# MASTER 1 CYCLE

## Academic Curriculum

<table>
<thead>
<tr>
<th>Core Courses:</th>
<th>Hours</th>
<th>ECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Company Law</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>• Contract Law</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>• Corporate Finance: Capital structure</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>• Corporate Finance: Corporate valuation</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>• Financial Accounting</td>
<td>36</td>
<td>6</td>
</tr>
<tr>
<td>• Financial Economics</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>• Financial Markets</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>• Leading Organizations</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>• Management and Cost Accounting</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>• Managing Organizational Performance</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>• Marketing Science</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>• Strategic Marketing</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>• Operations &amp; Supply Chain Management</td>
<td>36</td>
<td>6</td>
</tr>
<tr>
<td>• Statistics and Econometrics</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>• Strategy</td>
<td>36</td>
<td>6</td>
</tr>
<tr>
<td>• Purpose and Sustainability</td>
<td>30</td>
<td>3</td>
</tr>
</tbody>
</table>

*Catalog subject to modification without notice. Last revision: 07/07/21*
# CONTENTS

<table>
<thead>
<tr>
<th>Course</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPANY LAW</td>
<td>6</td>
</tr>
<tr>
<td>CONTRACT LAW</td>
<td>7</td>
</tr>
<tr>
<td>CORPORATE FINANCE: CAPITAL STRUCTURE</td>
<td>8</td>
</tr>
<tr>
<td>CORPORATE FINANCE: CORPORATE VALUATION</td>
<td>11</td>
</tr>
<tr>
<td>FINANCIAL ACCOUNTING</td>
<td>13</td>
</tr>
<tr>
<td>FINANCIAL ECONOMICS</td>
<td>14</td>
</tr>
<tr>
<td>FINANCIAL MARKETS</td>
<td>15</td>
</tr>
<tr>
<td>LEADING ORGANIZATIONS: PERSPECTIVES ON DESIGN, POWER AND CULTURE</td>
<td>16</td>
</tr>
<tr>
<td>MANAGEMENT AND COST ACCOUNTING</td>
<td>17</td>
</tr>
<tr>
<td>MANAGING ORGANIZATIONAL PERFORMANCE</td>
<td>19</td>
</tr>
<tr>
<td>MARKETING SCIENCE</td>
<td>21</td>
</tr>
<tr>
<td>STRATEGIC MARKETING</td>
<td>22</td>
</tr>
<tr>
<td>OPERATIONS AND SUPPLY CHAIN MANAGEMENT</td>
<td>23</td>
</tr>
<tr>
<td>STATISTICS AND ECONOMETRICS: A BASIC INTRODUCTION</td>
<td>24</td>
</tr>
<tr>
<td>STRATEGY</td>
<td>26</td>
</tr>
<tr>
<td>PURPOSE &amp; SUSTAINABILITY CURRICULUM</td>
<td>27</td>
</tr>
<tr>
<td>PURPOSE TRACK</td>
<td>29</td>
</tr>
<tr>
<td>SUSTAINABILITY TRACK</td>
<td>31</td>
</tr>
</tbody>
</table>
COMPANY LAW

Course coordinator: Armin STEINBACH, Professor, HEC Paris (Tax & Law Dept.)

Course overview

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.

Learning outcomes

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 12 lectures of 1.5 hours each plus a final exam. Attendance is required.

Course content

Introduction
Fundamentals and economic analysis of corporate law
Comparative corporate law
CSR

Individual work

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

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

Course coordinator: Pablo BAQUERO, Assistant Professor HEC Paris (Tax & Law Dept.)

Presentation

The objective of the course is to provide the students with a general knowledge of the law, and the law of contracts in particular. Due to its language, the course will not deal with French law specifically, but rather presents a comparative perspective of contract law, with a focus on English and American law.

Moreover, the course will deal with contract-related issues such as the corporate setting, the class action, litigation and arbitration.

Learning outcomes

At the end of the course, the students should be able to:

- Understand the mechanisms behind contractual settings
- Draft certain generally used contract clauses
- Understand how to litigate a contract before a court or an arbitral tribunal

Timing

18 hours.
The course is composed of twelve lectures of 1.5 hours (2 per week) each plus a final exam. Attendance is mandatory.

Course content

Introduction
Fundamentals of the law: sources and enforcement
Contractual mechanisms of offer, acceptance, and consideration
Remedies
Contracts in the corporate setting
Litigating and arbitrating contracts

Individual work

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

Assessment

The course evaluation will be based on the final exam grade plus the points obtained with attendance and presentations.
CORPORATE FINANCE: CAPITAL STRUCTURE

Course coordinator: Prof. Matthias Efing - efing@hec.fr

Prerequisites

Course Presentation
This course introduces the basic financial policies of companies. The aim is threefold:

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

Key Topics
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?

Schedule
18 hours: 6 sessions of 3h each.

<table>
<thead>
<tr>
<th>Class (3 hours)</th>
<th>Part 1</th>
<th>Part 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Sources of Funds</td>
<td>Case study: The Brick House</td>
</tr>
<tr>
<td>Day 2</td>
<td>Modigliani-Miller Theorem</td>
<td>Capital Structure: Debt Pros</td>
</tr>
<tr>
<td>Day 3</td>
<td>Case study: UST</td>
<td>Capital Structure: Debt Cons and Trade-off Theory</td>
</tr>
<tr>
<td>Day 4</td>
<td>Application: Distressed Debt</td>
<td>Application: Distressed Debt</td>
</tr>
<tr>
<td>Day 5</td>
<td>The “Pecking Order” Theory</td>
<td>Inefficient Markets</td>
</tr>
<tr>
<td></td>
<td>Application: Scopus Deal</td>
<td></td>
</tr>
<tr>
<td>Day 6</td>
<td>Cash and Payout Policy</td>
<td>Financial Policy: Wrap-up</td>
</tr>
<tr>
<td></td>
<td>Case study: Infineon</td>
<td></td>
</tr>
</tbody>
</table>

Teaching Methods and Teaching Material
A balance between theory and real-life problems:

- Lectures (theory + short applications)
Business case studies

Teaching material: Electronic notes on Blackboard. There is no required textbook.

Grading

Final exam: 100% of grade, closed book

Workload

To do well:

- Attend sessions. Everything we cover in class is relevant.
- Please bring a laptop with MS Excel for the case studies.
- Understand the theory. Do not just memorize content by heart.
- Be able to solve the calculations and problems presented in class sufficiently fast.
- If you want more training material, you will find a collection of additional problems sets along with the solutions on Blackboard (for your private training at home, not discussed in class, not graded).
- Ask questions in and/or outside of class (email to set up a meeting). But note that only a limited number of meetings are available during the last week before the exam. Hence, start revising early!

Teaching material

Lecture notes (distributed in class and on Blackboard)
Problem sets and solutions (on Blackboard only)
There is no required textbook

Grading

Evaluation will be based on exams with open books
Midterm exam: 1/3
Finalexam: 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)

Class rules

Access to the classroom may be refused in case of arriving late
The use of cell phones and smartphones is not allowed in the classroom
Notify any absence by email to the professor
Waiver

Waivers for the course will be granted based on the overlap of material covered in past courses (please provide the syllabus for relevant courses) and grade obtained in these courses.
Presentation
Corporate Finance covers one main topic: 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
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 companies in the context of an acquisition (M&A) or listing (IPO)?

Prerequisites

Timing
18 hours, composed of six lectures of 3 hours each per week

Teaching Methods
We will combine three teaching methods:
Lectures
Applications in class, including team-work on business case studies
Problems sets with solutions provided (at home)

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

Teaching material
Lecture notes (distributed in class and on Blackboard)
Problem sets and solutions (on Blackboard only)
There is no required textbook

Assessment
Evaluation will be based on exams: Finalexam: 100%

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)

Class rules
Access to the classroom may be refused in case of arriving late
The use of cell phones and smartphones is not allowed in the classroom Notify any absence by email to the professor
FINANCIAL ACCOUNTING

Course coordinator: Luc PAUGAM, Professor HEC Paris (Accounting & Management Control Dept)

Presentation

The objective of the course is to provide the participants with a sufficient knowledge of accounting to understand financial statements and the fundamental concepts and mechanics of financial accounting.

Learning outcomes

At the end of the course, the students should be able to:
Understand how financial accounting operates
Prepare the financial statements
Understand and analyze the financial statements

Format

36 hours (24 sessions of 1.5 hours - 2 sessions per week)

Course content

Definition of financial accounting, its users, introduction to the accounting process.
The financial statements (balance sheet, balance sheet equation, income statement, notes to financial statements, principle of double entry, examples of transactions, profit appropriation, notion of depreciation, consumption and inventory, statement of cash flows).

Preparation of financial statements (accounting principles, end-of-period entries: adjusting entries, change in value of fixed assets, change in value of current assets, other entries and adjustments).
Financial statement analysis (financial statements format, statement of cash flows, common-size income statement, financial structure, ratios).

Teaching methods

Compulsory reading of a recommended textbook
Problems and cases studies
Business game
Individual work
Readings
Homework (problems, cases studies)

Evaluation

Bachaccountinggame (group work) 10 points
Mid-term test (individual work) 30 points
Final test (individual work) 60 points
FINANCIAL ECONOMICS

Course coordinators: François DERRIEN (Professor), Daniel SCHMIDT (Assistant Professor); Irina Zviadadze (Associate Professor), Finance Dept.

Presentation

This course is an introduction to the basics of financial economics. It introduces the students to the financial decision making process: essentials of firms’ investment decisions, risk-and-return trade-off, investors’ portfolio choices, and theoretical basis of asset pricing. In doing so, the class covers fundamental theories of financial economics. This course, together with the “Financial Markets” course that follows it, seeks to provide a solid knowledge of finance that is needed for future finance courses.

Timing

18 hours. The course is composed of twelve lectures of 1.5 hours each (2 per week) plus a final exam. Attendance is required. Late-comers may be denied entry to class at professor’s discretion.

Course Content

In the first part of the course the emphasis is on time value of money (TMV) and its applications, including capital budgeting. After a brief review of some of the notions of probability, the second part of the course is devoted to the fundamental theories of finance: Portfolio Theory and the Capital Asset Pricing Model (CAPM).

After completing this course, students will have a good understanding of:
- the principles of project selection and investments by corporations
- the risk and return trade-off in financial markets
- fundamental theories of financial economics (Portfolio Theory and CAPM)

Teaching methods

The course is taught through lectures held in English.

Individual work

The professors have the discretion to require students to prepare homework and/or take in-class quizzes. To ensure a good performance, students are reminded to work regularly in order to have a thorough understanding of the material.

Assessment

The course evaluation is based on the final exam grade plus points obtained on homework and/or quizzes. The weighting scheme will be specified in the course syllabus that will be distributed at the beginning of the first class.
FINANCIAL MARKETS

Course coordinators: Stefano LOVO (Professor) and Evren ORS (Associate Professor); Finance Dpt.

Presentation

This course will introduce the students to the basics of financial markets and financial instruments traded in these markets. It will cover the stock market, the bond market, forward and futures contracts, and the options markets. The course follows the “Financial Economics” course and complements the fundamental knowledge of finance that is needed for the M1-level “Corporate Finance” and other finance classes.

Course objectives

The course seeks to provide a solid understanding of the basic financial contracts and the markets in which they are traded. The emphasis will be on the valuation of stocks, bonds, forward and futures contracts, and options using various methods. An important theme of the course is the concept of arbitrage in the financial markets.

Timing

18 hours.

The course is composed of twelve lectures of 1.5 hours each (2 per week) plus a final exam. Attendance is required. Late-comers may be denied entry to class at the professor’s discretion.

Course content

Introduction
Stocks and market efficiency
Bonds (Fixed-Income Securities)
Forward and Futures
Options

Teaching methods

The course is taught through lectures held in English.

Individual work

The professors have the discretion to require students to prepare homework and/or take in-class quizzes. To ensure a good performance, students are reminded to work regularly in order to have a thorough understanding of the material.

Assessment

The course evaluation will be based on the final exam grade plus points obtained on homework and/or quizzes. The weightingscheme will be specified in the course syllabus that will be distributed at the beginning of the first class.
LEADING ORGANIZATIONS: Perspectives on Design, Power and Culture

Course coordinator: Julien JOURDAN, Associate Professor (MRH Dpt.)

Presentation

Welcome to Leading Organizations! In this course, we’ll explore 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.

Course content

The course will introduce the three lenses perspective to understand what makes organizations function effectively. The first lens focuses on organizational design. This perspective addresses the four core elements and processes of organizational design—grouping, linking, aligning, and fitting. The second lens emphasizes the role of culture in management, covering what organizational culture is and how it shapes action in organizations. The cultural lens also offers useful toolkits to analyze and transform organizational culture. The third lens delves into relational—often political—issues in organizations. This political lens focuses on where power in organizations comes from, how to resolve conflicts in organizations, and also highlight the crucial role of social network in political processes in organizations.

Individual work

Leading Organizations follows a mixed format. The course is divided into two parts of equal duration: asynchronous content, composed of readings and lecture videos introducing key concepts, and in-class activities including case discussions, exercises, and simulations. Students are expected to prepare for class by carefully watching the lecture videos for the session and do all the required readings. At the end of the course, there will be an individual final exam, which will cover all lecture topics, including readings and lecture videos. In the classroom, students are expected to contribute to class discussions by speaking up and sharing their experiences, opinions, and relevant materials outside the class. Students will also work in a group for a final team presentation assignment.

Timing

18 hours (9 hours of asynchronous content and 6 weekly sessions of 1.5 hours)

Assessment

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Groupwork &amp; presentation</td>
<td>30%</td>
</tr>
<tr>
<td>Class participation</td>
<td>30%</td>
</tr>
<tr>
<td>Final exam</td>
<td>40%</td>
</tr>
</tbody>
</table>
MANAGEMENT AND COST ACCOUNTING

Course coordinator: David CRVELIN, Professor, Research Faculty and Head of Department Accounting and Management Control.

Presentation

Management control is essentially about planning and decision-making. Navigating through complex organizational decision scenarios requires managers and executives to apply a variety of economic and strategic analyses, in particular concerning the cost and profitability of products, clients and activities.

This course aims to develop students’ capacity to select and structure management accounting information necessary to evaluate alternative courses of action. It is particularly designed to enable students to translate typical management situations into accounting terms by applying costing techniques and reasoning methods that can be mobilized for particular management decisions.

Specifically, the course covers different types of costs, different methods of cost analysis and their relevance to decision-making.

Learning outcomes

The course learning objectives are as follows:
- Know how to identify the techniques, methods and reasoning adapted to a management situation or to make a specific managerial decision;
- Master the different techniques and methods to calculate costs and measure profitability in the organization;
- Develop an understanding of information usefulness in a variety of organizational contexts across hierarchies.

This course covers the most basic ‘toolbox’ for management accounting which students will also need to apply in subsequent management accounting courses, such as Business Performance Management. It is, therefore, useful for every student, irrespective of their professional goal, because the business techniques, tools and methods studied are used in most of organizations (Industry, Services, Non-Governmental Organizations, Cultural Enterprises, etc.). The course further complements the methods and approaches of the Financial Accounting course by turning attention to the internal dimension of decision-making.

Course content

Types of costs: fixed/variable costs, direct/indirect costs, opportunity costs, relevant costs, costs incurred;
Cost-volume-profit relationships and breakeven analysis;
Decisions based on contribution margin: special orders, product-mix, outsourcing; contribution per unit of scarce resource, discontinuation decisions;
Full cost calculation methods, with and without stock: 2-step allocation method, ABC method;
Discounted cash flow methods and long-term capital investment decisions;
Management accounting for start-ups: Profitability of products /markets /activities / customers; launch decisions;
Accounting for Customer Profitability: cost and value analyses;
Timing

18 hours (12 sessions of 1.5 hours; two sessions per week)

Teaching methods and material

Lectures, exercises, case studies
Before each class, students have to prepare the cases and read the reference book (chapters indicated in the detailed syllabus) and the additional readings provided in the textbook.

Assessment

30% Continuous Assessment
70% Final Exam

Reference book


Waiver

If a student wishes to apply for a waiver if the programs, they have taken cover clearly the MCA subjects in the syllabus, with a strong grade, then a waiver can be granted.

If the student achieves a middling or weak grade, then they have to pass our final exam and be assessed 100% on the exam, waiving the quizzes and continuous assessment. They may choose not to attend classes and follow the course. They need to tell their class teacher that they are activating the "no attendance/100% exam assessment" scenario at the start of the course.

If they have not covered all the relevant course material according to what they have submitted to us, then no waiver is granted.
MANAGING ORGANIZATIONAL PERFORMANCE

Course coordinator: Daniel MARTINEZ, Associate Professor, (Accounting & Management Control Dept.)

Course overview
Achieving and maintaining competitive advantage requires more than strategic insights. Successful managers of today need an in-depth understanding of financial and non-financial performance indicators, solid knowledge of how to drive strategy down to operational levels, and skills to deploy and manage multiple control systems to effectively steer their organizations. It is these topics that will be discussed in this core course. Our focus will revolve around the following question: How to design an organization that successfully executes strategy?

You will learn about performance management concepts and techniques that are commonly used in organizations today. However, these techniques should not be understood only in terms of their technical functioning, but also in their relationship to the organization’s context (e.g. its design and environment). Therefore, in this course, we will also learn how performance measurement techniques have different (sometimes unintended) effects on organizational life and on, more broadly, different external stakeholders.

Learning outcomes
There are five main takeaways for this class:
- Understand how and why a company is usually divided into different responsibility centres (e.g. profit centres, cost centres, revenue centres, and investment centres).
- Learn the principles through which organizational units negotiate and set the prices for the goods and services transferred within the organization.
- Understand how to use the budget to plan and control business performance.
- 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 more comprehensive view of performance measurement (e.g., Risk Matrix and Balanced Scorecard).

Prerequisites
The course builds upon financial accounting and cost accounting (methods of cost analysis) courses.

Timing
18 hours (2 x 1.5 hours per week)

Teaching methods and material
Lectures
Case studies

We will discuss a business case study in each session. The case will help strengthen your analytic and problem solving skills. It is important that you carefully read the case before each class in order to facilitate discussion and learning.

You can complement the theoretical content provided by the instructor in class with the readings from the reference textbook.

References
Or

There are copies of this and earlier editions at the HEC library.
Additional readings (articles) will be made available on Blackboard.

**Assessment**
- Final exam 40%
- Group project 30%
- Case analysis 15%
- An online quiz 5%
- Class participation 10%
MARKETING SCIENCE

Course coordinator: Cathy Liu YANG, Assistant Professor, HEC Paris; Information Systems and Operations Management Dpt.

Course Content

The course introduces key concepts of quantitative marketing strategy. Hands-on case studies will guide you to apply analytics tools to formulate effective marketing tactics in a dynamic business context based on information collected on the market, customers, the company and its competitors. You will use regression analysis and optimization to develop analytics solutions for sales forecasting, new product development, pricing, business experiments, and managing customer relationships.

Learning outcomes

The main objective of the course is to teach essential principles of how to inform key strategic marketing decisions through data. Furthermore, through course discussions, we expect students to become familiar with how data-driven approaches can be used to refine the impact that businesses have on sustainability and society.

Course Material

Lecture slides, cases, and additional readings and materials will be posted on Blackboard. An Excel campus license is available to you.

Assessment

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance and in-class activities</td>
<td>15%</td>
</tr>
<tr>
<td>Group project</td>
<td>25%</td>
</tr>
<tr>
<td>Exam</td>
<td>60%</td>
</tr>
</tbody>
</table>

Preparation and Classroom Policy

Class attendance and participation is mandatory to do well in this class. Students who miss three or more classes will be assigned an “F” in line with the school rules and policies. All students are expected to complete the group project and exam in order to pass the course. Students are expected to adhere to the code of conduct.

Timing

18 hours (2 x 1.5 hours per week)
STRATEGIC MARKETING

Course coordinator: Philippe Greco, HEC Paris; Marketing Dpt.

Course overview

The course introduces you to essential principles of marketing for a sustainable world. The core principles of marketing strategy are essential to successfully navigate the evolving business landscape as the digitization of numerous industries and rising societal challenges increasingly disrupt businesses today.

Learning outcomes

The main objective of the course is to provide you with a framework to approach marketing management problems in a structured way to successfully operate in tomorrow's business environment. You will also become familiar with common tactics to implement marketing decisions and develop a marketing plan, while also evaluating the influential role that marketing decisions have on the society that businesses operate in. This course is fundamental for students wishing to take advanced courses in marketing, digital strategy, entrepreneurship, and business analytics.

Course Material

Lecture slides, cases, and additional readings and materials will be posted on Blackboard. The recommended textbooks for the class are:

Evaluation

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance and in-class activities</td>
<td>20%</td>
</tr>
<tr>
<td>Group project</td>
<td>45%</td>
</tr>
<tr>
<td>Exam</td>
<td>35%</td>
</tr>
</tbody>
</table>

Preparation and Classroom Policy

Class attendance and participation is mandatory to do well in this class. Students who miss three or more classes will be assigned an “F” in line with the school rules and policies. All students are expected to complete the group project and exam in order to pass the course. Students are expected to adhere to the code of conduct.
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.

Learning outcomes
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
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

Assessment
Cases or exercises
Quiz
Final exam
Class Participation
STATISTICS AND ECONOMETRICS: A BASIC INTRODUCTION

Course coordinator: Gilles STOLTZ, affiliate professor HEC Paris (ESD Department)

Presentation and learning objectives
In our data era, statistics is much needed in particular to evaluate data quality: whether a given data set may lead, or not, to a given conclusion. In this course, we will focus on inferential statistics: how a sample data set may or may not lead to some better knowledge of the underlying population (confidence intervals, hypothesis testing). We will also briefly study a simple model-making method based on data called multiple linear regression.

Formulas will be presented and briefly discussed, but no mathematical proof of their derivation will be provided. This course has a strong business focus: much of the efforts will be on writing nice-to-read and enjoyable (lack of) conclusions. Most of the class time will be devoted to solving exercises illustrating management situations or dealing with other fields (sociology, politics, etc.).

Timing
12 lectures of 1h30 each

Content
Descriptive statistics, modeling of data
Concept 1: Confidence intervals
Concept 2: One-sample tests (comparison of a mean or a proportion to a reference value)
Concept 3: Two-sample tests (comparison of means or proportions for independent or paired data)
Concept 4: Chi-square tests (of independence or of goodness of fit)
Concept 5: Linear regression (simple and multiple linear regression, including significance tests on the coefficients)
Numerous applications on real data with the SPSS software will be performed.
No mathematical proof or details will be provided.

Assessment
Intermediate grade given by a mid-term exam or a project, depending on the sanitary situation
Final exam, with two problems
The exact grading scheme will be indicated during the first session

Bibliography
Statistics for Business and Economics, by Newbold, Carlson and Thorne
Statistics for Business and Economics, by McClave, Benson and Sincich

Grading
Intermediate grade given by a mid-term exam or a project, depending on the sanitary situation
Final exam, with two problems
The exact grading scheme will be indicated during the first session
Bibliography
Statistics for Business and Economics, by Newbold, Carlson and Thorne
Statistics for Business and Economics, by McClave, Benson and Sincich
STRATEGY

Course coordinator: John Mawdsley, Assistant Professor (SPE Department)

Course overview

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.

Learning outcomes

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 methods

The course uses a “blended learning” approach by integrating face-to-face in-class sessions with asynchronous content for independent study.

• The 36-hour course is organized across 12 weeks. Each week, teaching consists of (i) a 90 minute face-to-face in-class discussion of a business case, and other assigned material. You are expected to attend and actively participate. (ii) Asynchronous content, in which you will review assigned material (videos, articles, etc.) and complete assigned exercises before the face-to-face class.

• Where appropriate, we will make use of technology to enhance your learning experience and outcomes. Quizzes, discussion boards, and other exercises will be delivered through Blackboard. Other tools such as Qualtrics and Kahoot may also be used.

• For each hour of the 36-hour course you are expected to work independently for at least another 2 hours. Therefore, each week you are expected to work independently for at least 6 hours in addition to the 3 hours of face-to-face class time and reviewing asynchronous content.

Timing

36 hours (12 in-class sessions of 90-mins & 12 asynchronous sessions)

Evaluation

Student evaluation is based on class participation, group assignments and individual test.
**PURPOSE & SUSTAINABILITY CURRICULUM**

**Course coordinator: Society & Organizations Institute / Cécile de Lisle**

The Society & Organizations Institute

The Society & Organizations Institute is an interdisciplinary Institute at HEC Paris whose members think, teach and act for an inclusive and sustainable world. The Society & Organizations Institute train HEC students to understand the challenges of purpose and sustainability in the business world and to place purpose and sustainability at the heart of their student lives and professional projects.

The Purpose & Sustainability curriculum

To this end, the students entering HEC Grande Ecole take the ~200 hour “Purpose & Sustainability” mandatory curriculum throughout their 4 years at HEC, including ~100 hours on the theme of purpose (Purpose track) and ~100 hours on sustainability (Sustainability track). For M1 students, this curriculum is credited 3 ECTS.

### Purpose & Sustainability curriculum

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Reinventing Business</th>
<th>Discover</th>
<th>Mature</th>
<th>Experiment</th>
<th>Build</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>First Year (4 ECTS)</td>
<td>Second year (3 ECTS)</td>
<td>Gap year (mandatory)</td>
<td>Third Year (3 ECTS - Elective)</td>
</tr>
<tr>
<td>Key Challenges</td>
<td>Environmental &amp; Social Sustainability</td>
<td>Sustainability &amp; Business I</td>
<td>Sustainability &amp; Business II</td>
<td>Sustainability &amp; Business III</td>
<td></td>
</tr>
<tr>
<td>SUSTAINABILITY TRACK</td>
<td>~100 hours</td>
<td>- MOOCs on sustainable business (governance, strategy, marketing, value chain, inclusive business)</td>
<td>- MOOCs on Climate &amp; Earth challenges</td>
<td>- MOOCs on sustainable business (governance, strategy, marketing, value chain, inclusive business)</td>
<td></td>
</tr>
<tr>
<td>Purpose</td>
<td></td>
<td>- Experiment the stakes (Chamonix)</td>
<td>- Upgrade your knowledge (environment and business + 1st week work experience)</td>
<td>- Learn how to have positive impact (integrated projects)</td>
<td></td>
</tr>
<tr>
<td>Stakes of sustainability</td>
<td>- Understand Climate Change (Environ du Climat)</td>
<td>- Deepen sustainable finance (STM Finance)</td>
<td>- Question the sustainability strategy of your company (report)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PURPOSE TRACK</td>
<td>~100 hours</td>
<td>- Exchange with sustainability leaders (1st week on campus)</td>
<td>- Question the sustainability strategy of your company (report)</td>
<td>- Build a purposeful strategy (Unilever purpose game)</td>
<td></td>
</tr>
<tr>
<td>Purposeful leadership</td>
<td>- Understand challenges and implications on businesses (gender challenges course)</td>
<td>- Question the purpose of your work experiences (internship report)</td>
<td>- Use purposeful companionship with an alumnus in your field of specialization (alumnus - student mentoring/ reverse mentoring)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Be self with others</td>
<td>- Experiment the stakes (Chamonix)</td>
<td>- Question the purpose of your company of internship (report)</td>
<td>- Question the purpose of your work experiences (internship report)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status of Purpose</td>
<td>- Deep back and exchange with purposeful leaders (2nd week on campus)</td>
<td>- Understand better own and others reactions / basic needs / strengths and areas to develop (motivational needs) to be more aligned with self and with others (Deepen self-reflection session with coach and live-action exercises)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purpose in Business</td>
<td>- Develop key questions in a business field (dissertation in a business field)</td>
<td>- Purposeful Career Plan Build a purposeful strategy (Unilever purpose game)</td>
<td>- Purposeful Career Plan Build a purposeful strategy (Unilever purpose game)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purposeful Career Plan</td>
<td>- Build a purposeful strategy (Unilever purpose game)</td>
<td>- Use purposeful companionship with an alumnus in your field of specialization (alumnus - student mentoring/ reverse mentoring)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The learning experience

Developing tomorrow’s leaders goes beyond teaching them management techniques. We want to help you grow as the next generation of leaders by offering you multiple pathways and journeys to become actors of change in a purposeful and sustainable way. Those pathways can be scholarly, experiential, collective or introspective. In all cases, purposeful and sustainable leadership is a transformative process enhanced through hands-on learning initiatives. It needs knowledge on the key social and environmental challenges, but it also needs an experiential program and -particularly for purposeful leadership- deep knowledge about oneself and our ways of expressing and communicating ourselves.

Our learning experience uses flipped classroom and mentoring, coaching and sharing, introspection and role modeling. It also places humanities and social sciences at the heart of the journey.
Business and capitalism should massively contribute to social and economic development, as well as to individual fulfilment. The Society & Organizations Institute offers you this track to help you unleash your human potential by placing purpose and sustainability at the core of your actions.

“Purpose & Sustainability” Curriculum validation
In order to validate the “Purpose & Sustainability” M1 curriculum, you will have to validate both tracks: the Purpose track (pp.3-4) and the Sustainability track (pp.5-7). You will be assessed throughout the curriculum for each building block and will receive a combined grade for the entire “Purpose & Sustainability” M1 curriculum.
PURPOSE TRACK

Be Yourself With Others

Course coordinator: Patrick DELAMAIRE

Purpose of this new course
All great projects are collective successes. Protecting the planet, creating a start-up, playing team sports, forming a music band, exploring space, organizing the Olympic Games, creating a family, or simply living in society. Working and living together in a group seems at first to be easy but it is not that simple in reality, especially when facing the inevitable difficulties that arise either outside the group or... from inside.

This course is about working together better. First, it starts with self-awareness; our personal preferences, our core values, our automatic reactions, our behaviours, our biases, our limits, in order to be more aligned with ourselves, or simply just to... be oneself. Second, it is a matter of connecting with others, listening, feeling safe, levels of trust, accepting diversity, the desire to work together, the quality of relationships, helping each other, etc.

In line with the HEC shared vision: “We impact business and society”, this course is an invitation to explore many various human dimensions in order to better understand how to achieve great performance in teams, or simply live better collectively in our VUCA* world.

Learning objectives
In this course, you will likely:

- Meet other people who have similar issues to you, and maybe you will meet yourself too
- Understand better how other people react, and perhaps how you react yourself
- Know better the basic needs of people in groups, and maybe your own
- Identify the key questions that are fundamental to you, your strengths and your areas to develop to be more aligned with yourself and with others
- Discover simple tools and methods to facilitate your life in order to be yourself and to live and work better with others

Course content
The course includes the following elements:

- Some questionnaires helping you to explore more about who you are
- Cases about student life – like group projects, team sports, collective activities, professional experiences - and also real examples from the professional world and experiences shared by the professors.
- 3/4 of the time in class is about putting into practice, stepping back and sharing experiences. 1/4 consists of learning tools, models
- Coaching approaches and tools by professional executive coaches
- Business testimonials from several speakers (videos)
- Connections with the 5 HEC shared values CEDRE** and the 3 pillars of the “Purposeful Leadership” Chair: “Be yourself, be with, be for.”

Format
This new course is based on the following pedagogical principles:

- Small groups with less than 20 students sharing their experiences and working together
- 4 class sessions - in person - of 3 hours with exploration, practice, workshops, and peer-to-peer coaching
- Individual and collective work in class and between sessions
- A digital pedagogical platform to make “out of synch” activities more straightforward and for managing and completing your learning diary
Grading
In this course, your final grade will be based on continuous evaluation. An important aspect will be your participation in facilitating the achievement of the objectives referred to above in ‘Learning objectives (II)’, for you and your classmates. There are two main components:

- The quality of your participation in class: Full mental presence, constructive attitude to create a safe and benevolent atmosphere, following the rules set within the group, respect for others, facilitation of the collective workshops, commitment to engage in the exercises, etc.
- The quality of your participation between class sessions: individual and collective work, your answers to the questions on the platform (authenticity, depth, details), meeting the deadlines for your answers, etc.

NOTE: In this course, all beliefs, preferences and opinions are welcome. Diversity is one of the key values of HEC. The professors respect diversity carefully, provided the framework (rules) of the course are respected.

Last words 😊

The pedagogical team would like to thank all the HEC students who participated in the designing of this new course, who shared their expectations who gave feedback on ideas and who recommended teaching approaches.

We look forward to meeting you, sharing insightful moments, and enjoying this journey with you. Enjoy your summertime, and we will see you soon!

* VUCA : Volatility, Uncertainty, Complexity, Ambiguity
** CEDRE : Curiosity, Excellence, Diversity, Responsibility, Entrepreneurial spirit
SUSTAINABILITY TRACK

Course coordinator: Prof. Nathalie LUGAGNE

Track description:
As societal challenges reach unprecedented levels, the transition of companies towards the adoption of more sustainable business models can no longer be considered as an option. In this track, we propose you to step back and get an understanding of the origins, the trends and the stakes that shape the transition towards sustainability in a 3-step approach:

1. **Planetary Challenges:** You will deepen your understanding of the ecological crisis (climate change, impact on biodiversity, natural resources) and consequences on human societies and economies, by visioning a targeted selection of videos from AXA Climate School. In addition, in a 3-hour in-class session, you will have the opportunity to consolidate your understanding and address additional issues face-to-face with an expert-facilitator.

2. **Carbon Footprint:** The economic, societal, environmental context calls for new models of value creation for all and new forms of management. We propose you to tackle the issue is an immersive and educational workshop, the “2 tons Workshop” that will allow you to become actors of low-carbon transition.

3. **Sustainable Finance:** In this part, you will focus on sustainable finance and learn how to consider environmental, social and governance (ESG) issues when making investment decisions. You will attend the online STM Finance course and then deepen the topic in a 3-hour face-to-face session with an expert-facilitator.
Learning objectives:
At the end of this track, you will:

- Get a comprehensive and systemic view of the global context and forces (economic, environmental, societal, etc) influencing the transition towards sustainability.
- Be able to build a consistent and effective approach to strike the right balance between positive social and environmental impact, and economic performance.
- Acquire knowledge on responsible investment decisions and mechanisms currently in place to finance the sustainable transition.

Sustainability track validation
- You will be assessed through two graded tests, one at the end of the Planetary Challenges course and one at the end of the Sustainable Finance course. The track validation implies to successfully pass both tests and participate in the 2-Tons workshop.
Your final grade will be a combined grade for the two Purpose & Sustainability Tracks.

Planetary challenges
This 3-hour in-class session will give you an overall understanding of systemic concepts induced by planetary challenges and energy transition and a critical and open-minded insight into socio-economic models prospective.
You will:
- Step back on what planetary challenges and boundaries mean.
- Understand the complexity when planning and implementing energy transition.
- Better feature cognitive bias related to these challenges and stakes.
- Be able to (re)think about socio-economic models
Notions like progress, wealth, growth/decline, relation with the living will be debated.
Pre-requisite: visioning of the videos’ selection from AXA Climate School.

2-tons Workshop
In 3 hours, the 2tons workshop invites you to explore the future as a team and to try to limit climate change by reaching the 2tons CO2 eq. of greenhouse gas emissions per year and per person, by 2050, in order to respect the commitments of the Paris agreement.

To allow a systemic understanding of the issues, the workshop considers the individual and collective dimensions of the subject, without forgetting the role of influence, a key issue in the low-carbon transition. Thanks to an innovative pedagogical model, you will find ideas for concrete solutions that can be activated at different levels by comparing the impact of numerous individual and collective measures.

At an individual level, you will work on your own carbon footprint, after calculating it before the workshop. At a national level, you will have the opportunity to embody public and private decision makers (government, companies, local elected officials) and test multiple modes of governance to make the right decisions.

It is also a real serious game, designed to create constructive debates, using the diversity of thought within a group to enrich one’s understanding of a subject, and allowing everyone have fun and express their opinions while learning!

Sustainable Finance
The Sustainable Finance online course is part of the ‘Sustainable Transition Management’ (STM) program,
inspired by the United Nation’s Sustainable Development Goals (SDGs) and grounded in cutting-edge research as well as insights from practice. It has been designed to offer the greatest flexibility to build a consistent and effective approach of the strategic and functional challenges to design and operate the sustainable transition. More and more investors care about integrating sustainability into their investment-making decisions.

- From the investor’s perspective, students will learn why investors do care about responsible investment and how they integrate it into their decision making.
- They will review which financial actors around the world (pension funds, endowments, mutual funds, etc) fall into which investor type, based on their business objectives.
- They will examine what values responsible investors have and the factors they typically consider in their allocation decisions.
- More specifically, the course explores the notion of “materiality” in SRI and examines the evolution of ratings and measures in the SRI landscape and discuss their reliability.
- Participants will also construct an ESG portfolio, that has good properties in terms of Risk, Returns, and Impact. Impact is the final topic of this course which, in turn, invites participants to “put the shoes” of corporate executives to ask why they should be attentive to the concerns of responsible investors.

By the end of this course, you will:

- Learn why companies invest to make their value chains more sustainable.
- Understand when a value is considered sustainable and what its main components are.
- Acquire and apply a methodology to evaluate the environmental impact of your operations.

Discover how to create a roadmap to green your value chain.