

NYU Course Outline

12 weeks:

High level learning aims: A grounding in climate-related financial risk

Week 1 - Introduction to climate finance

Key topics

- Climate Pathways - IPCC
- Pathway costings - NGFS
- Impact on banking - credit and liquidity

This lecture is designed to provide students with the basic understanding around how to begin the understanding of the financial impact of climate policies on bank's liquidity positions.

Reading will be:

- NYU course e-book 1 Chapters 1, 4, 8, 10
- NYU course e-book 2 Chapters 2, 6
- NYU course e-book 3 Chapters 4, 8, 9

Week 2 - Green Standards

Key topics

- ESG vs Green - a definition
- China vs EU Green bond definition
- Green vs greenwashing

This lecture is designed to explain the taxonomy that defines green investments, and why it is sometimes confusing.

Reading will be

- NYU course e-book 2 Chapters 1, 9

Week 3 Supply Chain Complexities

Key topics

- Supply Chain Basics
- Supply Chain Financing
- 6 factor model on supply chain credit risk

This is an introductory lecture into the business of analyzing supply chains in terms of dependency, and how climate risk impacts that dependency.

- The subject project will be based on students writing up a climate based analysis of a sector, with the supply chain in mind.

Reading will be:

- NYU course e-book 1 Chapters 6, 4

Week 4 Circular Economy

Key topics

- Definition of a circular economy
- Impact of a replacement circular approach
- Impact of a transition to a circular approach

With the concept of a circular economy being key to the green transition, this lecture is designed to explain the concept and what it means for firms and their financing. This is related in part to the previous lecture on supply chains.

Reading will be:

- NYU course e-book 1 Chapters 2, 5, 7
- NYU course e-book 2 Chapter 10
- NYU course e-book 3 Chapters 5

Week 5 Responsible Banking

Key topics

- 17 UN SDGs
- Climate in SDGs
- Definition of responsible banking

The UN defines responsible banking and understanding this is key to understanding how banking must evolve in a greening environment.

Reading will be:

- NYU course e-book 1 Chapter 9, and embedded links (all available online free)
- NYU course e-book 3 Chapters 3, 7 and embedded links (all available online free)

Week 6 Credit risk as a climate risk measure

Key topics

- Economic Capital (EC) - a risk measure
- EC components
- Climate as an EC adjustor

The lecture is designed as a non quantitative overview of how climate elements learned so far impact the economic capital and therefore the credit risk and liquidity of a bank. This is a primer for understanding financing a green economy.

Reading will be:

- NYU course e-book 1 Chapter 8
- NYU course e-book 2 Chapters 2
- NYU course e-book 3 Chapters 1, 3, 7

Week 7 - Putting it all together and project discussions

Key topics

- Banking risk appetites
- Making climate a reportable risk metric
- Pricing climate transition into day to day bank business

This midway session is designed to make sure that the ideas touched upon can be combined into a systemic approach to the financial analysis of climate change.

Week 8 Putting a price on Carbon

Key topics

- Carbon pricing
- Carbon intensity
- Climate border adjustments

The lecture covers carbon pricing in terms of taxation, cap and trade, and implied value. Also covered will be measurement of carbon intensity and carbon border adjustments. These will all be important when considering pricing climate scenarios.

Reading will be:

- NYU course e-book 2 Chapters 4, 5, 7, 8,

Week 9 Evolving climate risk

Key topics

- Stranded assets
- Adaptation vs mitigation
- Carbon budgeting

The lecture covers areas of financial risk that change as pathways are followed or altered with policy shifts. These impact the economy and determine the 'steepness' of the ramp to net zero and therefore the potential speed of impact on the economy.

Reading will be:

- NYU course e-book 2 Chapters 3, 4, 6, 9
- NYU course e-book 3 Chapters 1, 5, 10

Week 10 Regulatory case study 1 - EU and Europe

Key topics

- US climate related economic policy evolution
- EU climate related economic policy evolution
- International banking climate risk standards

The lecture is aimed at taking the topics covered so far and looking at them through the lens of real world regulation.

Reading will be:

- NYU course e-book 1 Chapters 2, 3, 5
- NYU course e-book 3 Chapters 1, 6, 9
- NYU course e-book 4 Chapters 2, 3, 4

Week 11 Regulatory case study 2 - Africa

Key topics

- African climate related economic policy evolution
- International banking climate risk standards

- IPCC discussions on developing world economies

The lecture is aimed at taking the topics covered so far and looking at them through the lens of real world regulation.

Reading will be:

- NYU course e-book 1 Chapters 1, 10,
- NYU course e-book 3 Chapters 1, 8, 9
- NYU course e-book 4 Chapters 2, 5

Week 12 Final exam and project delivery

The final session will see projects delivered/presented and the final exam, covering all topics.