MGT-541

Nature finance

Coutu Sylvain

Cursus	Sem.	Type
Financial engineering	MA1, MA3	Opt.
Managmt, dur et tech	MA3	Opt.
Managmt, tech et entr.	MA1, MA3	Opt.

Language of teaching	English
Credits	3
Withdrawal	Unauthorized
Session	Winter
Semester	Fall
Exam	During the semester
Workload	90h
Weeks	14
Hours	**3 weekly**
Courses	2 weekly
Project	1 weekly
Number of positions	

Il n'est pas autorisé de se retirer de cette matière après le délai d'inscription.

Remark

MTE-SMT Students : MA3 only

Summary

This course explores the many financial instruments that can come as a support for protection and regeneration of natural assets.

Content

This course starts with an introduction to the scientific fundamental knowledge of key natural assets (such as agricultural commodities, forests, biodiversity and others), and on their economic value for the society.
In a second phase, the course will review the current financial services offered to protect and develop these assets. This includes traditional financial services (equity, credits, insurance, etc) but also an introduction to carbon and biodiversity credits. Reporting on Nature and some legal aspects (Nature rights) are also presented in dedicated sessions.
This is a pratical course based developed around concrete case study. It is developped with the intervention of several professional experts.
The objective of this courses are i) to open the students to different career opportunities at the interface of Nature and Finance and ii) to provide them the fundamental knowledge to interact in multi-disciplinary teams working on related topics.

Keywords

Nature - Finance - NbS - Technologies - Case study

Learning Prerequisites

Required courses

Basic knowledge of Finance is a plus but not a pre-requisite.

Learning Outcomes

By the end of the course, the student must be able to:

- Discuss scientific concepts related to nature
- Propose financial solutions as a support to natural assets

- Defend the relevance of Nature for our economic and social systems
- Visualize the job market ecosystem related to Nature Finance

Transversal skills

- Use a work methodology appropriate to the task.
- Communicate effectively with professionals from other disciplines.
- Negotiate effectively within the group.
- Respect relevant legal guidelines and ethical codes for the profession.
- Take responsibility for environmental impacts of her/ his actions and decisions.
- Continue to work through difficulties or initial failure to find optimal solutions.
- Write a scientific or technical report.

Teaching methods

In class sessions + Homeworks (mainly readings or videos)

Assessment methods

- In class knowledge evaluation on key numebrs related to the topic (10%)
- At home work on estimating value of a natural asset (10%)
- One mid-term session on Nature Finance tools (20%)
- One Final exam as Poster presentation or start-up pitch (60%)

Resources

Bibliography

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Ressources en bibliothèque

- Find the references at the Library

Notes/Handbook

Podcasts:

- Https://open.spotify.com/show/7cjMRLbOk1YdAlzh9gehig
- Https://www.eci.ox.ac.uk/page/naturefinanceoxford-podcast
- Https://www.radiofrance.fr/franceculture/podcasts/serie-nature-vs-economie
- https://www.iied.org/nature-finance-whats-being-done-it-working-make-change-happen-podcast-episode-34

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- Brokering finance deals to fund nature restoration with Rob Gardner: https://podcasts.apple.com/gb/podcast/brokering-finance-deals-to-fund-nature-restoration/id16851967â#Š
- https://www.pensionsforpurpose.com/knowledge-centre/Podcasts/2024/07/17/Biodiversity-and-nature-P4Pâ#Š: Biodiversity and nature - P4P Podcast - S1 Ep2 â## Charlotte Moore, Richard Giles and Robert Gardner discuss the importance of making nature an investable asset.

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Readings:

- Sapiens (Yuval Noah Harar) Chapter IV
- Https://www.afd.fr/en/ressources/little-book-investing-nature

- Https://www.wri.org/research/financial-sector-guidebook-nature-based-solutions-investment
- Birnam Wood - Eleanor Catton (Fiction - Psych thriller which was really good)
- Lagoon by Nnedi Okarafor (Fiction - is a wild ride of African-futuristic writing, where nature is utterly terrifying, recommend twice)
- Wilding - Isabella Tree (explains ecological concepts incredibly well and simply, is uplifting)

Moodle Link

- https://go.epfl.ch/MGT-541

Videos

- https://youtu.be/tdfh-N7ifMM?si=JodKqQDx0UbaJgRX