

CHAIR OF INNOVATION & VALUE IN HEALTH
 CLASS OF 2021

DATES	SESSIONS	LECTURERS
Jan 7 Amphi 4	1 Introduction 2 Why innovation in healthcare is so hard (part A) Team Project: Topic presentation	Prof. Gregory KATZ
Jan 14 Room 2	3 Why innovation in healthcare is so hard (part B) 4 Patenting genes & marketing companion diagnostics Case: Patenting & marketing breast cancer genetic tests, ESSEC Business School Team Project: Topic selection	Prof. Gregory KATZ
Jan 21 Room 2	5 Emergence of industrial genomics Case: 23&Me: Genetic testing for consumers, Harvard Business School 6 Implications of gene editing for health systems Case: The CRISPR-Cas9 Quarrel, Harvard Business School Team Project: Meeting with Air Liquide mentors (18:45-19:45)	Prof. Gregory KATZ
Jan 28 Room 3	7 Measuring 'Success' in Health Care 8 Case: Martini Klinik, Harvard Business School Team Project: Meeting with Amgen mentors (18:45-19:45)	Prof. Gregory KATZ
Feb 4 Salle des thèses	9 Business model canvas for respiratory innovations Case: Business model canvas 10 Digital transformation: Air Liquide ventures into home healthcare Case: Digitally-powered Customer-centricity in the Industrial Gas Sector, INSEAD Team Project: Meeting with Air Liquide mentors (18:45-19:45)	John ALTRIP, Medical Director Cambridge Respiratory Innovations Ltd. Juan-Fernando RAMIREZ, Medical Vice-President, Healthcare World Business Line, Air Liquide Charles-Henri de VILLETES, Vice-President Home Healthcare, Air Liquide France
Feb 11 Room 3	11 Innovation & imitation: Amgen strategy for biosimilars Case: Amgen: Pursuing Innovation and Imitation, Harvard Business School 12 Market access: from theory to practice Team Project: Meeting with Amgen mentors (18:45-19:45)	Corinne BLACHIER-POISSON, CEO Amgen France Jean-Philippe ALOSI, Director of Public Affairs, Amgen France Thibault de CHALUS, Innovation & Investment Program Lead, Amgen
Feb 18 Room 3	13 Measuring Cost & Value 14 Case: Schön Klinik: Measuring Cost & Value, Harvard Business School Return Case Study #1	Jens DEERBERG, CEO RoMed Health System Germany Founding President ICHOM
Feb 25 Room 3	15 Commercializing orphan drugs in emerging countries Case: Genzyme's Gaucher Initiative, Harvard Business School 16 Artificial Intelligence in clinical practice: learning from Watson Case: Building Watson: Not So Elementary, My Dear! Harvard Business School	Prof. Gregory KATZ David COLE, Innovation Lead Europe, IBM Watson Health, EMEA
March 4 Room 3	17 The US FDA in the XXI st century Case: Merck: Managing Vioxx, Harvard Business School 18 Team Project: Meeting with mentors (18:45-19:45)	Peter PITTS, Former FDA Associate Commissioner, President of the Center for Medicine in the Public Interest
March 11 Room 4	19 The pricing of care under Medicare for all 20 The case for the public option over Medicare for all, Harvard Business Review Return Book Essay	Prof. Zirui SONG, Department of health care policy at Harvard Medical School, internal medicine physician Massachusetts Gal Hospital
April 8 Salle des thèses	21 Pandemic alert and the vaccine industry Case: Precaution & Decision: the Vaccine Industry & the Pandemic Flu, ESSEC 22 How does it take to become a Medtech leader? Case: Business model canvas Team Project: e-meeting with mentors (18:45-19:45)	Prof. Gregory KATZ Sacha LOISEAU, Founder and CEO Mauna Kea
April 15 Room 4	23 Managerial implications of clinical trials 24 Case: Drug testing in Nigeria, Harvard Team Project: e-meeting with mentors (18:45-19:45)	Prof. Gregory KATZ
April 22 Room 4	25 Redefining standards of health insurance 26 Exam: essay (16:30-18:30) Return Case Study #2	Somesh CHANDRA, Chief Health Officer European Markets, AXA
May 6 Room 4	27 Organizational change to improve care delivery Case: Mayo Clinic: the 2020 Initiative, Harvard 28 Banking stem cells & marketing bio-insurance Case: Lifecell International, Ivey Team Project: Return final report	Prof. Veronique ROGER, Founding Director, Center for the Science of Health Care Delivery, Mayo Clinic Prof. Gregory KATZ
June 10 Room 3	29 Team Project: Oral presentation to mentors (14:00-17:30) 30 Conclusion: Parable of the Sadhu (17:45-18:45)	Prof. Gregory KATZ
July 2	Graduation Ceremony	

SYLLABUS

At the crossroads of the medtech, biopharma and health insurance industries, the Chair of Innovation & Value in Health develops a pragmatic, action-learning approach based on real-life case studies, role playing and negotiation workshops co-facilitated by the decision-makers actually involved in the case studies. On completion of the sessions, participants have the skills to sponsor a project in an entrepreneurial spirit, build a strategic action plan, negotiate and win the support of others. Each year, the Chair organizes immersion visits to European leading R&D sites or training platforms, offering students an inside glimpse of the industry and its challenges, from lab bench to production sites. Team projects are led in tandem with managers of partner companies. Through real-world problems and creative solutions, the Chair's vocation is to ignite fires, not fill vessels.

Managing Health Innovations (50 hours)

This course helps participants grasp the challenges of innovation management in the health industries. During the sessions, a wide variety of case studies are analyzed from a range of different perspectives: intellectual property, technology transfers, vaccine manufacturing, health technology assessment, connected medical devices, companion diagnostics, targeted therapies, hospital performance and more. Role playing and negotiation workshops are organized with experts and decision-makers actually involved in the cases discussed. By meeting with industry leaders, participants can establish close contacts with enterprises and expand their career opportunities. The international scope of the seminar allows students to approach these complex challenges from a global perspective.

Tackling Ethical Tensions in Health Systems (25h)

In this course, participants analyze the ethical tensions inherent to health industries. During the sessions, participants are confronted with critical situations presented in a number of case studies taking place in a dozen of different countries. Through negotiation workshops and role plays, they explore a wide variety of pragmatic solutions to neutralize tensions and convert technological advances into societal progress. Topics include crisis management during a pandemic alert, direct-to-consumer advertising of genetic tests, development of online patient communities, recalling of blockbuster drugs due to side effects, development of stem cell private banks, commercialization of expensive drugs for ultra rare conditions, launching of clinical trials in developing countries, etc. All these topics stimulate debates on performance versus risk or pragmatism versus exemplarity. Role playing and negotiation workshops are organized in order to reveal each participant's set of values and allow them to develop their personal ethics and leadership.

LEARNING OBJECTIVES

By the end of Chair program, each student should be able to:

- Anticipate changes in health systems and their socio-economic drivers;
- Understand the key challenges raised by the development of biomedical innovations;
- Analyze their lifecycle and their industrial impacts for health systems;
- Develop leadership skills, ability for strategic thinking and negotiation agility.

TEACHING APPROACH

The teaching approach is based on case studies, role-plays, interactive lectures and videos.

PRACTICAL INFORMATION

- Sessions on campus will be held on Thursday from 14:00 to 19:00 (or 19:45 when meetings with mentors);
- Venue: Necker campus, 160 rue de Vaugirard 75015 Paris;
- Chair Assistant: **Tatiana** Juresic-Shurmanova / tatiana.shurmanova-juresic@parisdescartes.fr
- Teaching Assistant: **Rosalind** Bell-Aldeghi / rosalind.bell-aldeghi@u-paris.fr
- Assignments must be returned in electronic format to Tatiana and Laure.
- <http://www.chair-innovation-value.eu/>

EVALUATION

To graduate the Chair and validate the 4 credits (75 hours), students must pass an evaluation based on the assignments presented in the table below. Each of them accounts for 20% of the final grade. These evaluation ratios are indicative. They can be adapted by the professor if necessary. Grades will be notified at the end of the program.

Tackling Ethical Tensions in Health Systems (2 Credits)	Managing Health Innovations (2 Credits)
Class participation (20%)	
Case study #1 (20%)	Group work report (20%)
Case study #2 (20%)	Group work presentation (20%)
Book Essay (20%)	
Final Exam (20%)	

1/ Class participation (20%)

Assigned readings should be completed prior to each class. Case studies have to be thoroughly prepared for the role plays. The relevance and frequency of your questions and comments will be assessed during each session. Attendance and class behaviour will also be taken into account.

2/ Book Essay (20%)

Each student chooses a book from the bibliography. Other books related to course can also be proposed by students: they must receive the professor's approval. The book essay should articulate two distinct parts: (i) a summary of the author's argument (one page); (ii) some personal critics about those arguments (one page). This exercise is designed to be both synthetic and analytic. The writing style will also be evaluated. Document format: 2 pages max, Times 12, single space. **The essay must be returned on time (see syllabus), before class begins. No document will be accepted after this deadline.**

3/ Case Studies (20% each)

Each student must choose two case studies amongst the course pack. Each case report must be conducted *individually*. Case studies are divided into two groups: the first case must be chosen *between sessions 1 and 10*; the second case must be chosen *between sessions 11 and 24*. **Case study reports must be returned before the beginning of the class when the case will be analyzed. No report will be accepted after this deadline.** Document format: 5-7 pages, Times 12, single space, printed, stapled; electronic version required.

Method

Cases tend to fall into one of three categories that sometimes overlap:

- **Decision Cases** describe a decision faced by the case protagonist. The student ultimately must choose among finite set of distinct decision alternatives.
- **Problem Cases** require a student to diagnose a problem in a business case and to formulate possible solutions.
- **Evaluation Cases** illustrate a business success or failure. The student analyzes the underlying reasons for that success or failure to arrive at management lessons.

For each of these case categories, the basic challenge remains the same: identifying the important issues at the heart of the case, addressing those through analysis, and identifying what lessons from the case can be applied more broadly. The following steps can be used to organize your thoughts about a case. As you perform your analysis remain open to the fact that your interpretation of the facts may change and therefore you should constantly revisit your answers.

1. **Read the case twice**, once for an overview and once again to gain full command of the facts; then take care to explore every one of the exhibits.

2. **Define the Problem:** Describe the type of case and what problem(s) or issue(s) should be the focus for your analysis.
3. **List any outside concepts that can be applied:** Write down any principles, frameworks or theories that can be applied to this case.
4. **List relevant qualitative data:** evidence related to or based on the quality or character of something.
5. **List relevant quantitative data:** evidence related to or based on the amount or number of something.
6. **Make a one page outline of your diagnosis** and present it as an executive summary.
7. **Describe the results of your analysis:** What evidence have you accumulated that supports one interpretation over another.
8. **Describe alternative actions:** List and prioritize possible recommendations or actions.
9. **Describe your preferred action plan:** Write a clear statement of what you would recommend including short, medium and long-term steps to be carried out.
10. **Review your action plan** and check if all issues are addressed: Be as alert to the downside risks of your recommendations as you are to their upside potential and appeal.
11. **Answer the questions at the end of the case,** and develop your recommendations.

Role plays

Beyond these two case reports, *each case study must be prepared for class discussions and role plays. This preparation is neither casual nor optional.*

- Prior the session, read the case carefully and the exhibits extensively
- Prepare a 1-2 pages note with some key elements to share with your group
- You will be assigned to a group at the beginning of the session
- In class, your group will have only 10' to structure the stakeholder's argument.
- For each stakeholder, four questions could be addressed:
 1. What is our mission?
 2. What is our objective?
 3. What we cannot accept?
 4. What we propose?
- Rather than opposing views from the trenches, try to negotiate a constructive, innovative and *realistic solution* leading to an agreement (if possible);
- Students within the same group may express different views during the role play;
- Each group should delegate a **spokesman** who gathers the arguments of everybody;
- The role play must be "played": adopt the view of the stakeholder you embody, even if it contradicts your personal opinion.

4/ Team Project (40%)

Each participant has to work on a group project conducted over a period of 5 months, from February to June. Each group is composed of 4-5 students. For the first session, each student should vote for two topics amongst those listed below, with a primary and secondary choice. Groups will be adjusted evenly. Group project topics are proposed by the Chair's partners. Each partner designates a "mentor" within the company to work in tandem with students on each topic. Each group will also receive adequate support from Chair faculty.

Evaluation criteria for the group projects:

- Team work organization and dynamic
- In-depth analysis of the present situation
- Capacity to make creative, realistic and implementable recommendations
- Level of professionalism when interacting with the partner & the professor
- Quality of the oral presentation
- Density and quality layout of the final report

5/ Final Examination (20%)

Final exam (2 hours) will include questions about key figures and definitions, a case study and/or a short essay.

BIBLIOGRAPHY

Most of the references are available at the library
(classmarks into brackets)

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