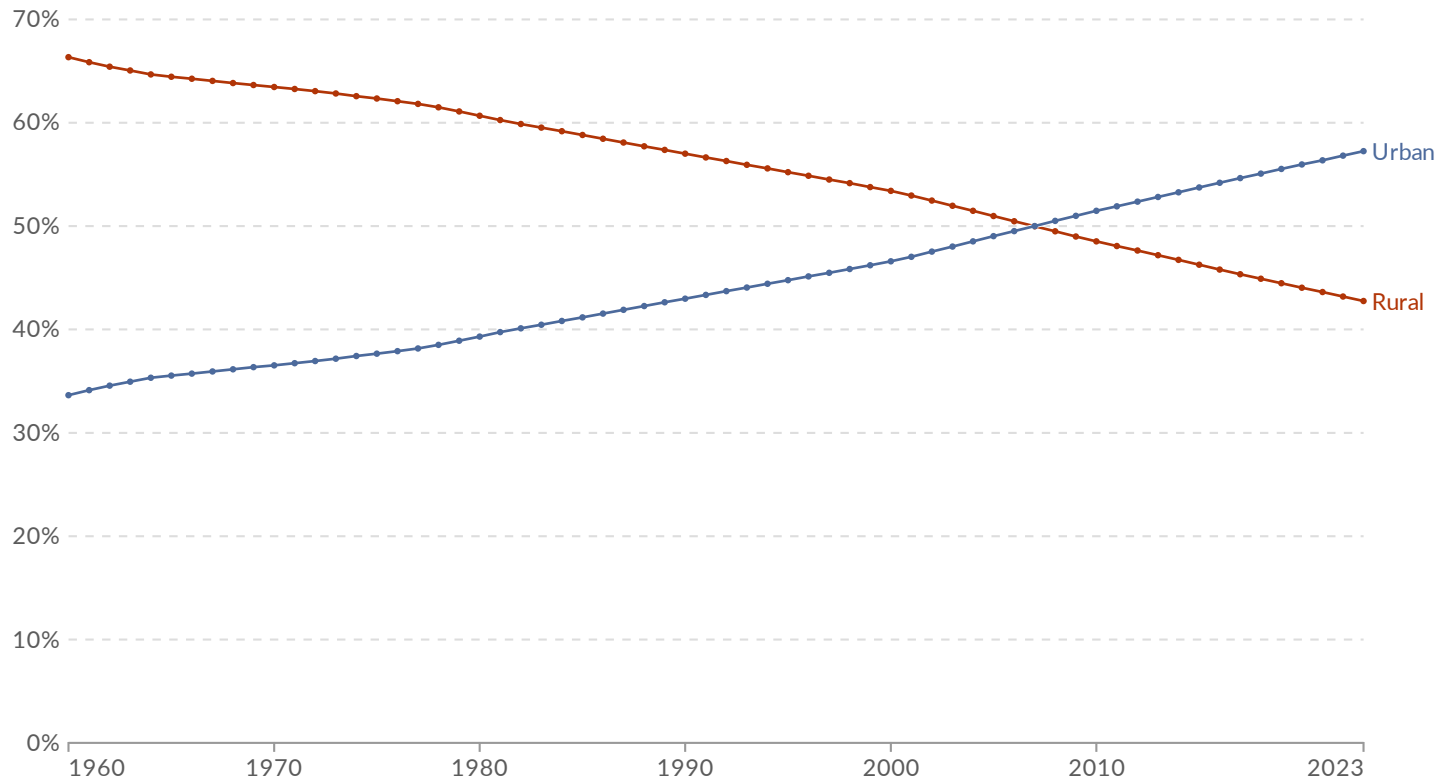
Why do we study “the city and technology?”



How urban is the world?

Share of people living in urban and rural areas, World

Our World
in Data



Data source: UN Population Division (via World Bank) (2025); World Bank based on data from the UN Population Division (2025)

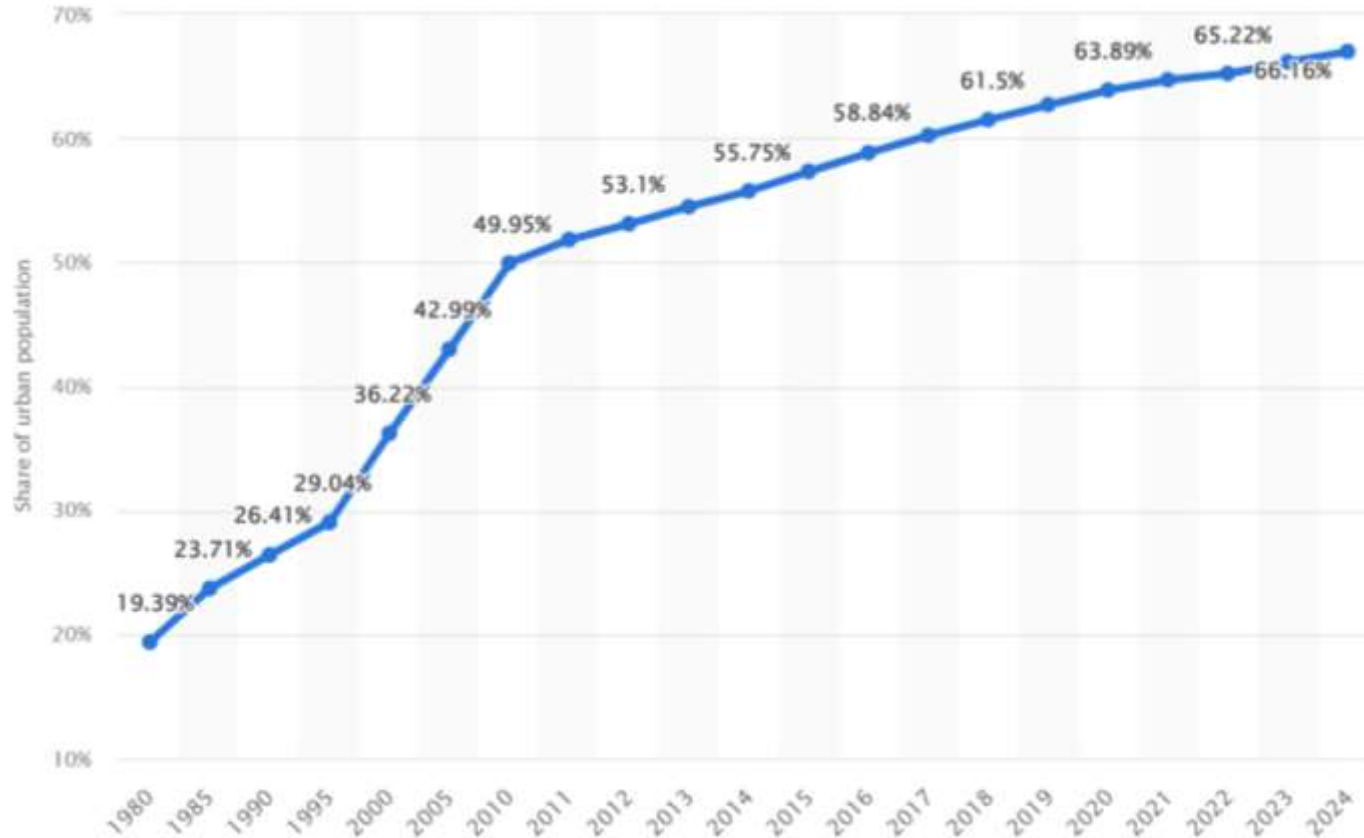
Note: Because the estimates of city and metropolitan areas are based on national definitions of what constitutes a city or metropolitan area, cross-country comparisons should be made with caution.

OurWorldinData.org/urbanization | CC BY

<https://ourworldindata.org/grapher/share-urban-and-rural-population?time=earliest..2023>

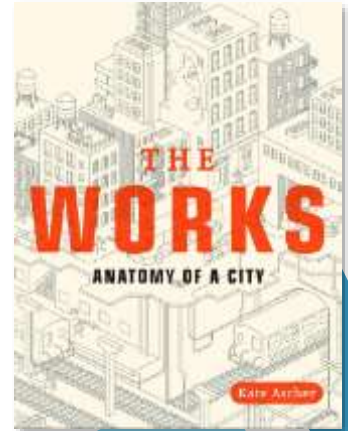
How urban is China?

Degree of urbanization in China in selected years from 1980 to 2024



<https://www.statista.com/statistics/270162/urbanization-in-china/#:~:text=In%202024%2C%20approximately%2067%20percent,China%20over%20the%20last%20decades.>

Rarely does a resident of any of the world's great metropolitan areas pause to consider the complexity of urban life or the myriad systems that operate round the clock to support it. He or she wakes up in the morning to turn on a tap, switch on a light, flush a toilet or perhaps grab a banana – little knowing how much effort, on the part of how many people, goes into making the simplest morning routine possible. The rest of the day is also deceptively simple: crossing a street, riding the subway, taking out the garbage – even the most mundane domestic tasks would be impossible without the far-reaching, complex, and often invisible network of infrastructure that supports them. (Kate Ascher, 2005)





Louis Wirth (1938)

**Urbanism as a
way of life**

American Journal of Sociology.

44 (1): 1-24

What are so special of cities?

Compared to the countryside



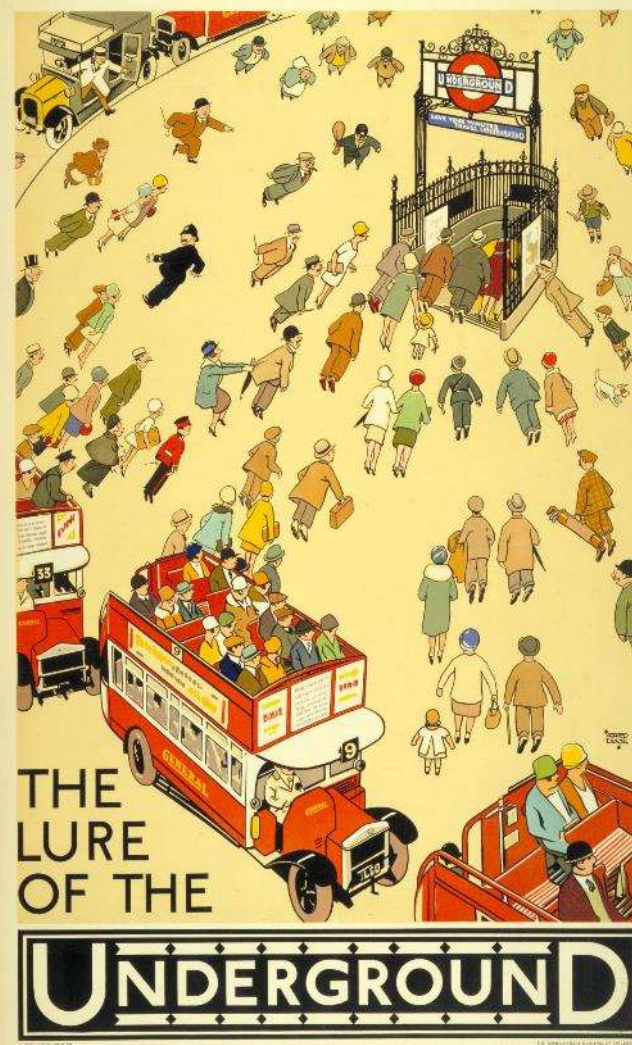
- Individuality
- Anonymity
- Diversity, complexity, heterogeneity
- Rapid social change
- Superficiality
- Transient
- Social labor division
- Mobility



- Size
- Density
- Agglomeration
- Spatial differentiation
- Spatial division
- Connectivity

Vintage posters of the London Underground in the 1910s-1920s

Source: <https://www.pinterest.com/pin/400750066832615397/?lp=true>





City Life by Victor Arnautoff

A mural of Coit Tower in San Francisco (1934)

<https://www.argsf.com/wp-content/uploads/2014/11/Coit-Full-Panel-1A.jpg>



Moses King (1853 – 1909)

American editor and publisher who produced guidebooks to travel destinations in the United States, including Massachusetts and New York.

King's Views of New York (1911-1912)

Source: <http://oldstructures.nyc/2018/06/13/a-spot-of-reality-in-a-dream/>



THE
SKY-
SCRAPER
TALL
IS A
WONDER
TO ALL
A THING
TO ADMIRE
BEYOND
QUESTION

But oh! down below where pedestrians go
it certainly adds to congestion

Mansfield, H. (2013 (1990)). *Cosmopolis: Yesterday's Cities of the Future*. P. 3



The pitfall of automobiles

Source:
<http://bikeyface.com/2016/06/08/drive-month/>

Urban sprawl in the US

Source: <https://www.bonnet.com/Listing/2839-St-Rose-Pkwy-Henderson-NV/9375688/>



Consumerism+ throwaway culture

Source: <https://medium.com/sia-nyuad/consumerisms-big-role-in-the-climate-crisis-3d7341979b8>



Vertical Agriculture



IoT



UAM



Humanoids



AI



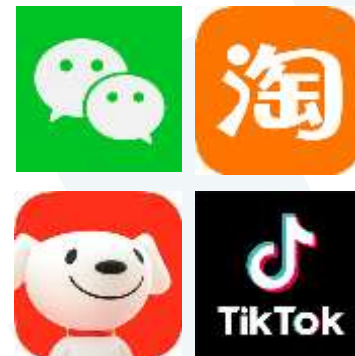
Digital twins



Autonomous driving



Platformization



Drone delivery in Shenzhen

Taken by Lili Wang on
December 17, 2024





Matchmaking on Rednote?



Louis Wirth (1938)
**Urbanism as a
 way of life**
American Journal of Sociology.
 44 (1): 1-24

https://mp.weixin.qq.com/s?search_click_id=5053490454297588321-1739946687543-0208205211&__biz=MzA3MzE1Njl3MA==&mid=2247504406&idx=1&sn=7f2dd0c2788dc2303fcc97981c197824&chksm=9eb5d4cc21bb2396b8090ff2c3efebfff7ac397db95fc7a93ed8f5daabc228474fa4a64a9f8f&scene=7&subscene=10000&sessionid=1739942875&clicktime=1739946687&enterid=1739946687&ascene=65&fasttmpl_type=0&fasttmpl_fullversion=7609352-en_US-zip&fasttmpl_flag=0&realreporttime=1739946687579&devicetype=android-31&version=28003858&nettype=WIFI&abtest_cookie=AAACAA%3D%3D&lang=en&countrycode=CN&exportkey=n_ChQIAhIQZe%2BbbwfaZOu%2BD2P4GPxtlBLfAQIE97dBBAAAAAANfeN%2BPEugYAAAAOpnlbLcz9gKnyK89dVj0cwwdy%2Bytr9%2FEZXgaQYLHTOTNR2s%2F2yzSOtckOnvtGiN8HorLtk%2FOsQ8%2BTtj6lkoS%2FjSF74orYaGcz2NGQre%2BTgQuaFfx%2FobZvmdqZ67ZoEet4w2vcVuyx%2Bfa4pE6d7eovvSVy2kcmUvqU1taW4zSAKrvim21BTvcqd4LcS12nNftH56hc6A1GF29n6igBQVQ%2FK0lxR4TT1SwTnEVxzYrZfhSujTwrrv4%2BaxJ3xKAXO2Oy158skmJ3s%3D&pass_ticket=BXp%2FickqHRNcMz8MGaL%2FzGbUsgtGWWW5ahZtrgx5BG0HboT%2FNH23TZls9JEX7I7&wx_header=3



Digital divide
in the
pandemic era

AI divide?

Source:
<https://i0.wp.com/cde.news/wp-content/uploads/2020/09/Digital-Divide.jpg?w=1280&ssl=1>

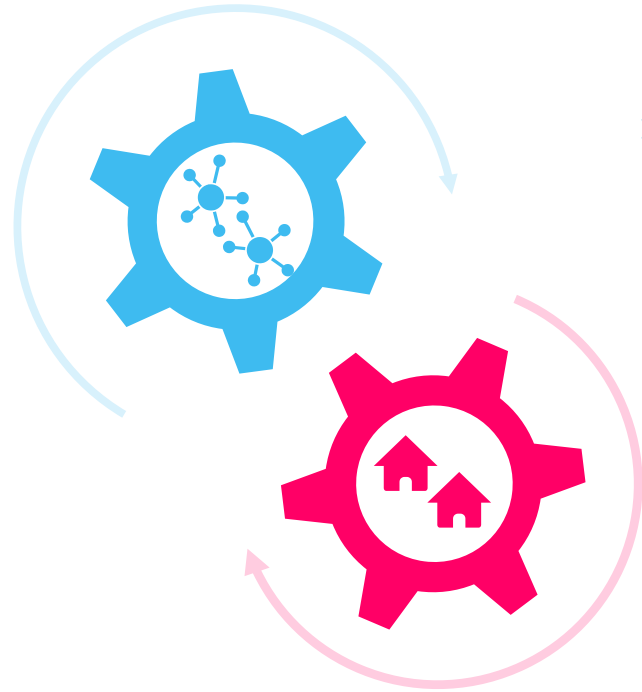
THOUGHT EXPERIMENTS

What are the technologies that shape your everyday life in Shenzhen?

Take ten minutes to complete the following tasks.

1. Write down a list of technologies that come to your mind immediately,
2. Choose one technology that you consider the most important. Reflect on how this technology impacts urban life and how your life would be different without it.

COURSE RATIONALITY



- » Understand the intertwined relationship between **urbanization** and **technology** in the past, the present, and the future
- » Cultivate the next generation of smart and responsible citizens, innovators, and leaders



2.

COURSE INTRODUCTION

What will we do this semester?



COURSE OBJECTIVES

- » Broaden students' knowledge and understanding of urbanization history,
- » Cultivate an appreciation of the interweaving relationship between technology and shifting urbanization patterns and processes,
- » Help students develop cutting-edge knowledge of how technology may shape future cities,
- » Provide students a set of research tools to perform independent research in social sciences.

The value of a college
education is not the learning
of many facts but the
**training of the
mind to think.**

By Albert Einstein

COURSE APPROACHES

- » Lectures
- » Reading and watching
- » In-class exercises and interactive activities, e.g., think-pair-share, debates, interview or role play
- » Process-based individual project (Case studies and problem-based learning)
- » After-class meetings and learning sessions
- » Field trip

LEARNING MATERIALS

» Readings (optional)

- ♦ Books
- ♦ Other readings

» Videos (optional)

- ♦ Documentaries
- ♦ Short-video clips



COURSE ASSESSMENT

IN-CLASS EXERCISES

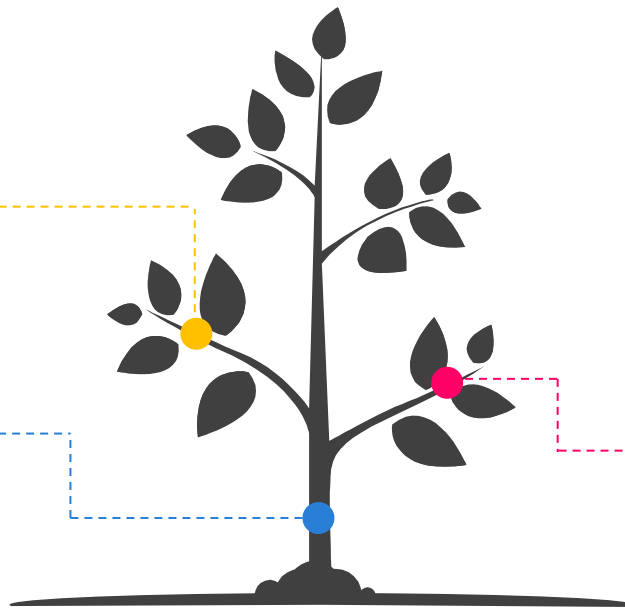
31% of final grade

12 in-class exercises in total
Given randomly

ATTENDANCE

13% of final grade

Missing more than three classes
will lead to a course failure.



INDIVIDUAL PROJECT

56% of final grade

Stage 1	Topic statement	4%
	Presentation – poster	20%
	Feedback	4%

Stage 2	Topic statement	4%
	Presentation – slides	20%
	Feedback	4%

CLASS INVOLVEMENT



ACADEMIC INTEGRITY



- » **Honesty:** The quality or condition of having or displaying strong moral principles; fair dealing; truthfulness; integrity
(Oxford English Dictionary, 2017)
- » **Plagiarism will be punished.**
Severe plagiarism will lead to a course failure.

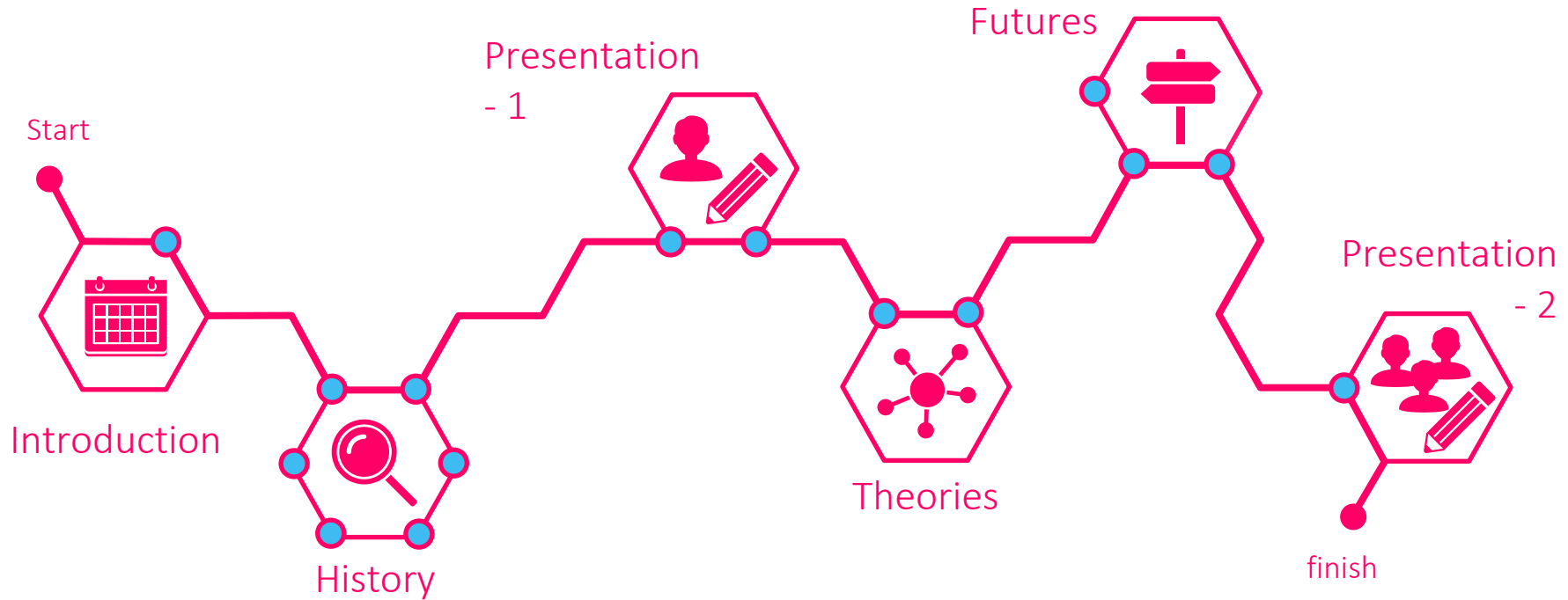
COMMUNICATION



+



COURSE STRUCTURE



	Lecture		Assignments
Week 1 (Feb. 19)	Introduction		• <i>ICE (1 pt)</i>
Week 2 (Feb. 26)	Histories	Basic utilities: Water, Sewer, Power	• <i>ICE (3 pts)</i>
Week 3 (Mar. 5)		Transportation (1): Modern roads & cars	• <i>ICE (3 pts)</i>
Week 4 (Mar. 12)		Transportation (2): Railroads & the metro	• <i>ICE (3 pts)</i>
Week 5 (Mar. 19)		Modern buildings and modern home	• <i>ICE (3 pts)</i>
Week 6 (Mar. 26)		Communication (1): Telephones & the TV	• <i>ICE (3 pts)</i>
Week 7 (Apr. 2)		Communication (2): The Internet, social media, & mobile technologies	• <i>ICE (3 pts)</i> • <i>IP-Topic statement -1 & Meeting</i>
Week 8 (Apr. 9)	Theories	Science and Technology Studies (1)	• <i>ICE (3 pts)</i>
Week 9 (Apr. 16)		Science and Technology Studies (2)	• <i>ICE (3 pts)</i>
Week 10 (Apr. 23)			• <i>IP-Presentation-1</i>
Week 11 (Apr. 30)			• <i>IP-Feedback-1</i>
Week 12 (May 7)	Futures	Future cities (1)	• <i>ICE (2 pts)</i> • <i>Field trip</i>
Week 13 (May 14)		Future cities (2)	• <i>ICE (2 pts)</i> • <i>IP- Topic statement -2 & Meeting</i>
Week 14 (May 21)		Future cities (3)	• <i>ICE (2 pts)</i>
Week 15 (May 28)			• <i>IP-Presentation-2</i>
Week 16 (Jun. 4)			• <i>IP-Feedback-2</i>



3.

SOME USEFUL TOOLS

How can you succeed in the class?



3.1 How to search and cite resources

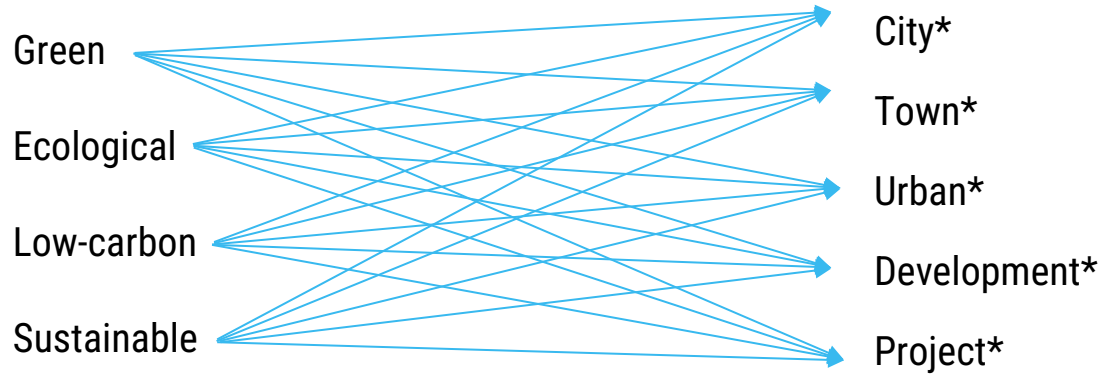
- » **Major research databases**
 - ◇ Scopus: www.scopus.com
 - ◇ Web of Science: www.webofknowledge.com
 - ◇ CNKI: www.cnki.net
- » Customize your search requests and results: an in-class demo of searching with Scopus
 - ◇ How to improve your search scope and accuracy

Keywords
web

Operators
OR, AND, AND NOT,
W/n, PRE/n

Punctuations
Wildcards (*), brackets
(()), quotation marks ("")

Keywords web



Operators:

OR, AND, AND NOT, W/n, PRE/n

Punctuations:

Wildcards (*), brackets (), quotation marks ("")

An exemplar search using operators and punctuations

(spatial OR space* OR spatiality* OR geography* OR geographical) AND ("Chinese state*" OR "Chinese government*")

3.1 How to search and cite resources

Refine results

- Search within results
- Wisely use the various filters provided by the databases

Sort results

- By date
- By cited times
- By relevance

Take Scopus as an example: Some tips

How can I best use the Advanced search?

https://service.elsevier.com/app/answers/detail/a_id/11365/c/10546/supporthub/scopus/

How do I work with document search results?

https://service.elsevier.com/app/answers/detail/a_id/11423/c/10546/supporthub/scopus/

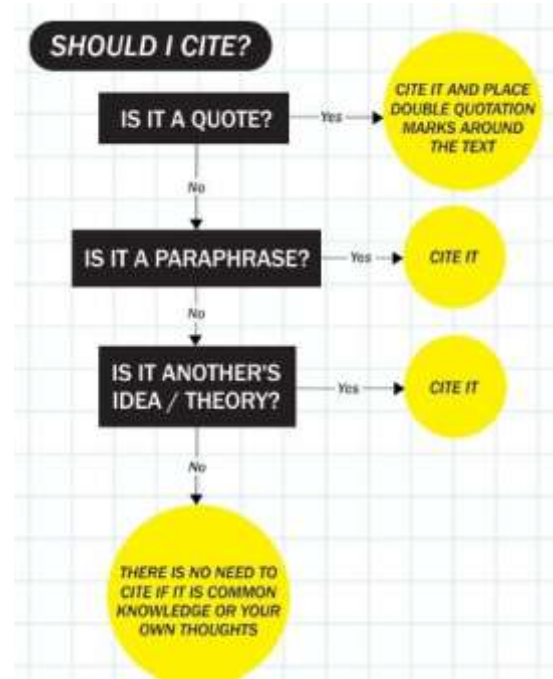
3.1 How to search and cite resources

» Why do we have to cite resources?

- ◇ Academic integrity: give credit where credit is due
- ◇ Provide “breadcrumb trail” or a lineage of research and allow readers to look further into your topic
- ◇ Provide validity to your final product
- ◇ Better grades!!!

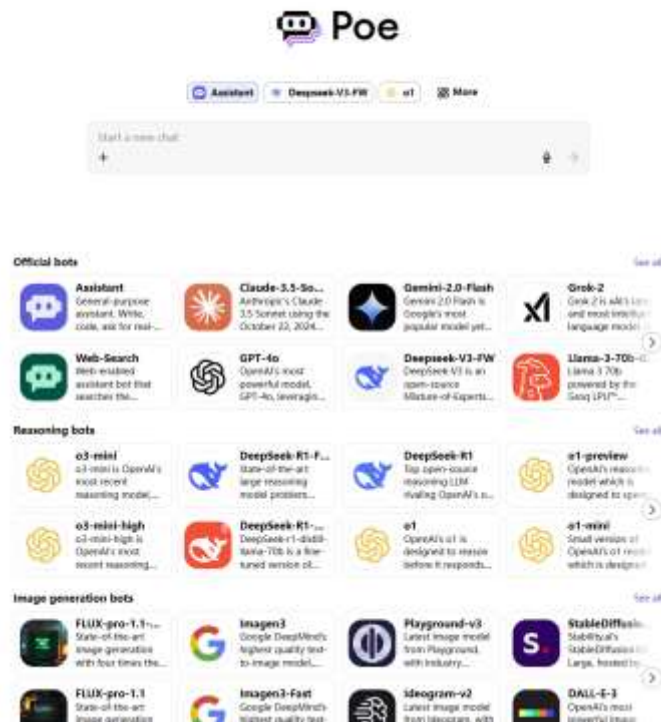
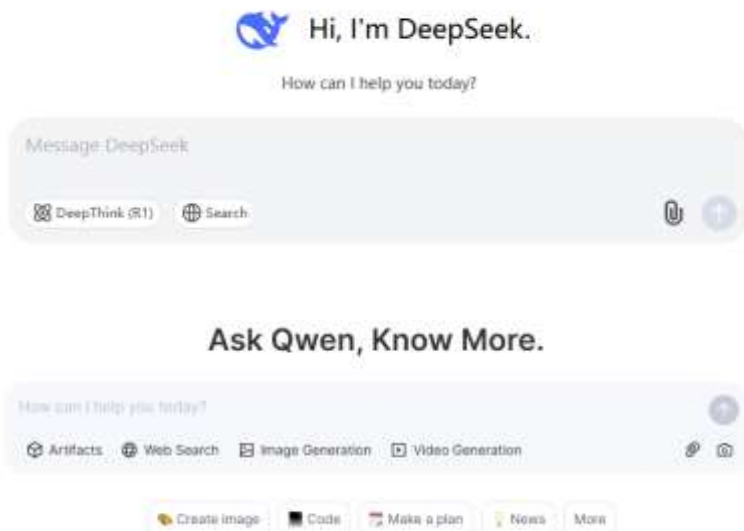
» Cite resources:

- ◇ In-text citations + bibliographies
- ◇ Different citation styles
- ◇ For example: APA 6th edition



<https://www.plagiarism.admin.cam.ac.uk/resources-and-support/referencing/when-cite>

3.2 How to use AI tools



3.1 How to use AI tools

- » **Understand yourself!** Understand your work and your needs!
- » Provide clear inputs: **Clarity + specificity**
- » Follow-up questions. Experiments. Trial and error.
- » Be **critical!!!** Understand the **limitations** of AI!!!
- » Ethical issues and academic **integrity**



QUESTIONS?

If you have any questions about the course, write them down. Feel free to ask me in the WeChat group or via email. You can also bring your questions to our next class.





END OF CLASS

SEE YOU NEXT WEEK.

