



HEC EXCHANGE PROGRAM

COURSE CATALOG

Spring 2019-2020



CONTENTS

F	INANCE, ECONOMICS & DECISION SCIENCES	
	CORPORATE FINANCE	3
	FINANCE D'ENTREPRISE	5
	ACCOUNTING 2	7
	COMPTABILITE 2	9
	STRATEGIC TAX MANAGEMENT	. 11
	CREDIT RATING	. 12
	MERGERS & ACQUISITIONS: FINANCIAL ANALYSIS	. 13
	INVESTMENT BANKING (CORPORATE FINANCE)	. 18
	DERIVATIVES TRADING	. 20
	MACROECONOMICS FOR BUSINESS	. 21
	BUSINESS at the BLOCKCHAIN AGE	. 22
	INNOVATION AND DIGITALIZATION LEVEL 1	. 24
	INNOVATION AND DIGITALIZATION LEVEL 2	. 26
	BUSINESS ECONOMICS	. 28
S	TRATEGY & DECISION MAKING	. 29
	STRATEGY	. 29
	BUSINESS PERFORMANCE MANAGEMENT	. 31
	OPERATIONS AND SUPPLY CHAIN MANAGEMENT	. 32
	STRATEGY IMPLEMENTATION	. 34
	BEHAVIORAL ECONOMICS	. 36
I	NTERNATIONAL AFFAIRS	. 37
	COMPARATIVE POLITICS OF LATIN AMERICA	. 37
	UNDERSTANDING THE MIDDLE EAST: ECONOMIC AND STRATEGIC FUNDAMENTALS	. 39
	LES MENACES DU TERRORISME	. 40
	STRATEGY CONSULTING AND PRIVATE EQUITY IN THE MIDDLE-EAST AND NORTH AFRICA	. 42
	BEYOND THE BRICS, A LOOK AT THE NEXT ELEVEN (N-11)	. 43
L	AW & INSTITUTIONS	. 45
	COMPANY LAW	. 45



DROITS DES SOCIETES	46
DROIT DU TRAVAIL (Relations individuelles – Relations collectives)	47
DROIT DE LA PROPRIETE INTELLECTUELLE	49
DROIT ENTREPRENEURIAL	50
DIVERSITY AND INCLUSION	51
MARKETING & COMMUNICATION	53
MARKETING	53
INTERNATIONAL MARKETING	54
INFLUENCER MARKETING	56
DIGITAL MARKETING FOR CONSUMER GOODS	58
PEOPLE ORGANIZATION & SOCIAL RESPONSABILITY	60
LEADING ORGANIZATIONS: Perspectives on Design, Power and Culture	60
ETHICS AND SUSTAINABILITY	62
STRATEGIC PEOPLE MANAGEMENT	64
THINKING OUT OF THE BOX	65
DIGITAL BUSINESS	67
DIGITAL MANAGEMENT	67
DECISION AND DATA MODELING USING SPREADSHEETS (Level 1)	68
DECISION AND DATA MODELING – LEVEL 2	69
ENTREPRENEURSHIP - INNOVATION & BUSINESS	70
UX & UI Design	70
DATA ANALYSIS IN PYTHON	72
EXPLORING THE FUTURE OF SPACE	73
TECH, DATA AND THE INNOVATION MINDSET	75
CULTURAL IMPERATIVES	77
ECONOMIE DES RELIGIONS	77
ECOLOGY A NEW MODEL OF SOCIETY	79
NEW SUSTAINABILITY CULTURE: THE POWER OF PURPOSE	81
ACTING AND IMPROVISATION	83
SHAKESPEARE'S HENRY IV Part One	84



FINANCE, ECONOMICS & DECISION SCIENCES CORPORATE FINANCE

Course coordinator: Denis GROMB, Professor HEC Paris, gromb@hec.fr (Finance Dpt.)

Presentation

Corporate Finance covers two main topics: financial policy of companies and the valuation of projects and companies. We will develop tools to deal with both sets of issues.

The aim is threefold:

- Culture: Learn what's what in corporate finance (players, instruments, deals, etc.)
- Frameworks: Understand the reasons for different corporate finance decisions
- Practice: Master corporate finance techniques used in industry

Learning Outcomes

Financial policy

- What are a company's different possible sources of funds?
- What is a suitable financial policy for a given company?
- How much cash should a company hold and what is a suitable dividend policy?

Project and company valuation

- How to value projects with net present value (NPV), internal rate of return (IRR), etc.?
- How to estimate a company's cost of capital?
- How to value a company using multiples and discounted cash flow (DCF) analysis?
- How to value a company in the context of an acquisition (M&A, LBO) or listing (IPO)?

Prerequisites

Financial Markets Financial Economics Financial Accounting

Timing

36 hours, composed of twelve lectures of 3 hours each per week



Teaching Methods

We will combine three teaching methods:

- Lectures
- In-class team-work on business case studies
- Problems sets with answers provided (at home, not graded)
- Possible meetings outside of class to discuss any questions (email me to set up a meeting)

We can meet outside of class to discuss your questions (email me to set up a meeting)

Teaching material

- Lecture notes
- Problem sets and solutions
- There is no required textbook

Grading

Evaluation will be based on exams with open books

Midterm exam: 1/3Final exam: 2/3

Workload

This is a high effort, high reward course. To do well:

- Attend sessions
- Bring a laptop with Excel
- Solve problem sets (some in class, most not, not graded, solutions provided)
- Ask questions in and/or outside of class (email to set up a meeting)



FINANCE D'ENTREPRISE

Responsable du cours: Pascal QUIRY, quiry@hec.fr, titulaire de la chaire BNP Paribas. Dpt Finance

Présentation

Le cours de Finance d'entreprise s'attache principalement à comprendre comment les décisions d'investissement et de financement sont prises au sein d'une entreprise, et comment sont gérés les risques financiers. Ceci ne peut pas être fait sans avoir au préalable une vision claire de la situation financière de l'entreprise (analyse financière) et de sa valeur (évaluation).

Objectifs pédagogiques

Donner aux étudiants les outils conceptuels et pratiques leur permettant de diagnostiquer précisément la situation des entreprises, de comprendre leur valeur et d'être capable de prendre, proposer ou challenger des décisions d'investissements (organiques ou d'acquisition), de financement et de gestion des risques financiers.

Prérequis de L3

- cours de Financial markets et de Financial economics
- cours de Comptabilité

Déroulement du cours

12 séances de 1h30 (2 séances par semaine, dont une en salle de classe et l'autre sous format MOOC).

- Introduction
- Analyse financière
- Evaluation d'entreprise et choix d'investissement
- Fondement conceptuels de la finance d'entreprise : théorie des marchés à l'équilibre, de l'agence, du signal, finance comportementale
- Choix d'une structure de financement
- Coût du capital
- Politique de distribution et d'autofinancement
- Politique d'augmentation de capital
- Financement des start-ups
- Structuration de la dette
- LBO
- Gestion des risques financiers
- Fusions et acquisitions

Méthodes Pédagogiques

A partir de MOOCs et de QCM accessibles 24h/24 pour la partie enseignements de ce cours



A partir de discussions, d'exercices, questions et cas d'entreprises réelles illustrant le contenu traité par les MOOC pour la partie en salle de classe.

A partir de la plateforme des MOOC qui permet de poser des questions, d'apporter et d'obtenir des réponses.

Travail personnel:

Le cours nécessite un travail important consistant, à chaque séance :

- Pour les séances en format MOOC, avoir vu et assimilé chaque semaine les vidéos et faits les QCM liés
- Pour les séances en classe, à préparer les exercices, le cas ou les questions ou exercices qui vous ont été donnés

Evaluation

QCM liés aux MOOC:

Test de mi-parcours de 75 minutes :

Test final de 3h00

20 % de la note finale
25 % de la note finale
55 % de la note finale

Les tests seront avec documents et livres, mais sans ordinateur. Le test final consistera en un cas créé pour l'occasion d'une entreprise européenne dont vous devrez analyser différents points de sa situation financière, de sa valorisation et de sa politique de financement, d'investissement et de gestion des risques.

Un élément correcteur d'un échelon, positif ou négatif, dépendant de la qualité de votre participation en salle de classe sera appliqué à la note finale.

La présence en cours est requise. Au delà de deux absences non justifiées, le cours est à reprendre.

Bibliographie

Finance d'entreprise de Pierre Vernimmen, édition 2020 chez Dalloz, septembre 2019 Corporate Finance, Pierre Vernimmen et alii, Wiley 2017



ACCOUNTING 2

Course coordinator: Pascale DEFLINE, Professor, HEC Paris (Accounting & Management Control Dept)

Presentation

Accounting and financial data forms one of the main corporate information channels.

While it is the accountant's job to compile this information, being able to read and interpret it is one of the basic skills that any company employee must have, whatever his or her position. It is essential to be able to understand the financial situation of one's customers, suppliers, or even one's employer or potential employer.

The course is designed to help students gain an in-depth knowledge of the accounting and financial information produced by single companies or groups (consolidated accounts):

- This information may be produced on a recurring basis (annual accounts) or be specific to certain financial operations (increase in capital, mergers, takeover bids, public offers of exchange, etc.),
- This information is increasingly produced in accordance with international financial reporting standards.

Teaching objectives

- Reading and understanding the accounting and financial information published by companies.
- Identifying the accounting consequences of corporate decisions.
- Clarifying the role of those involved in the production of accounting information (top managers, accountants, auditors, etc.) as well as situating this production in its technical, legal and economic environment.

Format

18 hours (12 weekly sessions of 1.5 hours)

Course content

- Introduction and revision
 - Financial reporting
 - Accounting principles
- Accounting policies for assets and their impact on reported results
 - Recognition
 - Measurement
 - Change in the value of assets
- Consolidation
 - Consolidation methods
 - Preparation of consolidated financial statements
 - Treatment of differences arising on the first consolidation
- Equity transactions
 - Capital increase and capital reduction
 - Mergers
- Published financial statements



Teaching methods

- Study of accounting issues
- Exercises
- Analysis of published statements

Prerequisites

This course builds on the basic concepts learned in the 1st year (accounting, finance, taxation, law).

Reference

☑ Financial Accounting and Reporting – A Global Perspective (Andover, UK: Cengage Learning, 4th Edition, 2013) by Hervé Stolowy, Michel Lebas and Yuan Ding

Individual Work

- Readings
- Preparation of exercises
- Financial statements analysis

Grading

Final exam on the entire course (100%)



COMPTABILITE 2

Coordinateur : Pascale DEFLINE, Professeur affilié, HEC Paris

Présentation

S'appuyant sur les connaissances acquises en L3 et éventuellement au 1er semestre de M1 (comptabilité, finance, droit), ce cours aborde les différents aspects de la préparation et de la communication des informations comptables et financières dans les sociétés cotées et vise notamment à :

Comprendre les enjeux de la politique comptable relative aux actifs

Comprendre et pratiquer la consolidation des comptes

Maîtriser les aspects comptables des opérations financières de haut de bilan (augmentations de capital, fusions, OPE...)

Savoir lire et interpréter les rapports annuels des grands groupes internationaux, y compris le rapport RSE

Objectifs pédagogiques

Savoir lire et comprendre l'information financière publiée par les sociétés cotées

Analyser les conséquences comptables des choix de l'entreprise

Resituer la comptabilité et ses acteurs dans leur environnement technique, économique et juridique

Objectifs carrière

Que vous envisagiez d'intégrer un des prestigieux cabinet de conseil en stratégie, de devenir DAF d'une PME innovante, de vous lancer dans la création de votre start up, de jongler avec les chiffres en private equity ou M&A, les connaissances en consolidation et opérations de haut de bilan, ainsi que la maîtrise de la comptabilisation des actifs, thèmes étudiés dans ce cours, sont tout simplement indispensables.

Mais plus largement, quel que soit votre choix de majeure, puis de vie professionnelle, que vous soyez plus attiré par le marketing, les thématiques RSE ou d'autres secteurs encore, ce cours vous donnera une véritable expertise et assoira votre crédibilité dans la prise de décision et les enjeux qu'elle implique.

Format

18 heures (12 sessions hebdomadaires de 1 heure 30)

Contenu

- Quelques rappels
 - Les états financiers
 - Les principes comptables
 - La notion de juste valeur
- La politique comptable de l'entreprise relative aux actifs
 - Le référentiel IFRS et les enjeux comptables
 - La reconnaissance des actifs
 - La comptabilisation des actifs
 - La baisse de valeur des actifs
- Les comptes consolidés
 - Le périmètre de consolidation
 - La préparation des états financiers consolidés
 - La constatation et l'analyse de l'écart de première consolidation



- Les opérations de haut de bilan
 - Les augmentations de capital
 - Les réductions de capital
 - Les fusions, les apports d'actifs et de titres, et les scissions
- La communication financière d'une société cotée auprès des investisseurs
 - Définition
 - Les objectifs
 - Le rapport RSE

Méthode pédagogique : Pédagogie inversée

- Avant les séances :
 - Etude commentée de thèmes de comptabilité financière approfondie à l'aide de courtes vidéos
 - Lectures d'articles de presse ou de recherche
 - Analyse de la partie RSE d'un document de référence afin de préparer la dernière séance
- En cours:
 - Exercices et cas faits par groupe
- Dernière séance : intervention d'un responsable RSE / Développement durable afin de présenter l'articulation de ces thèmes dans la communication financière d'une société. Sont déjà intervenus lors de sessions précédentes les responsables RSE de Schneider Electric et Accor.

Prérequis

La maîtrise des concepts fondamentaux appris en L3 et éventuellement au 1er semestre de M1 est indispensable (comptabilité, finance, droit).

Ouvrages de référence

☑ Comptabilité et analyse financière – Une perspective globale (De Boeck, 4ème édition, 2017) par Hervé Stolowy, Yuan Ding et Georges Langlois

Pour des questions précises, sur le site web de la bibliothèque d'HEC : Database NAVIS : "Editions Francis Lefebvre: Mémento Comptable ; Mémento IFRS "

Travail personnel

Etude du cours Lectures

Evaluation

10 QCM: 10 %

Cas effectués en groupe : 20 %

Test final sur l'ensemble du cours : 70 %



STRATEGIC TAX MANAGEMENT

Course coordinator: Martine ROSSETTI, Affiliated Professor HEC Paris (Tax & Law Dpt.)

Presentation

The tax system is one of the components of the universe within which a business has to evolve. To ignore it is to face nasty surprises, generally synonymous to serious financial difficulties (and even criminal ones!). Mastering it offers the ability to manage efficiently and to choose the least costly options in respect with the law.

The purpose of the course is not to create tax experts, but to enlarge the scope of students' view on how tax matters may impact business.

Pedagogical goals

- ✓ Lead the students to understanding the importance of the tax matters in management and decision making.
- ✓ Understand the basic mechanisms of tax impacts in France at both domestic and international levels.

Format

18 hours (6 sessions of 3 hours)

Content

- ✓ Presentation of the French tax system and basic notions regarding personal income tax (e.g. taxation of salary/internship).
- ✓ Main principles driving the computation of a company's taxable income: focus on tax treatment of debts, holding regime, LBO operations.
- ✓ Profit and loss management.
- ✓ Overview of the fiscal environment for Groups of Companies: tax groups; principles of international taxation; restructuring; transfer pricing regulations; anti-avoidance and tax heavens rules.
- ✓ VAT: mechanism and general rules, international transactions.

Pedagogical method

- ✓ Presentation by the stakeholders
- ✓ Practical cases discussions (one case on each subject to ensure that techniques and reflexes are acquired)

Homework

- ✓ Study of the hand-out
- ✓ Practical cases preparation

Grading

Mid-term test, oral participation, miscellaneous tasks: 1/3 of the final score Final exam as a case study: 2/3 of the final score

N.B. As tax is an evolutive matter, final exam is open book



CREDIT RATING

Professor: Yves BURGER, Fitch Learning

Objectives

- Introduce the Rating Industry: participants and challenges,
- Explain the rating agencies' credit analysis framework and methodologies, with a focus on the financial sector
- Apply rating methodologies to a series of exercises and cases,
- Increase understanding of the factors that drive credit risk ratings.

This course is intended as an opening to the content of jobs such as equity/credit analyst, risk manager, portfolio / fund manager, rating adviser, consultant in banking, etc. in financial institutions, central banks, investment companies or consulting firms.

Course content

The main topics addressed by the course are:

- Ratings definitions and tools; rating scales, default studies
- Rating relevance: users, impact of ratings; role & responsibility of CRAs in the financial crisis
- Rating process and methodology: sovereign ratings, corporate ratings, with a focus on financial institutions ratings
- Challenges for the rating industry and the financial sector: Basel II & Basel III, regulation

Teaching method

The courses are based on lectures and practical training using simulation exercises and cases studies. The courses are expected to be as interactive as possible and students are strongly encouraged to ask any questions / raise any issues they would think interesting to discuss.

Evaluation

Students' assessment will be done by the way of participation evaluation and a final examination.

Bibliography

Fundamentals of Corporate Credit Analysis – Blaise Ganguin / John Bilardello -- Mc Graw-Hill Cantor, R., & Packer, F. (1994). The Credit Rating Industry. FRBNY Quarterly Review. Packer, F., & Tarashev, N.

(2011). Rating methodologies for banks 1. BIS Quarterly Review

Credit Rating Agencies' research commentaries that will be handed out or can be directly downloaded.



MERGERS & ACQUISITIONS: FINANCIAL ANALYSIS

Course instructor: Patrick LEGLAND

Presentation

Primarily based on recent, real case studies, this intensive summer program will allow participants to master the key mergers and acquisitions practices. Learning's will range from how to originate a deal, structure it, and complete its final execution. Following the program, students will understand how an M&A deal can create value for shareholders and for firms. The primary techniques of share exchanges, acquisitions financing and take-over defences will be studied. Through case studies and business games, students will learn how to negotiate a valuation from the position of "expert", "buyer" or "seller". Valuation of new companies' will be explored within the framework of a capital increase, a disposal or a listing. Mergers and Acquisitions case studies will provide participants with real expertise based on recent international transactions.

Fundamental mergers and acquisitions terms and techniques will be developed, including certain complex company integration tools. Participants will learn how to build-up Excel modelling to value synergies related to a Mergers and Acquisitions transaction. Specific financial transactions such as the buyout of a firm by its managers or deferred payment schemes will be developed. As part of their teaching experience, students will also be offered counsel about internships, VIEs, job opportunities, challenges, and trends in Corporate & Investment Banking.

Intended Learning Objectives

The course will combine fundamental leanings and real recent case studies. Students will have the opportunity to analyse how an M&A transaction works and benefits for the key stakeholders. The main techniques studied include: financing, earn-out, Equity or cash financing, potential hostile bids, takeover defences, and mergers restructurings. Learning will be based on very recent and popular situations, in which the Professor has been directly involved through his career in Investment Banking. After this class, students will understand the key variables involved in M&A decisions: target selection and analysis, deal financing, offering implementation, negotiation, value creation analysis, deal modelling and simulation.

Upon completion of this intensive program, students will be able to do the following:

- Understand the key variable involved in M&A decisions
- Analyse target selection and analysis
- Decide and implementation offering including deal financing
- Negotiate the most relevant premium to optimize Synergies' value creation
- Build a comprehensive and ready-to-use M&A model
- Master due diligence processes, Mergers and Acquisitions techniques
- Understand the concept of signalling theories, valuation of minorities, illiquidity impact, holding structure
- Structure a deal in term of tax impact including Acquisitions versus asset buying
- **Be familiar** with takeover defences, leverage buy out, mezzanine debts, earn out, special M&A techniques: carveout, contingency value rights

Key Topics

1 - M&A Deal Structuring

Objectives: Mergers and Acquisitions case studies will provide participants with expertise based on recent, real-life



International transactions. Fundamental Acquisitions and Mergers terms and techniques will be developed, including company's integration tools. Synergy valuation techniques within the framework of Mergers and Acquisitions transactions will be studied. Finally, a focus will be placed on how a Mergers and Acquisitions transaction can impact a firm's valuation, and its share price appreciation. Take-over defences will be studied.

Topics: Deal structuring, data room, confidential memorandum, tax impact, Acquisitions versus asset buying, takeover defences, Acquisitions financing, Earn out, shareholding or profit dilution, shareholders' pacts and agreements, dual listing.

2 - Start-up Valuation & Fund Raising

Objectives: Through the Equity fundraising of a start-up, participants will appreciate the importance of an Equity refinancing within the framework of an M&A transaction. The role of the key shareholders having also a management role in the company ("The Insiders") will be particularly studied. The case study analysis will allow participants to understand the mandate of financial advisors and investment banks in an M&A transaction involving, Equity refinancing and fund raising

Topics: M&A refinancing techniques, new share issuance price assessment, Theoretical Ex Right Price ("TERP") calculation, right valuation, Shareh.' Pact, Blocking minority, signalling theories.

3 - M&A Strategy and Deal Financing

Objectives: Through a full real and recent case study students will learn how an M&A deal is decided, structured, implemented and financed. The case will be an opportunity to take into account the key steps of an M&A transaction and how financing between Bond, Hybrid or Equity is decided. Participant will have to take the most appropriate decision to execute an M&A transaction, in the best interest of the client, and with a view to optimize margins, closing, and compliance rules.

Topics: Deal valuation, target EV/ EBITDA analysis, synergies estimates, account optimization, impact of the M&A deal on the bidder's cost of capital.

4 - M&A Deal Analysis

Objectives: Participants will understand the key metrics to analyse a mergers and Acquisitions transaction. Which indicator are the most relevant to analyse if a take-over creates value for the shareholders?, which financing is the most appropriate between shares and cash? Under which conditions, should specific M&A financing tools be used. Through case studies and business games, students will learn how to negotiate a valuation, depending on if they are in the position of "expert", "buyer" or "seller". Company valuation will be also taught, either within the framework of capital raising, disposal, or listing.

Topics: Value creation indicators, net present value of synergies, specific M&A financing techniques, contingency value right, Carve out, leverage impact on earning per share, all share mergers parity, mergers of equal, M&A governance rules.

5 - M&A Financial Modelling

Objectives: Participants will build up a ready-to-use Mergers and Acquisitions spreadsheet model on their own computers. The model will allow modelling the impact of Acquisitions financing on a deal structure, on the new group's governance, and the sensitivity of the indicators to a change in share price of the bidder or the target company. The class will be based on a recent M&A transaction.

Topics: Structuring a spread sheet, building up a M&A dashboard, both for the bidder or the target constructing the most indicators, learning the key indicators used by shareholders, building up sensitivity tables, finding the optimal deal timing.

6 – M&A Strategic and Financial Board Decision & Hostile Takeover and Negotiation



Objectives: Based on a real case study, from a well know international firm, students will have to analyse the different options a board might have reading an M&A transaction. The class will be based on an International M&A transaction involving two global mining companies, and a Middle East Sovereign fund. Participants will have to find the most appropriate exchange parity, for a deal, which is paid only in shares. The class will teach as well how to have the best negotiation approach.

Topics: Compliance, Ethical, Conformity rules, Top management and Directors' key decision drivers. Exchange parity calculation, goodwill impact on negotiation, impact of shares payment on sovereign fund decision, and the most appropriate governance in an M&A deal structure.

Schedule – Course Content

Class Session 1	Topic M&A deal Structuring	Readings Articles, from professional reviews, provided by the Professor	Assignments Real and recent case study: Take over of European firm in the IT sector.
Session 2	M&A synergies valuation	Articles, from professional reviews, provided by the Professor	Real and recent case study: synergy valuation in the Financial sector.
Session 3	Due diligence	Articles, from professional reviews, provided by the Professor	Real and recent case study: acquisition of a distressed company.
Session 4	M&A specific techniques	Articles, from professional reviews, provided by the Professor	Problem based on concrete and recent deals.
Session 5	M&A deal financing	Articles, from professional reviews, provided by the Professor	Real and Recent case study: choose of cash or share offering in the mining sector.
Session 6	M&A financial modelling	Articles, from professional reviews, provided by the Professor	Real and recent case study in the service financial services industry: how to structure an M&A financial model.

Teaching Methods - Course Materials

- Each session combines fundamental coursework, application problems, and real world case studies
- Systematic (non-marked) Multiple-Choice sessions to sustain the learning curve
- Two articles with core concepts to read for each class
- Courses & materials in English



Required Books

Bosecke, K., "Value Creation in Mergers, Acquisitions and Alliances", Gabler, 2009. Brealey, R., Myers, S., Alen, F. "Principles of Corporate Finance", McGraw-Hill-Irwin, 2014. Vernimmen, P., Quiry, P., Le Fur, Y., "Corporate Finance: Theory and Practice", Wiley, 2014.

Individual Work

An equivalent amount of time to each session is required to prepare the case studies and read the articles distributed in class and the recommended chapters within the Vernimmen 4th edition book.

Grading

Grades are based on weekly participation, group work, and a final exam.

Case study presentation in class: 60% Class Participation: 40%

Potential specific group work acting as bonus points

About Patrick LEGLAND

Finance professional since more than 25 years, Patrick LEGLAND specialises in Equity, Debt Capital Markets, Merger and Acquisition. Affiliate Teacher at HEC Paris in the Finance Department, he teaches in the Master International of Finance (MIF), MBAs, and different specialised program sin Executive Education. He is also a Board member of the Club Finance HEC, which awards every year the best Professional Thesis for HEC Paris. Managing Director in different Investment banks in Hong Kong, London, Paris, having led Global teams, Patrick Legland benefits from a large international experience. Though his function of Member of the Global Capital Market at Société Générale, Managing Director at UBS and BNP Paribas, he has been involved in many transactions, in Equity and Debt Capital Markets, Merger and Acquisition, and deal structuring. Having worked in London, New York and Hong Kong, he benefits from a large international and multi-cultural experience. Patrick LEGLAND now focuses on Advisory mandates for CEOs and Executive committee internationally, through a business Partnership he has developed.



4 - Course - MCQ - Fin Markets

Earn-out techniques, Management incentives, Capital Market M&A deal structuring.

Problem: Earn-Out acquisition financing, Right Issue financing

Article to read: Merger that Sticks, Rewriting M&A rules

Case Study to prepare: GSI's acquisition of DLB: Investment banking M&A 5 – Final Exam: Questions on compulsory articles (5 points) and Real case study on two large well known Corporates, deal analysis and structuring (15 points).

5 - Final Exam Correction

Evaluation

Questions about compulsory technical articles: 5 points; Case Study: 15 points



INVESTMENT BANKING (CORPORATE FINANCE)

Professor: Ferdinand PETRA, petra@hec.fr

Prerequisite

- (1) having taken and finished the Corporate Finance course at HEC at the time the Elective begins
- or (2) having obtained a waiver for the HEC Corporate Finance course
- or (3) having taken and finished a Corporate Finance course before joining HEC (read specific conditions below)

Those students who are in the category (3) have to send an email to Mr. Petra (petra@hec.fr) one day before the end of the Elective selection period, including a detailed syllabus of the course (in English) and the transcript with your grade for this course (in English). In case these documents are not in English, you will need to ask in advance to your home university to forward you an English translation of the documents that you will then forward to Mr. Petra (same deadline).

Based on that information, Mr. Petra will evaluate, at his discretion, whether you are eligible for the elective. **No exception will be made if the above instructions have not been specifically followed.**

Intended learning objectives

The objective of this course is to provide students with a real-life understanding of the key tasks performed by analysts in Investment Banking Division: from designing an operating model for a client, to valuing a potential acquisition and analysing its financial impact for the acquirer. This course will also include an introduction to Leveraged Buyout (LBO) analysis.

In addition to 18h class, there will be 2 bank visits (BNP Paribas and Société Générale) during which you will work on 2h real case studies in each bank's premises (TO BE CONFIRMED). Such session will be held in the banks' premises outside of the class schedule and will be compulsory (likely on Thursday afternoon).

Please note that this elective covers more or less the same content as the "Investment Banking Academy". Therefore, it is not possible to attend this elective if you have already taken the Academy.

Key Topics and timing

18 hours (6 sessions of 3 hours)

- 1. Valuation methods (trading comparables, precedent transactions and DCF)
- 2. Merger analysis (merger model and key outputs)
- 3. Introduction to LBO (including modelling)
- 4. Bank's visits (to be confirmed)

Teaching methods

Mix of lectures, exercises and Excel financial modelling

Attendance

Attendance to every class is compulsory. Any missed class without prior agreement of the professor (48hrs notice via email) will lead to a downgrade to the final grade



Drop-out of the class is only possible at the end of the 1^{st} lecture. To drop the elective, you need to send an email to the professor before the beginning of the 2^{nd} lecture. Any drop-out afterwards will not be possible. Attendance of this elective as an auditor is not possible.

Course materials

Slides & Excel model will be distributed in class.

Mr. Petra recommends students to bring their laptop to every session. Some session may be conducted in a computer room but given computer's room limited capacity (only 20 computers), students will have to bring their laptop.

Evaluation

20% in class quiz/homework 80% final exam (closed book – 2 hours)

Please note that a significant amount of homework will be required for this class.

The marks achieved in the quizz and final exam may be revised up or down on the basis of classroom participation.

Bibliography & Websites

- J. Rosenbaum, J. Pearl, Investment banking: Valuation, leveraged buyouts and mergers & acquisitions, Wiley, 2009
- T. Koller, M. Goedhart, and D. Wessels, Valuation: Measuring and Managing the Value of Companies, Fifth Edition, University Edition, 2010
- F. Ceddaha, Fusions Acquisitions, Scissions, Economica 2013

Biography

http://www.hec.edu/Faculty-Research/Faculty-Directory/PETRA-Ferdinand



DERIVATIVES TRADING

Course instructor: Olivier BOSSARD

Course description

The aim of this course is to introduce the fascinating world of Derivative Products: how they are engineered, traded and risk-managed in the dealing rooms of London's Square Mile and New York's Wall Street. Students will examine the cutting edge mathematical models behind these products as well as getting an insight into the real-world pragmatism of traders who risk-manage the most complex and intricate risks of the financial markets in the 21st century.

This elective is specifically designed to prepare students for an internship in Financial Markets (Trading, Structuring or Sales) during their Gap Year, or for Summer Internship Programs at Global Investment Banks.

The ideal candidates for such roles would have a solid mathematical and programming background BUT for this elective itself, there is absolutely NO minimal eligibility criteria - you will apprehend all key concepts progressively in a fun and engaging teaching methodology, without any math or programming tasks involved.

Pre requisite

In order to maximize the number of students getting an exposure to Financial Markets, you CANNOT enroll to both this elective and the "Trading Academy" in January this year or next.

Therefore, please only select one or the other, otherwise you will be rejected automatically.

Format

18 hours.

Six three-hour sessions will be devoted to a mix of lecturing and workshop exercises.

After the initial session, each new session will start with an online quiz designed at assessing the knowledge acquired throughout the previous sessions.

Lectures will be highly interactive, including:

- constant interaction with students actively engaged during class sessions
- computer simulations using financial models on spreadsheets and VBA macros
- market-making and trading games

Course taught entirely in English

Course content

The course consists of four parts:

- Part I: Introduction to Derivatives: Size of market, Underlying assets, Participants
- Part II: Derivatives Pricing Theory
- Part III: Hedging Methodologies and practical constraints
- Part IV: Calibration to real market prices

Evaluation

Final exam



MACROECONOMICS FOR BUSINESS

Course instructor: Eric Mengus, Assistant Professor, HEC Paris mengus@hec.fr

Presentation

In the last few years the economic environment in which firms and entrepreneurs operate has been drastically changed by important macroeconomic events. Any manager or entrepreneur it is now required to have a basic understanding of macroeconomics. This course is designed to provide students with the basic tools to understand and analyze the macroeconomic conditions of a country and how it affects the business environment. Major topics include economic growth, business cycles, money and monetary policy. The course will use current economic events as way to illustrate some of these topics.

Pedagogical objectives

The objective of the class is to equip students with tools and insights from macroeconomics to improve their understanding of their future business environment to make better decisions. After the class, students will be able to read and interpret the main aggregate economic indicators, so as to be able to analyze current and future business cycle conditions, to investigate the long-term potential of a country or to understand the funding conditions of firms and how it depends on monetary policy interventions.

Format

18 hours (6 sessions of 3 hours)

Content

The class will cover a broad aspect of subjects divided in 4 topics:

- 1. Measuring Economic Activity: National Income Accounts
- 2. Economic Growth and Productivity
- 3. Business Cycles
- 4. Money, Inflation and Monetary Policy

Grading Policy

- A final exam (40% of the grade). Closed book exam. Exam form: exercises to solve.
- Quizzes during the class (60% of the final grade).
- Additional non-compulsory homeworks.



BUSINESS at the BLOCKCHAIN AGE

Note: This class is not designed for Crypto-Experts and can be taken by beginners.

Teachers: Georges-Edouard DIAS, QuantStream's Co-Founder & Laurent BENICHOU, R&D Head at AXA Labs

Overview:

In 2009, Satoshi Nakamoto launched Bitcoin, a new digital currency based on cryptography and solving the problem of double spending. Based on proven cryptographic techniques, Bitcoin has remained unhacked until today, even though some exchanges selling it have made the news. Bitcoin has opened the era of a new age of finance based on the internet of value, which opens the potential for new web services: smart contracts, micropayments, self-sovereign currencies. Bitcoin was followed by other digital currencies, each of them claiming to add new features: The Ether is used to fuel the Ethereum system of smart contracts; Monero is a fully private coin; Bitcoin Cash aims at improving Bitcoin; Basic Attention Token is willing to monetize advertising for users...

Even though most of these cryptocurrencies have a function within the service they fuel, new investors invested this field to speculate and take advantage of this new class of assets. Come with us and dive into the world of business at the blockchain age: learn how to prepare an initial coin offering (ICO), enjoy a market in which insider trading is not forbidden, and learn how to create new value assets that can fuel your business

Program objectives:

At the end of the program, students will have:

- Understand the underlying techniques of Blockchain.
- Acknowledged the interest of the main cryptocurrencies and mastered their risks and opportunities.
- Learned the drivers of value of cryptocurrencies.
- Understood how ICOs can fuel new business propositions, without relinquishing ownership to VCs.
- Thought of several entrepreneurial opportunities for them in this very young business sector.

Program organization: The program consists of six classes of 3 hours each. After a first introductory class on the Internet of Value and the world of cryptocurrencies, the program will become very hands-on (learning by doing) by working on ICO models; the course will continue by placing funds into a fantasy wallet and end up with a final trading game.

The content will be fully dedicated to providing the context and the tools necessary for students willing to benefit from the new blockchain and crypto-currency space to settle their personal business project.

Each session will feature an "On the News" panel debate where students will be proposed to enter.

Program Content:

- **S1**: Introduction to the genesis and interest of cryptocurrencies. The undelying Blockchain and its impact on the business world: a digital revolution forward. Typologies of Blockchains. Blockchain use cases.
- **\$2**: Bitcoin and its own blockchain. Consensus mechanism. Mining. Difference between FIAT and crypto-currencies. Optional Homework: analyse of the relevance of blockchain use in several business cases.
- **S3**: The tokenization of the world. Alt coins. Stable coins. Forks. Crypto-coins valuation drivers. Complementary currencies and the role of the IMF. The "Bitcoin Trial": a New York's Court tryes to ban "crypto-mining".



S4: The internet of value. Changing the business development model through ICOs. Whitepapers analysis and scams. Optional Homework: analysis of one cryptocurrency in a 1-pager case study template provided by teachers.

S5: The world of exchanges. Centralized/decentralized. Trading strategies (buy & hold, day-trading, ICO, exchange arbitrage, margin trading). Risks analysis: Pump and Dump, Portfolio Hacking, Network attacks, Fake News... Optional Homework: analysis of an ICO and Investment Recommendation through its WhitePaper.

S6: Rethinking Finance through the introduction of complementary currencies. The "Bottom up" business model. **Final cryptocurrency game**: students will manage a fantasy portfolio during multiple periods.

Teaching Methods:

- "Flipped classes" with cases analysis / lectures made by students: bring your smartphone and/or laptop.
- Testimonials, discussions and "On the News" debates with cryptocurrency professionals.

Personal work and commitment:

- Active participation with teachers and speakers during classes
- Homework: one business case to choose amongst the 3 proposed, plus one debate entry (at least).

Evaluation:

- Final game: 30%, of which 15% actual portfolio performance and 15% trade justification.
- Individual case-study: 30%.
- Debates Entries (and Discussion): 30%
- Active Participation: 10%.



INNOVATION AND DIGITALIZATION LEVEL 1

Course instructor: Nizar SAADANE

Course description

The course provides parallels between the digitalization, innovation and transformation in finance. Students will get wide understanding and knowledge of blockchain technology, big data, lot (Internet of things), AI (Artificial intelligence), H.F.T (high frequency trading) and will learn how all these technologies will transform the different types of finance.

The students will learn how to explore the effects and impacts of the latest disruptive technologies on corporate finance, market finance, trade finance, participative finance and financial services.

Students will know how the digitalization and innovation will review/change different work process in the field of finance.

The course has the following specific objectives:

- 1. Learn why finance transformation is important in the increasingly digitalized world.
- 2. Being able to articulate what great finance transformation is.
- 3. Understanding the digital transformation benefits and how to realize them.
- 4. Understand the Blockchain technology and its contribution in the finance transformation
- 5. Understand the Ethereum & Smart Contracts
- 6. Get familiar with initial coin offering and the tokenization process
- 7. Learn the new digital finance tools "data lake, predictive analysis, RPA, machine learning"
- 8. Understand the high frequency trading "H.F.T"
- 9. The future of blockchain technology, AI and IoT in finance

This course is advised for mainly Finance Major, the other majors are welcome to attend.

Pre-requisites if applicable

Basics of Finance

Format et/and credits

18 hours, 3 hours *6

3 ects

Course content

The course consists of 7 parts:

- Part 1: Introduction "Innovation & digitalization in Finance"
- Part 2: The Blockchain technology: The crypto world "past and present"
- Part 3: The Ethereum blockchain & the smart contracts
- Part 4: The Initial Coin Offering & the Tokenization Generation Event



- Part 5: The Blockchain major use cases in finance and the blockchain technology evolution
- Part 6: The Finance new digital tools: The data lake, the predictive analysis, the robotic process automation, I'AI and the machine learning in finance.
- Part 7: The High Frequency Trading

Individual work

- This course is based on theory, practical cases and concrete examples, combined with technical knowledge.
- The practical cases will be based on multiple real cases
- The teaching method facilitates interactivity between the participants and the lecturer
- Materials will be given at the beginning of the course to each participant

Evaluation

Assignments (40%) + Final Exam (60%)

References

- 1. Catalini, Christian. 2017. "How Blockchain Applications Will Move Beyond Finance." Harvard Business Review.
- 2. Advances in Financial Machine Learning by de Marcos Lopez de Prado.
- 3. The Robots Are Coming!: The Future of Jobs in the Age of Automation by Andres Oppenheimer
- 4. Hutton, Will. 2017. "Bitcoin Is a Bubble, but the Technology Behind It Could Transform the World." The Guardian.
- 5. Blockchain Revolution: How the Technology Behind Bitcoin Is Changing Money, Business, and the World de Don Tapscott et Alex Tapscott

Name of the company(ies) that will be studied

Blockchain real use cases in finance, banking, insurance, custody, asset management and investment.

Big data and the most important uses in Finance, Robotic automation process finance case



INNOVATION AND DIGITALIZATION LEVEL 2

Course instructor: Nizar SAADANE

Course description

The course provides a deep understanding of the digitalization, innovation and transformation in finance. Students will get wide understanding and knowledge of blockchain technology, robotisation and the digital transformation in finance,

The students will learn how to explore the effects and impacts of the latest disruptive technologies on corporate finance, market finance, trade finance, participative finance and financial services.

Students will know how the digitalization and innovation will review/change different work process in the field of finance.

The course has the following specific objectives:

- 10. Learn the latest digital transformation in Finance "Corporate, trade and market finance"
- 11. Being able to articulate what great finance transformation is.
- 12. Understanding the latest digital transformation benefits and how to realize them.
- 13. Understand the latest Blockchain technology business applications in finance
- 14. Understand the latest uses of smart contracts in finance
- 15. Develop a robust understanding of digital transformation
- 16. Learn from both the latest academic thinking and practical business examples
- 17. Build a comprehensive knowledge of the key challenges that can help a successful digital transformation in finance

This course is advised for mainly Finance Major, the other majors are welcome to attend.

Pre-requisites if applicable

Innovation and digitalization in Finance-Level I

Basics of finance

*A reminder of the basics of finance and the Innovation and digitalization in Finance-Level I will be given and explained at the first session.

Format & credits

18 hours, 3 hours *6 3 ects

Course content

The course consists of 7 parts:

- Part 1: Introduction "Innovation & digitalization in Finance" AND level I reminder
- Part 2: The Blockchain technology: The latest business app
- Part 3: The Digital disruption in the Finance World
- Part 4: The digital transformation
- Part 5: Digital platforms and Digital ecosystems
- Part 6: Digital Competition in Financial Services
- Part 7: The uses of robotization process in finance



Individual work

- This course is based on theory, practical cases, workshops and concrete examples, combined with technical knowledge.
- The practical cases will be based on multiple real cases
- The teaching method facilitates interactivity between the participants and the lecturer
- Materials will be given at the beginning of the course to each participant

Evaluation

Assignments (40%) + Final Exam (60%)

References

- 6. FinTech, BigTech and Banks: Digitalisation and Its Impact on Banking Business Models (Palgrave Macmillan Studies in Banking and Financial Institutions), by Alessandra Tanda (Author), Cristiana-Maria Schena (Author)
- 7. The Future of Finance: The Impact of FinTech, AI, and Crypto on Financial Services, by Henri Arslanian (Author), Fabrice Fischer (Author)
- 8. The Robots Are Coming!: The Future of Jobs in the Age of Automation by Andres Oppenheimer

Name of the company(ies) that will be studied

Blockchain, digitalization and robotisation real use cases in finance, banking, insurance, custody, asset management and investment.



BUSINESS ECONOMICS

Course instructor: Raphaël Levy, Assistant Professor, HEC Paris, levyr@hec.fr - Building V, office 102

Course description

This course aims at introducing the formal modeling of pricing and competition. As managers, you will face competitive pressure at several levels, ranging from the short-term constraints on your pricing ability to long run threats of entry. This course addresses questions surrounding pricing and competition by developing formal models that capture the opportunities and constraints which firms face.

Format

Six sessions of 3 hours with a mix of lecturing, class *discussion*, exercises, backed up by material provided to students in advance of the course.

Course content

The following topics will be addressed:

- Firm behavior in a competitive environment
- Externalities
- Monopolsitic behavior and price discrimination
- Game theory
- Oligopoly
- Asymmetric information

Evaluation

Problem sets + Final Exam (closed book)



STRATEGY & DECISION MAKING

STRATEGY

Course coordinator: John MAWDSLEY, Associate Professor (ESD Dpt.)

Presentation

- Why are some firms more successful than others? This is the fundamental question of strategy. As the business environment is becoming ever more complex, more turbulent, more global and more competitive, thinking strategically about how a firm should position itself in order to compete successfully is becoming increasingly critical. Those firms that will survive, grow, create and capture value are firms with a clear vision of what their competitive advantage is and of how to maintain and enhance it.
- The perspective of this course is that of a general manager whose responsibility is to maximize the overall performance of the firm or the performance of a business unit within the firm. To achieve this objective, general managers must analyze the business-level drivers of the firm's current performance and identify external changes that may affect this performance. On this basis, their job is then to find ways to better leverage the firm's internal resources in order to sustainably improve performance.
- At the corporate level, general managers' responsibility is also to define the scope of the firm's activities, to implement strategic moves that will affect this scope, and convince shareholders and stakeholders of the relevance of their strategy.
- The objective of this course is to review the main concepts, methods and tools which are used in the strategy analysis, formulation and implementation processes, identify the business situations in which they can be applied most effectively, as well as understand the limitations of the various approaches.

Teaching method

- Understand and be able to apply key concepts and analytic frameworks of strategic management to analyze strategic problems at the business and corporate level.
- **Understand** the dynamic influence of the strategic actions of a firm and its rivals on business and corporate strategy and industry structure.
- Appreciate and understand the various stakeholders in a company and how they influence and are affected by a company's strategy.
- Integrate knowledge gained from other business courses and understand what aspects of this knowledge are most useful for general managers (similarly, for strategy consultants who may advise general managers).
- Improve your ability to analyze and critically assess complex, unstructured business problems using appropriate tools and frameworks.
- Improve your skill in synthesizing information and results of analyses to develop solutions to strategic problems.
- Improve your skill in expressing arguments and conclusions clearly, logically and persuasively in written and oral forms.

Timing

36 hours (12 x 3 hours per week)



Evaluation

Grades are based on scores for each graded component of the course. **Please pay EXTRA attention to how the course is graded.**

Component	Percent
Class Participation	30%
Group project presentation	30 %
2 in class quizzes	10 % (5% each)
Final Exam	30%
Total	100%

Points earned for each grade component will be summed to obtain a total score for the course. **Students will be rank-ordered based** on this total score **to determine their course grade.**



BUSINESS PERFORMANCE MANAGEMENT

Course presentation

The course will introduce the concepts and techniques that managers use to measure and analyze their organization's performance, thereby enabling them to achieve their organization's goals.

Learning objectives

There are five main takeaways for this class:

- 1. Understand how and why a company is usually divided into different responsibility centres (e.g. profit centres, cost centres, revenue centres, and investment centres).
- 2. Learn the principles through which organizational units negotiate and set the prices for the goods and services transferred within the organization.
- 3. Understand how to use the budget to plan and control business performance.
- 4. Identify the uses, benefits, and limitations of financial measures such as ROI, EVA, and residual income.

Learn how to manage risk and operationalize the organization's strategy through a comprehensive view of performance measurement (e.g., Risk Matrix and Balanced Scorecard).



OPERATIONS AND SUPPLY CHAIN MANAGEMENT

Course coordinator: Christian VAN DELFT, Associate Professor MOSI Dpt.)

Presentation

Operations Management focuses on the set of processes that create goods (and/or services).

The Supply Chain Management refers to the global integration of the purchasing, production and distribution processes within a firm. The efficiency of such an integration constitutes a major competition factor. The performance is measured in terms of costs, quality, lead-time delivery and flexibility to respond to changes. This course presents the fundamental issues concerning information and flow management optimization in processes and supply chains.

Teaching objectives

This course is directed at providing a comprehensive introduction to main decisions and tradeoffs in Operations and Supply Chain Management. It focuses on three goals: (1) to impart knowledge of the standard tools and techniques used in the field; (2) to develop an appreciation for the interaction of Supply Chain Management with other management functions in the organization; and (3) to develop an understanding of the field as a whole. We intend to show that Operations / Supply Chain Management rather than an aggregation of tools is a blanket of concepts and management techniques.

Timing

36 hours (2 x 1.5 hours per week)

Course content

- Operations and processes
- Flow and capacity management
- Hierarchical planning and Inventory control
- Purchasing, logistics and distribution systems
- Just-in-time and lean management
- Quality management
- Strategic decisions

Teaching methods

- Lectures
- Cases and exercises
- On-line simulation cases
- Videos

Individual work

For each class:

- read the corresponding chapters in the book
- prepare the cases

The mean workload is equal to 2h by class



Grading

- Cases or exercises
- Quiz, Mid-Term exam
- Final exam
- Class Participation



STRATEGY IMPLEMENTATION

Making it happen!

Professor: Hélène MUSIKAS

Course objectives

Strategic failures are often the result of a poor strategy implementation. Managers not only need to identify opportunities for competitive advantage and to develop a strategy to take advantage of these opportunities, they have to be able to audit their firm and to know how the strategy can be I implemented. The most brilliantly designed strategy will not lead to success if its execution is weak.

In this context, the objectives of this course are to:

- Elaborate on the importance of strategy implementation in the strategic process;
- Understand the alignment process required for strategy implementation and its components;
- Provide frameworks and tools for helping successful strategy implementation;
- Focus on certain aspects of strategy implementation: strategic planning, communication and change management.

It is highly recommended that you have some professional experience for this course (internship in a company or an NGO or a student association).

Format

18 hours

Course content

The course will mix case discussions, class exercises, team work, lectures and a business simulation.

Session 1 – Introduction & Business Planning (I) (3 hours)

This session will discuss strategic plans / business plans / strategy implementation plans / action plans' structure and content and how they fit into the strategic or investment processes through examples and in-class exercises.

Session 2 - Business Planning (II) (3 hours)

This session will discuss strategic plans / business plans / strategy implementation plans / action plans' structure and content and how they fit into the strategic or investment processes through examples and in-class exercises.

Session 3 - Nissan case and strategy alignment (3 hours)

During this session the notion of strategic alignment, in other words the necessary consistency between strategy and the other elements of the firm's performance will be discussed. We will base our discussion on the well known Renault-Nissan alliance example which started by the spectacular turn-around of Nissan. The case will enable us to introduce and practice frameworks to think about strategic alignment.

Case: Renault and Nissan: Building Emotional Capital for Strategic Renewal: Nissan (1999-2002)

Session 4 - Change Management (3 hours)



This session will discuss change management issues in strategy implementation by showing several conceptual views and by discussing practical examples.

Session 5 – Managing the stakeholders, the MUTARI simulation (4 hours)

One key success factor in implementation is the ability of executives in charge to communicate and engage all stakeholders. This is a difficult task that must be practiced. Therefore we have chosen to use the MUTARI simulation to work on and develop this key skill and improve the prospects for success on projects.

In the context of a merger integration project of two banks participants must plan, develop and implement an effective strategy to achieve the business objectives of the project while gaining support for it from a diverse group of external stake holders.

Session 6 - Individual exam (2 hours)

Evaluation

Students will be evaluated and graded on the basis of:

- Team or individual work done in class (on the NISSAN case particularly, but not exclusively) (40% of grade);
- Their score, as a team, during the business simulation (25% of grade);
- An exam that will be explained in class (35 % of grade) and take place during the last two hours of the course.

BIBLIOGRAPHY

Post-course articles will be provided after each session.

The reference book for this course is: Lawrence Hrebiniak Making Strategy Work, Wharton School Publishing, Second Edition, 2013. However, we are not asking students to read it prior to the course.

LECTURER'S BIOGRAPHY

Hélène Musikas is an affiliate professor at HEC; She teaches strategy related courses in the EMBA, MBA, undergraduate and custom programs.

Prior to collaborating with HEC, Hélène acquired a large business experience working for McKinsey & Co, Bain &Co and France Telecom, both in France and in the United States. Her work focused on strategy projects, acquisition due diligences, turn around and M&A projects in various industries.

She was educated at Ecole Normale Supérieure and Sup Telecom in France. Her experience in executive education includes, in addition to HEC, INSEAD, EM Lyon and large multinational firms.

She co-authored a strategy book in French and an app-book in English at the end of 2014 called Odyssey 3.14, reinvent your business model. She was awarded in 2016 the "Teaching Awards Vernimmen".



BEHAVIORAL ECONOMICS

Course instructors: Mohammed ABDELLAOUI, Research Professor HEC Paris & Brian HILL, CNRS Research Professor HEC Paris

Introduction and objectives

Why do we sometimes tend to always postpone important tasks?

Why do we wait for a computer crash before starting running frequent backups? Why do we have so much trouble dealing with uncertainty?

People sometimes seem to systematically fail to choose what the best is for them in a variety of domains such as finance, health or energy consumption. How can we help them make better decisions?

Behavioral economics uses methods from psychology in order to better understand the way people make decisions. Its aim is twofold. It measures how people depart from the standard model of rationality, and lists systematic errors that people make: the biases.

It also proposes descriptive economic models that better account for the psychology of human decision making.

This approach covers all the main domains of individual and social decision making and offers new tools to understand and influence how people make decisions. Therefore, aside from academic research, behavioral economics is getting increasingly popular for applications in finance, marketing and public policies.

The course proposes an overview of the main results in behavioral economics. It also proposes an introduction to the experimental methods used to study behavior.

It aims at providing a toolbox for analyzing an economic question from a behavioral perspective, and proposing behavioral solution.

Content

- > Overview of the main results of behavioral economics, in the field of individual decisions social preferences.
- > Presentation of the methods used to measure decision biases and test behavioral models.
- > Presentation of tools for the development and evaluation behavioral solutions to economic problems (Nudges).
- The course will be based on field or lab experiments, as well as examples in the fields of marketing, finance and public policies.

Sessions

18 hours (6 sessions of 3 hours)

Material

Course material will be given in the form of slides and online apps. Optional reading for will be recommended for each topic

Evaluation

Personal project (90%) and active participation in class (10



INTERNATIONAL AFFAIRS

COMPARATIVE POLITICS OF LATIN AMERICA

Course instructor: Daniel MARCELINO RODRIGUES

Presentation

The course introduces students to the politics of Latin America.

After a brief historical analysis, the focus will be put on the regional post-Cold War democratic experiences and the challenges to its consolidation in the last decade.

Moreover, the course will cover topics such as the rise of Brazil and Mexico as emerging powers, the decline of Argentina, the reestablishment of the US-Cuba relations and the institutional fragility in the light of renewed socio-economic problems.

It will be expected that the students will be able to answer the following questions:

Are there similarities between Latin American regimes?

Are there deep differences between them? Are there any regional patterns that we can identify?

Format

18 hours (6 sessions of 3 hours)

Course content

The course will be divided into the following topics:

- 1. Political history of Latin America since the independence to the end of the Cold War
- 2. Democratization and political systems
- 3. Ethnic relations and ethnic politics
- 4. Emerging regional powers: from Brazil to Mexico
- 5. The New Left: from Chávez to Morales
- 6. Regionalism in Latin America
- 7. Latin America and the international system
- 8. What perspectives for Latin America?

Learning outcomes

At the end of the course, students should:

- understand Latin American politics and its main features
- be able to identify different political systems
- be able to distinguish different political actors and national interests
- be able to critically assess the importance of regime changes in Latin America and their consequences for the international system.

Teaching Methods and individual work



Students have to read and prepare the case before each class.

The first part of the course will mainly be made of lectures in order to introduce the students to the political, economic and social features of the region.

The second part will include students' participation with exercises (e.g. quizzes), short papers presentations and oral debate.

Evaluation

- Continuous assessment (oral debates, exercises, short essays): 30% of the final grade
- Final essay: 70% of the final grade

References

- Bethel, Leslie (1996) Ideas and Ideologies in Twentieth Century Latin America. Cambridge: Cambridge University Press.
- Bulmer-Thomas, Victor (2003) The Economic History of Latin America since Independence. Cambridge: Cambridge University Press.
- Edwards, Sebastian (2010) Left Behind. Latin America and the False Promise of Populism. Chicago: Chicago University Press.
- Halperín-Donghi, Tulio (1993) The Contemporary History of Latin America. Durham & London: Duke University Press.
- Several chapters of The Cambridge History of Latin America, edited by Leslie Bethel.



UNDERSTANDING THE MIDDLE EAST: ECONOMIC AND STRATEGIC FUNDAMENTALS

Course instructor: Charles MATAR

Description

The geographic scope of study is limited to the 'core' Arab Middle East, meaning the area stretching from Egypt to Iraq. Other countries such as Iran, Israel and Turkey will be considered to the extent that their policies or internal developments have a material effect on the 'core' area.

The course will consist in two parts. The first one will discuss the strategic/geopolitical backdrop of economic and business activities. An understanding of regional political ideas and of the formation of the state system is fundamental as well as the presentation of the history of conflicts, past and present.

The second part will concentrate on the economic structure and business environment of the region. It will draw on personal direct involvement in business strategy-making and development as well as in executing financial transactions on behalf of regional customers. Based on this experience, a description of the most remarkable and peculiar characteristics of the regional business environment will be tempted. A comparison between the main economic models on offer will be done.

Course objectives

- 1) Provide an understanding of the Middle-Eastern state system, its roots and dynamics and of the region's conflictual patterns.
- 2) Offer a first-hand view of the region's economic and business environment

Format

18 hours (6 sessions of 3 hours)

The course will mix lecturing and discussions. To get rich and lively sessions, specific readings will have to be performed.

Course content

- 1) The origins of the state system and its dynamics
- 2) Middle-Eastern conflicts
- 3) In search of an economic and social model: oil and the Gulf States
- 4) The business environment

Individual work

Preparatory readings; group presentations; end-of-course essay (1500 words)

Evaluation

Presentations & participation in discussions: 50%; Essay: 50%

References

Fromkin, David, A Peace to End All Peace, Holt (1989)

Bregman, Ahron, Israel's Wars: A History Since 1947, Routledge, Third Edition (2010)

Kemrava, Mehran, *The Modern Middle-East: A Political History since the First World War*, University of California Press, Second Edition (2011)

Commins, David Dan, The Gulf States: A Modern History, I.B Tauris, Second Edition (2014)



LES MENACES DU TERRORISME

Coordinateur du cours: Philippe MIGAUX

Présentation du cours

Le cours est consacré à la compréhension du phénomène terroriste, dont la menace principale est celle du jihadisme international.

Le modèle historique est celui d'Al-Qaida, fondé en 1988 pendant le conflit afghan, qui s'incarne dans un jihad global déterritorialisé. Il est concurrencé depuis 2013 par une mouvance dissidente, celle de l'Etat islamique qui a choisi la stratégie du sanctuaire territorial en zone syro-irakienne autour d'un proto-Etat censé ressusciter le califat, abrogé au sein du monde musulman en 1924. L'échec de ce modèle totalitaire et conquérant a contraint l'Etat islamique à adopter à son tour une stratégie de jihad global déterritorialisé, en s'appuyant sur un appareil extérieur de combat similaire à celui d'Al-Qaida.

L'existence de ces deux modèles montre la fragmentation du terrorisme jihadiste, mais leur rivalité renforce l'actualité de leurs menaces qui restent toujours évolutives en profitant des opportunités de la globalisation du monde, du développement exponentiel des technologies de communication et des limites posées par les failles des réalités géopolitiques.

Le cours qui s'appuie sur la présentation de documents concrets, en particulier des films de propagande jihadiste, présente l'évolution des stratégies de combat et de terreur qui visent, par le choix de cibles différentes à terroriser les opinions publiques pour fracturer les structures économiques et institutionnelles, au nom d'une idéologie totalitaire à ambition internationale.

Pré-requis

Etudiants ayant une vision cohérente des réalités internationales et des concepts géopolitiques.

Format du cours

18 heures (6 séances de 3 heures)

Les cours s'appuient sur des présentations de PPT, de films courts, relayés par des documents écrits du professeur à chaque cours. Ils engagent à la discussion autour d'exposés d'étudiants et de temps consacrés aux questions.

Contenu des séances

- 1) Comment penser le terrorisme
- 2) La formation de l'idéologie jihadiste
- 3) AQ et EI : les stratégies combattantes
- 4) Le rôle de la propagande
- 5) Les menaces contre l'économie pour fracturer les Etats
- 6) Les menaces de demain : intervention du chef du Raid

Evaluation

Exposé oral de 10 mn (20%) + fiche technique de 4 p (20%) + examen final par rédaction d'un document de 5 p (40%) + note de participation aux discussions (20%)



Philippe Migaux est commissaire divisionnaire de police. De 1990 à 1995, il a exercé en police judiciaire sur la criminalité organisée, en particulier à la Brigade des stupéfiants de Paris. Depuis 1995, il a toujours travaillé sur le terrorisme, en particulier jihadiste, au sein du service de sécurité français. Il a publié de nombreux livres et articles sur les problématiques terroristes.



STRATEGY CONSULTING AND PRIVATE EQUITY IN THE MIDDLE-EAST AND NORTH AFRICA

Course instructor: Amine BELAICHA

Context and course objectives

During the last decade, the Middle-East and North Africa (MENA) region confirmed to be appealing for economic operators. A sustained growth, an accelerated modernization and the opportunity to contribute to the fast economic rise of the area have been attracting companies and ambitious workers and managers from all over the world.

The growing sophistication of business culture and practices made the region attractive for activities like Strategy consulting and Private Equity that found a new area of development in countries where sky seems to be the limit. Growth perspectives and local dynamics offer strong Investment opportunities and exciting Consulting projects that are hard to match in more mature economies - the key challenge being the ability to conciliate the rules of these businesses with local business culture and specificities.

Since 2011, the uprising witnessed all across the region brought a new layer of complexity that influences through various dimension the way people live, think and apprehend business in the MENA.

The first objective of this course is to introduce the region on various dimensions: geographic, economic, historic, demographic, political and cultural. Rather than exhaustiveness, we will offer students key codes to better understand the variety of national specificities and the factors of homogeneity that define this geographic continuity of 20 countries. The main aim being to expose students to how people do business there and what are the specific rules of the game to have in mind when considering doing business there.

As a second step, we will introduce strategy consulting and Private Equity businesses, their functioning, their history and their recent evolution. Again, the purpose will be to give students a fact- based view on what are the day-to-day tasks and stakes behind the words.

Last, we will focus of the specificities of these businesses in the region.

Format

18 hours (6 sessions of 3 hours)

Evaluation

The course will be composed of lectures and case studies.

Student evaluations will consist in group synthetic written reports supported by class presentations.

Attendance and contribution to class dynamics will also highly valued in the grading.



BEYOND THE BRICS, A LOOK AT THE NEXT ELEVEN (N-11) For a successful Business development Strategy

Teachers: Georges-Edouard DIAS, and Pierre-Marie RELECOM, Founder & CEO of Relecom & Partners.

Presentation

Until recently, mature countries and BRICs were a sufficient playground for companies to develop. Now, both the weakening GDP growth in developed economies and the increasing competition in emerging countries, not withstanding the geo-political uncertainties, force companies to address a new frontier: the Next Eleven (N-11). Whilst mature countries are struggling with less than a 2% GDP increase, the Next Eleven (Egypt, Turkey, Iran, Nigeria, Bengladesh, Pakistan, Indonesia, Philippines, Vietnam, South Korea, Mexico) are enjoying a near double digit growth. But implementing a sustainable business in these countries is a unique daunting challenge: companies must reinvent themselves to become compatible to these new generations of states, doped by digital, where business rules and practices are unique of their kind.

Teaching objectives

At the end of the program, students will have:

- A full understanding of the N-11 opportunities and specificities in terms of business development.
- An extensive picture of the challenges facing companies willing to enter these countries.
- A complete tool box adapted for each country within the N-11, helping them to face successfully an always tough and sometimes unfair competition.
- The mindset necessary to be accepted in these one of their kind markets: humility, ability to listen to markets expectations, out of the box thinking, agility and positive resilience.
- The understanding on how to design, trigger and lead a successful and sustainable business approach to the N-11 markets, through a variety of recent and concrete cases of business implementations and through exchanges with key leaders and top executives having executed such approaches (CEOs, EVP of Business Development, EVP of Business Lines, ...).

Program Organization

The course will be organized in 6 sessions of 3 hours each. After a fist session scoping the N-11, spotting their commonalities and undelying their differences, the program will dig into the business steps that companies must follow to develop a sustainable line of business in these countries: identify the best opportunities (sometimes hidden), source the business through local partnerships, finance the development by securing access to local or regional funds, implement offices and recruit teams, whilst preserving the integrity and the sustainability of the operations. Then, the following classes will focus on the postures that companies and their people should adopt to gain access to these markets: loyalty, open mindfulness, patience, and carefulness in the business practices.

Three sessions will feature an optional business case, illustrated and discussed within the class, with the participation of top-line managers of the featured company.

Each session will feature an "On the News" debate, where students will be proposed to submit entries.



Program Content

- S1: The Next Eleven scope: discovering the business rules and languages of a different world.
- S2: The five steps to sustainable success in these one of their kind markets.
- S3: The meaning of loyalty. The impact on private life.
- S4: Patience and the notion of time: sacrifying short term returns to priviledge long term relations.
- S5: A very demanding CSR: neutralizing corruption and compensating for lack of regulations.
- S6: A N-11 successful implementation strategy: debriefing and discussions in the presence of the company leader.

Teaching Methods

- "A la carte" case studies, debriefed in the class with students' presentation (individual).
- Testimonials, discussions and debates with thought leaders.

Personal work and commitment

- Business cases (individual): at least one business case out of three.
- Debates entries : at least one debate entry out of six.

Evaluation

- Business Cases Resolution and Presentation 50%
- Debates Entries and Panel Discussion 30%
- Overall Participation 20%



LAW & INSTITUTIONS

COMPANY LAW

Course coordinators: Matteo WINKLER, Assistant Professor, Law & Tax Department

Presentation

This course will introduce the students to the basics of corporate law. It will cover the main actors of the corporate setting, their role, and their relationships from a legal standpoint, both domestically and within a cross-border environment.

Teaching objectives

The course seeks to provide a solid understanding of the basic operations of corporate law, focusing on its main actors such as shareholders, directors, auditors, regulators and law enforcement agencies.

Legal focuses will necessarily include the incorporation process, the agency problems arising out of the relationship between shareholders and directors, and corporate insolvency. The class will also cover typical corporate cross-border operations in Europe and the United States, with a comparison between the two systems. Finally, the course will address the issue of corporate social responsibility and its role in the life and activity of a corporation.

Timing

18 hours.

The course is composed of twelve lectures of 1.5 hours each plus a final exam. Attendance is mandatory.

Course content

- 1. Introduction
- 2. Fundamentals and economic analysis of corporate law
- 3. Comparative corporate law
- 4. CSR

Individual work

Students are required to come to class prepared to comment on the materials indicated in the handout.

Grading

The course evaluation will be based on the final exam grade plus the points obtained with attendance and presentations.

Waiver

Students with a law degree or a Master of Law (LLM) are entitled to a waiver for this course.



DROITS DES SOCIETES

Course coordinators: Michael Loy

Presentation

Au-delà des nombreuses questions juridiques et fiscales que pose la matière, le droit des sociétés est un instrument de gestion avec de multiple choix de nature stratégique : créer ou non une société, quel type de forme sociale adopter, quelle gouvernance choisir ou quel statut juridique, social et fiscal pour le dirigeant privilégier ? C'est dans cette double perspective théorique et pratique que s'inscrit le cours de droit des sociétés.

Objectifs Pedagogiques

Faire acquérir aux étudiants des connaissances aussi bien théoriques que pratiques ainsi que des réflexes en droit des sociétés.

Déroulement du cours/format

Cours organisé autour de six séances de trois heures chacune.

Contenu

Six séances de trois heures chacune sont prévues sur les six thèmes suivants :

- Contrat de société et société unipersonnelle ;
- Personnalité morale, droits des associés et société/entreprise;
- statut des dirigeants, gouvernement d'entreprise et R.S.E.1;
- Grands types de société;
- Opérations des sociétés ;
- Cessions de droits sociaux, pactes d'actionnaires et groupes de sociétés.

Méthodes pédagogiques/travail personnel

La méthode pédagogique est d'abord basée sur un travail personnel de l'étudiant. Il lui est demandé, préalablement à sa venue en cours, de regarder des vidéos courtes consacrées au droit des sociétés au sein de la collection « MOOC2 Sorbonne Droit des entreprises » sur la plate-forme FUN3. Les vidéos sont divisées en six thèmes qui correspondent aux six séances de trois heures chacune du cours de droit des sociétés.

En cours, les notions décrites dans les vidéos seront abordées à travers l'étude de cas pratiques et de documents (tels que les statuts de société) afin de pouvoir saisir aussi bien la portée théorique que l'enjeu pratique de ces notions.

Evaluation

L'évaluation sera fonction de deux notes attribuées à l'occasion d'un test de mi-parcours (coefficient 1/3) et d'un test final (coefficient 2/3). La participation en cours sera prise en compte lors de l'attribution de la note finale

¹ Responsabilité sociétale des entreprises.

^{2 «} Massive Open Online Course ».

^{3 «} France Université Numérique ». Le lien vers le site Internet est le suivant : https://www.canal-u.tv/producteurs/universite_paris_1_pantheon_sorbonne/droit_des_entreprises



DROIT DU TRAVAIL (Relations individuelles – Relations collectives)

Responsable du cours : Marie SERNA, Docteur en Droit, Professeur Associé Groupe HEC

Présentation

Tous les salariés doivent franchir les étapes professionnelles du recrutement, de la négociation du contrat de travail dans ses clauses les plus spécifiques, patrimoniales et extra-patrimoniales, jusqu'à la rupture de leur relation conventionnelle. Tous les dirigeants d'entreprises et leurs représentants doivent maîtriser l'entretien d'embauche la rédaction des contrats de travail, les domaines et limites de leurs pouvoirs et autorités hiérarchique et disciplinaire. Les relations individuelles et collectives du travail sont au coeur de la gestion des sociétés commerciales. Ainsi, le droit du travail se développe comme une technique d'optimisation de la gestion des entreprises mais aussi comme l'instrument de l'évolution de la société politique, dans son approche des droits et des devoirs des hommes et des femmes qui la composent.

Ce cours sera l'outil qui vous permettra de maîtriser et de faire fructifier chacun des moments-clés de votre carrière et de votre vie professionnelle au mieux de vos intérêts

Objectifs pédagogiques

- 1. Maîtriser toutes les étapes de la vie professionnelle dans leurs aspects juridiques de l'embauche à la rupture du contrat ;
- 2. Maîtriser la structure et la rédaction des contrats de travail ;
- 3. Maîtriser les droits et devoirs des partenaires sociaux : salariés, dirigeants, représentants du personnel.

Ce cours est conseillé pour la majeure SFJI, MAC, Entrepreneurs

Format

18 heures (6 séances de 3 heures)

Contenu

- Les étapes réelles du recrutement
- Le contrat de travail : étude détaillée et pratique
- Les conditions concrètes de travail
- L'autorité hiérarchique
- La santé physique et psychique
- La « société électronique » et le monde du travail
- Les responsabilité pénale et civile de l'employeur
- La fin du contrat de travail et le Conseil de Prud'hommes.

Evaluation

- Evaluations individuelles
- Participation et assiduité en cours

Bibliographie

- Dictionnaire permanent social.
- Revue : Travail et Emploi (bénéficiant du soutien du ministère en charge du travail et de l'emploi).



Noms des Entreprises (Institutions) étudiées

- Inspection du travail
- Jurisprudence des juridictions prudhommales
- Conseil Economique et Social et Environnemental
- Syndicats
- Organisation Internationale du Travail
- Pôle Emploi
- Agence Nationale pour l'amélioration des conditions de travail
- DARES
- MEDEF: Mouvement des entreprises de France.



DROIT DE LA PROPRIETE INTELLECTUELLE

Responsable du cours : Marie SERNA, Professeur Associé Groupe HEC

Présentation

Les agents économiques, et spécialement les dirigeants d'entreprises, sont constamment confrontés au problème de la maîtrise juridique des valeurs économiques intellectuelles et immatérielles. Le droit de la propriété intellectuelle vise à donner les clés, de la protection et de l'exploitation contractuelle, du marché des œuvres de l'esprit, pérennes ou temporaires ; classiques ou contemporaines, esthétiques ou utilitaires.

Ce cours est conseillé pour les majeures SFJI, MAC, Digital.

Format et/and credits

18 heures (6 séances de 3 heures).

Contenu du cours/ Course content

- Liberté et créativité
- Les auteurs
- Les conditions encadrant la protection des oeuvres de l'esprit
- Les différentes catégories d'oeuvres protégées
- Les droits patrimoniaux des auteurs
- Les exceptions aux droits patrimoniaux des auteurs
- Le droit moral des auteurs
- Le droit d'auteur post mortem
- La contrefacon
- Les contrats du droit d'auteur
- Un double statut
- Les contrats des artistes interprètes/artistes du spectacle

Evaluation

Contrôles continus et assiduité en cours

Bibliographie/ References

N. Binctin: Droit de la Propriété Intellectuelle, LGDJ.

Noms des Entreprises (Institutions) étudiées

Centre National du Cinéma et de l'Image Animée, Centre National du Théâtre, Sociétés de perception et de répartition des droits : **SACEM**, **ADAMI**, Sociétés de productions audiovisuelles, Centre des Monuments Nationaux.



DROIT ENTREPRENEURIAL

Responsable du cours : Marie SERNA, Professeur Associé Groupe HEC

Présentation

Dans le cadre de la liberté d'entreprendre (de valeur constitutionnelle) et de la liberté du commerce et de l'industrie (Principe Général du Droit), la conduite globale d'une activité entrepreneuriale, suppose la maîtrise de nombreux outils juridiques, codifiés, législatifs, règlementaires, jurisprudentiels.

Ce cours vise à maîtriser tous les outils juridiques nécessaires de toutes les étapes de la vie entrepreneuriale.

Ce cours est conseillé pour les majeures SFJI, Entrepreneurs, MAC.

Format

18 heures (6 séances de 3 heures).

Contenu du cours

- Introduction
- Règlements des litiges
- Responsabilités entrepreneuriales
- Droit de l'immatériel « marques, brevets, dessins et modèles "
- Intermédiation entrepreneuriale
- Distribution intégrée
- Contrats avec les consommateurs
- Publicité.
- Pratiques commerciales déloyales.
- Droit pénal entrepreneurial
- Entrepreneuriat et financement

Evaluation

Contrôles continus et assiduité en cours

Bibliographie

Dictionnaire permanent Droit des Affaires.

Noms des Entreprises (Institutions) étudiées

- Institut National de la Propriété Industrielle,
- Organisation mondiale de la Propriété Intellectuelle,
- Institut National de la Consommation,
- Associations de consommateurs,
- Autorité de la concurrence,
- Direction Générale de la concurrence, de la consommation et de la répression des fraudes,
- Fédération Française de la Franchise.



DIVERSITY AND INCLUSION

Course instructor: Prof. Matteo Winkler

Course description

This course offers an insight to what HEC Paris considers one of its main drivers: diversity and inclusion (D&I). In fact, most of the corporate partners of HEC and all leading global companies pursue strong D&I policies whose objective is managing the existing diversity and ensuring the inclusiveness of all corporate constituencies, especially the employees. Research indeed shows that an inclusive business is generally more profitable and is able to grant shareholders an additional payout – the so-called "diversity dividend". For a top school like HEC, teaching D&I is of the utmost importance in order to educate the leaders of tomorrow to the challenges posed by increasingly diverse workplaces and societies. This course provides the students with three essential tools: (1) an analytical framework to detect bias and stereotypes in ordinary behaviors; (2) a set of criteria to assess and shape corporate policies around D&I; (3) a guideline for managing different identities in the workplace, whether based on gender, sexual orientation, culture, neuro-diversity or body shape.

As a distinguishing element of this course, as 50% of the final grade the students are required to prepare a group assignment with the consulting branch of PwC on the following topic: "What's the impact of the digital transformation on gender balance within the organizations? Present to an imaginary client (one manufacturing group / retail group / bank-insurance group) a gender reskilling/upskilling plan. Define the case for reskill/upskill, justify the choice of focusing on a specific population, execution and delivery plan". A training session will be held at PwC France HQ and each group of students will be led by a coach from PwC Advisory to facilitate the preparation of the deliverables. Each student group will be assessed based on a presentation in front of a jury to be held at PwC France HQ with the participation of both PwC Partners and Directors and HEC Faculty and Administration.

Prerequisites

There are no prerequisites for this course.

Format et/and credits

18 hours, 3 hours for 6 weeks 3 ECTS

Course content

The course consists of six sessions:

- Session 1: Detecting unconscious bias
- Session 2: Gender balance and Group Project at PwC France HQ
- Session 3: LGBT and other sexual orientations
- Session 4: Managing a multicultural environment
- Session 5: Neurodiversity and body shape
- Session 6: Presentations at PwC France HQ

Individual and group work

Students are expected to do some mandatory pre-readings before each session. Workload for these pre-readings vary across the various sessions but does not generally exceed 2 hours of work per week. In class, students are required to actively participate and engage in exercises, both individually and in random groups. Student groups will spend time at PwC France HQ and autonomously work on the group assignment.



Class participation: 20%; individual assignment: 30%; group assignment 50%.

References

I. Bohnet, What Works: Gender by Design (2016); C. Steele, Whistling Vivaldi. How Stereotypes Affect Us and What We Can Do (2011); P. Bourdieu, La Domination masculine (1998).



MARKETING & COMMUNICATION

MARKETING

Course coordinators: Valeria STOURM, Associate Professor, HEC Paris

Course Objectives

The main objective of the course is to educate students in approaching marketing decision problems in a structured way and understand the social impact of marketing decisions. The first part introduces the key concepts of marketing strategy and common tactics to implement marketing decisions. This will provide students with a hands-on approach to marketing management. The second part operationalizes marketing strategy using a data-driven perspective. This will provide students with tools to implement marketing decisions using data on the customers, the company, and its competitors.

Learning Outcomes

By the end of the course, students should be able to apply marketing frameworks and strategies to analyze business cases. Students should also be familiar with quantitative techniques that are used in today's data-rich business environment. Particular emphasis will be given on value creation through sustainable marketing strategies.

Timing

36 hours (2 x 1.5 hours per week)

Teaching methods

The course is based on a combination of pedagogical tools, combining interactive lectures with other active learning methods (e.g., case studies, exercises, simulations, projects).

Individual work

For each class, students are expected to have read and prepared all class materials assigned for the class period. The workload is quite heavy and requires a high level of individual organization commitment to teamwork.

Grading

The teaching philosophy of this course places heavy emphasis on active participation in the learning process. Students are expected to come to class prepared to discuss the assigned readings and other materials, and ready to contribute to the discussion (including classes in which guest speakers and other students make presentations). The course may include various materials and activities, such as individual or group projects, cases, simulations, exercises, lectures, and class discussions.

The final grade is based on class participation (10%), group projects (20%), a midterm exam (35%), and a final exam (35%). Attendance is mandatory, and students are responsible for ensuring that they do not schedule job interviews or travel for personal reasons during classes or the exam periods.



INTERNATIONAL MARKETING

Course instructor: Philippe GRECO

Description and objectives of the course

Globalization, off-shoring, near-shoring, resettlement, international development... Companies use many levers when growing on the international battlefield. The aims of the course are:

- Understand the stakes of international Marketing
- Get to grips with International Marketing specificities: the opportunities and potential pitfalls deriving from its deployment
- Be able to analyze the Marketing Strategy of a company on its international market and understand the specific issues related to doing business in several countries & regions

Each session will be organized around International Marketing stakes:

Context and internes / external of international businesses Market research and business intelligence International business structures and organization Intercultural management applied to Marketing stakes **Product & Services management** Pricing policy International distribution

Communication

In order to foster discussions and knowledge/idea sharing, the tuition will be driven based on:

- Technical and practical knowledge
- Business cases in several business sectors
- Discussion with professionals who will intervene to share their past and current experiences

Format

18 hours (6 sessions of 3 hours each)

Theories and examples will allow to draw a large if not comprehensive perspective

Prerequisites

This course is designed to be followed in parallel to or after the M1 Marketing course. Exchange students are welcome (similar requirements of mandatory M1 level Marketing course already followed)

Homework

Homework and contributions will be asked before attending the sessions. The discussion and knowledge sharing are key for the quality of the tuition. These tasks are shared during the sessions.

Homework will be dedicated to the analysis of International marketing strategies of leading companies in several industries. The focus will be on understanding the differences of execution they develop between regions and countries to better address the international marketing stakes.



Course Content (tentative e.g. depending on guest speaker availability)

Session 1	Introduction
	Key stakes for an international deployment
	International market research
	Company case examples (Physio-Control in EMEA, edenred global deployment of a new offering)
Session 2	Discussion on International Marketing whitepapers by IBM & EY
	Impacts of globalization & localization
	Mix marketing standardization levels
	International marketing organizations and company maturity levels
Session 3	Cultural factor impact on International Marketing
	International distribution and Retail channels Guest
	speaker
Session 4	International pricing strategies
	International product & services deployment
	Home work presentation by subgroup, discussion in class and debrief
	Guest speaker
Session 5	International Communication strategies
	International Brand Management
	Home work presentation by subgroup, discussion in class and debrief
	Guest speaker
Session 6	Main pitfalls in international marketing deployment
	Home work presentation by subgroup, discussion in class and debrief
	Preparation of final exam on a real company case

Evaluation

20% on the active participation during the sessions

40% on a group home work (international marketing analysis of a renowned company)

40% on a final exam: a business case will allow students to use the course learning on a real situation



INFLUENCER MARKETING

Course instructor: Ertan ANADOL

Course description:

Influencer Marketing has been a buzzword for several years now and as it has become more mature every marketer needs to understand the principles of Influencer Marketing and why it matters. There are many definitions and ways of working with Influencers and by taking this course you will get a hands-on understanding why today it's an important part of your marketing strategy.

The course provides an overview of the history and development of marketing with Influencers while helping you to develop the necessary skills to drive your Influencer Marketing efforts. Building upon practical cases and concrete campaign and Influencer examples you will learn how to plan, build, execute, and measure an Influencer Marketing strategy. In order to make sure that Influencer Marketing integrates with the overall marketing goals of your organization.

The course has the following specific objectives:

- Definition of Influencers and Influencer Marketing
- History of Influencer Marketing and reasoning vs. other Marketing Channels
- KPI and Goal Setting for your Influencer Program
- Data Driven Influencer Identification
- ROI Analysis of Influencer Programs
- Authenticity and Creativity vs. Product Placement
- Compliance and Best Practices

This course is advised for Marketing Major.

Pre-requisites if applicable

Basic knowledge of digital advertising

Format and credits

18 hours, 3 hours *6 3 ects

Course content

The course consists of 6 parts:

- Part I: Definition, Origins and reasons of Influencer Marketing
- Part II: Influencers, Non Paid Social Media KPIs, Influencer Data
- Part III: Influencer Selection and Outreach
- Part IV: Case study and Influencer Identification Workshop
- Part V: Authenticity and Creativity as Key Success Factors
- Part VI: Building and presenting your Influencer Marketing Program



Individual work

Evaluation of performance will be based on active and individual participation during each session, participation in group exercises and the final group presentation.

Evaluation

Individual participation during each session (60%) + Final Group Exercise (40%)



<u>DIGITAL MARKETING FOR CONSUMER GOODS</u> Exploring the digital adventure and embracing marketing transformation

Course instructors: Georges-Edouard DIAS, QuantStreams' C o-founder & Jean-Pierre LEVIEUX, Chief Hospitality Officer.

Overview

Marketing, which has been for long a land of adventures, would have beeen trivialized if company policies had not been shaken in recent years by several major revolutions: globalization and growing importance of emerging countries (China, India, Brazil and Africa), consumer behavioral change (buying mode, media), deployment of the internet, generalization of smartphones, surge of social networks ...

The purpose of this course is to explore new digital frontiers of marketing and the profound implications they may have in terms of offers, corporate policy and organization.

This course will stimulate the creativity and the marketing appeal of HEC students, by confronting them to the challenges of a digital transformation that requires all large companies to move from a "marketing deals" approach to an "experience marketing " where the product purchased is only the beginning of a consumer engagement cycle and not the outcome of a sales funnel.

Program objectives

At the end of the course, students:

- will have a better knowledge of the realities, challenges, and opportunities of digital marketing,
- will have a better understanding of the transformations facing consumer goods companies,
- will have acquired through a variety of cases and examples from different parts of the world and through exchanges
 with thought leaders and digital executives from CPG groups, a mindset to understand, trigger and lead the digital
 transformation required for traditional companies.

Program organization

The course is organized in 6 sessions of 3 hours each.

After an introductory session (session 1) on marketing transformation are successively covered: the transformation of the communication strategy through development and curation of content (session 2), the new importance of data, at the core of the media strategy (session 3); the new role of the CMO within the organization: as an orchestrator (session 4); the new e-retail mix, especially thanks to mobile technology (session 5). The course concludes on the prospects of new business accelerated or permitted through digital, describing the successes of the "Indie" brands. (session 6).

The course includes 3 business cases, presented and animated by CPG marketing leaders: students have the choice of the case they want to cover.

- "Marketing a purely digital product: Fizzy, for AXA".
- "Betting on customers' attachment to a corporate brand : Dan'On".
- "The future of retail: Carrefour, before the final countdown."
- A case featuring the international launch of a new product.

The course features also 6 panel debates in which students can submit entries. Debates will cover "on the news" topics related to digital marketing and will be proposed after the break.



Program content

- S1: Marketing rebooted at the digital age: from Managing Products to Serving customers.
- S2: The brand is now a service platform: Brands must be on purpose and "Start with the Why".
- S3: From Big and Stupid Data to Smart Data: Social Excellence to enter customers' circle of trust.
- S4: The Future of the CMO: Conductor of the Marketing Orchestra.
- S5: The Reinvention of Commerce: Drop the "e", Retail is the future of Marketing.
- S6: Brand Engagement beyond Facebook: Creating a brand with a hashtag.

Teaching methods

- "A la carte" case studies, debriefed in the class with students' presentation (individual).
- Testimonials, discussions and debates with thought leaders.

Personal work and commitment:

- Business cases (one case out of 3, individual).
- Panel debate: at least one debate "entry" submitted amongst the six debates.

Evaluation:

- Business Cases Resolution and Presentation 50%
- Debates Entries and Panel Discussion 30%
- Overall Participation 20%



PEOPLE ORGANIZATION & SOCIAL RESPONSABILITY

LEADING ORGANIZATIONS: Perspectives on Design, Power and Culture

Course coordinator: Jin Wook CHANG, Assistant Professor (MRH Dpt.)

Presentation

This course explores three different perspectives on organizations that will help you understand issues involved in both managing and being managed at work. We all develop our own understanding of what organizations are and how to act effectively as organizational members.

But our understanding is often limited by our current position, functional area, or individual

interactions and experiences with other organizational members. A narrow view can lead to costly misunderstandings and damaging managerial decisions. In this class, we seek to enhance your understanding by studying the human aspects of organizations.

More specifically, we look at organizations through the lenses of design, power, and culture. Each lens provides explanations of why some organizations flourish whereas others collapse, and why people within organizations behave the way they do. We will discuss the managerial implications of each lens and provide you with the skills and tools to thoroughly diagnose organizational problems and to tackle them with the appropriate actions.

Learning outcomes

- ✓ Understand how organizations work from a design, power and cultural perspective
- ✓ Understand the human aspect within organizations, how people's beliefs, interests, and interactions shape managerial decisions and organizational actions
- ✓ Diagnose organizational problems from different perspectives and tackle them with appropriate actions
- ✓ Develop your competence in navigating through organizational life while avoiding the typical
- ✓ pitfalls

Key topics

Class 1: Introducing the three lenses

We introduce the three lenses perspective and subsequently discuss "new organizational forms" in the current economy.

Class 2: Lens 1: Organizational design

In this session we address the four components of the organizational design perspective: fitting, aligning, grouping and linking. Grouping will be analyzed by looking at the various organizational structures firms can use. Linking deals with how information flows between the various units in the organizational structure. Fitting is the link between the organizational structure and the environment. Finally, aligning is the process of ensuring that the goals of different groups are in sync.



Class 3: Lens 2: Organizational culture

We address what organizational culture is and how it shapes action in organizations. What are the advantages and disadvantages of strong cultures for employees, shareholders, and customers? We show how culture can be analyzed through its artifacts, espoused values and underlying assumptions.

Class 4: Lens 3 Part 1: Power

We identify the different sources of power within organizations, including the power within organizational design, the power of individuals, the power of connections and social networks. We discuss where and when conflict exists in organizations and how it can be resolved. We also talk about changing power dynamics through shifting alliances.

Class 5: Lens 3 Part 2: Social networks

We take a closer look at social networks within organizations and how they can build leaders' influence and success. We will map the class' own social network which allows us to illustrate some of the most important network concepts and discuss strategies to build a network that increases your power and influence.

<u>Class 6</u>: Student team presentations

Timing

18 hours (6 weekly sessions of 3 hours)

Teaching methods

Our goal is to create a safe learning climate in which students feel comfortable to speak up and to share their own ideas and thoughts. As every student has different preferences for different teaching modes, the course integrates a variety of teaching methods, including lectures, case discussions, small group exercises and presentations. Your active participation is crucial for creating the best learning environment for everyone.

Grading

Group case work & presentation	25%
Class participation & attendance	25%
Final exam	30%
Reading journal	20%



ETHICS AND SUSTAINABILITY

Course coordinators: Bénédicte FAIVRE-TAVIGNOT (MRH Dept.)

Course description

Ethics is a crucial component of individual and group behavior and is at the heart of organizational responsibilities. This course considers the ethical responsibilities of managers and corporations. We consider individual and organizational business actions and decisions in the light of moral principles and values. We will raise ethical challenges and provide frameworks that inform common patterns of success and failure in managing ethics and corporate responsibilities. We address these questions at multiple levels of individual, organization, society and international space and in multicultural contexts.

The growing notion of sustainability raises the question of organizations' ethical and societal responsibilities that go beyond their economic responsibilities. Organizations are increasingly required to expand their understandings of their role in society to include other stakeholders such as employees, customers, suppliers, local communities, governments and international organizations. We address the complex environments of multinational corporations and emerging governance structures, management systems and innovative business models that can help align the firms' interests more closely to societal expectations.

At the end of the class the students will:

- 1. Understand the core processes that undergird ethical management in organizations
- 2. Know some levers for how to create value sustainably

Format

Six three-hour sessions will be devoted to a mix of lecturing (PDFs of slides will be provided), case discussion and exercises, backed by printed materials provided to students in advance of the course.

Course content

Session 1: Introduction to ethics

We will discuss the main ethical frameworks and how they matter for management.

Session 2: Understanding ethical violations: Why do smart people do dumb things?

We will discuss how power and authority shape ethical behavior in organizations. If power is so important, what are the bases of power? What are my options? We will also unpack a core process involved in ethical violations such as frauds: escalation of commitment.

Session 3: Corporate social responsibility and global corporations.

We will explore the different meanings of corporate social responsibility. What purpose(s) should corporations serve? Do cultural norms and practices matter? Should companies like Nike, Apple and other global corporations be held responsible for the practices of their suppliers? If so, how?

<u>Session 4: New technologies and ethical dilemma: Balancing opportunities and responsibility at the "new frontier"?</u>

Biotechnologies are one of the most innovative industries. But such new technologies constantly raise new ethical dilemmas. What are the main dilemmas in biotechnologies and biomedicine? Why are controversies so salient? Can we forge common ethical guidelines and practices?

Session 5: Innovative and inclusive Business Models



Beyond ethical and responsible behaviors, some companies develop innovative and even sometimes breakthrough business models, to provide access to goods and services to people at the Base of the Pyramid. How are these models implemented and how do they work?

Are they developed in an ethical way? Do they contribute to decrease social inequalities, one of the major challenges of sustainability? Do they serve the competitiveness of the company?

Session 6: Innovative and green Business Models

Some firms tackle environmental challenges such as climate change, depletion of natural resources, pollution, etc. through also innovative products/services, processes and/or business models. Many companies do it in a defensive way; some think they can transform these new constraints into business opportunities. What are the new approaches that emerge today? Do they provide real solutions to the massive environmental challenges our society is facing? Do they also make the firms more competitive?

Course work and Evaluations

- Attendance and Participation (30% of the final grade):

Class participation is based on contributions to the class discussion with a particular focus on the **readings and case discussions**. It is expected that you will be present and prepared for every class, and ready to share your views in the classroom discussion. **Students should expect and be prepared to be called upon individually in class and asked to provide a summary of the case or of one of the required readings.**

- Individual papers (40% of the final grade):

Two **individual** write-ups of case analysis out of the five cases offered in class: Vandivier, Apple, Geron, Bel, GE. While students are welcome to discuss amongst themselves the elements of the case in preparation, the papers must reflect an individual analysis and effort. Plagiarism across write-ups will lead to an F to the course.

The write-ups should be two pages long (Times New Roman 12pt). The write-ups should be posted on Blackboard at 5pm the latest the day before the session.

- Group work (30% of the final grade):

In teams of 5 to 6 students, prepare an analysis of a case or event in relation to ethics and sustainability. While the course endeavors to provide an overview of the main of issues related to ethics and sustainability, it is by no means an exhaustive catalogues of the rich questions, topics and situations encountered by various industries, organizations and organizational members. This group project is an occasion to extend the course concepts to new topics or to topics of particular interest to the group members.

You can explore the following topics: ethical issues or questions raised by new or existing practices or technologies, organizational crises or scandals, or cases of organizational transformation. Your final report should be around 15 pages long. The topic should be communicated to the instructor in session 4. The final report should be handed in a paper copy one week after the last session and posted electronically on Blackboard.

You will be evaluated on the following criteria:

- Quality of the research
- Quality of the analysis
- Originality and relevance of the topic
- Application of course learning and concepts
- Quality of the presentation



STRATEGIC PEOPLE MANAGEMENT

Course instructor: Vincent Barat, partner at Akoya Consulting

Course description

Do you feel unprepared to manage your own team? Do you sometimes wonder what does dealing with Human Resources actually mean? If so, it should not come as a surprise. Over the past decades, business schools' reputation has been built on marketing and finance excellence and more recently, entrepreneurship. However, from our experience undergraduates have zero to limited knowledge when it comes to managing people... but are paradoxically expected to become great leaders!

Meanwhile, human resource management has come a long way to become more strategic, pushed by several factors: entire industries are facing major disruptions; the war on talent is raging between companies; multiple generations must learn how to work together in the same workplace; digitalization and the ubiquity of data has created new fields, such as People Analytics...

This course is intended for students who wish to be trained to face these challenges and improve their people management skills. Through a series of guest speakers coming from prestigious companies (e.g. in previous years: LVMH, Uber, Google, Ubisoft, startups...), application workshops, live experiments and real-life examples, students will reach the following objectives:

- Learn modern and solid HR concepts (no BS!)
- Use efficient management tools
- Discover what strategic consulting is

Format

18 hours / Six three-hour sessions

Each session will include at least: a testimony from a guest speaker, a "theoretical" part, and an application workshop.

Course content

The course consists of six parts:

- Part I: Course intro & Collaboration: what is human capital, what drives people to work together, etc.
- Part II: Business transformation & social impacts: how are jobs evolving, how are the new business models (Uber, Deliveroo) impacting our perception of the workforce, etc.
- Part III: Talent management: how to acquire, develop and retain the bests
- Part IV: Performance: what is HR performance and how to measure it
- Part V: Well-being: what is employee experience, how employee value proposition is reshaping the traditional corporate view on well-being
- Part VI: Group assignments restitution (possibly off-campus)

Evaluation

Students will be expected to work in groups, like they will do most of their lives in a real company. Final group assignment (100%)



THINKING OUT OF THE BOX

(Unconventional paradigms of management)

Course instructor: Luciano Traquandi (university professor, independent researcher, managerial trainer and consultant in Italy, France, Switzerland)

Présentation

Introduction and spirit of the course

Do not go where the path may lead - go instead where there is no path and leave a trail.(Ralph Waldo Emerson)

The Unconventional Paradigms of Management (UPM) are patterns of behaviours that seem at first glance to contradict the most common practices in our present organisations; they are the most viable way to start thinking and acting "out of the box"

The basic assumption is that *unconventional managerial behaviour* is an innovative way to cope with the most significant organisational phenomena and it assumes a particular importance in a context of complexity and globalisation.

This course helps to leave the well known road and explore the "out of the box" world, to encounter what is outside the *comfort zone*. This allows to design oneself as a flexible leader and professional, giving new vigor and new directions to the own path. With some risks, but with benefits that the consolidated roads would no longer be able to offer.

Objectives of the course

- 1) To provide the participants with a diagnostic skill for the comprehension of complex organizational contexts
- 2) To acquire new strategies and flexible behaviours to overcome the impasse situations, where nobody and nothing else can succeed
- 3) To create a community of innovative thinking people , able to mutually support in the business and existential events

The ingredients which compose this course and constitute the teaching strategy are:

- Innovative and advanced models and behavioral theories and practices, to comprehend and tackle the most challenging situations
- Examples from professional and the academic experience of the trainer
- Organizational cases which are close to the participants reality and experience
- > Study of audiovisuals, for an immediate test of the participants diagnostics skills
- Workshops in subgroups and in plenary, to analyze the context lived by the participants
- Forum of questions and answers on personal cases

Pré-requis si nécessaire/ Pre-requisites if applicable

No particular preparation is required. A personal organizational experience is helpful, in order to compare the classic approaches with the unconventional ones

The course is particularly effective for people with an economic, scientific or humanistic background



Format et/and credits

18 hours, 3 hours *6 3 ects

Contenu du cours/ Course content

- What anchors us in everyday practice and limits innovative thinking and acting
 - Benefits and risks of comfort areas
 - Reassuring certainties and blocking certainties
- What are the Unconventional Paradigms of Management (UPM)
- When and why the UPM could be a better option than remaining within the classic strategies; methods for the Out of the Box leap
- Application of UPM to:

change management
conflict and negotiation context
multicultural strategies
globalization challenge
personal work-life balance
"unsolvable" impasses
innovation

- The trap of knowledge: in search of new, unconventional Learning Curves
- The ultimate case of the Black Box approach, as the highest peak of the unconventional: organizational applications and future perspective
- Cases of success and failure: what we can learn from both
- Case study: a merger and acquisition and its unconventional management

Evaluation

The exam will consist in preparing individually a paper , where the student will apply one-two theoretical models treated in class to a personal case

Bibliographie/ References

The didactic material will be released after the course in PDF form, according to the pedagogical strategy adopted by the teacher

A basic bibliography will be released om the base of students' specific interests

Noms des Entreprises (Institutions) étudiées/ Name of the company(ies) that will be studied Leroy Merlin, IBM, STMicroelectronics, Diesel



DIGITAL BUSINESS

DIGITAL MANAGEMENT

Course coordinators: Shirish C. SRIVASTAVA, Professors

Department - Information Systems and Operations Management

Presentation

This course aims to help students understand the basics of digital technologies and their impact on contemporary organizations. In particular, we will examine the digital disruption in various activity sectors and the innovative applications of digital technologies in organizations to enhance customer intimacy, streamline business operations and develop new business models. Students are expected to understand the strategic importance of digital technologies for organizations and how they are used in different functional areas in organizations. Students are also expected to understand the basics of coding and business analytics.

Objectives

- To study the nature and the depth of digital disruption
- To appreciate the strategic importance of digital technologies for organizations
- To learn how digital technologies are used in contemporary organizations, in particular to transform customer experience and operational processes.
- To understand the unique principles of the digital economy, such as disintermediation, remediation, network
 effects, ecosystems and platforms, and their implications for business models.
- To understand the basic concepts of big data and business analytics.
- To get a practical experience of the basic concepts of coding. Therefore, the course includes hands-on sessions of coding using Python.

<u>Note</u>: This course is taught in multiple formats where students are expected to come prepared for classes, having read assigned readings and cases. Students will have to prepare for coding sessions by performing self-training on the Code Academy platform. Students are required to participate actively in discussion, which is associated with the final grades.

Timing

18 hours

All cases will be provided in the course pack. The course has components of group work and individual work.

Evaluation

Group work on case and coding	25%
Group research report & presentation	25%
Individual final Exam	35%
Individual attendance and class participation	15%



DECISION AND DATA MODELING USING SPREADSHEETS (Level 1)

Course coordinator: Sri KUDARAVALLI, Associate Professor HEC

The course requires students to bring their personal laptop (PC or MAC) fully charged to each class. **Presentation**

This course aims to introduce students to reflective practice in data modeling and problem resolution using a spreadsheet.

Pedagogical goals

- Modeling and programming basics using a spreadsheet
- Simulation models

Timing

18 hours (1.5 hours per week)

Course content

- Spreadsheet fundamentals
- Understanding the general structure of a business model, identifying the parameters
- Main functionalities, basic functions, building formulas, searching, tables, graphics, formatting
- Tips on using Excel
- Databases and pivot tables

Teaching methods

- The course takes place in groups of 25 students maximum
- Hands-on work on the computer
- All course documents are on line on a dedicated web site, which allows students to access course materials and send their work when asked to

Personal Work

- Active participation during the sessions
- Students must review the course between sessions to assimilate all the notions and finish exercises

Grading

Continuous attending and participation control over all the sessions + Final exam Note to students

Duration of the course is only 12 sessions and the difficulty level increases rapidly. Should you miss a session, please inform your teacher and ask him (or ask a student of your class) about what was done during the session. Download the session exercise on BLACKBOARD and try to do it before the next session.



DECISION AND DATA MODELING – LEVEL 2

Course instructor: Etienne Morel

Course description

This course is for students who already have a basic knowledge of spreadsheets and want to improve their capabilities to create and handle advanced models. This course will present many advanced tools and functions which will give students new skills and a very good practice of Excel.

Pre-requisites if applicable

Students must have a basic-to-medium Excel knowledge. In particular, they should know:

- Relative and absolute references
- Use of names on cells or ranges
- · Graphs handling
- Data search functions: Match(), Index(), Vlookup()
- Conditional formatting using formulas
- Basic knowledge on data bases and pivot tables

For L3 students, this correspond to having validated the course Decision and Data Modeling – Level 1.

Format and credits

18 hours, 3 hours *6 3 ects

Course content

- Relative and dynamic names
- Logical values
- Errors and troubleshooting
- Addressing functions such as Offset(), Indirect(), Sumif(), Row(), etc.
- Array handling such as Sumproduct(), CSE functions
- Dealing with dates and times
- Dealing with text
- And more...

Individual work

• Students must review the course between sessions to assimilate all the notions. They must also do the exercises which are given at the end of some sessions.

Evaluation

- Continuous attending and participation control over all the sessions
- Homework control
- Final test (1h30) on computer



ENTREPRENEURSHIP - INNOVATION & BUSINESS

UX & UI Design

Course instructor: Boris Paillard

Course description

Airbnb changed the way people travel, Netflix changed the way people entertain themselves, Slack changed the way people communicate at work. Why are these services so successful? They identified a strong need and built a great user experience around it.

The UX & UI course guide students through the process of designing a digital product (e.g. a web or mobile application): from understanding a user's needs and objectives to drafting a solution and finally building and testing an interactive mock-up. In short, students will learn how to build a product with a user-centered approach. They will also become familiar with designer's workflow (user research / wireframe / user tests / mock-up / UX analytics), enabling them to collaborate more efficiently with designers and engineers throughout their career.

The course has the following specific objectives:

- 1. Provide participants with an understanding of the key principles of UX and UI Design
- 2. Allow participants to learn about design tools, libraries and how tech companies can save time with the right design workflow and best practices
- 3. Allow participants to understand how to quickly develop a simple prototype to validate an idea or to collaborate more easily with their tech team.

Format and credits

18 hours 3 ects

Course content

The course consists of the following lessons:

- Introduction to UX Design (What's UX/UI Design? Introducing designer tools)
- Product Pitch (What is a product pitch? Airbnb, Trello, Typeform case studies
- UX Persona (What is a UX persona?)
- User Journey
- User Flow (Drawing a user flow with the right tools)
- Intro to Atomic Design (What is Atomic Design? What is a UI kit?)
- Building a UI kit with Figma
- Building a Wireframe for your web or mobile app
- Build a prototype and run user tests to validate your UX
- Colors and typography: how to add a visual identity to your wireframe
- Icons and pictures: the best open-source design libraries
- Advanced UI Design patterns
- Introduction to Behavior analytics.



Individual work

Student work is assessed through:

- Individual grading of the two projects they have submitted (User Research Spreadsheet, App's Prototype on Figma)
- Results to quizzes

Evaluation

Quiz (20%) + First Project (40%) + Second Project (40%)

References

- White Alex, The Elements Of Graphic Design, Allworth Press (March 15, 2011)
- Lupton Ellen, Thinking with Type, A Critical Guide for Designers, Princeton Architectural Press (October 6, 2010)
- Lupton Ellen, Graphic Design: The New Basics, Princeton Architectural Press (July 14, 2015)
- Krishna Golden, The Best Interface Is No Interface, New Riders (February 20, 2015)



DATA ANALYSIS IN PYTHON

Course instructor: Boris Paillard

Course

Big Data, Machine Learning, Artificial Intelligence, those are the words you now hear daily on the general news. Behind the hype and the buzz words lies tools & techniques that can be grasped by undergraduate students. Data Scientist has been declared the best job in America according to Glassdoor, forgetting about her sidekiq: the Data Analyst. This course will cover the basis of the Python programming language and will quickly dive into the daily tasks of a Data Analyst. The goal is to quickly dive into business cases and learn from real-life datasets.

The course has the following specific objectives:

- Fundamentals of Programming with Python, Numpy & Pandas
- Data Exploration & Visualization
- Introduction to Machine Learning

Format et/and credits

18 hours 3 ects

Course content

The course consists of the following lessons:

- Introduction to Python
- Data Types & Variables
- Control Flow, Conditionals & Loops
- Advanced Types
- Jupyter Notebook: how to structure a data analysis in Python.
- Data Exploration & Visualisation
- Numerical recipes with Numpy
- Pandas & Dataframes
- Data Visualisation
- Data Sourcing & Cleaning
- Parsing a text file or a PDF
- Web Scraping in Python
- Getting data from web APIs
- Enriching a Dataframe
- Introduction to Machine Learning
- Regression Problem
- Classification Problem
- Clustering Problem

Individual work

Student work is assessed through:

- Individual grading of their Data Analysis Project
- Results to Python coding challenges
- Results to quizzes

Evaluation

Quiz (20%) + Data Analysis Project (40%) + Python Coding Challenges (40%)



EXPLORING THE FUTURE OF SPACE Introduction to Strategic Foresight applied to the Space Sector

Teachers(s): Nathalie RIOND, Etienne KRIEGER & Patrick LEGLAND

Presentation:

If there is one area where the only limit of the human mind is the imagination, it is space, which has many scientific, technical, political, economic, environmental and legal issues.

The space sector is thus a paradise for entrepreneurs and innovators. This is why HEC Paris has put its expertise at the service of this industry, where many of its former students already work.

Anticipating the future of the space economy is a major challenge for Europe. In order to facilitate the emergence of breakthrough innovations, HEC has created with ArianeGroup and the European Space Agency (ESA) the Chair "Exploring the Future of the Space Economy" (cf. link).

This foresight Chair allows to explore possible futures for the European space industry.

This course will allow you to actively participate in a series of foresight workshops. They will combine both a rigorous methodology and creative sessions to help invent the space industry of tomorrow.

The main course objectives are the following:

- Learn about the most advanced methods of strategic foresight.
- · Build real scenarios on the future of space and its commercial applications.
- · Identify strategic surprises and their implications for key players.

This course is recommended for students interested in the Majors pertaining Strategy, Entrepreneurship & Innovation, Finance and Project Management. It is perfectly in line with HEC's new slogan: "Tomorrow is our business" (cf. link).

Format and credits:

- · 6 sessions of 3 hours.
- · 3 ECTS credits (European Credits Transfer System).
- Maximum number of participants: 40.

Course Content:

1] Strategic foresight applied to the Space industry (P. Legland/N. Riond)

Monday 30 March 2020 from 16h20 to 19h30

- · Presentation of the HEC/ESA/ArianeGroup strategic foresight chair (P. Legland)
- · Introduction to strategic foresight (N. Riond)
- · Why explore the future? Forecasts vs. scenarios, usual biases.
- Explore the ecosystem and find the relevant question about the future.
- · Turn uncertainties into opportunities.
- · Scenarios, strategy and influence.



2] Challenges for the space industry (N. Riond, PG. Amand & D. Ponziani).

Monday 6 April 2020 from 16h20 to 19h30

- · Current global environment for the Space Industry.
- · Competitors' map and emerging competition.
- · Space Industry's key drivers.
- How to create value in a changing industry?

3-5] Foresight workshops relating to economic issues of the "New Space" (N. Riond).

Monday 20 April 2020 from 16h20 to 19h30 Monday 27 April 2020 from 16h20 to 19h30 Monday 4 May 2020 from16h20 to 19h30

6] Final presentation and feedbacks (E. Krieger, N. Riond, P. Legland, + guests)

Monday 11 May 2020 from 16h20 to 19h30

Teaching Methods:

- · Presentation and analysis of real cases of disruption of the spatial value chain.
- Debate with leaders and experts of strategic foresight and the space sector.
- · Application exercises, with specific tools and methods.

Individual Work:

- Group work: creation and presentation of a set of prospective scenarios.
- Each scenario will represent a possible future for the actors of the "New Space".

Grading:

- · Attendance & Participation: 50%.
- · Group work pertaining to a real scenario: 50%.

Teachers:

- **Nathalie Riond**, Founder and CEO of Planext, expert in innovation and strategic foresight. Director of CCMO and member of the strategic committee of several startups.
- **Patrick Legland**, Affiliate Professor at HEC, co-director of the ArianeGroup / ESA / HEC Chair "Exploring the Future of Space Economy".
- **Etienne Krieger**, Affiliate Professor at HEC, member of the investment committee of the Paris Saclay Seed Fund, codirector of the ArianeGroup / ESA / HEC strategic foresight Chair.
- Other speakers: ArianeGroup & ESA managers (European Space Agency) and/or other emblematic companies in the sector.

Conditions to participate to this course:

· A strong motivation for innovation and changes in the space industry.



TECH, DATA AND THE INNOVATION MINDSET

Course instructor: Ghislain Mazars Email: gmazars@ubeeko.com

OVERVIEW

This course explores the profound changes triggered by the emergence of a data-driven economy – from the review of core data technologies to new business approaches developed in the Silicon Valley. The objective is to strengthen students' abilities to evolve in an increasingly technology minded environment where new rules and methods emerge rapidly.

To that end, the course:

- Delivers the theoretical tools and perspective to make sense of the evolutions of recent years, and prepare students for the future;
- Integrates an experimental component that will allow students to engage in concrete, practical assignments with a DIY mindset.

Intended Learning ObJectives

This course intends to:

- Provide students with sound reference frameworks to understand and assess the impact of tech and data in today's economic environment;
- Demystify tech and software through practical (albeit limited-scale) tech assignments;
- Deliver a continuum of knowledge from technology to data-first business models and new managerial methodologies.

KEY TOPICS

Part 1: All things software

- "Every company is a software company"
- How open source and GitHub transformed the software industry
- Tech assignment 1: Creating the course static web site from open source

Part 2: The modern way of building applications

- Software engineering vs software development
- The key methodologies: Agile, Scrum, Continuous Integration
- Tech assignment 2: Improving the site by connecting external services

Part 3: Working with the Cloud

- Fundaments of the Cloud
- The Cloud native stack: the role of Docker and Kubernetes
- Tech assignment 3: Deploying in the Cloud

Part 4: Why data matters this much

- The data flywheel concept
- Making sense of Big Data



Tech assignment 4: Tracking users, from data collection to visual analysis

Part 5: Understanding the Silicon Valley mindset

- From the right to fail to Customer development & Lean Startup[™]
- Discussion of key intellectual contributions
- Tech assignment 5: Making the project future-proof

Part 6: Data-driven Artificial Intelligence

- Understanding machine learning and deep learning
- Business opportunities of AI
- Tech wrap-up: What we have achieved together

Teaching Methods

The course combines interactive lectures from the instructor with a "learning by doing" methodology for the tech assignments.

PREREQUISITES

Prior knowledge of a programming language is NOT a prerequisite for this course. You will not be expected to code, but to rapidly engineer a solution assembling various pre-existing technology components. What absolutely mandatory is:

- A "hands on" attitude: from the initial guidance provided during the class, you will be expected to complete (small) tech assignments with only level 2 instructor support.
- The commitment to actively work on the tech assignments and to support your peers in the process.

Grading

Grading is based on both participation and the achievements from the tech assignments.

Biography

A visiting professor at HEC, Ghislain Mazars is currently the CEO of Ubeeko, a software and services company focusing on Big Data.

Before founding Ubeeko, Ghislain has held executive sales, product management and business development positions in VC-backed start-up companies. During this period, he has successfully evolved in a variety of geographies (Europe, Asia, Americas) and markets (telecom infrastructure management, embedded software, satellite-based services).

Ghislain is a graduate from HEC Paris (class of 1998). He also specialized in IT & Telecoms at Ecole Centrale Paris and has been squarely focused on the Technology sector ever since.



CULTURAL IMPERATIVES

ECONOMIE DES RELIGIONS

Intervenant: Jean-Marie SOUBIROU

Description du cours:

Le cours fournit les concepts centraux, les résultats et les débats au sein du champ de recherche récent et en plein développement de l'économie des religions.

Nous adopterons une approche thématique avec un contact direct d'articles de recherche récents (Robert Barro, Roland Bénabou...) appliqué à des religions variées (amérique, europe, asie, afrique).

Nous combinerons, après une séance d'introduction, dans chaque cours: un exposé théorique, des questions sur des articles sélectionnés et des presentations par des groupes d'étudiants.

Ces présentations rendront compte de la revue de littérature, de la méthode et des résultats de l'article de recherche qu'ils auront sélectionné.

Le cours a les objectifs suivants:

- 1. Comprendre et appliquer les concepts microéconomiques utilisés dans le champ de l'économie des religions (modèles beckeriens, de club...)
- 2. Aborder les développements les plus récents de l'économie post-comportementale (ignorance stratégique : R bénabou et J. Tirole)
- 3. Rappeler l'apport des fondateurs (Pascal, Adam Smith...)
- 4. Aborder les relation d'économie politique entre mondialisation, religion, croissance et innovation (débat sur la sécularisation)

Format

18 heures.

6 sessions de 3 heures mixant questions sur des documents préalablement distribués, presentation par l'enseignant et presentation d'articles par les groups d'etudiant suivi de discussion.

Contenu du cours

Le cours consiste en 3 parties:

Partie 1 : microéconomie du choix religieux (demande)

Partie 2 : Marché religieux et strategies des organisations religieuses (offre)

Partie 3 : Economie politique du religieux et relation à la croissance et au développement

Travail individual:

Au début de chaque cours quelques question seront posées aux étudiants sur des matériaux préparant le thème abordé.

Evaluation

Questions de début de cours : 20% Présentation de groupe 50% Examen final 30%



References

1. Sriya Iyer, The new economics of religion, Cambridge and IZA WP, 2015. Cet article fournit une excellente introduction à la variété des thèmes que nous aborderons.



ECOLOGY A NEW MODEL OF SOCIETY

Course instructor: Lucile Schmid

Course description (please detail the course outcomes and if it is advisable for the student academic progress)

The course intends to give a wide panorama of the reasons why ecology is already part of our reality (private life and personal behaviour, innovative processes and creativity by large, strategy of private actors, geopolitics, public policies, local development). It will focus on the reality of the ecological change, show the resisting forces to this change and the dynamics it creates, identify the main difficulties to this cultural revolution and propose concrete elements of solution and orientations. A special emphasis will be put on the proposals for action (one or two at the end of each sequence). The course will be organized in thematic sequences. Each sequence will focus on a theme (economics, geopolitics, daily life, developing territories, sciences, democracy and politics...) The students will study examples and debate with experts in each different field. The interaction between these fields will be examined and demonstrated in the two last sequences of the course with the objective of having for each subject one or two operational proposals.

Students will write a small thesis on a subject of their own choice (in relation with ecology) and present it to the class.

The objectives are the following:

- understanding the main ecological questions of public debate in France and Europe by giving facts and figures, access to expertise and knowledge,
- Putting in interaction and relation examples, reasoning and processes which are usually presented separately. Ecology is a new model of society and implies to put into relation and action economics and science, geopolitics and the role of civil society, daily life and professional choices.
- Giving students the opportunity to discuss about the main controversies about Ecology as a new model of society (should it be democratic or authoritarian, is it a question of science or citizenship, how can we enforce climate justice?...)
- Analyzing the « Greta Thunberg effect » (climate demonstrations, mobilization of teen agers), in a specific sequence and think of the way it changes our perspectives.

Pre-requisites if applicable

Curiosity and interest for these subjects

Format et/and credits

18 hours

Course content

The course consists of 6 thematic sequences of three hours each

- Youth and ecology: what do the youth mobilisations say about our responsability, is there a perspective? Ecology as an inspiration (arts, literature..)
- Sciences and democracy: what is the right way to analyse ecological challenges? Can we make science and democracy interact? What about collapsology?



- What could be the role of firms? How does ecology make us rethink economics and private responsibility?
- Climate justice and geopolitics. Can climate justice be the main principle of the ONU negotiating process? Is ecological commitment becoming part of international leadership? Can Europe be an example on green issues?
- Main controversies about ecology for our personal choices: are we at war? Is ecology a new constraint or a new emancipating process? Can technology save us from natural disasters?
- Final: interactions between those issues, Ecology as a new model of society, what are the main actors? How can citizens, firms, public actors develop common objectives?

Individual work

The students will have to write a thesis (around 10 000 characters). Each sequence should be prepared. A list of articles of reference and essays will be provided. Active participation to the course will be encouraged. The controversial sequence will give an opportunity to take the lead on interesting subjects.

Evaluation

40% personal thesis 30% oral participation 30% assignation to certain subjects (controversies)

References

Catherine et Raphaël Larrère Penser et agir avec la Nature, Dominique Bourg Dictionnaire de la pensée écologique, IPCC reports, IPBS reports, les mondes de l'écologie Revue Esprit janvier 2018, Notes du think tank La Fabrique écologique.

Name of the institutions that will be studied

United Nations, European Union, France, regions, multinational companies playing a major role in climate and biodiversity change, NGO.



NEW SUSTAINABILITY CULTURE: THE POWER OF PURPOSE

Course instructor: Laure Modesti-Jubin

Course description

The course is designed to provide an overview of the profound cultural evolutions which are underway in society and in the world of business, and which are driven by the necessity and the opportunity for organizations to engage in today's social and environmental issues.

Businesses are confronted to new expectations: having an authentic sense of purpose and growing their level of consciousness with regards to their impacts and contributions to society has become an imperative. From CSR (Corporate Social Responsibility) to social entrepreneurship, companies and their leaders need to strategically position themselves and communicate on sustainability. This has become an essential component of their image, their performance and their links with stakeholders at large.

The sessions will explore the development of this new relationship between organisations and society, based on purpose, social contribution and consideration for the common good. French and international case studies will be studied to support the theory.

The program will offer students a practical and concrete approach to rising notions of purposeful business, conscious capitalism and meaningful communication, and the opportunity to deepen their perspectives on some the most pressing issues of our time.

Format

18 hours.

Six three-hour sessions will be devoted to a mix of lecturing, open discussion and presentations by the students.

Course content

PART 1 - The foundations of a new business culture The common good: a shared responsibility Social engagement: revealing culture and values The power of purpose and the impact of words

PART 2 - Engaged actors and audiences Understanding the consumer citizens The employer brand transformations Inspiring and purposeful leadership

PART 3 - Purpose in action and practice

Exploring fields of engagement: special focus on education, climate change and global health Designing the future: social entrepreneurship and conscious capitalism

Individual work

Individual and collective presentations and essays



Evaluation

Individual oral presentation (30%) + Collective Case Study (30%) + Written essay (20%) - Oral Participation (20%)

References

- MACKEY, John, SISODIA, Raj, Conscious Capitalism Liberating the Heroic Spirit of Business, Harvard Business Review, 2013
- SINEK, Simon, Start With Why, Penguin, 2009
- ESTY, Daniel, WINSTON, Andrew, Green to Gold, Wiley, 2006
- HURST Aron, The Purpose Economy: How Your Desire for Impact, Personal Growth and Community Is Changing the World, Elevate, 2014.
- ILHEN, Oyvind, BARTLETT, Jennifer, MAY, Steve, The Handbook of Communication and Corporate Social Responsibility, Wiley-Blackwell, 2011



ACTING AND IMPROVISATION

Course instructor: Franck NEBECKER

Course description

Students will get involved in the production of a theatre play at all levels (reading, acting, editing, costumes, setting...) — the objective being for the students to put on and perform a play, or several scenes, depending on the working conditions.

Format

18 hours.

Six three-hour sessions will be devoted to a mix of lecturing, open discussion and presentations by the students.

Course content

Students will choose, study, adapt and perform a play, or several extracts — depending on the number of participants. As things go on, students may be required to adapt, rewrite that is, some of the passages they'll be working on.

Students are required to attend class regularly as they will be part of a group project. Any lapse shall prove disruptive. The success of the project and the production of the play itself depend on a constant participation. Everyone is to complete their work in due time (making of costumes or stage elements, learning, rehearsing, acting...)

Individual work

Reading and writing Acting and rehearsing Improvisation Video analysis (self-evaluation)

Evaluation

Evaluation is based on regular attendance, participation and involvement in the project; Personal contribution in terms of interpretation and ideas; Complying with rules and deadlines; Quality of spoken English and acting performances.



SHAKESPEARE'S HENRY IV Part One

Course instructor: Dr Paul LEITCH

Course description

In this course we will study in depth Shakespeare's play Henry IV Part One, which many esteemed critics take to be his best play. In Henry IV Part One we see the future great king Henry V (Shakespeare's most successful and inspirational leader) as a young prince. The young Prince Hal is a bit of a "bad boy", but much of his future greatness comes from the "Lessons from the Tayern" he learns as a youth.

The basic format of the class is to study a number of key scenes from the play. You will be allocated parts to prepare in advance which you will then act out in class. Acting Shakespeare is a great way to learn about the rhythm of the English language, and how to use intonation and put variety into your voice. We will study the rhetoric of some great speeches, and you will learn some language tricks which you can all easily adapt and which have lost none of their potency today.

The course has the following specific objectives:

- 1. To explore the idea of inspirational leadership through a study of Shakespeare's most inspirational leader.
- 2. Through drama, speech and analysis to increase your mastery of the English language.

Format

18 hours. Six three-hour sessions.

Class Content

A mixture of acting, analysis and watching some professional productions. For the acting, we will use some theatre methods used by the Royal Shakespeare Company in Stratford-Upon-Avon. For the analysis part, we will look in detail at Shakespeare's use of, for example, apposition, metaphor and verse. We will also study the characters, mainly the Prince, of course, but also three other fantastic characters. First of there is the inimitable Falstaff, Shakespeare's greatest comic creation. Then, King Henry IV, a very good leader himself, but haunted by the fact that he is a usurper. Finally, there is Hotspur, the greatest warrior of the time, with a fiery temper. Professional productions we will look at will include both recent film productions from the BBC, with Tom Hiddleston and Jeremy Irons among the actors, and theatre recordings from he Globe and the Royal Shakespeare Company.

Individual work and Evaluation

This will be made up of 3 marks: one written, one oral and one for participation. For the written assignment, you will have to write an essay or a text commentary on Shakespeare. The oral mark for be for a "performance" of a scene acted in class. The participation mark will be for your contribution to class discussion.

REMEMBER TO MAKE AS MANY CHOICES AS POSSIBLE