ADVANCED AI

Bachelor in Data and Business Analytics BDBA SEP-2024
AAI-DBA.1C.4.M.A

Area Computer Science and AI
Number of sessions: 25
Academic year: 24-25
Degree course: FOURTH
Number of credits: 5.0
Semester: 1º
Category: OPTIONAL
Language: English

Professor: **LAURA SANCHEZ GARCIA**

E-mail: lsanchezg@faculty.ie.edu

Laura has a mixed academic and industry background. On the academic side, Laura has a PhD, Master and a Bachelor in Physics from Universidad Autónoma de Madrid. She did her PhD in the field of Nanotechnology with a strong focus on experimental data acquisition and analysis. She has published more than 10 peer-reviewed scientific publications and has been speaker at numerous international conferences.On the industry part, she is working as Advanced Analytics Lead in Sandoz Farmacéutica and previously worked for McKinsey & Company as a Senior Data Scientist. She has experience in a broad variety of Data Science use cases and has worked in several industries across the globe.

Office Hours

Office hours will be on request. Please contact at:

lsanchezg@faculty.ie.edu

PREREQUISITES

- Probability, Statistics, Calculus and Algebra
- Python programming
- AI - Machine Learning Foundations
- AI - Machine Learning & Analytics

  Examples will be given to the students and the subject will be taugth in Python (mostly in a Notebook format). Therefore, students are expected to have a fluent level of Python.

SUBJECT DESCRIPTION

Artificial Intelligence (AI) started in the aftermath of World War II as one of the newest fields in science and engineering. Shortly afterwards, AI transformed into a hot topic as its applications spread across numerous industries and businesses, including automation, natural language processing, recommended systems, fraud detection and disease diagnosis in medicine.

In recent years, the development of new Deep Learning techniques, together with the availability of large amounts of data and increased computing power has lead to novel applications and AI systems which can perform a variety of tasks at human-performance level.

The general objective of this course is to understand the basis of the newest AI applications based on Machine Learning and Deep Learning using a "from theory to practice" approach. We will apply theory and knowledge to real practical examples across different industries and study state-of-the-art algorithms and technologies.

LEARNING OBJECTIVES

In this course, you will learn state-of-the-art methodologies in AI used for different applications. The subject covers three important blocks of the AI modern landscape. Namely Advanced Computer Vision & Object Detection; Natural Language Processing and Advanced Sequence Models; and Generative Models.

We expect that at the end of the course, students will obtain a solid understanding of the theory and practical implementations of modern AI methodologies, with special focus on Deep Learning technicques for the above mentioned applications. The course has a strong practical component in which we will use Python libraries such as PyTorch and Tensorflow. Therefore, it is expected that students have a medium to advanced level of programming in Python.

In order to fill the possible gap in programming knowledge, the course has a section devoted to reviewing important programming concepts that will be used along the course.

TEACHING METHODOLOGY

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. Professor's main role is to lead and guide students to achieve the learning objectives of the course. This is done by engaging in a diverse range of teaching techniques and different types of learning activities such as the following:

Learning Activity	**Weighting**	**Estimated time a student should dedicate to prepare for and participate in**
Lectures	30.0 %	37.5 hours
Discussions	10.0 %	12.5 hours

Exercises in class, Asynchronous sessions, Field Work	30.0 %	37.5 hours
Group work	30.0 %	37.5 hours
TOTAL	100.0 %	125.0 hours

AI POLICY

Generative artificial intelligence (GenAI) tools may be used in this course for acceptable use cases such as research, ideation, coding, image generation, with appropriate acknowledgement. GenAI may not be used for exams. If a student is found to have used AI-generated content inappropriately, it will be considered academic misconduct, and the student might fail the respective assignment or the course.

If you are in doubt as to whether you are using GenAI tools appropriately in this course, I encourage you to discuss your situation with me.

Below, a suggested format to acknowledge the use of generative AI tools. Please note that acknowledging AI will not impact your grade.

I acknowledge the use of [AI systems link] to [specify how you used generative AI]. The prompts used include [list of prompts]. The output of these prompts was used to [explain how you used the outputs in your work]

If AI was permitted to use in your assignment, but you have chosen not to include any AI generated content, the following disclosure is recommended:

No content generated by AI technologies has been used in this assignment.

PROGRAM

The program addresses the following topics:

- Advanced Computer Vision Applications
- Advanced Natural Language Processing Applications
- Generative Models

SUMMARY

Disclaimer: The following description of the material covered is tentative. An attempt will be made to cover all listed topics. However; the pace in the classes will depend on the group performance.

SESSION 1 (LIVE IN-PERSON)

Course introduction and overview of Artificial Intelligence.

Review of programming concepts, setup and best practices.

PyTorch and Tensorflow for AI applications.

Book Chapters: Deep Learning with PyTorch. Chapters 1 & 3 (See Bibliography)

SESSION 2 (LIVE IN-PERSON)

Course introduction and overview of Artificial Intelligence.

Review of programming concepts, setup and best practices.

PyTorch and Tensorflow for AI applications.

SESSION 3 (LIVE IN-PERSON)

Course introduction and overview of Artificial Intelligence.

Review of programming concepts, setup and best practices.

PyTorch and Tensorflow for AI applications.

SESSION 4 (LIVE IN-PERSON)

Course introduction and overview of Artificial Intelligence.

Review of programming concepts, setup and best practices.

PyTorch and Tensorflow for AI applications.

SESSION 5 (LIVE IN-PERSON)

Advanced Sequence Modelling and Natural Language Processing (NLP)

Review of autorregressive models for Advanced AI & NLP: RNNs, LSTMs & GRU, Deep RNNs and examples (text generation, music generation)

Word representations, embeddings, embedding matrix.

Article: You Only Look Once. Unified, Real-Time Object Detection (Arxiv, 2015)

SESSION 6 (LIVE IN-PERSON)

Advanced Sequence Modelling and Natural Language Processing (NLP)

Review of autorregressive models for Advanced AI & NLP: RNNs, LSTMs & GRU, Deep RNNs and examples (text generation, music generation)

Word representations, embeddings, embedding matrix.

SESSION 7 (LIVE IN-PERSON)

Advanced Sequence Modelling and Natural Language Processing (NLP)

Review of autorregressive models for Advanced AI & NLP: RNNs, LSTMs & GRU, Deep RNNs and examples (text generation, music generation)

Word representations, embeddings, embedding matrix.

Book Chapters: Generative Deep Learning. Teaching Machines to Paint, Write, Compose and Play.

Chapters 6, 5 and 8 (See Bibliography)

Book Chapters: Deep Learning with Python. Chapter 6 (See Bibliography)

SESSION 8 (LIVE IN-PERSON)

Advanced Sequence Modelling and Natural Language Processing (NLP)

Review of autorregressive models for Advanced AI & NLP: RNNs, LSTMs & GRU, Deep RNNs and examples (text generation, music generation)

Word representations, embeddings, embedding matrix.

SESSION 9 (LIVE IN-PERSON)

Advanced Sequence Modelling and Natural Language Processing (NLP)

Encoder-Decoder architectures (e.g., text translation, image captioning)

Book Chapters: Generative Deep Learning. Teaching Machines to Paint, Write, Compose and Play. Chapter 3 and 9 (See Bibliography)

SESSION 10 (LIVE IN-PERSON)

Advanced Sequence Modelling and Natural Language Processing (NLP)

Autoencoders & Variational Autoencoders

Book Chapters: Generative Deep Learning. Teaching Machines to Paint, Write, Compose and Play. Chapter 3 (See Bibliography)

SESSION 11 (LIVE IN-PERSON)

Transformers & Self-attention mechanisms

Book Chapters: Generative Deep Learning. Chapter 3 (See Bibliography)

SESSION 12 (LIVE IN-PERSON)

Transformers & Self-attention mechanisms

SESSION 13 (LIVE IN-PERSON)

Review/Questions/Inquiries.

Book Chapters: Lewis Tunstall, et al.: Natural Language Processing with Transformers; O'Reilly 2022 (See Bibliography)

SESSION 14 (LIVE IN-PERSON)

Midterm exam.

SESSION 15 (LIVE IN-PERSON)

Student's group project follow-up

SESSION 16 (LIVE IN-PERSON)

Review of theory behind Generative models & applied concepts

SESSION 17 (LIVE IN-PERSON)

Diffussion models

SESSION 18 (LIVE IN-PERSON)

Diffussion models

Book Chapters: David Foster: Generative Deep Learning (See Bibliography)

SESSION 19 (LIVE IN-PERSON)

Diffussion models

SESSION 20 (LIVE IN-PERSON)

Applications of Generative Models

SESSION 21 (LIVE IN-PERSON)

Review of notebooks and explanations

SESSION 22 (LIVE IN-PERSON)

.Students Group projects follow-up

SESSION 23 (LIVE IN-PERSON)

Review/Questions/Inquiries.

SESSION 24 (LIVE IN-PERSON)

Student's Group Project presentations.

SESSION 25 (LIVE IN-PERSON)

Final exam

EVALUATION CRITERIA

During the course students will be required to read material prior to the sessions, and to participate in discussions during class. Students will be given assignments and quizzes to be completed individually. These will be solved and discussed during class sessions where students are expected to participate actively. The group project will consist of solving a given business or research problem using some of the AI methods learned. The group will present the solution to the problem. The overall grading will be based on the following criteria:

criteria	percentage	Learning Objectives	Comments
Class Participation	10 %		includes active engagement in class asking/answering questions
Individual Work	20 %		includes assignments, voluntary exercises, research.
Group Presentation	30 %		includes quality of group project and delivery
Midterm Exam	20 %		midterm exam
Final Exam	20 %		final exam

RE-SIT / RE-TAKE POLICY

Each student has four chances to pass any given course distributed over two consecutive academic years: ordinary call exams and extraordinary call exams (re-sits) in June/July.

Students who do not comply with the 80% attendance rule during the semester will fail both calls for this Academic Year (ordinary and extraordinary) and have to re-take the course (i.e., re-enroll) in the next Academic Year.

Evaluation criteria:

- Students failing the course in the ordinary call (during the semester) will have to re-sit the exam in June / July (except those not complying with the attendance rule, who will not have that opportunity and must directly re-enroll in the course on the next Academic Year).
- The extraordinary call exams in D / July (re-sits) require your physical presence at the campus you are enrolled in (Segovia or Madrid). There is no possibility to change the date, location or format of any exam, under any circumstances. Dates and location of the June / July re-sit exams will be posted in advance. Please take this into consideration when planning your summer.
- The June / July re-sit exam will consist of a comprehensive exam. Your final grade for the course will depend on the performance in this exam only; continuous evaluation over the semester will not be taken into consideration. Students will have to achieve the minimum passing grade of 5 and can obtain a maximum grade of 8.0 (out of 10.0) – i.e., “notable” in the in the re-sit exam.
- Retakers: Students who failed the subject on a previous Academic Year and are now re-enrolled as re-takers in a course will be needed to check the syllabus of the assigned professor, as well as contact the professor individually, regarding the specific evaluation criteria for them as retakers in the course during that semester (ordinary call of that Academic Year). The maximum grade that may be obtained in the retake exam (3rd call) is 10.0.

After ordinary and extraordinary call exams are graded by the professor, you will have a possibility to attend a review session for that exam and course grade. Please be available to attend the session in order to clarify any concerns you might have regarding your exam. Your professor will inform you about the time and place of the review session. Any grade appeals require that the student attended the review session prior to appealing.

Students failing more than 18 ECTS credits in the academic year after the June-July re-sits will be asked to leave the Program. Please, make sure to prepare yourself well for the exams in order to pass your failed subjects.

In case you decide to skip the opportunity to re-sit for an exam during the June / July extraordinary call, you will need to enroll in that course again for the next Academic Year as a re-taker and pay the corresponding extra cost. As you know, students have a total of four allowed calls to pass a given subject or course, in order to remain in the program.

PARTICIPATION

The following criteria will be used to make a judgment about your class participation:

Quality (not quantity) of in class and forum participation. Specially, high quality comments revealing deep insights and a good understanding of the subject will be very considered as positive scores. Concise and precise presentation of your ideas will reveal that you have a good understanding of what you are saying. Basically, the ability of explaining deep or difficult concepts in simple terms. Frequency of relevant interventions. Doing the right intervention at the right time, which includes asking questions that may also help your peers to understand better which is being explained.

ASSIGNMENTS

Assignments on previously covered material or prework to prepare for the upcoming class will be given periodically. These can be in the form of quizzes and or short programming exercises. These quizzes will help you assess your overall understanding of the subject being studied and identify any caveat in your learning. The dates of these assignments will be announced by the professor weekly. Students should be prepared to solve these assignments as they comes in.

All assignments need to be submitted online via Turnitin on Campus Online. All other methods of submission will not be considered.

FINAL GROUP PROJECT

The group project has the highest weight in the overall grade because it is an important part of this course. Each group (composed of 4 -5 students) will be asked to choose an advanced topic related to the course content. The professor will suggest several topics to pick up at the beginning of the course. The solution to the problem should constitute a complete and working solution (e.g., uploaded as a repository in GitHub). This will mimic how professionals work and familiarize students with software version control. This solution has to be accompanied with a description of the project and a presentation. There will be a special session where students will present their solutions.

All assignments need to be submitted online via Turnitin on Campus Online. All other methods of submission will not be considered.

MIDTERM AND FINAL EXAMS

There will be a midterm and a final exam, each of them covering part of the program. The final exam may include questions from the part covered in the midterm exam as well. For the exams, you will need your own laptop. Each of the exams is split in two parts, a theoretical and a practical one. For the theoretical part you are allowed to bring an (2-sides) A4 sheet with all the formulae you may consider. For the practical one you have to make use of your computer and be prepared to complete programming questions.

Disclaimer:

NO QUESTIONS ARE ALLOWED DURING THE EXAMS. THE CHEAT-SHEET ALONG WITH ANY SCRAP PAPER WILL BE COLLECTED AND STAPLED TO YOUR EXAMS.

In order to pass the course, you need a minimum grade of 5 in the final exam. If your grade in the final exam does not reach the threshold value of 5, you will fail the course, even in the case in which your weighted average (computed using the table above) exceeds 5.0.

Notice that the date of the midterm exams could change and needs to be considered with flexibility. The precise date will be communicated to students two weeks ahead of time. The date of the final and the retake exam CANNOT BE CHANGED under any circumstances.

There exists the possibility that both, midterm and final exams, will be in the form of take home exercise. In such a case, the professor will adapt the exams to that format.

BIBLIOGRAPHY

Recommended

- Eli Stevens, Luca Antiga, Thomas Viehmann. (2020). *Deep Learning with PyTorch.* Manning. ISBN 978161729526 (Digital)
- David Foster. (2022). *Generative Deep Learning. Teaching Machines to Paint, Write, Compose and Play.* O'Reilly. ISBN 978149204194 (Digital)
- L. Tunstall, L. von Werra, T. Wolf. (2022). *Natural Language Processing with Transformers. Building Language Applications with Hugging Face..* O'Reilly. ISBN 978109810324 (Digital)

BEHAVIOR RULES

Please, check the University's Code of Conduct here. The Program Director may provide further indications.

ATTENDANCE POLICY

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ETHICAL POLICY

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AT THE EDGE OF NEUROSCIENCE: MARKETING DECISIONS

Bachelor in Data and Business Analytics BDBA SEP-2024
AEN-DBA.1C.4.M.A

Area Marketing and Communication

Number of sessions: 15

Academic year: 24-25

Degree course: FOURTH

Number of credits: 3.0

Semester: 1º

Category: OPTIONAL

Language: English

Professor: **ROSARIO PERICUESTA CAMACHO**

E-mail: rpericuesta@faculty.ie.edu

Charo Pericuesta holds a Bachelor in Economics from the Universidad de Salamanca, a Bachelor in Market Research from the Universidad Autónoma de Madrid and a Master in Marketing and Sales Management from ESIC University in Madrid.

She has been more than a decade in Nielseniq, advising multinational companies in their strategy of innovation of their product portfolio using consumer data analysis.

Prior to that she worked:

- In the consumer insights department of Mondelez (Kraft) developing research plans to explore the different marketing initiatives of the company and using different market research techniques to understand the consumer behaviour and support decision making for the strategy of the brand;

- In United Planet in Boston as Marketing Project Manager;

- In Research International as Market Research Executive being seconded to the Chicago Office;

- In Russell Bedford International in London as Marketing Assistant.

Office Hours

Office hours will be on request. Please contact at:

rpericuesta@faculty.ie.edu

PREREQUISITES

No specific academic background required. Passion to learn.This course is particularly useful for those interested in pursuing marketing and marketing research related careers.

SUBJECT DESCRIPTION

Neuroscience helps us to understand the decision making process that we undergo as consumers. For our brain, context matters and everything is relative. Consumers not always disclosure the drivers behind their decisions, that's why being able to measure such hidden drivers becomes so important.

This course provides a first approach to how Neuroscience is currently applied to Marketing. In particular understanding how attention, memory or emotion affect the decisions of consumers and how brands and value perceptions are built in consumers' minds.

LEARNING OBJECTIVES

The objectives are:

- Understanding how consumers make decisions.

- Understanding what's outside consumers' awareness and how to measure it.

- Leverage how our brain automatically works to make marketing experiences more powerful.

TEACHING METHODOLOGY

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. Professor's main role is to lead and guide students to achieve the learning objectives of the course. This is done by engaging in a diverse range of teaching techniques and different types of learning activities such as the following:

Learning Activity	**Weighting**	**Estimated time a student should dedicate to prepare for and participate in**
Lectures	13.3 %	10.0 hours
Discussions	13.3 %	10.0 hours
Exercises in class, Asynchronous sessions, Field Work	20.0 %	15.0 hours
Group work	26.7 %	20.0 hours
Individual studying	26.7 %	20.0 hours
TOTAL	100.0 %	75.0 hours

PROGRAM

SESSION 1 (LIVE IN-PERSON)

Introduction

- Course overview
- Introduction to consumer Neuroscience
- Landscape of implicit tools and their possible use in marketing

SESSION 2 (LIVE IN-PERSON)

How our rational decision-making is hindered by cognitive biases I: Illusions.

SESSION 3 (LIVE IN-PERSON)

How our rational decision-making is hindered by cognitive biases II: What factors affect our decisions?

SESSION 4 (LIVE IN-PERSON)

How we think: System 1 and System 2 – Thinking Fast and Slow

Implicit and explicit: Two modes of thinking

- System 1: The automatic mode
- System 2: The lazy controller
- System 1 and System 2 in decision making

SESSION 5 (LIVE IN-PERSON)

Attention: Standing out from competitors. Modern view of attention in marketing.

SESSION 6 (LIVE IN-PERSON)

Practice: Identify how brands catch consumers attention and analyze it.

SESSION 7 (LIVE IN-PERSON)

Power of familiarity in marketing

- Memory: How familiarity impact on our decision-making process
- The Mere Exposure Effect
- The brain as an association machine

SESSION 8 (LIVE IN-PERSON)

Practice: Brands as associative memory networks.

SESSION 9 (LIVE IN-PERSON)

Approach or Avoid? How emotions motivate our decision-making process.

SESSION 10 (LIVE IN-PERSON)

How the halo effect affects consumers' responses.

SESSION 11 (LIVE IN-PERSON)

Value beyond price. How non-conscious processes impact value calculations.

SESSION 12 (LIVE IN-PERSON)

Neuroscience and Social Marketing.

SESSION 13 (LIVE IN-PERSON)

Group Assignment Presentation

Explore Attention, Familiarity and Emotion in different brands and compare them.

SESSION 14 (LIVE IN-PERSON)

Market Research today and tomorrow: the impact of Neuroscience.

SESSION 15 (LIVE IN-PERSON)

Exam.

EVALUATION CRITERIA

criteria	percentage	Learning Objectives	Comments
Final Exam	25 %		
Class Participation	25 %		
Individual Work	25 %		
Group Presentation	25 %		

RE-SIT / RE-TAKE POLICY

AI POLICY

In today's world, generative artificial intelligence (GenAI) is changing how we work, study and, in general, how we get things done. However, in the context of this course, the use of GenAI is not permitted, unless it is otherwise stated by the instructor. The use of GenAI tools would jeopardize the students' ability to acquire fundamental knowledge or skills of this course.

If a student is found to have used AI-generated content for any form of assessment, it will be considered academic misconduct, and the student might fail the respective assignment or the course.

BIBLIOGRAPHY

Recommended

- Edited by Moran Cerf and Manuel Garcia-Garcia. (2017). *Consumer Neuroscience.* The MIT Press. ISBN 9780262036597 (Printed)

- Daniel Kahneman. *Thinking, fast and slow.* PENGUIN BOOKS LTD. ISBN 0141033576 (Printed)

- Richard H. Thaler and Cass R. Sunstein. *Nudge, the final edition..* Penguin Books. ISBN 9780143137009 (Printed)
- Dan Ariely. *Predictably Irrational.* Generic. ISBN 9780062018205 (Printed)
- Phil Rosenzweig. *The halo effect… and the Eight Other Business Delusions That Deceive Managers.* FREE PR. ISBN 9781476784038 (Printed)

BEHAVIOR RULES

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ATTENDANCE POLICY

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ETHICAL POLICY

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DEEP REINFORCEMENT LEARNING

Bachelor in Data and Business Analytics BDBA SEP-2024
DRL-DBA.1C.4.M.A

Area Human Resources and Organisational Behaviour

Number of sessions: 25

Academic year: 24-25

Degree course: FOURTH

Number of credits: 5.0

Semester: 1º

Category: OPTIONAL

Language: English

Professor: **JOSÉ MANUEL REY GONZÁLEZ**

E-mail: jreyg@faculty.ie.edu

Consultant Director of numerous projects of strategic planning and business development, market studies and quality improvement, revenue growth and cost optimization, business processes reengineering, information systems design and implementation, for companies in virtually all industries, in both public and private sectors, with a systemic approach based on the identification of innovative competitive strategies, efficient organizational and process transformation and a firm leverage on the impulse of new technologies

Education

He is a Civil Engineer graduated with honors, special End Of Career Award, Bachelor of Economics and Business Administration, PhD student (unfinished) in Applied Quantitative Economics, and holds a CISA Title from the EDPAA (now ISACA) and a Master in Corporate Finance IESE, University of Navarra.

Professional Background

He became International Partner in Arthur Andersen in 1997, led the area of Innovation and Business Transformation, responsible for comprehensive quality management services, shared services centers, process reengineering and technological integration and the eBusiness area for strategic planning and development of interactive business and electronic commerce nationwide.

International Director of the World Excellence Center for Business Process Reengineering, member of the eBusiness leadership team in EMEIA and coordinator of this practice in the Mediterranean region.

He was a Managing Director in KPMG Consulting/BearingPoint, responsible for the Technology industry within the Telecommunications, Media and Content Sector and leader of the area of Process Innovation Solutions and Advanced Technology

He has served as Member of Board of Directors, Advisory boards or Management Consultant in matters of strategy and business development for several Spanish companies and Advisor of Venture Capital Companies and M&A Firms.

Arbitrator of the Madrid Arbitration Court, specialist in the Technology, Information and Communications sector and Developer of an advanced software platform for modelling business risks and economic projections, valuation of companies & portfolios and for building advanced risk & value information systems for Directors.

Public Activity and Teaching

He has been part of the Advisory Committees of eMobility and SIMO. He was a member of the Jury of the National eMobility Prize and participated in the Competitiveness Forums of Madrid and Castilla y León.

Instructor and speaker in numerous courses and seminars, national and international, of a general nature and related to his areas of specialization. Lecturer in various Business Management Master courses in subjects related to advanced economic and statistical analysis as well as organizer of the Master eBusiness of the Universidad Pontificia de Comillas, Speaker in the Executive Education Program of ESADE and in the Executive MBA of AEDE Business School in the subjects of "Information Systems", "Technological Environment" and "Systems Architecture".

He has published articles on business and technical content topics in newspapers such as Expansión, Cinco Días, Gaceta de los Negocios, Actualidad Económica, Dinero, etc., and directed or participated, as author or coordinator, in the publication of various books on issues of quality, organization and information technology (Las empresas del click / The Clickable Corporation [1999, Actualidad Económica], La Calidad en España/Quality in Spain [1995, Cinco Días]) and collaborated in the development of others (The organization in the information age: Learning, Innovation and Change [1995, IESE])

He was listed in the year 2000 by Actualidad Económica in the ranking of the 100 most relevant people on the Internet and eBusiness in Spain.

Office Hours

Office hours will be on request. Please contact at:

E-Mail: jreyg@faculty.ie.edu

PREREQUISITES

To optimize your chances of success in this program, we recommend having a good Python programming knowledge with at least 120hrs of programming experience, familiarity with data structures and experience with libraries. This is especially important for the assignments, and for getting the most out of the F2F practice/tutorials along the course. Additionally, the use of some standard Machine Learning libraries such as scikit-learn, Tensorflow and Pytorch will be required. The new environment programming and tools (such as OpenAI gym) will be introduced and covered along the course.

In a few sections, some of the theoretical concepts will be presented with quite a bit of rigor and a good college-level knowledge of linear algebra, calculus and basic inferential statistics would be desirable for a thorough understanding. For example, it is expected that you know about standard probability distributions (Uniform, Gaussians, Poisson…), and also understand the operation and interpretation of derivatives and the basic mathematics underlying probability models. Some concepts about dynamic programming and markov decision processes will be revisited.

SUBJECT DESCRIPTION

Reinforcement Learning (RL) is a melting pot where excellent computational techniques of dynamic programming, heuristic search in problem spaces and the new techniques of functional representation of neural networks have converged with great success to build a highly scalable area of discipline that is allowing to efficiently attack a wide range of problems previously considered as practically unapproachable.

Throughout the course we will analyze each of these components in a structured way and we will see the types of approach combinations currently in use, from basic Q-Value models, to Deep QL and methods based on policy gradients, actor-critic, curiosity driven and other innovations in the dynamic definition of reward functions.

We will try to understand in which problem scenarios they are most advisable, their strengths and limitations and to anticipate some of the future trends that will progressively lead to advances and breakthroughs in this field.

LEARNING OBJECTIVES

The main objective of this course is to introduce students to the exciting field of RL and to set up a framework of knowledge that will allow them to make informed analysis of the opportunities and challenges for its successful application in Business.

To achieve this, we will focus on helping students grasp a sound understanding of RL techniques and their variations (model-free, model-based, online/offline RL, behavioural cloning, etc) and a good intuition of how to apply them to tasks of their own design.

It encompasses knowledge about:

- the fundamentals and theoretical principles of this discipline,
- the most relevant algorithms used in practice,
- the engineering process for the development and management of this type of projects and
- the understanding of the difficulties, obstacles and challenges to be faced in this path.

Therefore, it will combine both a theoretical and conceptual approach with a hands-on technical understanding of the different stages of these type of RL projects keeping always a clear perspective of the business issues and opportunities and the future evolution and innovations from the current state of the art.

To streamline the technical/computational requirements, we will concentrate on the implementations using Python, and a level of complexity ranging from basic to intermediate.

For some advanced examples we could also touch on some other development environments (such as LUA for robotics or Matlab for process-control) but just for showcase purposes. No programming activities will be required in these cases.

TEACHING METHODOLOGY

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. Professor's main role is to lead and guide students to achieve the learning objectives of the course.

This program will try to put you in a good starting point for becoming a well-rounded RL practitioner, experiencing how to build RL models and apply them to problems in various fields.

We have tried to organize the different knowledge blocks integrating the conceptual and theoretical background first, then moving into practice/tutorials examples and then framing assignments of assorted levels of complexity.

We expect students to work 3 to 8 hours/week on average. This is a rough estimation of total hours the average student may take to complete all required coursework, including lecture and project time (actual hours may vary depending on the individual student and each specific stage of the course).

The course will be both lecture and example-based, and will include group in-class discussions to promote learning and understanding of the course material in a variety of formats.

The course will have 6 main elements:

- **Lectures**: We will explain the theoretical ideas, concepts and methods involved and will try to check on-time the correct understanding of the key elements. Questions and feedback will be the basic tool for this interactive dialog, in order to guarantee that the message gets across.
- **Examples/Tutorials/Cases:** We will use profusely cases and examples related to the theory (and preparatory for the Assignments). Questions and what-if interactive analysis will be encouraged.
- **Discussions:** as one critical skill for your future is how you present your work, we will encourage from time to time, for the relevant concepts in each section, some group discussions. A few of them will be announced in advance and will require some preparation from each student.
- **Assignments:** practical exercises for experimenting with RL concepts, algorithms and techniques.
- **Exams:** There will just one formal test/exam, and a "test-exam" assignment will be included to get students used to answer questions about RL in different types of formats.
- **Group work:** For the final part of the course the student will have to work in a small group for preparing a final project presentation.

Assignments:

The best way to learn about a machine learning method is to program it yourself and experiment with it. So, the assignments will generally involve implementing machine learning algorithms, and experimentation to test your algorithms on some data. You will be asked to summarize your work, and analyze the results.

The implementations will be done in Python, creating Jupyter notebooks or pure Python programs (in some cases, numba or cython could be required for performance optimization), and the structure and review criteria will be reported for each specific job.

Though they are considered as individual work, the "individual assignments" will be realized (and delivered jointly) in small groups that will be defined by an special algorithm that will dynamically form the groups for each assignment ensuring that no two students will be assigned more than once together and trying to optimize and combine the skills of each one based on their previous results to maximize cross-learning, Therefore, collaboration on the assignments is only allowed (and enforced) within each group. Each student/group is responsible for his or her own work.

Discussion of assignments and programs should be limited to clarification of the handout itself, and should not involve any sharing of pseudocode or code or simulation results.

The only exception will be for the Final Group Assignment, for which another specific algorithm will try to create optimized groups based on the preferences informed by each student.

The schedule of assignments is included in the syllabus and in general will correspond to the sessions planned as "with assignment" except for exceptions required for the best development of the content.

Assignments are due at the beginning of class/tutorial on the due date. Because they may be discussed in class that day, it is important that you have completed them by that day.

Optionally, some of the assignments could have the form of a “bake-off” (a competition between machine learning algorithms). We will give everyone some data for training a RL system, and you will try to develop the best method. We will then determine which system performs best on some unseen test data.

Exams:

There will just one formal test/exam. However, as an especial practice/assignment the students will have a series of test-exams to get them prepared for answering questions about RL (multiple choice, true-false or open questions). These test-exams will be either automatically scored by the machine or in some cases will require a self-evaluation or self-assessment. So, they are a type of simulation of an open-book exam on all material covered up to that point in the lectures, tutorials, required readings, and assignments, but eventually there could be topics not covered in any of these that will require some online investigation or other type of research to find out (or understand) the possible answers. The final scoring of this “assignment” will be based on the number of test exams done (freely decided by each student), their average results, and the degree of progressive improvement/learning shown.

The questions for the final test/exam will be selected from the ones used for the practice.

Participation:

We expect students to attend all lectures, and all practice/tutorials. Attention, interaction and participation during these lectures is especially important because we will cover material in class that is not included in the reference readings. Also, the tutorials will not only be for review, practicing and answering questions, but new material and concepts will also be covered or explained.

The oreintative expected distribution of times for these different types of learning activities is such as the following:

Learning Activity	**Weighting**	**Estimated time a student should dedicate to prepare for and participate in**
Lectures	16.0 %	20.0 hours
Discussions	8.0 %	10.0 hours
Exercises in class, Asynchronous sessions, Field Work	52.0 %	65.0 hours
Group work	12.0 %	15.0 hours
Individual studying	12.0 %	15.0 hours
TOTAL	100.0 %	125.0 hours

AI POLICY

Generative artificial intelligence (GenAI) tools may be used in this course for research, ideation, generating an outline, proofreading, grammar check, coding, generating diagrams or knowledge graphs and/or image generation, with appropriate acknowledgement.

GenAI can also be used for the Assignments and the practice of preparation of the Exam, but it will not be allowed during the final Exam.

Such use is encorauged with the goal of developing an informed critical perspective on potential uses and generated outputs, so the student is responsible for any errors or omissions and the validation of the outputs of GenAI. A clear lack of attention to this task could be taken into account negatively in the process of correcting and grading the work.

AI is a tool, but one that you need to acknowledge using. Failure to do so is in violation of academic honesty policies. Acknowledging the use of AI will not impact your grade.

Suggested format to acknowledge the use of generative AI tools:

"I acknowledge the use of [AI systems link] to [specify how you used generative AI]. The prompts used include [list of prompts]. The output of these prompts was used to [explain how you used the outputs in your work]".

If you have chosen not to include any AI generated content in your assignment, the following disclosure is recommended:

"No content generated by AI technologies has been used in this assignment".

DISCLAIMER

The following description of the material covered is tentative. An attempt will be made to cover all listed topics. However; the pace in the classes will depend on the group performance and the recent advances in the field.

PROGRAM

SESSION 1 (LIVE IN-PERSON)

INTRODUCTION TO THE COURSE (SYLLABUS)

Procedural Learning and RL motivation. Overview of contents and analysis of the approaches and the relevant issues in this field.

SESSION 2 (LIVE IN-PERSON)

RL INTRODUCTION

Building blocks of current RL algorithms and approaches.

Different convergent routes to current RL (from MPC, Markov Chains, Genetic algorithms, etc...).

RL BASIC CONCEPTS

Definition of intelligent agents and their types. Evaluative vs Instructive feedback. Associative vs Non-associative models.

Book Chapters: Reinforcement Learning: An Introduction; Chapter 1, Section 1.7 Early history of Reinforcement Learning Chapter 1, Section 1.3 Elements of Reinforcement Learning (See Bibliography)

SESSION 3 (LIVE IN-PERSON)

MULTI-ARMED BANDITS

Introduction to contextual bandits and its understanding as a basis for full RL.

Interesting "low-hanging fruits" practical examples for its direct application in some type of business problems.

Book Chapters: Reinforcement Learning: An Introduction; Chapter 2, Tabular Solution Methods (See Bibliography)

SESSION 4 (LIVE IN-PERSON)

GRAPHS, SEARCH, MDP's

The understanding of the search space and its representation and the possible dimensions of heuristic approaches for search, prediction and control. Introduction to Markov Decision Processes.

Review and apply concepts about MDP's.

Practical cases of MDP's. Intuition and analytical solutions (for simple cases). Understanding of techniques for its representation (backup diagrams).

DYNAMIC PROGRAMMING, CSP's, GAME THEORY

The iterative value function and the Generalized Policy Improvement techniques.

Book Chapters: Reinforcement Learning: An Introduction; Chapter 3, Tabular Solution Methods, Finite Markov Decision Processes Chapter 4, Tabular Solution Methods, Dynamic Programming (See Bibliography)

SESSION 5 (LIVE IN-PERSON)

MONTE CARLO METHODS [Assignment: WARM-UP ASSIGNMENT]

Explanation of Monte Carlo methods and the mathematical foundations behind the (extremely versatile in ML) Importance Sampling technique. The merge of these approaches with the TD ones: n-step bootstrapping.

Book Chapters: Reinforcement Learning: An Introduction; Chapter 5, Mote Carlo Methods, Importance Sampling (See Bibliography)

SESSION 6 (LIVE IN-PERSON)

TEMPORAL DIFFERENCES

The integration of the previous different concepts in the current cornerstone of RL (for finite-MDP-like problems). Bellman Optimality Equation.

Book Chapters: Reinforcement Learning: An Introduction; Chapter 6, Temporal-Difference Learning Chapter 7, n-step Bootstrapping (See Bibliography)

SESSION 7 (LIVE IN-PERSON)

A FIRST PRACTICE - INTEGRATION OF CONCEPTS

The Snake Game. Application of the principles studied to an initial problem. Comparison with the other possible solutions (harcoded, genetic algorithm, hamiltonian paths, etc). Live comparison and charting of all of them and discussion of pros and cons. Rationale behind the use of RL approaches.

SESSION 8 (LIVE IN-PERSON)

LEARNING AND PLANNING

A deeper comparative study of the characteristics and differences of model-based vs model-free methods.

Book Chapters: Reinforcement Learning: An Introduction; Chapter 8, Planning & Learning with tabular methods (See Bibliography)

SESSION 9 (LIVE IN-PERSON)

EVOLUTIONARY COMPUTATION [Assignment: ASSIGNMENT]

Genetic algorithms and beyond, Non-dominated multi-objective optimization, the Pareto frontier and NEAT.

Exploration of a sometimes considered independent field (genetic algorihtms and other non-derivative-based methods). Practical examples of their use in practical problems such as multi-objective optimization. Analysis of the non-dominated genetic algorithms (introduction to the concept of Pareto frontier). Exploration of Neuro-Evolution techniques and the current and future lines of research for connecting these types of solutions with the mainstream RL approaches.

SESSION 10 (LIVE IN-PERSON)

RL FRAMEWORKS

Overview of main RL Frameworks.

Comparison of some currently used RL frameworks (from OpenAI gym, stable baselines, etc to Ray and RLib). Pros, cons and requisites for their use.

SESSION 11 (LIVE IN-PERSON)

INTERMEDIATE PRACTICE

Analysis and comparison of different algorithmic methods for the training of these types of models.

SESSION 12 (LIVE IN-PERSON)

APPROXIMATION METHODS

DEEP-Q NETWORKS

The key change in the strategy: the calculus of approximative functions (for value, q(s,a) or policy functions). The main advantages of this approach. Focus in one of the main (most relevant in practice) approaches: ANN function approximators.

Book Chapters: Reinforcement Learning: An Introduction; Chapter 9, On-policy prediction with approximation. Section 9.7 Nonlinear Function Approximation: Artificial Neural Networks Chapter 10, Chapter 11 and Chapter 12 (Eligibility traces) (See Bibliography)

SESSION 13 (LIVE IN-PERSON)

POLICY GRADIENTS [Assignment: ASSIGNMENT]

Theory behind PGM's and the "Policy Gradient Theorem".

Book Chapters: Reinforcement Learning: An Introduction; Chapter 13: Policy Gradient Methods (See Bibliography)

SESSION 14 (LIVE IN-PERSON)

ACTOR-CRITIC

Definition and analysis of the actor-critic methods. The concept of "advantage". Main algorithms.

Book Chapters: Reinforcement Learning: An Introduction; Chapter 13, Section 13.5 Actor-critic methods (See Bibliography)

SESSION 15 (LIVE IN-PERSON)

PRACTICE REVIEW

Dissection and discussion of sample solutions. Exploration of main difficulties.

SESSION 16 (LIVE IN-PERSON)

PROBLEM APPROACH FRAMEWORK

Exhaustive analysis of a classical problem (The Travelling Salesman Problem) under all possible lines of solutions (from Christofides to genetic algorithm, ant-colony optimization and simple or complex Reinforcement Learning) Discussion of pros and cons and initial understanding of "When, Why and How" of their possible uses.

SESSION 17 (LIVE IN-PERSON)

DEEP RL PRACTICE [Assignment: ASSIGNMENT]

Connecting the dots between RL and approximation (ANN) functions. Application to a more complex learning problem. Comparison of results.

SESSION 18 (LIVE IN-PERSON)

SUMMARY RECAP

Recap session for all the concepts and algorithms introduced so far. Introductory extension to some new concepts (Rainbow algorithms, etc).

SESSION 19 (LIVE IN-PERSON)

RESEARCH PAPERS, INNOVATION TRENDS [Assignment: EXAMINATION PRACTICE. BE PREPARED TO ANSWER QUESTIONS ABOUT RL]

Study and discussion of some of the most relevant papers published in the field. This will include the new developments in Parametric Model Based RL, Off-line RL, Inverse RL, introduction to the novel field of IRL (learning an agent's objectives, values, or rewards by observing its behavior). Connection to related concepts of Behavioural Cloning, Imitation Learning and Teacher Agents, etc and a summary of new approaches (reward shaping, finite automata rewards, hierarchical RL...)

Analysis of obstacles and challenges in the field and in its practical application to business problems.

Book Chapters: Reinforcement Learning: An Introduction; Chapter 17: Frontiers (See Bibliography)

SESSION 20 (LIVE IN-PERSON)

MULTI-AGENT RL

Incursion in the multi-agent reinforcement learning (MARL) sub-field. Possible dynamics for the behavior of multiple learning agents that coexist in a shared environment. Extension (or generalization) of the basic principles to these type of complex models.

SESSION 21 (LIVE IN-PERSON)

RL APPLICATIONS [Assignment: GROUP ASSIGNMENT]

Exploration of business cases of practical application across the different industries.

SESSION 22 (LIVE IN-PERSON)

TOP CASES & COMPANIES

Company leaders in this field. Study of breakthrough examples (from AlphaGo, AlphaFold-2, Fusion Reactor Modeling, and beyond).

SESSION 23 (LIVE IN-PERSON)

TEST-EXAM

Concept summary review examination. Not to be considered as a final exam. Its score will be added to the rest of the evaluation items. No minimum passing grade required.

SESSION 24 (LIVE IN-PERSON)

GROUP PROJECTS PRESENTATIONS (A)

Presentations, discussion and Q&A of group projects.

SESSION 25 (LIVE IN-PERSON)

GROUP PROJECTS PRESENTATIONS (B), WRAP-UP

Presentations, discussion and Q&A of group projects.

EVALUATION CRITERIA

We will behave as professionals. This means that I expect you to come to class prepared to discuss as if this was a meeting in your company. This is a small group, so we will take advantage of it doing a lot of direct interaction. Come prepared to class and be inquisitive.

The followng table summarizes the Ongoing grading (maximum) for each of the sessions and assignments:

SESSION	LECTURE	Participation	I.Assignment	G.Assignment	Test/Exam	TOTAL
DRL_01	INTRODUCTION TO THE COURSE (SYLLABUS)	4				4
DRL_02	RL INTRODUCTION RL BASIC CONCEPTS	4				4
DRL_03	MULTI-ARMED BANDITS	4				4
DRL_05	MONTE CARLO METHODS [Assignment: WARM-UP ASSIGNMENT]	4	40			44
DRL_06	TEMPORAL DIFFERENCES	4				4
DRL_07	A FIRST PRACTICE - INTEGRATION OF CONCEPTS	4				4
DRL_08	LEARNING AND PLANNING	4				4
DRL_09	EVOLUTIONARY COMPUTATION	4				4
DRL_10	RL FRAMEWORKS	4				4
DRL_11	INTERMEDIATE PRACTICE	4				4
DRL_12	APPROXIMATION METHODS	4				4
DRL_13	POLICY GRADIENTS [Assignment: ASSIGNMENT]	4	40			44
DRL_14	ACTOR-CRITIC	4				4
DRL_15	PRACTICE REVIEW	4				4
DRL_16	PROBLEM APPROACH FRAMEWORK	4				4
DRL_17	DEEP RL PRACTICE [Assignment: ASSIGNMENT]	4	40			44
DRL_18	SUMMARY RECAP	4				4
DRL_19	MODEL-BASED, OFF-LINE, INVERSE RL RESEARCH PAPERS, INNOVATION TRENDS (A) [Assignment: EXAMINATION PRACTICE. BE PREPARED TO ANSWER QUESTIONS ABOUT RL]	4	55			59
DRL_20	MULTI-AGENT RL	4				4
DRL_21	RL APPLICATIONS [Assignment: GROUP ASSIGNMENT]	4		100		104
DRL_22	TOP CASES & COMPANIES	4				4
DRL_23	TEST-EXAM	4			75	79
DRL_24	GROUP PROJECTS PRESENTATIONS (A)	4		50		54
DRL_25	GROUP PROJECTS PRESENTATIONS (B), WRAP-UP	4				4

Summary of Criteria:

CRITERIA	POINTS	PERCENTAGE
Participation	100	20%
I.Assignment	175	35%
G.Assignment	150	30%
Test/Exam	75	15%
TOTAL	500	100%

criteria	**percentage**	**Learning Objectives**	**Comments**
Final Exam	15 %		
Individual Assignments	35 %		
Group Assignment	20 %		
Group Presentation	10 %		
Participation	20 %		

RE-SIT / RE-TAKE POLICY

Each student has four chances to pass any given course distributed over two consecutive academic years: ordinary call exams and extraordinary call exams (re-sits) in June/July.

Students who do not comply with the 80% attendance rule during the semester will fail both calls for this Academic Year (ordinary and extraordinary) and have to re-take the course (i.e., re-enroll) in the next Academic Year.

Evaluation criteria:

- Students failing the course in the ordinary call (during the semester) will have to re-sit the exam in June / July (except those not complying with the attendance rule, who will not have that opportunity and must directly re-enroll in the course on the next Academic Year).
- The extraordinary call exams in June / July (re-sits) require your physical presence at the campus you are enrolled in (Segovia or Madrid). There is no possibility to change the date, location or format of any exam, under any circumstances. Dates and location of the June / July re-sit exams will be posted in advance. Please take this into consideration when planning your summer.
- The June / July re-sit exam will consist of a comprehensive exam. Your final grade for the course will depend on the performance in this exam only; continuous evaluation over the semester will not be taken into consideration. Students will have to achieve the minimum passing grade of 5 and can obtain a maximum grade of 8.0 (out of 10.0) – i.e., “notable” in the in the re-sit exam.
- Retakers: Students who failed the subject on a previous Academic Year and are now re-enrolled as re-takers in a course will be needed to check the syllabus of the assigned professor, as well as contact the professor individually, regarding the specific evaluation criteria for them as retakers in the course during that semester (ordinary call of that Academic Year). The maximum grade that may be obtained in the retake exam (3rd call) is 10.0.

After ordinary and extraordinary call exams are graded by the professor, you will have a possibility to attend a review session for that exam and course grade. Please be available to attend the session in order to clarify any concerns you might have regarding your exam. Your professor will inform you about the time and place of the review session. Any grade appeals require that the student attended the review session prior to appealing.

- Students failing more than 18 ECTS credits in the academic year after the June-July re-sits will be asked to leave the Program. Please, make sure to prepare yourself well for the exams in order to pass your failed subjects.
- In case you decide to skip the opportunity to re-sit for an exam during the June / July extraordinary call, you will need to enroll in that course again for the next Academic Year as a re-taker and pay the corresponding extra cost. As you know, students have a total of four allowed calls to pass a given subject or course, in order to remain in the program.

BIBLIOGRAPHY

Compulsory

- Richard S. Sutton and Andrew G. Barto. (2018). *Reinforcement Learning: An Introduction.* 2nd edition. AbeBooks. ISBN 9780262039246 (Digital)

This book covers the ground essential to understanding much of the work out there published on RL. Could be hard going for the students without a relatively solid mathematical background (especially the Bellman equations and monte-carlo sections) but it is worth it. It is a must-read for anyone doing graduate research in reinforcement learning in order to get to grips with these matters. It talks about most important topics to get you started in the required direction.

BEHAVIOR RULES

Please, check the University's Code of Conduct here. The Program Director may provide further indications.

ATTENDANCE POLICY

Please, check the University's Attendance Policy here. The Program Director may provide further indications.

ETHICAL POLICY

Please, check the University's Ethics Code here. The Program Director may provide further indications.

FROM DATA TO DECISION MAKING IN MARKETING

Bachelor in Data and Business Analytics BDBA SEP-2024
FDTDM-DBA.1C.4.M.A

Area Data Science
Number of sessions: 30
Academic year: 24-25
Degree course: FOURTH
Number of credits: 6.0
Semester: 1º
Category: OPTIONAL
Language: English

Professor: **MARCUS JOSEPH SHERWIN**

E-mail: mjoseph@faculty.ie.edu

MARCUS JOSEPH SHERWIN

mjoseph@faculty.ie.edu

Marcus Sherwin holds a Bachelor in History and Classical Studies from University College Dublin, and an MBA in Business from Universidad Carlos III.

He has over 10 years experience working in the Tech sector with leading multi national companies on their digital media strategies.

- Criteo, Account Strategist: Spearheaded innovative performance marketing strategies for multinational clients in Retail & Travel, driving significant growth through data-driven campaigns.
- Yieldr, Key Key Account Manager : SaaS integrations within the Aviation sector, advising on revenue management and marketing, significantly enhancing operational efficiencies and profitability.
- TikTok Brand Partnership Manager: Developed and executed pioneering fintech marketing strategies on TikTok, achieving substantial audience engagement and brand growth at scale.
- LinkedIn: Currently EMEA Lead Enterprise Account Director: directs strategic B2B client partnerships across the region for global clients within LinkedIn marketing solutions enterprise division, leveraging LinkedIn's network to foster targeted engagement and long-term business success.

Office Hours

Office hours will be on request. Please contact at:

mjoseph@faculty.ie.edu

Professor: **ROSARIO PERICUESTA CAMACHO**

E-mail: rpericuesta@faculty.ie.edu

ROSARIO PERICUESTA CAMACHO

E-mail: rpericuesta@faculty.ie.edu

Charo Pericuesta holds a Bachelor in Economics from the Universidad de Salamanca, a Bachelor in Market Research from the Universidad Autónoma de Madrid and a Master in Marketing and Sales Management from ESIC University in Madrid.

She has been more than a decade in Nielseniq, advising multinational companies in their strategy of innovation of their product portfolio using consumer data analysis.

Prior to that she worked:

- In the consumer insights department of Mondelez (Kraft) developing research plans to explore the different marketing initiatives of the company and using different market research techniques to understand the consumer behaviour and support decision making for the strategy of the brand;
- In United Planet in Boston as Marketing Project Manager;
- In Research International as Market Research Executive being seconded to the Chicago Office;
- In Russell Bedford International in London as Marketing Assistant.

Office Hours

Office hours will be on request. Please contact at:

rpericuesta@faculty.ie.edu

PREREQUISITES

No specific academic background required. Passion to learn.This course is particularly useful for those interested in pursuing marketing and marketing research related careers.

SUBJECT DESCRIPTION

Marketing professionals are nowadays exposed to an infinite number of data arising from an ever increasing number of sources. This generates an unpararel opportunity to understand consumer behavior but only to the extent that those professionals are able to correctly read and interpret those data.

This course provides an overview of the sources of information that Marketing teams are most exposed to and how to analyze and interpret such information to identify and solve marketing challenges.

LEARNING OBJECTIVES

- Identify the sources of information most used in Marketing.
- Learn to interpret the information gathered from those sources
- Learn to build a story telling from the data gathered by putting together a report which will be used as the basis for decision making

- Have a solid understanding of what is needed to create a digital marketing plan.
- Learn how to measure the effectivness of digital marketing campaigns.

TEACHING METHODOLOGY

The course will be divided into 30 sessions.

Each session will consist of synchronous and will have a theoretical and practical component. It will combine live lectures, discussions, case studies and a final presentation assigment.

Most of the sessions will have a focus on real applications of the theory we are covering.
Bringing your laptop is mandatory to all sessions, although its use (or not) will be decided by the professor.

Students are expected to create and execute a marketing plan targeting to specific audience to promote their product/service. Students will need to apply what they are learning not only to their group projects but also to the broader real-world context.

There will be a brief reading list included also some articles and recommended short Pod casts which links will be provided to access on class notes.

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. Professor's main role is to lead and guide students to achieve the learning objectives of the course. This is done by engaging in a diverse range of teaching techniques and different types of learning activities such as the following:

Learning Activity	**Weighting**	**Estimated time a student should dedicate to prepare for and participate in**
Lectures	6.7 %	10.0 hours
Discussions	6.7 %	10.0 hours
Exercises in class, Asynchronous sessions, Field Work	20.0 %	30.0 hours
Group work	46.7 %	70.0 hours
Individual studying	20.0 %	30.0 hours
TOTAL	100.0 %	150.0 hours

PROGRAM

SESSION 1 (LIVE IN-PERSON)

SESSION 1 (MARCUS)

Course Intro

Introducing Digital - Marketing landscape, Key players in the space.

SESSION 2 (LIVE IN-PERSON)

SESSION 2 (CHARO)

Introduction to Marketing Research

- The marketing research process

- Research problem definition: typical bussiness questions

SESSION 3 (LIVE IN-PERSON)

SESSION 3 (MARCUS)

Your marketing strategy for your startup

Three options, B2C product, B2B product or service,

Resources will be provided on how to research your idea, in season 3, there will be a brief 5 minute presentation on why you chose the product/service, what is your thought process around the decision.

SESSION 4 (LIVE IN-PERSON)

SESSION 4 (CHARO)

Introduction to Story Telling

- The Minto Pyramid Principle
- How to write Headlines
- How to write Summaries

SESSION 5 (LIVE IN-PERSON)

SESSION 5 (MARCUS)

Your company vision & mission statement

Who is your audience, how are you servicing them, how will you target them.

This session will be around Qualitative info, writing your value proposition.

SESSION 6 (LIVE IN-PERSON)

SESSION 6 (CHARO):

Decision making using Cualitative Research: Focus groups and In-depth interviewing

SESSION 7 (LIVE IN-PERSON)

SESSION 7 (MARCUS)

Focus groups validating your idea

Focus solutions:

- Focus groups, how can you find users of the B2C or B2B service to validate your idea

SESSION 8 (LIVE IN-PERSON)

SESSION 8 (CHARO)

Decision making using Social Media and Mystery Shopper

SESSION 9 (LIVE IN-PERSON)

Session 9 (MARCUS)

Secondary sources:

- Competitor research, who is the leader in your industry, what gaps are there in the market:

- Survey analysis: Can you validate your audience by survey data.

SESSION 10 (LIVE IN-PERSON)

SESSION 10 (CHARO)
Decision making using Cuantitative Research: Surveys

SESSION 11 (LIVE IN-PERSON)

SESSION 11 (MARCUS)
Creating an ideal buyer
Who is this person
What do we know about them ?
How are we going to find them ?
Here we will look : Hubspot and how you can use it as the foundation for Marketing efforts.

SESSION 12 (LIVE IN-PERSON)

SESSION 12 (CHARO)
Practice: Cualitative and Cuantitative Research

SESSION 13 (LIVE IN-PERSON)

SESSION 13 (MARCUS)
Building a marketing funnel:
What are the key steps

- Awareness key KPIs
- Consideration what are the core KPIs
- Lower funnel KPIs

SESSION 14 (LIVE IN-PERSON)

Syndicated sources of secondary data: Retail and Purchase Panel
Decision making using information derived from individuals or households on their buying behavior

SESSION 15 (LIVE IN-PERSON)

SESSION 15 (MARCUS)
Marketing to your audience and how to do it per platform:
TikTok overview
Google Ad words/Youtube

SESSION 16 (LIVE IN-PERSON)

SESSION 16 (CHARO)
Data and Brand Growth:
Double jeopardy law

Pareto’s Law
The duplication of purchase law
Natural Monopoly law

SESSION 17 (LIVE IN-PERSON)

Session 17 (MARCUS)
Marketing to your audience Social platforms part 2
LinkedIn overview
Facebook/Instagram overview

SESSION 18 (LIVE IN-PERSON)

SESSION 18 (CHARO)
Understanding Price to improve Decision Making

SESSION 19 (LIVE IN-PERSON)

SESSION 19 (MARCUS)
Positioning digital on platforms
Competitors pricing: premium, mid level , mass markets.
Organic vs Paid content

SESSION 20 (LIVE IN-PERSON)

SESSION 20 (CHARO)
The use of AI in Market research

SESSION 21 (LIVE IN-PERSON)

Session 21 (MARCUS)
Getting set up
Linkedin ad account
TikTok Ad account
Implementing conversion tracking
Setting up your audiences lookalike audiences, retargeting audiences

SESSION 22 (LIVE IN-PERSON)

SESION 22: The use of Neuroscience in Market Research

SESSION 23 (LIVE IN-PERSON)

SESSION 23 (MARCUS)
User Identity.
Identity cookies, md5, walled gardens vs the open internet.

(Last 15 minutes) Building out your marketing plan, analysing, what platforms you will find your audience.

SESSION 24 (LIVE IN-PERSON)

SESSION 24 (CHARO)

Diagnostic Consulting: The use of different Analytical tools in Market Research (Correlations, Quadmaps, Brand positioning maps, TURF)

SESSION 25 (LIVE IN-PERSON)

Session 25 (MARCUS)

1p 2p 3p data GDBR & Data privacy, measurement platforms, Dataroma, Google data hub.

Google Analytics

Analyzing attribution

SESSION 26 (LIVE IN-PERSON)

Session 26 (CHARO)

How Market Research can help brands to innovate: Successful stories

SESSION 27 (LIVE IN-PERSON)

Session 27 (MARCUS)

Best D2C examples

Understanding campaign performance, live demos

What can be done to improve performance, creative, bid or messaging.

SESSION 28 (LIVE IN-PERSON)

Session 28 (CHARO)

Presentation of your marketing plan, where you will invest your seed capital on what channels, what are your expected returns, how will you allocate what & how much.

SESSION 29 (LIVE IN-PERSON)

SESSION 29 (MARCUS)

Presentation of your marketing plan, where you will invest your seed capital on what channels, what are your expected returns, how will you allocate what & how much.

SESSION 30 (LIVE IN-PERSON)

SESSION 30 (CHARO)

Exam

EVALUATION CRITERIA

criteria	percentage	Learning Objectives	Comments

Final Exam	25 %		
Class Participation	25 %		
Individual work	20 %		
Individual presentation	30 %		

RE-SIT / RE-TAKE POLICY

AI POLICY

Specific use cases of GenAI are encouraged

Generative artificial intelligence (GenAI) tools may be used in this course for e.g. research, ideation, generating an outline, proofreading, grammar check, coding, image generation, with appropriate acknowledgement. GenAI may not be used for e.g. assignments, group submissions, exams. If a student is found to have used AI-generated content inappropriately, it will be considered academic misconduct, and the student might fail the respective assignment or the course.

If you are in doubt as to whether you are using GenAI tools appropriately in this course, I encourage you to discuss your situation with us.

BIBLIOGRAPHY

Recommended

- Daniel Nunan, David F. Birks, Naresh K. Malhotra. *Marketing Research. Applied Insight..* Pearson Education Limited. ISBN 9781292308722 (Printed)
- Barbara Minto. *The Pyramid Principle: Logic in Writing and Thinking.* Pearson Education Limited. ISBN 9781292372266 (Printed)
- Byron Sharp. *How Brands grow, what marketers don't know.* OUP Australia & New Zealand. ISBN 9780195573565 (Printed)

BEHAVIOR RULES

Please, check the University's Code of Conduct here. The Program Director may provide further indications.

ATTENDANCE POLICY

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ETHICAL POLICY

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Please refer to University's Ethics Code

INTRODUCTION TO HEALTHCARE FOR DATA SCIENCE

Bachelor in Data and Business Analytics BDBA SEP-2024
IHCDS-DBA.1C.4.M.A

Area Data Science
Number of sessions: 25
Academic year: 24-25
Degree course: FOURTH
Number of credits: 5.0
Semester: 1º
Category: OPTIONAL
Language: English

Professor: **ANA MARIA GLAVAN**

E-mail: aglavan@faculty.ie.edu

Ana Maria holds a Ph.D. in Mathematical Engineering from Carlos III University of Madrid. She taught different topics of Mathematics at Carlos III University, University of Navarra and IE University. Her actual research interests are on mathematical analysis and numerical simulations of biological and medical systems, and new trends in the fintech industry.

Academic Qualifications

- Ph.D. in Mathematical Engineering, Carlos III University, 2016
- Master in Biosensors for Environmental Monitoring, Perpignan University and Bucharest University, 2003
- B.Sc. in Chemistry, Bucharest University, 2001

Academic Experience

- Adjunct Professor, IE Business School, 2016-present
- Invited Professor, Carlos III University, Ph.D. Programme in Mathematical Engineering, 2016-2017
- Assistant Professor, University of Navarra, 2010-2012
- Teaching Assistant, Carlos III University, 2004-2009
- Research Assistant, BIOMEM, Centre de Phytopharmacie, 2002-2003

Fields of Interest

- Computational methods in Biology and Finance
- Applied and computational mathematics
- Numerical modelling algorithms

Office Hours

Office hours will be on request. Please contact at:

aglavan@faculty.ie.edu

PREREQUISITES

The course is designed to introduce the healthcare system and to help identifying the opportunities of using data science for improving and personalizing it. No previous experience is needed.

SUBJECT DESCRIPTION

Introduction to Healthcare for Data Science course provides an interdisciplinary environment designed for students interested in healthcare, technology, and data science.

This course provides an in-depth overview of the healthcare ecosystem, the economic tools and concepts used in the analysis of healthcare system, and identifies the opportunities and challenges for data science applications in this booming sector.

LEARNING OBJECTIVES

The course is designed for students interested in Life Sciences and Biomedical disciplines, and its main objective is to see how they can use new technologies and data science to improve the quality of healthcare services.

Specifically, this course is designed to achieve several objectives:

- Describe the differences between public, private and non-profit health organizations
- Recognize the stakeholders in the healthcare system, their roles and responsibilities
- Identify the main challenges of the healthcare system
- Understand the structure and functions of pharmaceutical entities, the drug discovery process and future trends in the pharmaceutical sector
- Overview the values and applications of bioengineering in solving actual health issues
- Understand the impact of biomedical research in modern healthcare and identify the challenges faced by scientists in the field
- Examine in detail the Economics theories applied in healthcare, and analyze the economic implications of actual healthcare reforms
- Explain the difference between private insurance plans and public insurance programs
- Identify the professionals delivering support and proficiency in different facets of the pharmaceutical and healthcare businesses
- Understand the essential concepts, uses and innovations in biotechnology and health technologies
- Analyze how the actual status of the healthcare industry can be improved through the use of data science and analytics
- Investigate the actual industry environment covering personalized and precision medicine
- Examine and improve groundbreaking business models for health tech startups in creating

value-based healthcare systems

TEACHING METHODOLOGY

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. Professor's main role is to lead and guide students to achieve the learning objectives of the course. This is done by engaging in a diverse range of teaching techniques and different types of learning activities such as the following:

In today's world, generative artificial intelligence (GenAI) is changing how we work, study and, in general, how we get things done. However, in the context of this course, the use of GenAI is not permitted, unless it is otherwise stated by the instructor. The use of GenAI tools would jeopardize the students' ability to acquire fundamental knowledge or skills of this course.

If a student is found to have used AI-generated content for any form of assessment, it will be considered academic misconduct, and the student might fail the respective assignment or the course.

Learning Activity	Weighting	Estimated time a student should dedicate to prepare for and participate in
Lectures	9.6 %	12.0 hours
Discussions	6.0 %	7.5 hours
Exercises in class, Asynchronous sessions, Field Work	12.0 %	15.0 hours
Group work	18.4 %	23.0 hours
Individual studying	54.0 %	67.5 hours
TOTAL	100.0 %	125.0 hours

AI POLICY

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PROGRAM

SESSION 1 (LIVE IN-PERSON)

Overview of the Healthcare Industry:

- Basic terminology
- Introduction to healthcare systems: structure and stakeholders
- Public vs private health systems
- Discussion about characteristics of healthcare systems in different countries
- Case studies

SESSION 2 (LIVE IN-PERSON)

Overview of the Healthcare Industry:

- Basic terminology
- Introduction to healthcare systems: structure and stakeholders
- Public vs private health systems
- Discussion about characteristics of healthcare systems in different countries
- Case studies

SESSION 3 (LIVE IN-PERSON)

Overview of the Healthcare Industry:

- Basic terminology
- Introduction to healthcare systems: structure and stakeholders
- Public vs private health systems
- Discussion about characteristics of healthcare systems in different countries
- Case studies

SESSION 4 (LIVE IN-PERSON)

Overview of the Healthcare Industry:

- Basic terminology
- Introduction to healthcare systems: structure and stakeholders
- Public vs private health systems
- Discussion about characteristics of healthcare systems in different countries
- Case studies

SESSION 5 (LIVE IN-PERSON)

Overview of the Healthcare Industry:

- Basic terminology
- Introduction to healthcare systems: structure and stakeholders
- Public vs private health systems
- Discussion about characteristics of healthcare systems in different countries
- Case studies

SESSION 6 (LIVE IN-PERSON)

Anatomy, Physiology, and Pathology

SESSION 7 (LIVE IN-PERSON)

Healthcare Services and Patient Care:

- Health overview: from hospitals to home care
- Patient interaction: ethics and communication
- Medical records and documentation

SESSION 8 (LIVE IN-PERSON)

Healthcare Services and Patient Care:

- Health overview: from hospitals to home care
- Patient interaction: ethics and communication
- Medical records and documentation

SESSION 9 (LIVE IN-PERSON)

Healthcare Economics:

- Health economics
- Insurtech
- Operations management in healthcare: tradeoffs between costs, patients experience, and clinical quality
- Operations management in healthcare: pricing of procedures and their margins

SESSION 10 (LIVE IN-PERSON)

Healthcare Economics:

- Health economics
- Insurtech
- Operations management in healthcare: tradeoffs between costs, patients experience, and clinical quality
- Operations management in healthcare: pricing of procedures and their margins

Practical Case: CVS Health: Promoting Drug Adherence (HBS 515010-PDF-ENG)

SESSION 11 (LIVE IN-PERSON)

Specialized Areas of Healthcare:

- Pediatrics and Geriatrics
- Radiology and Imaging
- Infections diseases
- Surgery basics

SESSION 12 (LIVE IN-PERSON)

Implementing Medical Knowledge in Patient Care::

- Nutrition and wellness
- Mental health
- Ethical dilemmas in healthcare

SESSION 13 (LIVE IN-PERSON)

Quiz after Module 1 and Final Project Task Description

SESSION 14 (LIVE IN-PERSON)

Introduction to Pharmaceutical sector. Case study

SESSION 15 (LIVE IN-PERSON)

Introduction to Bioengineering (challenges and applications)

Practical Case: Serum Institute of India: COVID-19 Vaccine Pricing (HBS W20983-PDF-ENG)

SESSION 16 (LIVE IN-PERSON)

The importance of biomedical research. Case study

SESSION 17 (LIVE IN-PERSON)

Biotech and health technologies sectors

SESSION 18 (LIVE IN-PERSON)

Health Tech startups landscape overview: opportunities for data science. Case study

Practical Case: Theranos: How Did a $9 Billion Health Tech Startup End Up DOA? (HBS B5971-PDF-ENG)

SESSION 19 (LIVE IN-PERSON)

Health Tech startups landscape overview: opportunities for data science. Case study

SESSION 20 (LIVE IN-PERSON)

Improving healthcare quality – characteristics and new strategies. Personalized medicine

Practical Case: DayTwo: Going to Market with Gut Microbiome (HBS 519010-PDF-ENG)

SESSION 21 (LIVE IN-PERSON)

Improving healthcare quality – characteristics and new strategies. Personalized medicine

SESSION 22 (LIVE IN-PERSON)

Future Trends and Challenges in Health Tech. New business models

Practical Case: Good Shepherd Pharmacy and RemediChain: Will this Blockchain Deliver Donated Drugs to Needy Patients? (HBS NA0613-PDF-ENG)

SESSION 23 (LIVE IN-PERSON)

Group Presentations Part I

SESSION 24 (LIVE IN-PERSON)

Group Presentations Part II

SESSION 25 (LIVE IN-PERSON)

Final Exam

EVALUATION CRITERIA

The final grade of the course will be based on both individual and group work and it will be weighted in the following way:

- **Class Participation 10%**
- **Case Studies 20%**
- **Intermediate Quiz 20%**
- **Final Group Presentation 25%**
- **Final Exam 25%**

Case Studies represent a fundamental learning mechanism and are also crucial for the well-functioning of the class. The pre-class preparation and in-class participation will make the course pleasant and intellectually stimulating.

Final Presentation is a group presentation where the students present their proposal for the creation of a Tech company delivering service to the healthcare industry.

The Intermediate Quiz and Final Exam will comprise both theoretical and applications of the topics covered during the course.

criteria	percentage	Learning Objectives	Comments
Final Exam	25 %		
Intermediate tests	20 %		
Group Work	20 %		Case Studies
Group Presentation	25 %		
Class Participation	10 %		Class Discussions

RE-SIT / RE-TAKE POLICY

Grading for retakes will be subject to the following rules:

1. Those students who failed the subject in the first regular period will have to do a retake in July (except those not complying with attendance rules who are banned from this possibility).
2. Dates and location of the July retakes will be posted in advance and will not be changed. Please take this into consideration when planning your summer.
3. The maximum grade that a student may obtain in the 2nd exam session is 8 out of 10.

BIBLIOGRAPHY

Recommended

- Dakota Mitchell; Lee Haroun. *Introduction to Health Care.* 4th. ISBN 1305575075 (Digital)

- Christensen, Clayton M., Jerome H. Grossman M.D., and Jason Hwang M.D.. *The Innovator's Prescription: A Disruptive Solution for Health Care.* McGraw-Hill. ISBN 0071592083 (Digital)

BEHAVIOR RULES

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ATTENDANCE POLICY

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ETHICAL POLICY

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MACHINE LEARNING FOR HEALTHCARE

Bachelor in Data and Business Analytics BDBA SEP-2024
MLFH-DBA.1C.4.M.A

Area Data Science
Number of sessions: 20
Academic year: 24-25
Degree course: FOURTH
Number of credits: 4.0
Semester: 1º
Category: OPTIONAL
Language: English

Professor: **IVÁN MAURICIO DÍAZ LEIVA**

E-mail: idiazl@faculty.ie.edu

Ivan Diaz, Senior Analytics Manager at Kearney Analytics since May 2022, has 14 years of international experience in product & project management tohether with strategy consulting at prominent firms such as Kearney, BCG, Bain & Co, and Deloitte S&O. At Kearney he is the lead for the Data & Analytics transformation hub, and during his tenure at BCG GAMMA, Ivan served as the Head of the Iberia node, supervising 18 analysts across various disciplines, including Data Engineering, Data Science, Geo-Analytics, and Software Development. He holds an MSc in Business Analytics and Big Data from IE Business School (Dean's list) and an MBA (Cum Laude) from Stellenbosch Business School, along with certifications in PRINCE 2, Scrum Master, and Product Owner.

Since November 2018, Ivan has been sharing his expertise as an instructor for Data Visualization, Communication & Storytelling with Data courses at IE University's Master's in Business Analytics and Big Data, Bachelor's in Business Analytics and Big Data, and the ieXL BootCamp. His teaching has been recognized with academic awards for all three cohorts.

Few selected software development projects:

- Retail
  - Development and deployment of a cross country, harmonized software solution, for Trade Terms & Promo performance improvement (Azure, Databricks, Delta Lake, Power BI)
- Oil & Gas (Retail)
  - Software development and deployment of a Personalization Engine for fuel and convenience store retailers. Managing a cross-regional team of 6 Developers, including DevOps, Back & Front Ends, and Data Science and Engineering Modules (AWS, Spark, Docker, Django, React)
- Infrastructure
  - Development and deployment of a data-intensive platform for Project Planning optimization and prediction of large infrastructure project deviation for a large multinational construction firm (AWS, Spark, Django, React)

- Pharma
- Developed of a SaaS Control Tower solution, for the coordination and planning of Pharmaceutical studies across Europe (AWS, Postgres, Python, Tableau)

Office Hours

Office hours will be on request. Please contact at:

1. MS Teams channels set up for this purpose
2. idiazl@faculty.ie.edu

PREREQUISITES

Students should have good understanding of Machine Learning methods, and follow accompanying coure of the Healthcare track e.g. Healthcare primer, Data in Healtcare, etc.

- Very good understanding of Python, and ML f/ works such as Scikit learn libraries is expected

SUBJECT DESCRIPTION

The Healthcare sector is undergoing a major transformation with the integration of advanced Machine Learning techniques. However, there are significant challenges that come with the implementation of these technologies, particularly in **ensuring they are responsible, explainable, and ethically sound.** As part of the HEaltchare track, this course aims to practice and apply Machine Learning skills tailored to healthcare specific analytics, emphasizing the **critical aspects of Responsible and Explainable AI, as well as performance measurement and experimentation.**

In today's digital healthcare landscape, **it is not enough to merely apply Machine Learning algorithms to complex health-related issues.** It is crucial to ensure that these applications are **ethically designed, transparent, and can be audited for performance and bias.** This course aims to address this need, combining a **strong technical** curriculum with **ethical considerations and deeep understanding of performance metrics.**

This course will provide insights into complex topics like ensemble methods, survival analysis, and time-series analysis while also delving into ethical implications and responsible conduct in AI applications. **The integration of healthcare use-cases ensures a context-rich understanding.**

As healthcare organizations transition toward AI-augmented decision-making systems, the need for experts skilled in responsible AI and ML performance tracking is paramount. This course provides the foundational framework for achieving these complex goals, blending technical expertise with ethical diligence.

Caveat emptor: Faithfully adhering to the agile spirit, this syllabus will be modified and adapted to the specific requirements, needs, and pace of the class. Lead this journey, provide feedback, and let's get the most out of this experience together!

LEARNING OBJECTIVES

The course is designed for final-year undergraduate students specializing in Data and Business Analytics, who already possess a good understanding of Machine Learning and healthcare fundamentals (through other coureses in this track). Upon completion, you will be able to:

- Develop a comprehensive understanding of advanced Machine Learning techniques as applied to healthcare
- Understand and implement Responsible AI practices, focusing on transparency, fairness, and ethics in Machine Learning models
- Master the techniques of performance measurement in Machine Learning, including setting up experiments and tracking ML model performance
- Implement real-world healthcare use-cases through hands-on projects, reinforcing practical applications of the learned material
- Engage in the ethical considerations and societal implications of applying Machine Learning in healthcare, fostering a holistic approach to problem-solving

Disclaimer: The following description of the material covered is tentative. An attempt will be made to cover all listed topics

TEACHING METHODOLOGY

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Learning Activity	Weighting	Estimated time a student should dedicate to prepare for and participate in
Lectures	20.0 %	20.0 hours
Discussions	10.0 %	10.0 hours
Exercises in class, Asynchronous sessions, Field Work	10.0 %	10.0 hours
Group work	30.0 %	30.0 hours
Individual studying	30.0 %	30.0 hours
TOTAL	100.0 %	100.0 hours

AI POLICY

In this course, the use of generative artificial intelligence (GenAI) is encouraged, with the goal of developing an informed critical perspective on potential uses and generated outputs.

However, be aware of the limits of GenAI in its current state of development:

- ·If you provide minimum effort prompts, you will get low quality results. You will need to refine your prompts to get good outcomes. This will take work.
- ·Don't take ChatGPT's or any GenAI's output at face value. Assume it is wrong unless you either know the answer or can cross-check it with another source. You are responsible for any errors or omissions. You will be able to validate the outputs of GenAI for topics you understand.
- ·AI is a tool, but one that you need to acknowledge using. Failure to do so is in violation of academic honesty policies. Acknowledging the use of AI will not impact your grade.

Suggested format to acknowledge the use of generative AI tools:

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If you have chosen not to include any AI generated content in your assignment, the following disclosure is recommended:

No content generated by AI technologies has been used in this assignment.

PROGRAM

SESSION 1 (LIVE IN-PERSON)

Introduction and Overview

- Role of Machine Learning in Healthcare
- Clinical challenges
- Overview of Responsible AI
- The importance of developing and intuition for basic statistical concepts

SESSION 2 (LIVE IN-PERSON)

Introduction and Overview

- Role of Machine Learning in Healthcare
- Clinical challenges
- Overview of Responsible AI
- The importance of developing and intuition for basic statistical concepts

SESSION 3 (LIVE IN-PERSON)

Introduction and Overview

- First individual assignment
- The Diagnosis (Classify), Prognosis (Predict), Treatment (Optimization) framework
- Use case: Risk of Opioid addiction
- Clinical Data sources

SESSION 4 (LIVE IN-PERSON)

Introduction and Overview

- First individual assignment
- The Diagnosis (Classify), Prognosis (Predict), Treatment (Optimization) framework
- Use case: Risk of Opioid addiction
- Clinical Data sources

SESSION 5 (LIVE IN-PERSON)

The Machine Learning Cycle in Healthcare

- Framing the problem

- Having and end to end perspective of the ML solution
- Metrics that matter - Clinical vs. ML objectives
- Responsible AI - Clean code

Use Case: Opiod crisis in US end-to-end Classification execise

SESSION 6 (LIVE IN-PERSON)

The Machine Learning Cycle in Healthcare

- Framing the problem
- Having and end to end perspective of the ML solution
- Metrics that matter - Clinical vs. ML objectives
- Responsible AI - Clean code

Use Case: Opiod crisis in US end-to-end Classification execise

SESSION 7 (LIVE IN-PERSON)

Metrics that matter - deep dive

- Sensitivity, Specificity and Evalution metrics
- Accuracy in conditional probability
- Sensitivity, Specificity and Prevalence
- PPV, NPV
- Confusion Matrix
- Calculating PPV in terms of Sensitivity
- ROC and Thresholds
- Interpreting confidence intervals

SESSION 8 (LIVE IN-PERSON)

Metrics that matter - deep dive

- Sensitivity, Specificity and Evalution metrics
- Accuracy in conditional probability
- Sensitivity, Specificity and Prevalence
- PPV, NPV
- Confusion Matrix
- Calculating PPV in terms of Sensitivity
- ROC and Thresholds
- Interpreting confidence intervals

SESSION 9 (LIVE IN-PERSON)

Machine learning for patient stratification and classification I

- Stratification through unsupervised learning
    - Visualization of time series trends partitioned by outcome
    - k-means clustering

Use Case: Stratification and classification, for decision support in the intensive care unit

SESSION 10 (LIVE IN-PERSON)

Machine learning for patient stratification and classification I

- Stratification through unsupervised learning
    - Visualization of time series trends partitioned by outcome
    - k-means clustering

Use Case: Stratification and classification, for decision support in the intensive care unit

SESSION 11 (LIVE IN-PERSON)

Machine learning for patient stratification and classification II

- Patient classification through supervised learning
    - k-nearest neighbors
    - Logistic regression
    - Decision trees
    - Random forest
    - Group Assignmnet guidelines

Use Case: Stratification and classification, for decision support in the intensive care unit

SESSION 12 (LIVE IN-PERSON)

Machine Learning for Clinical Predictive Analytics

- Clinical classification and/or clustering tasks
- Unsupervised learning methods for clustering and visualization
- Bayes theorem
- Experiment tracking with Weight and Bias

Use Case: Breast Cancer Wisconsin (Diagnostic) Database, and pre-extracted ICU data from PhysioNet Database

SESSION 13 (LIVE IN-PERSON)

Machine Learning for Clinical Predictive Analytics

- Clinical classification and/or clustering tasks
- Unsupervised learning methods for clustering and visualization
- Bayes theorem
- Experiment tracking with Weight and Bias

Use Case: Breast Cancer Wisconsin (Diagnostic) Database, and pre-extracted ICU data from PhysioNet Database

SESSION 14 (LIVE IN-PERSON)

Robust Predictive Models in Clinical Data - From Decision Trees to Random Forests, and SVMs

- Advantages and limitations
- Building and evaluate a machine learning model on ICU mortality
- Interpret the model results in clinical terms

Use Case: Predicting the ICU mortality using patient demographics and first laboratory tests (MIMIC III database)

SESSION 15 (LIVE IN-PERSON)

Robust Predictive Models in Clinical Data - From Decision Trees to Random Forests, and SVMs

- Advantages and limitations
- Building and evaluate a machine learning model on ICU mortality
- Interpret the model results in clinical terms

Use Case: Predicting the ICU mortality using patient demographics and first laboratory tests (MIMIC III database)

SESSION 16 (LIVE IN-PERSON)

Robust Predictive Models in Clinical Data - From Decision Trees to Random Forests, and SVMs

- Advantages and limitations
- Building and evaluate a machine learning model on ICU mortality
- Interpret the model results in clinical terms

Use Case: Predicting the ICU mortality using patient demographics and first laboratory tests (MIMIC III database)

SESSION 17 (LIVE IN-PERSON)

Survival models, and Time series for clinical Prognosis

- Survival models and functions
- Time to event data
- Chain rules for conditional probabilities
- Kaplan Meier Estimate
- Hazard functions and relative risk

Use Cases:

- Stokes
- Heart attack
- Censor data

SESSION 18 (LIVE IN-PERSON)

Treatment effect estimation

- Analyze data from a randomized control trials
- Interpreting multivariate models
- Evaluating treatment effect models
- interpreting ML models for treatment effect estimation.
    - Average tratment effect
    - Individualized treatment effect

SESSION 19 (LIVE IN-PERSON)

Treatment effect estimation

- Analyze data from a randomized control trials
- Interpreting multivariate models
- Evaluating treatment effect models
- interpreting ML models for treatment effect estimation.
    - Average tratment effect
    - Individualized treatment effect

SESSION 20 (LIVE IN-PERSON)

- Final project presentations
- Review of ML concepts
- Discuss next steps in your Healthcare career

EVALUATION CRITERIA

criteria	percentage	Learning Objectives	Comments
Group Presentation	20 %		
Group Work	25 %		
Class Participation	20 %		
Individual Work	25 %		
Intermediate Tests	10 %		

RE-SIT / RE-TAKE POLICY

BEHAVIOR RULES

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ATTENDANCE POLICY

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ETHICAL POLICY

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STRATEGIC MARKETING AND BRANDING

Grado en Administración de Empresas / Bachelor in Business Administration BBA SEP-2024 SMB-NBA.1C.m.OPT.M.B

Area Marketing and Communication

Number of sessions: 30

Academic year: 24-25

Degree course:

Number of credits: 6.0

Semester: 1º

Category: OPTIONAL

Language: English

Professor: **RAMON MENDEZ RODRIGUEZ**

E-mail: rmendez@faculty.ie.edu

Brand Strategist and expert in Marketing, Branding, Innovation & Consumers, with more than 23 years in both top FMCG companies (Unilever & Kraft) and also Consulting companies. Professor at IE since 2010.

Proffessional experience:

- From 2017: **Brand strategist and Marketing & Branding Consultant**. Independent consultant.
- From 2012: **BMC Strategic Innovation Company** (Branding, Consumer and Innovation Agency, working with top global companies, such as **Coca Cola, Heineken, Unilever, Nespresso, BBVA**,…)
  - Regional Manager for Europe and Africa (from Sept'14)
  - Contents Director Europe BMC Strategic Innovation Company (managing mainly the account of **Coca-Cola**)
- From 2012: Marketing Professor, Marketing electives coordinator at IE University
- 2003-2012: Different Marketing roles in **Mondelez/Kraft**. Marketing Director **Tassimo & Saimaza**, Marketing Manager **Oreo, Chips Ahoy!**, Brand Manager **Milka & Philadelphia**...
- 2000-2003: Brand **Dove. Unilever**

Educational background:

- 2017-2019: Master in Humanistic Psychology by Universidad de Alcalá
- 2006 - 2012: Marketing Academy inn Kraft Foods, completing different course in branding, strategy, consumer, insights...
- 1996-2000: B.Sc. (Hons.) Economics, majored in Marketing. Universidad Autónoma de Madrid.

Office Hours

Office hours will be on request. Please contact at:

rmendez@faculty.ie.edu

PREREQUISITES

No prerequesites needed to take this course

SUBJECT DESCRIPTION

The past decade has seen the triumph of brand and branding: everyone are now encouraged to think themselves of as a brand. Indeed, the term brand is probably overused nowadays. Everything is about brand, branded content, branded environments, branded experience...

Branding is a crucial and exciting topic, which is rapidly evolving in order to connect products with consumers in a more relevant and resonating way. Great brands succeed in creating value for consumers with a clear product role and therefore driving business results. That's why main companies are becoming more and more consumer-centric and brands and products are evolving their relationship with consumer.

A winning brand strategy should start with a in-depth consumer understanding, which together with market situation analysis and evaluation of your current marketing mix will allow to build relevant, resonating, differentiating brands, which can really make a difference in context of hyper-segmented consumers a increasingly competitive market.

This course will provide the students with a practical understanding of the brand strategy and identity, working with many real examples of companies and brands and being able to create their own brand plan and design one brand identity.

LEARNING OBJECTIVES

This course will provide the student with the following knowledges and skills following a highly practical methodology:

1. Brands today. How to be different & relevant with your brand in a crowded and competitive markets.

2. Customer centricty in branding today. Motivational map and Censydeam model

3. Brands & Branding: Defining a winning brand strategy

- Positioning, Benefit ladder, Brand Essence
- Point of Difference and Frame of Reference
- Brand Territory

4. Brand Equity: The brand value in consumer mind (Awareness, Associations, Perceived Quality and Loyalty) and how to measure it.

5. Brand Dilemmas: Brand stretch, Brand repositioning or revitalizing and Brand deletion.

6. Portfolio Management

7. Iconic brands and brand purpose

8. Brand Design and identity
9. Many brand examples and benchmarks!

TEACHING METHODOLOGY

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. Professor's main role is to lead and guide students to achieve the learning objectives of the course. This is done by engaging in a diverse range of teaching techniques and different types of learning activities such as the following:

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- AI is a tool, but one that you need to acknowledge using. Failure to do so is in violation of academic honesty policies. Acknowledging the use of AI will not impact your grade.
- Suggested format to acknowledge the use of generative AI tools:I acknowledge the use of [AI systems link] to [specify how you used generative AI]. The prompts used include [list of prompts]. The output of these prompts was used to [explain how you used the outputs in your work].If you have chosen not to include any AI generated content in your assignment, the following disclosure is recommended: No content generated by AI technologies has been used in this assignment.

PROGRAM

SESSION 1 (LIVE IN-PERSON)

STRATEGIC MARKETING AND BRANDING - INTRODUCTION

- Presentation and expectation of program
- The importance of strategy for long term brand growth
- Strategic Marketing role in companies
- Overview of a brands and branding. Functions of brands: Consumers & companies.
- Branding: Where business meets psychology!

Activity:

- *Discussions of best brands and learnings*

SESSION 2 (LIVE IN-PERSON)

MARKETING PLAN

- Marketing strategic framework: A consumer-centric approach
- Brands and branding in a Marketing plan
- Overview and stages of a Marketing plan
    - Analysis: 5 C's. Company, Context, Competitors, Consumers, Collaborators
    - Objectives and strategy
    - 360º execution
    - KPI's Metrics
- Benchmarks

SESSION 3 (LIVE IN-PERSON)

OVERVIEW: GROWTH STRATEGIES & FOCUS IN PENETRATION

- Overview of growth strategies: Penetration, Frequency, Retention, Premiumization
- Focus on Penetration

Activity: Discussion of best cases and learnings

SESSION 4 (LIVE IN-PERSON)

GROWTH STRATEGIES & FOCUS IN FREQUENCY, RETENTION & PREMIUNIZATION

Overview of growth strategies: Penetration, Frequency, Retention, Premimization
Focus in Penetration
Activity: Discussion of best cases and learnings

SESSION 5 (LIVE IN-PERSON)

CUSTOMER CENTRICITY IN BRANDING

- 4 levels of Consumer insights: Cultural insights, Human insight, Category insights & Brand insights
- The Value of Motivational Segmentation: Motivational Map & Censydeam model
- Persona & Customer journey

Activity:

- *Define the persona and main motivations of some brands*
- *Plotting different brands in different motivational spaces*

SESSION 6 (LIVE IN-PERSON)

POSITIONING AND POSITIONING STATEMENT

- Positioning and Positioning Statement
- Brand Strategy and Positioning Statement elements: Target, Frame of Reference, Point of Difference and Reason to Believe.
- Reading: Brand Positioning. Kellogg on Branding (Kellogg School of Management).

Book Chapters: Brand Positioning in "Kellogg on Branding" (CED)

Multimedia Material: Inputs for developing your brand (IE Media)

SESSION 7 (LIVE IN-PERSON)

FUNCTIONAL AND EMOTIONAL BENEFITS - BENEFIT LADDER

- Functional vs. emotional
- Benefit ladder
- Choosing your point of difference

Activity:

- *In class training benefit ladderLadder exercise in pairs*

SESSION 8 (LIVE IN-PERSON)

LADDERING UP, BRAND TERRITORY & ESSENCE

- Laddering up vs. laddering down strategy
- Links with consumer insights
- Brand territory
- Brand essence

Activity:

- *Video Brand Essence Volkswagen. Discuss their brand territory and essence*

SESSION 9 (ASYNCHRONOUS)

DOVE, A LADDERING-UP CASE

Business Case: Dove, Evolution of a brand (HBS 508047-PDF-ENG):

Description: Examines the evolution of Dove from functional brand to a brand with a point of view after Unilever designated it as a Masterbrand, and expanded its portfolio to cover entries into a number of sectors beyond the original bath soap category. The development causes the brand team to take a fresh look at the clichés of the beauty industry. The result is the controversial Real Beauty campaign. As the campaign unfolds, Unilever learns to use the Internet, and particularly social network media like YouTube, to manage controversy.

Activity:

Read the case and answer the following questions:

- *Write the 3 levels of consumer understanding: Human Insight, Category insight and brand insight. What is the main one here?*
- *Develop the full DOVE benefit ladder. What is the main point of difference?*
- *Write the brand territory of Dove*
- *What you would recommend to this brand today?*

Practical Case: Dove: Evolution of a Brand (HBS 508047-PDF-ENG)

Multimedia Material: Dove: Video Advertising Distributed by Harvard Business School (HBS 6558-

AVO-ENG)

SESSION 10 (LIVE IN-PERSON)

BRAND EQUITY

- Brand Equity definition and key components (Awareness, Associations, Perceived quality, Loyalty & Experience).
- Types of brand awarenes: Top of mind, Recall, Recognition
- Types of brand associations: Product and Non-product related

Activity:

- *Role play Interview for brand equity assesment (pairs)*

SESSION 11 (LIVE IN-PERSON)

BRAND EQUITY - PERSONALITY & ARCHETYPE

- What's an archetype? Archetypes vs. stereotypes
- Brand personality: Key to connect with customer values 12 brand archetypes

Activity:

- *Analysing brand archetypes (pairs)*

SESSION 12 (ASYNCHRONOUS)

BRAND EQUITY IN ACTION

Activity:

- *Choose one brand (pairs)*
- *Interview 10 people to understand its equity in depth (5 each). Please use the components of brand equity seen in class*
- *Discuss with your pair to analyze and understand*
- *Analyze its current brand equity and share your reco for the brand today.*
- *Share in the forum your conclusions*

SESSION 13 (LIVE IN-PERSON)

MEASURING BRAND EQUITY

- Qualitative and quantitive techniques to measure brand equity
- Free association vs. projective questions
- ZMET: Zaltman Methaphor Elecitacion Techniques
- Case Nestlé Crunch (519061-PDF-ENG)

Practical Case: Understanding the Brand Equity of Nestlé Crunch Bar: A Market Research Case (HBS 519061-PDF-ENG)

Multimedia Material: Olson Zaltman: Intro to ZMET (YouTube)

SESSION 14 (LIVE IN-PERSON)

PRIVATE LABELS BRANDS

- Private labels growth in a more branded context

- Are they brands? Pros and cons of Private labels today
- Possible strategies to fight with private labels

Multimedia Material: What is Private Label? (YouTube)

SESSION 15 (ASYNCHRONOUS)

STARBUCKS CASE

Description: After going public in 1992, Starbucks' strong balance sheet and double-digit growth made it a hot growth stock. The Starbucks vision was coffee culture as community, the Third Place between work and home, where friends shared the experience and exotic language of gourmet coffee. Its growth was fuelled by rapid expansion in the number of stores both in the United States and in foreign markets, the addition of drive-through service, its own music label that promoted and sold CDs in stores and other add-on sales, including pastries and sandwiches. In an amazingly short time, Starbucks became a wildly successful global brand. But in 2007, Starbucks' performance slipped; the company reported its first-ever decline in customer visits to U.S. stores, which led to a 50 per cent drop in its share price. In January 2008, the board ousted CEO Jim Donald and brought back Howard Schultz - Starbucks' visionary leader and CEO from 1987 to 2000 and current chairman and chief global strategist - to re-take the helm. Starbucks' growth strategies have been widely reported and analysed, but rarely with an eye to their impact on the brand. This case offers a compelling example of how "non-brand" managerial decisions - such as store locations, licensing arrangements and drive-through service - can make sense on financial criteria at one point in time, yet erode brand positioning and equity in the longer term. Examining the growth decisions made in the United States provides a rich context in which to examine both the promise and drawback of further foreign expansion.

Read the case and answer the following questions:

- How did Starbucks build its brand equity? Please use the components of brand equity seen in class
- What were the main reasons for the company downturn?
- Visit one Starbuck store and analyse their main brand messages today
- What would you recommend them today to drive growth?

Practical Case: Trouble Brews at Starbucks (HBS 909A02-PDF-ENG)

SESSION 16 (LIVE IN-PERSON)

INTERMEDIATE TEST: 15 Online questions

CREATING AND LAUNCHING NEW BRANDS

- Starting from scratch: Key strategic questions
- Full launching process; from creation to execuction
- Branding in Start ups
- Choose one great new brand and assess its success factors in the forum (pairs)

SESSION 17 (LIVE IN-PERSON)

BRAND DILEMMAS I

- Consistent brands: Sustaining brands over time
- 4 brand dilemmas:
    - Brand stretch
    - Brand repositioning
    - Brand revitalization

- Brand Deletion

SESSION 18 (LIVE IN-PERSON)

BRAND DILEMMAS II

- Deeping into the 4 brand dilemmas:
  - Brand stretch
  - Brand repositioning
  - Brand revitalization
  - Brand Deletion

Activity:

- *Discussing pros and cons of each dilemmas*

SESSION 19 (ASYNCHRONOUS)

BRAND DILEMMAS IN ACTIONS

Activity:

- *Sharing one good and bad examples of each dilemma in the forum, explaining briefly your reasons to choose thes examples.*

SESSION 20 (LIVE IN-PERSON)

BRANDS & PORTOLIO MANAGEMENT

- The four levels of strategy: Corporate, Portfolio management, Positioning & Marketing Mix
- Portfolio Management: Minimizing overlapping & maximizing business reach
- Brands vs. corporate strategies: House of brands vs. branded house
- Brand hierarchy & types of brand

SESSION 21 (ASYNCHRONOUS)

CORPORATE & BRANDS ANALYSIS

- *Choose one company with different brands (pairs)*
- *Analyse if it's a house of brands, branded house or hybrid*
- *Explain how you think that this company manages its brands and product portfolio today*

SESSION 22 (LIVE IN-PERSON)

ICONIC BRANDS

- What is an iconic brand?
- Brand purpose
- Golden circle: Why, How and Why
- Benchmark of Iconic brands

Activity:

- *Discussing iconic brands. What's their pledge?*

Multimedia Documentation: Cultural Branding: How Brands Become Icons (Logo & Imago MS Blog)
Multimedia Material: How great leaders inspire action (Ted.com)

SESSION 23 (LIVE IN-PERSON)

BRAND ELEMENTS & IDENTITY

- Brand elements to build brand equity - Making it real and visual!
- Designing your brand identity
- Brand identity book and guidelines:

Slides and material in additional documentation

SESSION 24 (LIVE IN-PERSON)

DESIGNING YOUR BRAND IDENTITY

- Innovation in branding
- Create a new brand, leveraged on powerful consumer insights.
- Define your main point of difference (functional or emotional)
- Design your brand elements: Brand name, logo, slogan, character, packaging
- Define your brand guidelines: Colours, tone...

SESSION 25 (ASYNCHRONOUS)

SHARE YOUR NEW BRAND DESIGN

Activity:

- *Design and share your final design (one page) in forum*
- *Voting for the best new brand*

SESSION 26 (LIVE IN-PERSON)

WORKING SESSIONS WITH PROFESSOR

Working session in class with each team to guide and support for final project presentation

SESSIONS 27 - 28 (LIVE IN-PERSON)

TEAM BRAND PROJECT PRESENTATION

SESSIONS 29 - 30 (LIVE IN-PERSON)

FINAL EXAM: WRITTEN (30 Min) AND ORAL (2 min per student)

The exam is closed book and will consist of 3 open-ended questions to apply theory (30 min). Every student will defend one their answer in front of professor (scheduled 2 minute per student).

EVALUATION CRITERIA

It's required to work outside the class, doing the exercises, participating in forum, doing presentations and a final project. Both individual and group work will be taken into account in the final grade.

It is important to be respectful and proactive during in-class sessions as well as in the group projects, For the group project, students will choose who they will work with.

During the entire course, the students will receive feedback on the activities they are presenting, so they can keep track of their grade and be in control of it. Attendance will also be taken into account daily for the very same reason.

Evaluation criteria details:

- **In-Class participation(20%)**: Attendance is mandatory and will, therefore, have an impact on the final grade. Discussions and debates will count towards participation (including the one in forum). this grade (participation, engaged listening, self-involvement in class...).Participation will be evaluated according to attention paid, participation in discussions and debates and general involvement within the course.
- **Cases in forums (15%):** Each students will have to write and share their analysis in forums in pairs, showing his/her concepts knowledge and understanding, as well as his/her point of view
- **Final Team Project (25%)**: Each student will be part of a group project that will have to be presented by the end of the term. You will have to create a new brand. Specific briefing and details will be presented in class prior to the due date and uploaded to Campus. Teams will have supervised working sessions with the professor.
- **Intermediate test (15%)**: Quiz 15 questions
- **Final Exam (25%)**: 2 open-ended questions and oral answer to a question.

criteria	**percentage**	**Learning Objectives**	**Comments**
Final Exam	25 %		
Group Presentation	25 %		
Class Participation	20 %		
Intermediate tests	15 %		
Individual work	15 %		

RE-SIT / RE-TAKE POLICY

Each student has four (4) chances to pass any given course distributed over two (2) consecutive academic years. Each academic year consists of two calls: one (1) ordinary call (during the semester when the course is taking place); and one (1) extraordinary call (or “re-sit”) in June/July.

Students who do not comply with the 80% attendance requirement in each subject during the semester will automatically fail both calls (ordinary and extraordinary) for that Academic Year and have to re-take the course (i.e., re-enroll) during the next Academic Year.

The Extraordinary Call Evaluation criteria will be subject to the following rules:

- Students failing the course in the ordinary call (during the semester) will have to re-sit evaluation for the course in June / July (except those students who do not comply with the attendance rule, and therefore will not have that opportunity, since they will fail both calls and must directly re-enroll in the course during the next Academic Year).
- It is not permitted to change the format nor the date of the extraordinary call exams or deadlines under any circumstance. All extraordinary call evaluation dates will be announced in advance and must be taken into consideration before planning the summer (e. g. internships, trips, holidays, etc.).
- The June/July re-sit will consist of a comprehensive evaluation of the course. Your final grade for the course will depend on the performance in this exam or evaluation only. I.e., continuous evaluation over the semester (e. g. participation, quizzes, projects and/or other grade components over the semester) will not be taken into consideration on the extraordinary call.

Students will have to achieve the minimum passing grade of 5 and the maximum grade will be capped at 8.0 (out of 10.0) – i.e., “notable” in the extraordinary call.

- Re-takers: Students who failed the subject on a previous Academic Year and are now re-enrolled as re-takers in a course will need to check the syllabus of the assigned professor, as well as contact the professor individually, regarding the specific evaluation criteria for them as re-takers in the course during that semester (ordinary call of that Academic Year). The maximum grade that may be obtained as a retaker during the ordinary call (i.e., the 3rd call) is 10.0 (out of 10.0).

After exams and other assessments are graded by the professor (on either the ordinary or extraordinary call), students will have a possibility to attend a review session (whether it be a final exam, a final project, or the final overall grade in a given course). Please be available to attend the session in order to clarify any concerns you might have regarding your grade. Your professor will inform you about the time and place of the review session.

- Students failing more than 18 ECTS credits after the June/July re-sits will be asked to leave the Program. Please, make sure to prepare yourself well for the exams in order to pass your failed subjects.
- In case you decide to skip the opportunity to re-sit for an exam or evaluation during the June/July extraordinary call, you will need to enroll in that course again for the next Academic Year as a re-taker, and pay the corresponding tuition fees. As you know, students have a total of four (4) allowed calls to pass a given subject or course, in order to remain in the program.

BIBLIOGRAPHY

Recommended

- Kevin Lane Keller. *Strategic Brand Management.* ISBN 9780133255423 (Printed)
- Alice M.Tybout & Tim Calkins. *Kellogg on Branding.* ISBN 9780471690160 (Printed)
- Byron Sharp. *How Brands Grow.* ISBN 9780195573565 (Printed)
- Alina Wheeler. *Designing Brand Identity.* ISBN 9781118099209 (Printed)

BEHAVIOR RULES

Please, check the University's Code of Conduct here. The Program Director may provide further indications.

ATTENDANCE POLICY

Please, check the University's Attendance Policy here. The Program Director may provide further indications.

ETHICAL POLICY

Please, check the University's Ethics Code here. The Program Director may provide further indications.

SUSTAINABLE FINANCE

Grado en Administración de Empresas / Bachelor in Business Administration BBA SEP-2024 SF-NBA.1C.f.OPT.M.B

Area Finance

Number of sessions: 25

Academic year: 24-25

Degree course:

Number of credits: 5.0

Semester: 1º

Category: OPTIONAL

Language: English

Professor: **EMMA NAVARRO AGUILERA**

E-mail: enavarroa@faculty.ie.edu

Emma Navarro is a member of the High Corps of Spanish State Economists and Trade Experts. She holds a Law degree from Universidad San Pablo CEU and has completed advanced studies in EU legal and economic subjects at Sorbonne-Paris I University and Complutense University of Madrid.

Presently, Emma serves on the Board of Iberdrola España, a major renewable energy company and a forerunner in the shift towards a low carbon economy and acts as Chairwoman of its Audit and Compliance Committee.

Until recently, she was also senior fellow for Climate Finance at the European Climate Foundation, a role that aligns with her commitment to environmental stewardship.

Her professional journey includes her tenure as Vice-President of the European Investment Bank, the largest multinational bank globally by assets. In this role, she was pivotal in shaping the bank's Climate Action Strategy, cementing its status as the EU's Climate Bank with a renewed focus on combating climate change.

Previously, Emma was Chairperson of ICO, Spain's National Promotional Bank and State Financial Agency. During her extensive career in the Spanish public administration, Emma also served as Secretary General for the Treasury and Financial Policy, where she managed banking and financial policy regulation, funding, and debt management. Her board positions at the Bank of Spain, the National Securities Market Commission (CNMV), the FROB (Spanish Executive Resolution Authority), and as Vice-Chairperson of the Governing Committee of the Deposit Guarantee Fund, also reflect her diverse expertise.

Internationally, Emma has represented Spain in various high-level financial forums, including the EU's Economic and Financial Committee (EFC), the Eurogroup Working Group (EGW), and as a deputy representative at the Eurogroup, ECOFIN, and G20 meetings. She was also a Board Member of the European Stability Mechanism (ESM), and a member of the Financial Stability Board (FSB).

Emma also worked at the International Monetary Fund as an adviser to the Executive Board Director for Colombia, Mexico and Spain.

Office Hours

Office hours will be on request. Please contact at:

enavarroa@faculty.ie.edu or using blackboard ultra.

Office Hours: Mondays: 18h00-19h00. Fridays: 9h00-10h00.

PREREQUISITES

SUBJECT DESCRIPTION

The goal of this course is to explore the foundations of Sustainable Finance. Students will develop theoretical and practical knowledge and understanding of the main debates around CSR and Sustainable Finance.

Sustainable Finance is one of the most trending topics in Finance today. A fundamental reshaping of finance is taking place to integrate Environmental, Social and Governance issues (the so-called ESG factors) into investment decisions and business strategies. At the same time, there is growing acknowledgment that finance can be a powerful tool to transform our economic and social model towards sustainability.

More and more companies are eager to tackle key sustainability issues like climate change, biodiversity loss, and social inequality using robust business principles. They are aligning with the global Sustainable Development Goals agenda to guide these efforts. A new paradigm has emerged in corporate finance that shifts the traditional shareholder-centric approach focus to consider long-term value creation for all stakeholders.

ESG investments have increased exponentially in the last years, while green and other sustainable products have soared. Investors are more and more scrutinizing companies' efforts to manage sustainability risks and opportunities, which has driven demand for company data on ESG related performance and resulted in a proliferation of competing reporting frameworks and guidelines. In response, International Sustainability Reporting Standards are being now elaborated, while some jurisdictions are also developing or strengthening their mandatory climate or ESG disclosure regulations.

Recognition by financial supervisors, regulators and investors that climate change is a source of financial risk is rapidly transforming sustainable finance from niche to mainstream. A growing number of financial supervisors are now expecting financial institutions to manage climate-related financial risks, and some are also conducting climate stress tests or scenario analysis to test the resilience of banks and the financial system as a whole to those risks. Additionally, the ECB and other central banks are starting to incorporate climate change considerations into their monetary policy frameworks.

The covid-19 pandemic had accelerated the ESG momentum and has triggered debates on the opportunity to rebuild economies placing sustainability and corporate purpose well-entrenched at the core. And while the war in Ukraine and other global developments have brought new dynamics and challenges, they have also reinforced the importance of transitioning to a more sustainable and resilient global economy.

Against this background, developing a critical mass of experts on Sustainable Finance is becoming critical for the financial sector as they need to adapt to emerging sustainability requirements, capitalize on business opportunities, and mitigate risks, ensuring long-term viability and alignment with evolving market trends and stakeholder expectations.

LEARNING OBJECTIVES

The main objectives of this course are the following:
•To gain a better understanding of the transformations that the financial sector is currently undergoing as a result of the challenges linked to sustainability.
•Overview of the key international agreements and frameworks supporting sustainable finance
•Reflect on the challenges and opportunities posed by climate change and the transition to a more sustainable economy
•Learn to identify and understand various ESG factors, with a focus on recognizing materiality to determine the most relevant factors for a company.
•Gain insight into the challenges of measuring ESG performance, including the complexities and nuances of ESG ratings.
•Understand how the ESG reporting landscape is evolving, including the most widely used voluntary reporting frameworks, how mandatory disclosure requirements are being adopted in many jurisdictions for companies and investors, and current efforts to achieve international standardization.
•Assess how ESG factors can affect the value creation and risk of a company and the performance of an investment.
•Recognize the different approaches investors use to integrate ESG considerations into their investment decisions.
•Learn how sustainable taxonomies are adopted by jurisdictions to promote and increase sustainable investments. Understand this tool for classifying economic activities based on their sustainability, with a focus on the EU Sustainable Taxonomy.
•Familiarize with different sustainable financial products, especially green bonds and other thematic bonds.
•Understand how financial regulations are adapting to include climate-related financial risks, focusing on areas such as risk assessment and management, climate stress testing or capital requirements.
•Be cognizant of the role of MDBs in promoting sustainability and mobilizing finance towards sustainable projects.

TEACHING METHODOLOGY

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. Professor's main role is to lead and guide students to achieve the learning objectives of the course. This is done by engaging in a diverse range of teaching techniques and different types of learning activities such as the following:

Learning Activity	Weighting	Estimated time a student should dedicate to prepare for and participate in
Lectures	14.4 %	18.0 hours
Discussions	17.6 %	22.0 hours
Exercises in class, Asynchronous sessions, Field Work	20.0 %	25.0 hours
Group work	24.0 %	30.0 hours
Individual studying	24.0 %	30.0 hours
TOTAL	100.0 %	125.0 hours

AI POLICY

Generative artificial intelligence (GenAI) tools may be used in this course for research, ideation, generating an outline, proofreading or grammar check with appropriate acknowledgement. GenAI may not be used for group submissions and exams. If a student is found to have used AI-generated content inappropriately, it will be considered academic misconduct, and the student might fail the respective assignment or the course.

If you are in doubt as to whether you are using GenAI tools appropriately in this course, I encourage you to discuss your situation with me.

Below, a suggested format to acknowledge the use of generative AI tools. Please note that acknowledging AI will not impact your grade.

I acknowledge the use of [AI systems link] to [specify how you used generative AI]. The prompts used include [list of prompts]. The output of these prompts was used to [explain how you used the outputs in your work]

If AI was permitted to use in your assignment, but you have chosen not to include any AI generated content, the following disclosure is recommended:

No content generated by AI technologies has been used in this assignment.

PROGRAM

SESSION 1 (LIVE IN-PERSON)

1. Introduction to the course. What to expect from this course?
2. What is Sustainable Finance? Why it matters?
3. Sustainability challenges today and the role of the financial sector.
4. Context and trends. Understanding the evolution and growth of Sustainable Finance. Impact of the Covid-19 pandemic
5. Challenges and Opportunities for Sustainable Finance.
6. The EU Sustainable Finance Agenda

Article: What is sustainable finance? (The Economist (ced))

Article: What is sustainable finance and how it is changing the world? (World Economic Forum)

SESSION 2 (LIVE IN-PERSON)

KEY INTERNATIONAL DRIVER OF SUSTAINABLE FINANCE (PART 1)

1. The Role of the United Nations in the promotion of Sustainable Finance. The Sustainable Development Goals.
2. Other frameworks promoting the integration of Sustainability into investment decision-making.
3. Climate change as a key driver for sustainable finance. The Paris Climate Agreement and progress in climate change conferences. Climate Finance in climate negotiations.
4. Climate change mitigation and adaptation.
5. The concept of Just Transition. Climate Finance vs. Transition Finance.

Practical Case: Climate Change in 2020: Implications for Business (Pre-reading) (HBS 320087-PDF-ENG) (Optional)

Article: The great disrupter. Business and climate change (Pre-reading) (Special Reports The Economist) (Optional)

Article: Acting on climate-on-climate-and-poverty: if we fail on one we fail on the other (LSE) (Optional)

Article: Key aspects of the Paris Agreement (Reference) (United Nations)

SESSION 3 (LIVE IN-PERSON)

CLIMATE CHANGE AS AN INTERNATIONAL DRIVER OF SUSTAINABLE FINANCE. (Part 2).

1. Carbon Pricing. Why? Modalities.
2. Voluntary Carbon Markets.
3. The concept of climate neutrality. Net zero pledges and science-based targets.
4. Green Finance and Transition Finance.
5. What is a credible transition plan?

Article: Pricing Carbon (World Bank) (Optional)

Article: The Voluntary Carbon Market and Sustainable Development (Grantham Research Institute on Climate Change and the Environment)

Article: What every leader needs to know about carbon credits (HBS H07YB3-PDF-ENG)

SESSION 4 (LIVE IN-PERSON)

SUSTAINABILITY AND CORPORATE SOCIAL RESPONSIBILITY. THE SDG.

1. Sustainability as an investment strategy vs. as an organization approach. Corporate Social Responsibility.
2. What is the purpose of a corporation? From the shareholders primacy norm to the Stakeholders Value Approach.
3. A new concept of fiduciary duty?
4. The triple bottom line: profit, people and planet.

Pre-class readings:

Article: Business Roundtable Redefines the Purpose of a Corporation to Promote An Economy That Serves All Americans (Business Roundtable. August 19, 2019)

Article: C.E.O.s Are Qualified to Make Profits, Not Lead Society (The New York Times. July 24, 2020) (CED)

SESSION 5 (LIVE IN-PERSON)

THE ESG FINANCIAL ECOSYSTEM

1. The ESG financial Ecosystem.
2. ESG ratings and Indices.
3. How green is a company? Indicators of Environmental performance. Carbon footprint. Other environmental metrics.
4. The concept of finance emissions. Measuring the carbon footprint of a portfolio.
5. What is climate neutrality? Climate neutrality pledges and climate transition planning.

Article: ESG Investing and Climate Transition: Market Practices, Issues and Policy Considerations (OECD)

Article: ESG Ratings: Whose interests do they serve?

SESSION 6 (ASYNCHRONOUS)

HOW GREEN IS A COMPANY? PRACTICAL ANALYSIS.

Students will evaluate the environmental credentials of a company of their choice, identifying key indicators discussed in class. The professor will provide guiding questions in advance to support their analysis.

Practical Case: The Volkswagen Emissions Scandal (HBS UV7245-PDF-ENG)

SESSION 7 (LIVE IN-PERSON)

THE ESG FINANCIAL ECOSYSTEM (Part 2).

1. Diving into the social factors of ESG. Examples.
2. Good governance as an overriding principle for ESG.
3. ESG Ratings and challenges. Regulatory trends concerning ESG ratings.

Article: ESG Investing and Climate Transition. Market Practices, issues and policy considerations (OECD)

SESSION 8 (ASYNCHRONOUS)

THE SOCIAL AND GOVERNANCE COMPONENTS OF ESG. A PRACTICAL ANALYSIS.

Students will evaluate the social and governance aspects of a chosen company, identifying key indicators discussed in class.

The professor will provide guiding questions in advance to facilitate the analysis

SESSION 9 (LIVE IN-PERSON)

Sustainability Topics:

- Economic Development

ESG REPORTING AND MEASUREMENT

- Why sustainability disclosures are important?
- ESG main metrics and reporting frameworks.
- Determining material factors.
- The Task Force for Climate Related Disclosures. (TCFD).
- Towards global sustainability and Climate reporting standards. The ISSB.

- Nature related disclosures.

Article: ESG Metrics: Reshaping Capitalism? (HBS 116037-PDF-ENG)

Article: Recommendations of the Task Force on Climate-related financial disclosures (TCFD)

Article: ESG Investing and Climate Transition: Market Practices, policies and challenges (OECD)

Article: What is the TNFD and how does it Fit into Climate Reporting? (Climate Manifest)

SESSION 10 (LIVE IN-PERSON)

ESG REPORTING LANDSCAPE. PART 2.

1. Towards enhanced regulatory sustainability disclosure requirements.
2. The Corporate Sustainability Reporting Directive. The double materiality principle.
3. Increasing sustainability disclosure requirements for investors. The Sustainable Finance Disclosure Regulation. Requirements in other jurisdictions.
4. A discussion about materiality. Comparing materiality in the 3 main frameworks.

SESSION 11 (ASYNCHRONOUS)

Students will need to evaluate the sustainability reports of a company of their choice, using questions provided by the professor as guidance.

SESSION 12 (LIVE IN-PERSON)

INTEGRATING ESG FACTORS INTO INVESTMENT DECISIONS. ESG INVESTMENT STRATEGIES.

1. ESG Investment Strategies.
2. Exclusions.
3. Best-in-Class.
4. ESG Integration.
5. ESG engagement.
6. Impact investments.

SESSION 13 (LIVE IN-PERSON)

There will be a mid-term quiz to assess understanding of the topics covered thus far.

SESSION 14 (LIVE IN-PERSON)

ESG: VALUE CREATION AND FINANCIAL PERFORMANCE

1. Understanding how ESG factors influence the value creation and financial performance. Examples.
2. Evidence on ESG corporate and investment performance. “Doing well by doing good”?

Article: Five ways that ESG creates value (Mc Kinsey) (Optional)

Article: Musings on Markets: Sounding good or Doing good? A Skeptical Look at ESG (aswathdamodaran.blogspot) (Optional)

Article: The Secret Diary of a Sustainable Investor (part 1) (Medium, August 2021)

Article: A Critique Of Tariq Fancy’s Critique Of ESG Investing: An Interview With Clara Miller (Forbes) (Optional)

SESSION 15 (LIVE IN-PERSON)

WHAT IS REALLY IS A SUSTAINABLE INVESTMENT? ADDRESSING “GREENWASHING”

1. The concept of green washing. How to address greenwashing in the financial system?
2. Sustainable Taxonomies. The EU Taxonomy.
3. The role of gas and nuclear in the EU Taxonomy.
4. Other taxonomies.

Technical note: What is the EU Taxonomy and how does it work in practice (European Comission)
Article: Green Taxonomies Around the World. Where do we stand? (ECOFACT)

SESSION 16 (LIVE IN-PERSON)

Sustainability Topics:

- Environment

GREENING THE FINANCIAL SYSTEM

1. What are climate-related financial risks? Revisiting Physical risk and Transition Risks.
2. Stranded Assets.
3. The role of the Central Banks in addressing climate change. The Network for Greening the Financial System.
4. Greening Monetary Policy.
5. Greenflation.

Article: Breaking the Tragedy of the Horizon. Climate Change and financial Stability (Pre-class reading) (BIS central bankers’ speeches; September, 29th 2015)
Article: Letter to CEOs: A fundamental Reshaping of Finance (Pre-class reading) (BlackRock)
Article: A new age of energy inflation: climateflation, fossilflation and greenflation (Pre-class reading) (European Central Bank)
Article: Network for Greening the Financial System (Reference) (NGFS.Net)

SESSION 17 (ASYNCHRONOUS)

Sustainability Topics:

- Environment

UNDERSTANDING CLIMATE-RELATED FINANCIAL RISKS FOR BANKS: A PRACTICAL ANALYSIS.

Students will need to assess the climate-risk reporting of a bank of their choice, guided by detailed questions provided by the professor. These questions will help students evaluate how the bank identifies, measures, and mitigates climate risks, the transparency of their disclosures, and their alignment with global sustainability standards.

SESSION 18 (LIVE IN-PERSON)

SUSTAINABLE FINANCE BY ASSET CLASSES

1. ESG funds and SRI funds. ESG Passive Investments.
2. Green Bonds and the Green Bond Principles. The EU Green Bond Standard.
3. Other Thematic Bonds. Social Bonds and Sustainability Bonds.

4. Green Loans and Green Loan Principles.
5. Other Green Products.
6. PPAs as a product to support the energy transition.

Article: What is the point of green bonds? (The Economist) (CED)

SESSION 19 (LIVE IN-PERSON)

MOVILIZING CAPITAL TOWARDS SUSTAINABLE INVESTMENTS.

1. The role of the public sector. Green Public Investment Programs.
2. Green Budgeting.
3. The role of Multilateral Development Banks. Business model and History.

SESSION 20 (LIVE IN-PERSON)

MOBILIZING CAPITAL TOWARDS SUSTAINABLE INVESTMENT.

1. Understanding how Multilateral Development Banks work.
2. Leveraging private sector investment. What is Blended Finance? Examples
3. MDB's efforts to aligning operations with the Paris agreement.
4. Reforming MDBs to deal with global challenges.

Article: How to reform multilateral development banks to take on climate change (Energy Monitor; April 10, 2023) (Optional)

SESSION 21 (LIVE ONLINE)

In this session, we will have a guest speaker that works for a Multilateral Development Bank (MDB) to present through practical cases the challenges and opportunities of sustainable finance within the perspective of a public bank.

SESSION 22 (LIVE IN-PERSON)

Students will need to complete a quiz covering materials of the second-half of the syllabus.

SESSIONS 23 - 24 (LIVE IN-PERSON)

GROUP PROJECT PRESENTATION

In the last day of the course, students will present their group projects.

Students will work in teams of 5-8 people to study the risks and opportunities arising from ESG factors for a particular company. Three companies pertaining to different sectors will be given as a choice. The group assessment should include how ESG factors affect the business model and the financial position of the company and a strategic plan to assess those risks and harness the opportunities.

Book Chapters: Dirk Schoenmaker and Willem Schramade, "Principles of Sustainable Finance" Chapter 5 (Reference) (See Bibliography)(Optional)

Students could use as a reference Chapter 5 of Dirk Schoenmaker and Willem Schramade. (2019). Principles of Sustainable Finance. Oxford University Press. ISBN 9780198826606 (Printed)

SESSION 25 (LIVE IN-PERSON)

Wrap up session. Final discussion on ESG challenges ahead.

EVALUATION CRITERIA

The evaluation method will be multifaceted, incorporating the following components:

- Quizzes/Intermediate Tests (25%): Throughout the course, several quizzes will be administered to assess students' understanding of the course content and classroom discussions.
- Individual Work/Cases (20%): Students will complete various assignments and case studies to deepen their comprehension of key topics, evaluate their critical analysis skills, and present well-founded conclusions.
- Group Presentation (25%): In groups, students will evaluate a case based on the ESG challenges and opportunities facing a specific company. This component will assess their ability to apply knowledge to real-world scenarios, conduct thorough research, work collaboratively, and communicate effectively—skills essential for professional environments.
- Class Participation and Engagement (15%): Students' contributions to class discussions will be evaluated based on the quality of their input, their ability to advance the discussion, and their impact on the overall learning experience.
- Final Exam (20%): A comprehensive final exam will be conducted to evaluate students' overall grasp of the course material.

criteria	percentage	Learning Objectives	Comments
Final Exam	20 %		
Group Presentation	25 %		
Individual work	15 %		
Class Participation	15 %		
Intermediate tests	25 %		

RE-SIT / RE-TAKE POLICY

Each student has four (4) chances to pass any given course distributed over two (2) consecutive academic years. Each academic year consists of two calls: one (1) ordinary call (during the semester when the course is taking place); and one (1) extraordinary call (or “re-sit”) in June/July.

The Extraordinary Call Evaluation criteria will be subject to the following rules:

Students failing the course in the ordinary call (during the semester) will have to re-sit evaluation for the course in June / July (except those students who do not comply with the attendance rule, and therefore will not have that opportunity, since they will fail both calls and must directly re-enroll in the course during the next Academic Year).

It is not permitted to change the format nor the date of the extraordinary call exams or deadlines under any circumstance. All extraordinary call evaluation dates will be announced in advance and must be taken into consideration before planning the summer (e. g. internships, trips, holidays, etc.)

The June/July re-sit will consist of a comprehensive evaluation of the course. Your final grade for the course will depend on the performance in this exam or evaluation only. I.e., continuous evaluation over the semester (e. g. participation, quizzes, projects and/or other grade components over the semester) will not be taken into consideration on the extraordinary call. Students will have to achieve the minimum passing grade of 5 and the maximum grade will be capped at 8.0 (out of 10.0) – i.e., “notable” in the extraordinary call.

Re-takers: Students who failed the subject on a previous Academic Year and are now re-enrolled as re-takers in a course will need to check the syllabus of the assigned professor, as well as contact the professor individually, regarding the specific evaluation criteria for them as re-takers in the course during that semester (ordinary call of that Academic Year). The maximum grade that may be obtained as a retaker during the ordinary call (i.e., the 3rd call) is 10.0 (out of 10.0).

After exams and other assessments are graded by the professor (on either the ordinary or extraordinary call), students will have a possibility to attend a review session (whether it be a final exam, a final project, or the final overall grade in a given course). Please be available to attend the session in order to clarify any concerns you might have regarding your grade. Your professor will inform you about the time and place of the review session.

Students failing more than 18 ECTS credits after the June/July re-sits will be asked to leave the Program. Please, make sure to prepare yourself well for the exams in order to pass your failed subjects.

In case you decide to skip the opportunity to re-sit for an exam or evaluation during the June/July extraordinary call, you will need to enroll in that course again for the next Academic Year as a re-taker, and pay the corresponding tuition fees. As you know, students have a total of four (4) allowed calls to pass a given subject or course, in order to remain in the program.

BIBLIOGRAPHY

Recommended

- Dirk Schoenmaker and Willem Schramade.. (2019). *Principles of sustainable finance..* 2019. Oxford University Press. ISBN 978019882660 (Digital)

- Nuno Fernandes. (2023). *Climate Finance.* Finance for Executives. ISBN 9789899885431 (Digital)

BEHAVIOR RULES

Please, check the University's Code of Conduct here. The Program Director may provide further indications.

ATTENDANCE POLICY

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ETHICAL POLICY

Please, check the University's Ethics Code here. The Program Director may provide further indications.

SUSTAINABLE SUPPLY CHAINS

Grado en Administración de Empresas / Bachelor in Business Administration BBA SEP-2024 SSC-NBA.1C.su.OPT.M.A

Area Environmental Science and Sustainability

Number of sessions: 15

Academic year: 24-25

Degree course:

Number of credits: 3.0

Semester: 1º

Category: OPTIONAL

Language: English

Professor: **FELIPE AMADO QUINTANA NAVARRO**

E-mail: faquintana@faculty.ie.edu

FELIPE AMADO QUINTANA NAVARRO

Academic background:

- Master in Technology and Communication for teaching by UNED (2013-2014)
- Master in Logistics, Purchasing and Stocks Management by AERCE (2003)
- MBA by IE Business School (1999-2000)
- Industrial engineer by Univesity of Las Palmas de Gran Canaria (1992-1998)

Professional experience:

- MDS (since 2014). Customer Experience and Lean Thinking consultant.
- Aguas Minerales de Firgas (2009-2016): Operations & Supply Chain Manager. New Products Development Responsible (Canary Islands. Spain).
- Robert Bosch (2004-2009): Project Manager for Bosch Car Service Spain and Portugal (Madrid-Lisbon-Kalsruhe)
- LVMH (2000-2004): Operations Responsible for Perfumes Loewe (Madrid-Paris)

Academic experience:

- IE Business Schoo, IE University and IE School of Human Sciences and Technology Adjunct Professor since 2004: Operations Management, Supply Chain Management, Customer Experience Management, Sustainability through SCM and Lean Thinking.

Professor contact and information:

- Phone & WhatsApp: +34 609 402 509
- e-mail: faquintana@faculty.ie.edu
- Linkedin: Felipe

Office Hours

Office hours will be on request. Please contact at:

Phone & WhatsApp: +34 609 402 509
e-mail: faquintana@faculty.ie.edu

PREREQUISITES

No special prerequisites are needed to attend this course.

SUBJECT DESCRIPTION

Sustainability is not only a new trend but it is also a "*must*" specially in a business environment because customers are demanding sustainable solutions.

- According to several authors, Business ***sustainability***, also known as corporate sustainability, is the management and coordination of environmental, social and financial demands and concerns to ensure responsible, ethical and ongoing success. Within the corporate world, they are sometimes referred to as the triple bottom line: Economic, Social and environmental.
- ***Supply Chain Management*** is the management of the flow of goods and services and includes all processes that transform raw materials into final products. It involves the active streamlining of a business's supply-side activities to maximize customer value and gain a competitive advantage in the marketplace. This function involves not only internal activities related with Operations management and coordination with the rest of the areas of the company, but also upstream to suppliers and downstrem to customers, including logistics and after sales activities.

In this 15 sessions elective course we shall discover together how we can achieve sustainability through our Supply Chain Management, which is responsible for more than the 60% of the value addition for customers.

Join me in this trending topic elective and let us discover together plenty of frameworks, tools and best practices to be able to apply them during your professional career.

LEARNING OBJECTIVES

Main topics and best practices covered by this elective are:

· INTRODUCTION. COMEPTING THROUGH SUSTAINABILITY

· THE 6 FRAMES OF SUSTAINABILITY

· CIRCULAR ECONOMY AND GREEN SUPPLY CHAIN MANAGEMENT

· BEST PRACTICES: SUSTAINABILITY AT IKEA GROUP.

· BEST PRACTICES: WALMART'S SUSTAINABILITY STRATEGY

· TRIPLE A SUPPLY CHAIN. ACHIEVING SUSTAINABILITY THROUGH SUPPLY CHAIN INTEGRATION. BEST PRACTICES: FERRERO GROUP

· COMPETING THROUGH SUSTAINABILITY. BEST PRACTICES: UNILEVER

· SUSTAINABLE GROWTH: LEARNING FROM MISTAKES: STARBUCKS

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

- *Understand how to compete through sustainability*
- *Understand the model of Circular Economy and the Supply Chain Contribution to Circular Economy.*
- *The strategic role of sustainability in the supply chain*
- *How to build a sustainable and green supply chain*
- *How to interpret and ellaborate a "Sustainability Report"*
- *Implement a sustainable supply chain*
- *To analyse the sustainability strategy of any firm*
- *Learn from common mistakes and identify best practices in sustainability*

TEACHING METHODOLOGY

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. Professor's main role is to lead and guide students to achieve the learning objectives of the course. This is done by engaging in a diverse range of teaching techniques and different types of learning activities such as the following:

Learning Activity	**Weighting**	**Estimated time a student should dedicate to prepare for and participate in**
Lectures	20.0 %	15.0 hours
Discussions	26.7 %	20.0 hours
Exercises in class, Asynchronous sessions, Field Work	26.7 %	20.0 hours
Group work	20.0 %	15.0 hours
Individual studying	6.7 %	5.0 hours
TOTAL	100.0 %	75.0 hours

AI POLICY

#2 – Specific use cases of GenAI are encouraged

Generative artificial intelligence (GenAI) tools may be used in this course for the final individual activity with appropriate acknowledgement. GenAI may not be used for any other activity than the final one. If a student is found to have used AI-generated content inappropriately, it will be considered academic misconduct, and the student might fail the respective assignment or the course.

If you are in doubt as to whether you are using GenAI tools appropriately in this course, I encourage you to discuss your situation with me.

Below, a suggested format to acknowledge the use of generative AI tools. Please note that acknowledging AI will not impact your grade.

I acknowledge the use of [AI systems link] to [specify how you used generative AI]. The prompts used include [list of prompts]. The output of these prompts was used to [explain how you used the outputs in your work]

If AI was permitted to use in your assignment, but you have chosen not to include any AI generated content, the following disclosure is recommended:

No content generated by AI technologies has been used in this assignment.

PROGRAM

SESSIONS 1 - 2 (LIVE IN-PERSON)

INTRODUCTION. THE TRIPLE BOTTOM LINE. COMPETING THROUGH SUSTAINABILITY:

Sustainability Challenges, Competencies and Opportunities. The 5 stages model for competing through sustainability.

- Stage 1: Viewing Compliance as opportunity
- Stage 2: Making Value Chain Sustainable
- Stage 3: Designing Sustainable products and services
- Stage 4: Developing new business models
- Stage 5: Creating next-practice platforms

Article: Why Sustainability Is Now the Key Driver of Innovation (HBS R0909E-PDF-ENG)

Article: A More Sustainable Supply Chain (HBS R2002F-PDF-ENG)

SESSIONS 3 - 4 (LIVE IN-PERSON)

THE 6 FRAMES OF SUSTAINABILITY:

1. The resources frame
2. The time frame
3. The value frame
4. The design frame
5. The abundance frame
6. The moral frame

Article: The 6 Ways Business Leaders Talk About Sustainability (HBS H03YII-PDF-ENG)

SESSION 5 (LIVE IN-PERSON)

CIRCULAR ECONOMY AND GREEN SUPPLY CHAIN MANAGEMENT

- Green Supply Chain Management
- Circular Supply Chain
- Recovery and Recycling
- Building product to last
- Sharing Platform
- PaaS business model (Product-as-a-service)

Article: Introducing a Circular Economy: New Thinking with New Managerial and Policy Implications (HBS CMR677-PDF-ENG)

Article: Can One Green Deliver Another? (TCC P0509D)

SESSION 6 (LIVE IN-PERSON)

CIRCULAR ECONOMY AND GREEN SUPPLY CHAIN MANAGEMENT

- Green Supply Chain Management
- Circular Supply Chain
- Recovery and Recycling

- Building product to last
- Sharing Platform
- PaaS business model (Product-as-a-service)

SESSION 7 (LIVE IN-PERSON)

Session 7: ***Midterm exam.*** 15 Multiple Test questions and 4 open questions to answer in approx. 8 lines.

SESSION 8 (LIVE IN-PERSON)

Session 8: ***Learning from Sustainability's report. Analyzing sustainability reports. Identifying green and socialwashing.***

SESSIONS 9 - 10 (ASYNCHRONOUS)

Sustanability through Supply Chain Management AT IKEA:

Activity to be done in groups.

SESSION 11 (LIVE IN-PERSON)

Session 11: BEST PRACTICES: WALMART'S SUSTAINABILITY STRATEGY

Teamwork presentation (first teams)

Practical Case: Wal-Mart's Sustainability Strategy (A) (HBS OIT71A-PDF-ENG)

SESSION 12 (LIVE IN-PERSON)

Session 12: TRIPLE A SUPPLY CHAIN. ACHIEVING SUSTAINABILITY THROUGH SUPPLY CHAIN INTEGRATION. BEST PRACTICES: FERRERO GROUP.

Teamwork presentation (second teams)

Article: Triple-A Supply Chain (HBS R0410F-PDF-ENG)

Practical Case: Ferrero Group: Achieving Sustainability Through Supply Chain Integration (HBS W17371-PDF-ENG)

SESSION 13 (LIVE IN-PERSON)

Session13: COMPETING THROUGH SUSTAINABILITY. BEST PRACTICES: UNILEVER

Unilever's New Global Strategy: Competing through Sustainability

Session 14: SUSTAINABLE GROWTH: LEARNING FROM MISTAKES: STARBUCKS

The HBR Interview: Starbucks CEO Howard Schultz

Practical Case: Unilever's New Global Strategy: Competing through Sustainability (HBS 916414-PDF-ENG)

SESSION 14 (LIVE IN-PERSON)

Session13: COMPETING THROUGH SUSTAINABILITY. BEST PRACTICES: UNILEVER

Unilever's New Global Strategy: Competing through Sustainability

Session 14: SUSTAINABLE GROWTH: LEARNING FROM MISTAKES: STARBUCKS

The HBR Interview: Starbucks CEO Howard Schultz

Article: The HBR Interview: Starbucks CEO Howard Schultz (HBS R1007K-PDF-ENG)

SESSION 15 (ASYNCHRONOUS)

FINAL REPORT PRESENTATIONS

Every student will present a final report on a free selection topic related with the course. Professor will give all the indications for this activity and the possible formats of the deliverable with time enought.

EVALUATION CRITERIA

criteria	percentage	Learning Objectives	Comments
Class Participation	25 %		10% attendance and 15% class participation
Intermediate Tests	25 %		During Session 7
Group Presentation	25 %		Presentation during session 11&12 (12.5%) Teamwork STSCM at IKEA during Session 9&10 (12.5%)
Individual Work	25 %		During Session 15

RE-SIT / RE-TAKE POLICY

Different learning and teaching methodologies will be used in order to give dynamism and a practical character to the subject.

The methodology includes business case study, articles, technical notes videos, latest news and Internet web-links. All this material will be mixed in order to ensure the appropriate process for the analysis and decision-making skills. Teamwork is essential in the process and every team will prepare a teamwork presentation and a teamwork activity STSCM at IKEA. Groups will be informed and will be given indications in advance in order to prepare their reports and presentations properly. There are also an intermediate test and a final report.

Attendance & Class Participation (25%):

- Attendance counts as 5% and class participation as 20%. Make sure to participate debating with your colleagues and creating a collaborative learning environment. Add value with your participation. It is very important to attend to all sessions and actively contribute with your opinions, decisions and solid arguments in an environment of respect.

Teamwork Activities (25%):

- IKEA Fieldwork (12,5%) During session 9&10 we shall do a teamwork activity about IKEA and every team will answer some challenges prepared by the professor related to sustainability. Professor will give all the indications to prepare this activity.
- Teamwork Presentation (12,5%):Teamwork presentations will take place during session 11&12, where every team will prepare only one presentation with the professor's indications.
- Groups configuration (number of groups and members of each group) will be established by

Adjunct Professor before the starting of the course according to final number of students taking part of this course.

Intermediate Test (25%):

- During session 7: 15 Multiple Test questions and 4 open questions to answer in approx. 8 lines.

Final Report (25%):

- Each student will elaborate an individual final report about a chosen topic related with the subject for Session 15. The more important aspects for the evaluation of this individual report are: Relationship with the learning topics of the subject, multimedia material to illustrate your topic, application of the tools and frameworks studied, creativity and strucure of the presentation.

RE-SIT / RE-TAKE POLICY:

Each student has four (4) chances to pass any given course distributed over two (2) consecutive academic years. Each academic year consists of two calls: one (1) ordinary call (during the semester when the course is taking place); and one (1) extraordinary call (or "re-sit") in June/July.

Students who do not comply with the 80% attendance requirement in each subject during the semester will automatically fail both calls (ordinary and extraordinary) for that Academic Year and have to re-take the course (i.e., re-enroll) during the next Academic Year.

The Extraordinary Call Evaluation criteria will be subject to the following rules:
Students failing the course in the ordinary call (during the semester) will have to re-sit evaluation for the course in June / July (except those students who do not comply with the attendance rule, and therefore will not have that opportunity, since they will fail both calls and must directly re-enroll in the course during the next Academic Year).
It is not permitted to change the format nor the date of the extraordinary call exams or deadlines under any circumstance. All extraordinary call evaluation dates will be announced in advance and must be taken into consideration before planning the summer (e.g. internships, trips, holidays, etc.)
The June/July re-sit will consist of a comprehensive evaluation of the course. Your final grade for the course will depend on the performance in this exam or evaluation only. I.e., continuous evaluation over the semester (e.g. participation, quizzes, projects and/or other grade components over the semester) will not be taken into consideration on the extraordinary call. Students will have to achieve the minimum passing grade of 5 and the maximum grade will be capped at 8.0 (out of 10.0) – i.e., "notable" in the extraordinary call.
Re-takers: Students who failed the subject on a previous Academic Year and are now re-enrolled as re-takers in a course will need to check the syllabus of the assigned professor, as well as contact the professor individually, regarding the specific evaluation criteria for them as re-takers in the course during that semester (ordinary call of that Academic Year). The maximum grade that may be obtained as a retaker during the ordinary call (i.e., the 3rd call) is 10.0 (out of 10.0).

After exams and other assessments are graded by the professor (on either the ordinary or extraordinary call), students will have a possibility to attend a review session (whether it be a final exam, a final project, or the final overall grade in a given course). Please be available to attend the session in order to clarify any concerns you might have regarding your grade. Your professor will inform you about the time and place of the review session.
Students failing more than 18 ECTS credits after the June/July re-sits will be asked to leave the Program. Please, make sure to prepare yourself well for the exams in order to pass your failed subjects.

In case you decide to skip the opportunity to re-sit for an exam or evaluation during the June/July extraordinary call, you will need to enroll in that course again for the next Academic Year as a re-taker, and pay the corresponding tuition fees. As you know, students have a total of four (4) allowed calls to pass a given subject or course, in order to remain in the program.

BIBLIOGRAPHY

Recommended

- Nancy Bocken, Paavo Ritala, Laura Albareda, Robert Verburg. (2019). *Innovation for Sustainability: Business Transformations Towards a Better World.* Palgrave Macmillan. ISBN 9783319973852 (Printed)

- Balkan Cetinkaya, Christoph Tyssen, Graham Ewer, Richard Cuthbertson, and Thorsten Klaas-Wissing. (2011). *Sustainable Supply Chain Management: Practical Ideas for Moving Towards Best Practice.* Springer. ISBN 9783642120220 (Printed)

- Joëlle Morana. (2013). *Sustainable Supply Chain Management.* Wiley. ISBN 9781848215269 (Printed)

BEHAVIOR RULES

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ATTENDANCE POLICY

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ETHICAL POLICY

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TECHNOLOGY NEW VENTURES

Grado en Administración de Empresas / Bachelor in Business Administration BBA SEP-2024 TNV-NBA.1C.e.OPT.M.A

Area Entrepreneurship

Number of sessions: 15

Academic year: 24-25

Degree course:

Number of credits: 3.0

Semester: 1º

Category: OPTIONAL

Language: English

Professor: **IGNACIO LARRU MARTÍNEZ**

E-mail: ilarru@faculty.ie.edu

Professor IGNACIO LARRU MARTÍNEZ

Ignacio Larrú is a technology investment director at KFund a venture capital fund in Spain. A former investment banker Ignacio was head of Big Data projects at Ticketbis. His work involves advising companies on the design and implementation of information systems and statistical models for both descriptive and predictive analytics.Previously Ignacio has been the founder (and coder…) of a wide array of different start-ups ranging from online retailers to complex software in the civil sector. He started his career as an IT consultant with PricewaterhouseCoopers developing software applications for leading financial institutions.

Ignacio holds a Master of Telecommunications Engineering from Universidad Politécnica de Madrid and a Master in Business Administration from IESE business School.

Office Hours

Office hours will be on request. Please contact at:

ilarru@faculty.ie.edu

PREREQUISITES

There are no prerequisites to take this course

SUBJECT DESCRIPTION

Technology Entrepreneurship is one of the most praised and discussed yet vaguely defined topics in today's turbulent economic environment. What is a technology entrepreneurship? Who can be defined as a technology entrepreneur? How can technological innovations be transformed into viable business opportunities? Sheltered by its polyhedral nature a wide array of different schools of thought for technology entrepreneurship have blossomed, each of them focusing on a particular side of this elusive topic. In this course we will examine the established knowledge base for technology entrepreneurship identifying the entrepreneurial mindset and process trying to distinguish art from science. We will be examining technological entrepreneurship as a process of innovation and value creation, rather than the single event of opening a business or writing a business plan. In our course we will navigate through the entrepreneurial journey from the initial opportunity recognition and assessment to the final business scaling reflecting on important aspects like innovation management, disruptive technologies or web and app development processes. We will focus our attention in the development of web and mobile app and startups and the challenges faced by entrepreneurs in these areas from the initial conception to the implementation of its idea.

LEARNING OBJECTIVES

Understanding innovation cycles and the creation of disruption technologies

- Be better able to recognize entrepreneurial opportunities based on these disruptive technologies
- Be able to translate the initial idea into an action plan to test it and implement it
- Learn the basics of achieving scalable growth in a technology startup
- Gain understanding of the implementation processes of the most relevant technologies in order to lead ventures based on them

TEACHING METHODOLOGY

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. Professor's main role is to lead and guide students to achieve the learning objectives of the course. This is done by engaging in a diverse range of teaching techniques and different types of learning activities such as the following:

Learning Activity	**Weighting**	**Estimated time a student should dedicate to prepare for and participate in**
Lectures	13.3 %	10.0 hours
Discussions	26.7 %	20.0 hours
Exercises in class, Asynchronous sessions, Field Work	13.3 %	10.0 hours
Group work	33.3 %	25.0 hours
Individual studying	13.3 %	10.0 hours
TOTAL	100.0 %	75.0 hours

AI POLICY

In this course, the use of generative artificial intelligence (GenAI) is encouraged, with the goal of developing an informed critical perspective on potential uses and generated outputs.

However, be aware of the limits of GenAI in its current state of development:

·If you provide minimum effort prompts, you will get low quality results. You will need to refine your prompts to get good outcomes. This will take work.

·Don't take ChatGPT's or any GenAI's output at face value. Assume it is wrong unless you either know the answer or can cross-check it with another source. You are responsible for any errors or omissions. You will be able to validate the outputs of GenAI for topics you understand.

·AI is a tool, but one that you need to acknowledge using. Failure to do so is in violation of academic honesty policies. Acknowledging the use of AI will not impact your grade.

Suggested format to acknowledge the use of generative AI tools:

I acknowledge the use of [AI systems link] to [specify how you used generative AI]. The prompts used include [list of prompts]. The output of these prompts was used to [explain how you used the outputs in your work].

If you have chosen not to include any AI generated content in your assignment, the following disclosure is recommended:

No content generated by AI technologies has been used in this assignment.

PROGRAM

SESSION 1 (LIVE IN-PERSON)

Why technology entrepreneurship is different?. Introduction to the course and basic concepts on the new business models for technology entrepreneurs

SESSION 2 (LIVE IN-PERSON)

Introduction to the business model canvas for technology ventures. In this session we will review the Lean Canvas as the first step in the development of a new venture.

SESSION 3 (LIVE IN-PERSON)

In these two sessions you will have, together with your group, to think of your idea for the course and develop the lean canvas and business hypotheses for your idea based on the content from the previous sessions

SESSION 4 (LIVE IN-PERSON)

In these two sessions you will have, together with your group, to think of your idea for the course and develop the lean canvas and business hypotheses for your idea based on the content from the previous sessions

SESSION 5 (LIVE IN-PERSON)

Customer Discovery – Test the problem

As an entrepreneur it is very important for you to focus on real customer pains. In this session we will learn how to conduct customer interviews in order to extract the maximum insight from them. Additionally we will set up our smoke test landing page for our ideas.

Practical Case: Suzuka Aquajets (s-c)

SESSION 6 (LIVE IN-PERSON)

Customer Discovery – Test the solution

Incremental implementation is key for successful technological innovations. In this session we will learn how to build our company taking user's feedback into consideration through an incremental prototype from Minimum Viable Product to Beta testing

SESSION 7 (LIVE IN-PERSON)

Customer Discovery – Test the solution

Incremental implementation is key for successful technological innovations. In this session we will learn how to build our company taking user's feedback into consideration through an incremental prototype from Minimum Viable Product to Beta testing

Practical Case: Pick and click (s-c)

SESSION 8 (LIVE IN-PERSON)

In these sessions you will work with your group on the customer interview questionnaire and your landing page for the MVP of your idea.

SESSION 9 (LIVE IN-PERSON)

In these sessions you will work with your group on the customer interview questionnaire and your landing page for the MVP of your idea.

SESSION 10 (LIVE IN-PERSON)

In these sessions we will start thining about growth for our ventures. We will review the main growth loops (viral, paid and content based) and how they fit with the different products and business models

SESSION 11 (LIVE IN-PERSON)

In these sessions we will start thining about growth for our ventures. We will review the main growth loops (viral, paid and content based) and how they fit with the different products and business models

SESSION 12 (LIVE IN-PERSON)

In these sessions we will start thining about growth for our ventures. We will review the main growth loops (viral, paid and content based) and how they fit with the different products and business models

SESSION 13 (LIVE IN-PERSON)

Entrepreneurial finance: From bootstrapping to Venture Capital

In this session we will review and analyze the main characteristics of the different financing sources for entrepreneurs

Practical Case: Deluxe Capital (s-c)

SESSION 14 (LIVE IN-PERSON)

In this session you and your team will prepare the final presentation that you will presnet in front of the class during the session 15.

SESSION 15 (LIVE IN-PERSON)

In these sessions we will review the contents of the course using each team's presentation as an anchor for discussion

EVALUATION CRITERIA

Your final grade in the course will be based on both group deliverables and the final presentation that will be weighted in the following way:

criteria	percentage	Learning Objectives	Comments
Class Participation	20 %		
Workgroups	30 %		Deliverables for each group during course
Group Presentation	50 %		Final group presentation

RE-SIT / RE-TAKE POLICY

A. CLASS PARTICIPATION

Three main criteria will be used in reaching judgment about your class participation:

- Depth and Quality of Contribution: The most important dimension of participation concerns what it is that you are saying. A high quality comment reveals depth of insight, rigorous use of case evidence, consistency of argument, and realism.
- Moving Your Peers' Understanding Forward: Great ideas can be lost through poor presentation. A high quality presentation of ideas must consider the relevance and timing of comments, and the flow and content of the ensuing class discussion. It demands comments that are concise and clear, and that are conveyed with a spirit of involvement in the discussion at hand.
- Frequency: Frequency refers to the attainment of a threshold quantity of contributions that is sufficient for making a reliable assessment of comment quality. The logic is simple: if contributions are too few, one cannot reliably assess the quality of your remarks. However, once threshold quantity has been achieved, simply increasing the number of times you talk does not automatically improve your evaluation. Beyond the threshold, it is the quality of your comments that must improve. In particular, one must be especially careful that in claiming more than a fair share of "airtime", quality is not sacrificed for quantity. Finally, your attempts at participation should not be such that the instructor has to "go looking for you". You should be attempting to get into the debate on a regular basis.

B. WORKGROUPS

During the course you will work with your group to deliver materials that will help you advance in your understanding of your market, business model and idea.

C. GROUP FINAL PRESENTATION

In the last session of the course you will need to present your findings regarding your idea in front of your classmates. The presentation will have the format of an investor's pitch with a following Q&A section.

RE-SIT / RE-TAKE POLICY

Each student has four (4) chances to pass any given course distributed over two (2) consecutive academic years. Each academic year consists of two calls: one (1) ordinary call (during the semester when the course is taking place); and one (1) extraordinary call (or "re-sit") in June/July.

Students who do not comply with the 80% attendance requirement in each subject during the semester will automatically fail both calls (ordinary and extraordinary) for that Academic Year and have to re-take the course (i.e., re-enroll) during the next Academic Year.

Regarding to the newly implemented ´liquid learning´ model, all students must still abide by the same IEU attendance policy, including those students who are connecting remotely to class sessions and not physically in the classroom because they are unable to be physically in Spain, on campus. During the sessions, students connecting remotely are required to fully connect their camera and microphone at all times, and must actively participate during the sessions (using all necessary audiovisual equipment), just as their fellow peers who are physically present in the classroom on campus.

The Extraordinary Call Evaluation criteria will be subject to the following rules:

- Students failing the course in the ordinary call (during the semester) will have to re-sit evaluation for the course in June / July (except those students who do not comply with the attendance rule, and therefore will not have that opportunity, since they will fail both calls and must directly re-enroll in the course during the next Academic Year).
- It is not permitted to change the format nor the date of the extraordinary call exams or deadlines under any circumstance. All extraordinary call evaluation dates will be announced in advance and must be taken into consideration before planning the summer (e.g. internships, trips, holidays, etc.)
- The June/July re-sit will consist of a comprehensive evaluation of the course. Your final grade for the course will depend on the performance in this exam or evaluation only. I.e., continuous evaluation over the semester (e.g. participation, quizzes, projects and/or other grade components over the semester) will not be taken into consideration on the extraordinary call. Students will have to achieve the minimum passing grade of 5 and the maximum grade will be capped at 8.0 (out of 10.0) – i.e., "notable" in the extraordinary call.
- Re-takers: Students who failed the subject on a previous Academic Year and are now re-enrolled as re-takers in a course will need to check the syllabus of the assigned professor, as well as contact the professor individually, regarding the specific evaluation criteria for them as re-takers in the course during that semester (ordinary call of that Academic Year). The maximum grade that may be obtained as a retaker during the ordinary call (i.e., the 3rd call) is 10.0 (out of 10.0).

After exams and other assessments are graded by the professor (on either the ordinary or extraordinary call), students will have a possibility to attend a review session (whether it be a final exam, a final project, or the final overall grade in a given course). Please be available to attend the session in order to clarify any concerns you might have regarding your grade. Your professor will inform you about the time and place of the review session.

- Students failing more than 18 ECTS credits after the June/July re-sits will be asked to leave the Program. Please, make sure to prepare yourself well for the exams in order to pass your failed subjects.
- In case you decide to skip the opportunity to re-sit for an exam or evaluation during the

June/July extraordinary call, you will need to enroll in that course again for the next Academic Year as a re-taker, and pay the corresponding tuition fees. As you know, students have a total of four (4) allowed calls to pass a given subject or course, in order to remain in the program.

BEHAVIOR RULES

Please, check the University's Code of Conduct here. The Program Director may provide further indications.

ATTENDANCE POLICY

Please, check the University's Attendance Policy here. The Program Director may provide further indications.

ETHICAL POLICY

Please, check the University's Ethics Code here. The Program Director may provide further indications.

THE ART OF SELLING

Grado en Administración de Empresas / Bachelor in Business Administration BBA SEP-2024 TAOS-NBA.1C.m.OPT.M.A

Area Marketing and Communication

Number of sessions: 15

Academic year: 24-25

Degree course:

Number of credits: 3.0

Semester: 1º

Category: OPTIONAL

Language: English

Professor: **MARINA TIRADO TEWES**

E-mail: mtirado@faculty.ie.edu

MARINA TIRADO TEWES

Marina Tirado is a global thought leader – professor, speaker, chief curiosity officer, futurist, ceramist, and learning and development specialist – whose career is forged in the frontier between business strategy, sales, leadershio and education.

She grew up in 5 continents and by the time she entered university, she had travelled the world and spoke five languages fluently.

Marina works with forward thinkers, leaders and organizations who wish to gain a different perspective in this era of unusual business. It is an era that calls for virtuous and courageous individuals to lead human organizations forward, generating a positive impact upon our world, our workplace, and our communities.

She brings together the best in strategy and sales to drive smarter, sustainable growth by identifying global change drivers, and reimagining markets and opportunities. Marina is passionate about helping her students reach their full potential by focusing on their innate capabilities and expand their innate talents and potential.

She teaches this course with a broad experience in sales, having managed sales forces of over 100 people in more than 30 different countries.

Academic credentials:

- Executive Master in Positive Leadership and Strategy. IE Business School, Spain.
- Master in e-Business. IE Business School, Spain.
- Bachelor of Science Degree in Business Administration. Fordham University, New York City.
- ICF Certified Executive and Team Coach

Office Hours

Office hours will be on request. Please contact at:

Weekly face-to-face office hours will be scheduled the first week of class. You can also schedule an invidivudal office hour by email at: mtirado@faculty.ie.edu.

PREREQUISITES

To sell is human. If you are human, you have innate sales capacities. The only pre-requesite for this program is to be human.

SUBJECT DESCRIPTION

One out of every nine workers worldwide works in sales. Each day people earn their living by helping someone make a purchase. They are real estate brokers, consultants, retailers, executives, bartenders, industrial sales representatives, among many others. They sell trains to governments, digital transformation projects to organizations, food to wholesalers, and cars to prospective drivers at dealerships across the world.

Sales remains the second-largest occupational category in the world and even with the explosion of AI, Internet, smartphones, and e-commerce, the number of sales professionals has, against all odds, increased steadily over the past years.

As all other talents and skills honed over time, selling is a true art form that takes mastery to conquer and creativity to shape. It is also a life skill and a lot of fun.

In the corporate world, the sales departments within organizations are crucial for continues success and growth. The commercial function of an organization is where the execution of the marketing strategy is materialized. Its effectiveness has a direct and profound impact on the competitiveness of organizations, rendering the commercial department as the “voice of the customers”.

Sales and Business Development Executives are also the first ones to identify change and disruption in the industry, pushing their organizations to innovate constantly.

An honest and direct dialogue between an organization and its customers sets a flourishing ground for innovation, new products and services, and business opportunities.

The purpose of this journey we take together in this course is to dive into the importance of sales and business development departments within an organization and at the same time develop your own efficient and effective art of selling skills.

What you will gain from our time together is a deep dive into this fascinating discipline that will provide you with a wider strategical business perspective and self-awareness about your own selling skills. By far, the best way to influence people is to understand the true nature of our human experience.

“100% of employees are human. 100% of customers are human. You either know about human, or you do not know about business.”

Simon Sinek.

LEARNING OBJECTIVES

In this course, we will focus on both your own selling skills, how to manage a sales department, as well the sales and commercial strategy in an organization. The program objectives include:

- A deep look into your own mastery of selling.
- A deep understanding of the human experience in the sales interaction.
- Comprehend the role of the sales and business development departments.
- Grasp the different structures of sales forces within organizations.
- Understand the rising impact of technology and AI in sales.
- View the change drivers that are disrupting different industries and thei impact in sales strategy.
- Build bridges between customers, distribution channels, products, and services.
- Become aware of the challenges of creating, managing, and motivating a sales force.
- Gain deep knowledge about how to build strong customer relationships through and open and honest dialogue.
- Design effective and smart channel and customer strategies.
- Understand customer strategies and needs.
- Build and effective and dynamic commercial plan.

TEACHING METHODOLOGY

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. The professor's main role is to lead and guide students to achieve the learning objectives of the course. This is done by engaging in a diverse range of teaching techniques and different types of learning activities such as the following:

Learning Activity	**Weighting**	**Estimated time a student should dedicate to prepare for and participate in**
Lectures	20.0 %	15.0 hours
Discussions	20.0 %	15.0 hours
Exercises in class, Asynchronous sessions, Field Work	20.0 %	15.0 hours
Group work	20.0 %	15.0 hours
Individual studying	20.0 %	15.0 hours
TOTAL	100.0 %	75.0 hours

AI POLICY

Generative artificial intelligence (GenAI) tools may be used in this course for research, ideation, generating an outline, proofreading, grammar check, coding, image generation, with appropriate acknowledgement. GenAI may not be used for assignments, group submissions, exams. If a student is found to have used AI-generated content inappropriately, it will be considered academic misconduct, and the student might fail the respective assignment or the course.

If you are in doubt as to whether you are using GenAI tools appropriately in this course, I encourage you to discuss your situation with me.
Below, a suggested format to acknowledge the use of generative AI tools:

I acknowledge the use of [AI systems link] to [specify how you used generative AI]. The prompts used include [list of prompts]. The output of these prompts was used to [explain how you used the outputs in your work]

Please note that acknowledging AI will not impact your grade. If AI was permitted to use in your assignment, but you have chosen not to include any AI generated content, the following disclosure is recommended:

No content generated by AI technologies has been used in this assignment.

PROGRAM

SESSION 1 (LIVE IN-PERSON)

This program consists of four parts:

Part 1: The first part of the course consists of understanding the current business context. The future is no longer an extrapolation of the past, it is volatile and unpredictable. Business growth is no longer steady or assured. It requires a new focus and can be exponential. This requires new strategic thinking and mindset for the commercial departments.

Part 2: The second part of the program focuses on gaining mastery in selling and the strategic importance of the sales departments within organizations. We will deep dive into designing effective channel and retail strategies.

Part 3: The third part focuses on how to build lasting and flourishing relationships with customers and ecosystems and how to manage sales teams. A special focus on the impact of AI and other technologies in managing the effectiveness of the customer relationship will be discussed.

Part 4: Finally, the fourth part will provide an idea of the techniques for identifying and understanding business opportunities and creating an overall commercial plan.

Introducing the Art of Selling:

- Overview of the program
- Introduction of key concepts and elements
- Program content and assignments
- Getting to know each other

SESSION 2 (LIVE IN-PERSON)

Future & Growth

The future is no longer an extrapolation of the past, it is volatile and unpredictable. Growth is no longer steady or assured. It requires a new focus and can be exponential. This requires new strategic thinking. What's the future of business? How are business leaders reinventing organizations, and driving innovation and transformation, for future growth?

- Vision Canvas … how to define a better future
- Growth Canvas … how to find the best opportunities
- Disruption Canvas … how to change the game
- Strategy Canvas … how to choose your priorities

SESSION 3 (LIVE IN-PERSON)

Future & Growth Continued ...

Understanding change and growth vectors in different industries and setting the correct sales Strategies

Technical note & tutorials: Sales Strategy Definition and Implementation (Part I) (MKS020156-U-ENG-VID)

Technical note & tutorials: Sales Strategy Definition and Implementation (Part II) (MKS020157-U-ENG-VID)

SESSION 4 (LIVE IN-PERSON)

The New Customer Agenda

"Yes, a real person, a human being. I have my needs and wants, to get through the day, and to achieve what I must. But I also have my hopes, dreams and ambitions. For too long you have treated me as a name or number. You group me into segments, or sometimes just a mass of average people. But I'm not prepared to tolerate that anymore …"

In seeking to understand the longer-term agenda for customers, we need combine our insight into customer priorities and aspirations of today with the broader "megatrend" drivers of the external world.

SESSION 5 (LIVE IN-PERSON)

The New Customer Agenda Continued ...

Understanding sales and communication channels in the era of AI.

Technical note & tutorials: Sales Compensation (MKS020158-U-ENG-VID)

SESSION 6 (LIVE IN-PERSON)

The Human in Sales. Global and Effective Sales Skills.

- What makes a great sales person?
- What can we learn for great sales executive?
- How do we establish a good human connection?
- What are the interferences in the sales process?

Technical note & tutorials: Basics of Sales Management (MKS020189-U-ENG-HTM)

SESSION 7 (LIVE IN-PERSON)

The Human in Sales. Global and Effective Sales Skills. Continued.

- What makes a great sales person?
- What can we learn for great sales executive?
- How do we establish a good human connection?
- What are the interferences in the sales process?

SESSION 8 (LIVE IN-PERSON)

Getting into Action.

- Customer Journey mapping. Pain and Delight Points
- Target audiences

- Happy Customers Everywhere. Channels and Emotions.
- How to create customer wow moments.
- Pleasure Meaning and Engagement

SESSION 9 (LIVE IN-PERSON)

Sales Management

- Structuring the Sales Force for Customer and Company Success
- Sales Force?Generated Marketing Intelligence
- Management of a Contracted Sales Force
- Incentive Systems
- Sizing the Sales Force and Designing Sales Territories for Results
- Training and Motivation of Sales Force
- CRM and AI Technologies

SESSION 10 (LIVE IN-PERSON)

Sales Management Continued. Focus on B2B, B2C and B2G

- Structuring the Sales Force for Customer and Company Success
- Sales Force?Generated Marketing Intelligence
- Management of a Contracted Sales Force
- Incentive Systems
- Sizing the Sales Force and Designing Sales Territories for Results
- Training and Motivation of Sales Force

SESSION 11 (LIVE IN-PERSON)

The Sales Force and the Customer

- Salespeople's Influence an Consumers' and Business Buyers' Goals and Wellbeing
- Sales Technology
- Customer Selection to Acquire, Retain, and Grow
- Customer Relationship Management and the Sales Force
- The Use of Organizational Climate in Sales Force Research

SESSION 12 (LIVE IN-PERSON)

The Moment of Truth. Raising the standards and closing the deal.

- Sustainable Business Growth
- Innovation and Creativity in the Sales Process
- Negotation Skills

SESSION 13 (LIVE IN-PERSON)

Creating the Commercial Plan.

- Vision Canvas … how to define a better future
- Growth Canvas … how to find the best opportunities
- Disruption Canvas … how to change the game
- Strategy Canvas … how to choose your priorities
- Aligning the brand vision, business objectives with sales objectives
- The Strategic Role of the Selling Function
- Sales Force Agility, Strategic Thinking, and Value Propositions

SESSION 14 (LIVE IN-PERSON)

Creating the Commercial Plan Continued.

- Vision Canvas … how to define a better future
- Growth Canvas … how to find the best opportunities
- Disruption Canvas … how to change the game
- Strategy Canvas … how to choose your priorities

Technical note & tutorials: Scaling Sales: From Startup to Scaleup (ENT020074-U-ENG-VID)

SESSION 15 (LIVE IN-PERSON)

Final Exam

EVALUATION CRITERIA

CLASS PARTICIPATION (Face-to-Face and Online)

Three main criteria will be used in reaching judgment about your class participation:

- Depth and Quality of Contribution: The most important dimension of participation concerns what it is that you are saying. A high-quality comment reveals depth of insight, rigorous use of case evidence, consistency of argument, and realism.
- Moving Your Peers' Understanding Forward: Great ideas can be lost through poor presentation. A high-quality presentation of ideas must consider the relevance and timing of comments, and the flow and content of the ensuing class discussion. It demands comments that are concise and clear, and that are conveyed with a spirit of involvement in the discussion at hand.
- Frequency: Frequency refers to the attainment of a threshold quantity of contributions that is sufficient for making a reliable assessment of comment quality. The logic is simple: if contributions are too few, one cannot reliably assess the quality of your remarks. However, once threshold quantity has been achieved, simply increasing the number of times you talk does not automatically improve your evaluation. Beyond the threshold, it is the quality of your comments that must improve. In particular, one must be especially careful that in claiming more than a fair share of "airtime", quality is not sacrificed for quantity. Finally, your attempts at participation should not be such that the instructor has to "go looking for you". You should be attempting to get into the debate on a regular basis.

GROUP FIELD WORK

You will be visiting retail stores and observe the different elements of their shopper propositions and strategy. You will give a report and a presentation to the class. This work will teach you to use objective indicators and public sources of information to better understand your customers, their objectives and needs. You will be asked to think about possible strategies that fit best with that particular customer.

FINAL GROUP PRESENTATION

You will have to prepare a final work where you will apply your learnings from the course. Two possibilities are given: taking a company / product of your choice, you will propose a channel strategy and the corresponding design of the sales organization to serve it, or you will propose a strategic customer segmentation.

FINAL EXAM

All students will make a final exam to check they have taken the basic concepts and learnings covered throughout the course.

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criteria	percentage	Learning Objectives	Comments
Workgroups	25 %		
Final Exam	25 %		
Class Participation	25 %		
Midterm Exam	25 %		

RE-SIT / RE-TAKE POLICY

Each student has four (4) chances to pass any given course distributed over two (2) consecutive academic years. Each academic year consists of two calls: one (1) ordinary call (during the semester when the course is taking place); and one (1) extraordinary call (or “re-sit”) in June/July.

Students who do not comply with the 80% attendance requirement in each subject during the semester will automatically fail both calls (ordinary and extraordinary) for that Academic Year and have to re-take the course (i.e., re-enroll) during the next Academic Year.

The Extraordinary Call Evaluation criteria will be subject to the following rules:

· Students failing the course in the ordinary call (during the semester) will have to re-sit evaluation for the course in June / July (except those students who do not comply with the attendance rule, and therefore will not have that opportunity, since they will fail both calls and must directly re-enroll in the course during the next Academic Year).

· It is not permitted to change the format nor the date of the extraordinary call exams or deadlines under any circumstance. All extraordinary call evaluation dates will be announced in advance and must be taken into consideration before planning the summer (e. g. internships, trips, holidays, etc.)

· The June/July re-sit will consist of a comprehensive evaluation of the course. Your final grade for the course will depend on the performance in this exam or evaluation only. I.e., continuous evaluation over the semester (e. g. participation, quizzes, projects and/or other grade components over the semester) will not be taken into consideration on the extraordinary call. Students will have to achieve the minimum passing grade of 5 and the maximum grade will be capped at 8.0 (out of 10.0) – i.e., “notable” in the extraordinary call.

· Re-takers: Students who failed the subject on a previous Academic Year and are now re-enrolled as re-takers in a course will need to check the syllabus of the assigned professor, as well as contact the professor individually, regarding the specific evaluation criteria for them as re-takers in the course during that semester (ordinary call of that Academic Year). The maximum grade that may be obtained as a retaker during the ordinary call (i.e., the 3rd call) is 10.0 (out of 10.0).

After exams and other assessments are graded by the professor (on either the ordinary or extraordinary call), students will have a possibility to attend a review session (whether it be a final exam, a final project, or the final overall grade in a given course). Please be available to attend the session in order to clarify any concerns you might have regarding your grade. Your professor will inform you about the time and place of the review session.

· Students failing more than 18 ECTS credits after the June/July re-sits will be asked to leave the Program. Please, make sure to prepare yourself well for the exams in order to pass your failed subjects.

· In case you decide to skip the opportunity to re-sit for an exam or evaluation during the June/July extraordinary call, you will need to enroll in that course again for the next Academic Year as a re-taker, and pay the corresponding tuition fees. As you know, students have a total of four (4) allowed calls to pass a given subject or course, in order to remain in the program.

BIBLIOGRAPHY

Recommended

- Dan Pink. *To Sell is Human.* Penguin LCC US. ISBN 1594631905 (Digital)
- Jeanne Liedtka. *Designing for Growth: A Design Thinking Tool Kit for Managers.* Columbia University Press. ISBN 0231158386 (Printed)
- Jamie Smart. (2023). *Clarity: Clear Mind, Better Performance, Bigger Results.* 2nd edition. Capstone. 2nd edition. ISBN 0857089366 (Printed)

BEHAVIOR RULES

Please, check the University's Code of Conduct here. The Program Director may provide further indications.

1. Be on time: : Students arriving late will be marked as “Absent”. Only students that notify in advance in writing that they will be late for a specific session may be granted an exception (at the discretion of the professor).

2. If applicable, bring your name card and strictly follow the seating chart. It helps faculty members and fellow students to learn your names.

3. Do not leave the room during the lecture: Students are not allowed to leave the room during lectures. If a student leaves the room during lectures, he/she will not be allowed to re-enter and, therefore, will be marked as “Absent”. Only students that notify that they have a special reason to leave the session early will be granted an exception (at the discretion of the professor).

4. Do not engage in side conversation. As a sign of respect toward the person presenting the lecture (the professor as well as fellow students), side conversations are not allowed. If you have a question, raise your hand and ask it. It you do not want to ask it during the lecture, feel free to approach your professor after class. If a student is disrupting the flow of the lecture, he/she will be asked to leave the classroom and, consequently, will be marked as “Absent”.

5. Use your laptop for course-related purposes only. The use of laptops during lectures must be authorized by the professor. The use of Social Media or accessing any type of content not related to the lecture is penalized. The student will be asked to leave the room and, consequently, will be marked as “Absent”.

6. No cellular phones: IE University implements a “Phone-free Classroom” policy and, therefore, the use of phones, tablets, etc. is forbidden inside the classroom. Failing to abide by this rule entails expulsion from the room and will be counted as one absence.

7. Escalation policy: 1/3/5. Items 4, 5, and 6 above entail expulsion from the classroom and the consequent marking of the student as “Absent.” IE University implements an “escalation policy”: The first time a student is asked to leave the room for disciplinary reasons (as per items 4, 5, and 6 above), the student will incur one absence, the second time it will count as three absences, and from the third time onward, any expulsion from the classroom due to disciplinary issues will entail 5 absences.

ATTENDANCE POLICY

Please, check the University's Attendance Policy here. The Program Director may provide further indications.

This academic year´s student attendance policy aims to offer IE University students a world-class education.

CLASS ATTENDANCE

For in-person programs, students should attend their live, in-person sessions on campus.

According to IE University policy, attendance is mandatory; bachelor’s and master’s degree students are expected to attend 100% of the sessions as attendance is an essential component of IE´s learning methodology. For this reason, we monitor attendance closely and have established a policy for exceptional reasons for absence.

This policy applies to any type of session as planned in the syllabus: live in-person, asynchronous, and live online. Students attending less than 80% of sessions will receive a FAIL for the course. For bachelor-degree programs, this fail will apply to the ordinary and extraordinary calls of the current academic year. For master-degree programs, students must obtain a Low Pass in the subject’s retake, or they will face program expulsion.

The professor will monitor attendance to asynchronous sessions and such attendance will count the same way as synchronous sessions. As asynchronous sessions involve activities or assignments, the professor will monitor the completion of such work to record attendance.

Health problems, visa delays, travel restrictions, personal trips, appointments, family celebrations, or other personal matters are to be treated as exceptions to the 100% attendance policy. Such exceptions cannot total more than 20% of the student’s overall attendance in the course. If any student exceeds 20% of exceptional absences due to ongoing extraordinary circumstances, Program Management will study the case individually with the student. Program Management will inform professors of any extraordinary cases.

If students have questions about attendance, they should contact Program Management. Under no circumstances should students approach faculty to discuss attendance since faculty members have no responsibility/power to justify a student´s absence.

Students who are absent from live-in person sessions are permitted to attend the session online; however, they will be marked absent and will not be allowed to participate if any exam happens during that session.

INSTRUCTIONS FOR IN-PERSON SESSIONS

Student behavior in the classroom is a key factor to guarantee that every student has access to a conducive learning environment.

For this reason, IE University expects students to comply with the following rules:

- Punctuality: Students will not be allowed to enter the classroom once the class has begun, nor will they be allowed to leave the classroom until the end of the class. If a student arrives late or leaves early, the professor will mark them absent.

- Disruptive Behavior: The professor may ask students to leave the classroom if they engage in disruptive behavior such as side talking, misuse of digital devices (non-class-related use), eating/drinking, and if they are disrespectful when their peers or the professor are presenting. If this occurs, the professor will mark them absent.

- Smoking: We remind you that smoking or vaping inside the building is not permitted.

- Classroom Hygiene: As a sign of respect to the next students who will use the classroom after the session, students are expected to keep the classroom space clean and tidy and use the trash bins located outside the classroom.

Please refer to the Code of Conduct for further details.

INSTRUCTIONS FOR LIVE ONLINE SESSIONS

Student behavior during online sessions must comply with IE University standards on education, respect for peers and professors, and a commitment to learning. Any infraction to these standards could be considered an ethics violation as per the IE Code of Ethics.

Students must:

- Keep their cameras on for the entire session.

- Be at a desk seated in an appropriate position, in a distraction-free, professional environment, and follow an adequate dress-code for attending classes.

- Be courteous and conduct themselves maturely with their peers and professor in the digital or hybrid environment.

- Use the correct equipment.

- Download and log into (with IE University email) the latest version of Zoom if their course is taught through this platform.

Punctuality is expected from all students. For that reason, students will not be allowed to access the session once the class has begun. If a student is late, leaves the online session before the class ends, or unjustifiably switches off the camera during the session for an extended period of time, they will be marked absent.

RECORDINGS

Recordings of in-person sessions will not be made available. Only in very extraordinary circumstances Program Management can grant an exception to this policy based on justified and documented reasons. In any case, recordings will only be available for a limited period of 80 days.

ETHICAL POLICY

Please, check the University's Ethics Code here. The Program Director may

provide further indications.

THINK LIKE A FUTURIST

Grado en Administración de Empresas / Bachelor in Business Administration BBA SEP-2024 TLF-NBA.1C.is.OPT.M.A

Area Information Systems and Technology

Number of sessions: 15

Academic year: 24-25

Degree course:

Number of credits: 3.0

Semester: 1º

Category: OPTIONAL

Language: English

Professor: **ENRIQUE DANS**

E-mail: edans@faculty.ie.edu

Born in La Coruña, in May 14, 1965, Enrique Dans is one of the most prominent academics in the fields of technology adoption, entrepreneurship and innovation, included in the prestigious Thinkers 50 ranking since 2016. Besides being a full time professor since 1990, he is also Senior Advisor for Innovation and Digital Transformation at IE University.

Enrique graduated with a Baccalaureate in Science at Universidade de Santiago de Compostela in 1989 and a Master in Business Administration (MBA) at Instituto de Empresa (1989-90), before joining IE Business School as an Assistant Professor in IS/IT in September 1990. In 1996, Enrique got a grant to pursue doctoral studies at the John E. Anderson Business School at University of California in Los Angeles (UCLA): he graduated with a Ph.D. in Management in 2000, with a dissertation focused on the transition of newspapers from the paper to the screen and the measurable effects of IT adoption in small and medium enterprises.

Whilst at UCLA, Enrique worked for the International Management Fellowship (IMF) as a Program Instructor between 1997 and 2000. Once returned to Spain in 2000, Enrique rejoined IE Business School as a Full Professor and IS/IT Area Chair, and started a permanent line of collaboration with Spanish newspapers and magazines on technology adoption, innovation, entrepreneurship and the effect of technology at the consumer, corporate and societal level of analysis. Enrique keeps a permanent presence in the Spanish and international media panorama, is a board member in the digital newspaper El Español, and publishes many articles and collaborations in other newspapers, magazines, radio and TV. Enrique is also Senior Contributor to the US edition of Forbes magazine, where he's been writing regularly since 2014. In 2016, he got the prestigious Adigital Award in Communication. He also advises online startups and consolidated companies as a consultant or board member. The newspaper El Mundo has included him in the “Top 25 most influential people in Spain” on the Internet and Technology category every single year since 2006. Besides that, he is one of the highest ranked professors at IE Business School according to his student evaluations. He teaches several courses in the IS/IT, Innovation and Entrepreneurship areas: “Innovation in a digital world”, “Technology immersion”, “Digital journalism”, “CRM”, “Social web”, and “Managing the tech startup”, with student evaluations consistently above 4 in a scale from 1 to 5.

In February 2003, Enrique started his personal blog, enriquedans.com, and he has been publishing regularly every single day since then, turning it into the most influential technology blog in Spanish. In 2010, he published his first book, “Todo va a cambiar” (“Everything is gonna change”) with a foreword from Vinton Cerf, and became a best-seller in the management category in Spanish. He also published an online social edition of the book at todovaacambiar.com with the full text supplemented with links, pictures, videos and comments. Since July 2013, his blog is also available in English on Medium. In October 2019, Enrique released another book, "Viviendo en el Futuro" ("Living in the Future"), with views on the future that many critics say have been dramatically pushed forward by the COVID-19 pandemic. In April 2023, he published his third book, "Todo vuelve a cambiar" ("Everything is going to change... again").

Enrique is married to Susana Alosete, a former TV producer in the US, TV blogger and now managing all of Enrique's professional activities. They have one daughter, Claudia, thirty years old, working on internet advertising and married to an Amazon developer, and a grandson, Julio, born in February 2023.

Academic Background

- Ph.D in Management (Information Systems), The John E. Anderson School of Management at UCLA
- CPCL, Harvard Business School
- MBA, Instituto de Empresa
- B.Sc. (Biology), Universidade de Santiago de Compostela

Professional Background

- Chief Innovation Officer at TuringDream
- Tech writer at enriquedans.com (SP) and on Medium (EN)
- Senior Advisor on Innovation and Digital Transformation at IE Business School since September 2016
- Founder at Lonxanet.com (closed)
- Former advisor at Tractis (closed), SocialMediaSL (exit), WeblogsSL (exit), Petuki (exit), DoctorDoctor (closed) and Spotbros (exit)
- Member of the Strategic Advisory Board, BigML
- Member of the Netexplo University Network and member of Unesco Netexplo Advisory Board
- Forbes (US Edition) senior contributor between 2014 and 2021
- Key Opinion Leader (KOL), Huawei
- Board member at El Español, 2015 to 2020
- Included by Forbes in its "The Best Influencers" in the Business category in 2019, 2020, 2021 y 2022.

Teaching and Research Experience

- My academic vita (publications and other boring stuff)
- Personal page at Academia.edu
- Personal page at Google Scholar
- IS/IT Professor at IE Business School since September 1990
- Senior Advisor on Innovation and Digital Transformation at IE Business School since September 2016.
- IS/IT Area Chair at IE Business School, June 2001 to January 2005
- International Management Fellowship (IMF) Program Instructor at The John E. Anderson Graduate School of Management at UCLA, 1997-2000

- Visiting professor at Oxford University
- Visiting professor at Escuela Diplomática (Spain)
- Member of the Editorial Board at Harvard Deusto Marketing & Ventas
- Member of the Editorial and Scientific Committee at TELOS journal
- Track Chair, Business Association of Latin American Studies (BALAS) Annual Conference, Babson College, Wellesley, MA, 19 al 22 de Mayo de 2004
- Conference co-chair, European Conference of IT Evaluation (ECITE) 2003, Madrid
- Member of the Editorial Board for the Electronic Journal for Business Research Methods (EJBRM)
- Member of the Editorial Board at Revista de Empresa (Iberoamerican Academy of Management and Instituto de Empresa)
- Member of the Conference Committee for the European Conference on IT Evaluation (ECITE)
- Member of the Conference Committee for the European Conference on Research Methodology for Business and Management Studies (ECRM)
- Member of the Program Committee at IFIP joint WG 8.2 and 9.4 Conference, Athens, Greece, June 15-17, 2003
- Member of the Program Committee for the Project Management track at IRMA (Information Resources Management Association)
- Occasional reviewer for Management Information Systems Quarterly (MISQ), Journal of Business Strategies, Journal of Electronic Commerce Research, Quarterly Journal of Electronic Commerce,Journal of Information Technology Theory and Applications (JITTA) y Journal of Global Information Management
- Non-Resident Senior Fellow, Digital Innovation Initiative at the Center for European Policy Analysis (CEPA)

Office Hours

Office hours will be on request. Please contact at:

(every hour is an office hour)

e-mail: enrique.dans@ie.edu or edans@faculty.ie.edu
Mobile phone: +34 646 55 98 27

PREREQUISITES

No prerequisites are required for this course

SUBJECT DESCRIPTION

This is a course designed to teach you how to *think* about technology and innovation. Teach-you-how-to-think. If you want a course in which to take class notes, study books, concepts and definitions, go someplace else, because you are not going to find it here. In this course, you will read, analyze and discuss current tech news, you will analyze companies' strategies and you will understand the current technology trends from the blockchain or the Web3 to Artificial Intelligence, machine learning or generative assistants, or the current environmental concerns related to the climate emergency. You will understand how they work and what will they mean to you and the companies you start up or work for, but you will do so by challenging your common beliefs and biases, not by studying or memorizing anything. You will have to read a lot and follow the news, that's for sure, but you will not have the impression of being in an academic course, but more like getting you boss to understand how technology changes will affect business in the future. Hopefully, you will also understand which factors play a role when it comes to getting organizations to leverage technology, and you will get some indications on what works and what not. You will learn how to think like a futurist by working on real, current cases from the news, and learning to understand the mechanisms of innovation and technology adoption.

You will have to manage this course the same way you would be managing your development in a company: if you plan to ask me which font do you have to use in a report when I say "a two pages report", you will not do well. I will not be treating you as students, but as coworkers. You are adults, and I plan to treat you as such.

Get ready to rumba...

LEARNING OBJECTIVES

The course introduces students to the critical elements in technology adoption and forecasting.

The course has the following learning objectives:

- Understanding futures thinking
- Managing uncertainty, change and complexity
- What do futurists do?
- Types of trends: megatrends, microtrends and their lifecycles. Methods for identifying and analyzing trends
- Introduction to forecasting: tools and methodologies (diffusion of innovation, Delphi technique, environmental scanning)
- Understanding the most important trends:
    - The climate emergency as a technology transition
    - Social media and advertising
    - Blockchain, crypto and Web3
    - Internet of things and sensorization
    - Machine learning and artificial intelligence
- Applying futures thinking to different contexts:
    - The home of the future
    - The healthcare of the future
    - The cities of the future
    - The future of education

- The financial industries (banks and insurance) of the future
- Shopping in the future
- Working in the future (and UBI)
- The politics of the future

- The future is already here

TEACHING METHODOLOGY

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. Professor's main role is to lead and guide students to achieve the learning objectives of the course. This is done by engaging in a diverse range of teaching techniques and different types of learning activities such as the following:

Learning Activity	**Weighting**	**Estimated time a student should dedicate to prepare for and participate in**
Lectures	13.3 %	10.0 hours
Discussions	33.3 %	25.0 hours
Exercises in class, Asynchronous sessions, Field Work	6.7 %	5.0 hours
Group work	20.0 %	15.0 hours
Individual studying	26.7 %	20.0 hours
TOTAL	100.0 %	75.0 hours

AI POLICY

Critical GenAI use is encouraged

In this course, the use of generative artificial intelligence (GenAI) is encouraged, with the goal of developing an informed critical perspective on potential uses and generated outputs.

However, be aware of the limits of GenAI in its current state of development:

- If you provide minimum effort prompts, you will get low quality results. You will need to refine your prompts to get good outcomes. This will take work.
- Don't take ChatGPT's or any GenAI's output at face value. Assume it is wrong unless you either know the answer or can cross-check it with another source. You are responsible for any errors or omissions. You will be able to validate the outputs of GenAI for topics you understand.
- AI is a tool, but one that you need to acknowledge using. Failure to do so is in violation of academic honesty policies. Acknowledging the use of AI will not impact your grade.

Suggested format to acknowledge the use of generative AI tools:

I acknowledge the use of [AI systems link] to [specify how you used generative AI]. The prompts used include [list of prompts]. The output of these prompts was used to [explain how you used the outputs in your work].

If you have chosen not to include any AI generated content in your assignment, the following disclosure is recommended:

No content generated by AI technologies has been used in this assignment.

PROGRAM

SESSION 1 (LIVE IN-PERSON)

UNDERSTANDING WHAT ARE WE DOING HERE, IN AN FUTURISM COURSE...

- Hello, this is me, and all that :-)
- Introducing the course and the professor
- Rules of engagement
- Class mechanics, methodology, principles... and all the irrelevant things: evaluation, assignments, exam, etc.
- Understanding the hacker mentality
    - What is hacking
    - What is sandboxing
    - What is redteaming
    - What are we going to do with this concepts - hacking, sandboxing or redteaming - all over this course

Article: In praise of ignorance (Medium) (Optional)
Article: You are not going to believe what I'm about to tell you... (The Oatmeal) (Optional)
Book Chapters: A Hacker's mind (Read Part 1: Hacking 101)(Optional)
Book Chapters: Living in the Future (Chapter 1)(Optional)

SESSION 2 (LIVE IN-PERSON)

Sustainability Topics:

- Social Challenge

LEARNING TO HACK: LET'S HACK OURSELVES

- Who are we? What do we do? Managers as a digital Input-Process-Output system. We feed ourselves with information (a crazy, disproportionate amount of information, to the point of getting "infoxicated"), we try to process and store this information in a convenient way to be able to bring it back anytime we need it, and we produce outputs that we can call, depending on the moment; assignments, reports, decisions, PR, communication, social networking updates, blog posts, personal brand, etc. The tools we need to survive in today's scenario are changing extremely fast: anyone who doesn't use feed readers, online repositories, cloud-based collaboration tools, corporate IM, social networks, etc. can consider himself or herself severely disadvantaged. Besides that, the whole managerial culture and perception is changing, from valuing "discreetness" towards valuing exposure, image and influence.
- The truth is out there on the web, not in some book. Go on the web and read. A lot.
- Your information sustem on the web: Feedly
- Your algorithmic recommendation engine on the web: Refind
- Other content repositories: Flipboard

Article: There's a whole world of content discovery tools out there, waiting to make your life easier (Medium) (Optional)
Article: You Are Wrong If You Think Generation Z Is 'Immune' To Fake News (Forbes) (Optional)
Book Chapters: Living in the Future (Chapter 2)(Optional)

SESSION 3 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Governance
- Social Challenge
- Economic Development

NOW LET'S GET SERIOUS ABOUT HACKING: LET'S HACK MONEY

- Blockchain? What's that and why do we need it?
- But... is there any problem with the money as we know it?
- A paper written by whom? Understanding bitcoin and its value proposition
- Why so many cryptocurrencies?

Working Paper: Bitcoin: A Peer-to-Peer Electronic Cash System(Optional)
Article: Are we in the midst of a crypto-winter? (Medium) (Optional)
Article: You may not have heard of The Merge, but it could change our world (Medium) (Optional)
Book Chapters: Living in the Future (Chapter 3)(Optional)

SESSION 4 (LIVE IN-PERSON)

Sustainability Topics:

- Governance
- Social Challenge
- Economic Development

AND WHAT IF WE HACK... THE WHOLE WEB?

- Understanding Web3
- Metaverse? What's the metaverse? Do I need to be there?
- Horizon Worlds? Decentraland? Sandbox?
- NFTs? Isn't that for buying and selling pictures of bored apes?
- Smart contracts? DAOs? WTF?
- EXERCISE: WorldCoin

Article: What’s the difference between a metaverse and a virtual world? (Medium) (Optional)
Article: It doesn’t matter if you don’t understand blockchain and Decentralized Digital Identity: it just works (Medium) (Optional)
Article: Zuckerberg: master of the “metaverse” (Medium) (Optional)

SESSION 5 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Governance
- Social Challenge
- Economic Development

THE LIMITS OF HACKING: CAN WE HACK OUR PLANET?

- Climate emergency, economics and politics
- Understanding the climate emergency

- Who's to blame?
- Reimagining capitalism: from neoliberalism to... what?
- Indicators: GDP? Job creation? Money?
- Introduction to the crypto world
- The evolution of technology and its societal effects

Article: Of robots and men (Medium) (Optional)
Article: Friedman's dictum is finally laid to rest: so what's the function of companies now? (Medium) (Optional)
Article: Can Capitalism Really Be Reimagined? (Forbes) (Optional)

SESSION 6 (LIVE IN-PERSON)

Sustainability Topics:

- Governance
- Social Challenge
- Economic Development

ARTIFICIAL INTELLIGENCE: FINALLY, HACKING EVERYTHING

- A little bit of history
- From machine learning to generative AI
- Understanding algorithms
- Tokenization, RAGs, thin wrappers, etc.
- Prompt engineering
- AGI? And now what?

Article: Welcome to the token economy (Medium) (Optional)
Article: Is artificial general intelligence already here? (Medium) (Optional)

SESSION 7 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Governance
- Social Challenge
- Economic Development

ELON MUSK: UNDERSTANDING VISIONS

- Elon Musk and the role of the visionary
- Understanding isomorphism (the Netflix article - I know the discussion is about Tesla, but isomorphism is very well explained w/ the Netflix example))
- Applying first principles thinking
- How does Elon pick his battles?
- Cars, solar roofs, batteries, rockets... what do they have in common?

Article: Bob Lutz And Tesla: The Difference Between The Old Economy And The New (Forbes) (Optional)
Article: How Tesla proved critics wrong (Medium) (Optional)
Article: For Elon Musk, economies of scale are not rocket science… or are they? (Medium) (Optional)

Article: Tesla doesn't advertise, it innovates, which is why it is now so profitable (Medium) (Optional)
Article: Netflix and the terrible tendency toward isomorphism (Medium) (Optional)

SESSION 8 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Social Challenge
- Economic Development

THE HOME OF THE FUTURE

Book Chapters: Living in the Future (Chapter 3)(Optional)

SESSION 9 (LIVE IN-PERSON)

Sustainability Topics:

- Social Challenge
- Economic Development

THE HEALTHCARE OF THE FUTURE

Book Chapters: Living in the Future (Chapter 4)(Optional)

SESSION 10 (LIVE IN-PERSON)

Sustainability Topics:

- Environment
- Social Challenge
- Economic Development

THE CITY OF THE FUTURE

Book Chapters: Living in the Future (Chapter 5)(Optional)

SESSION 11 (LIVE IN-PERSON)

Sustainability Topics:

- Governance
- Social Challenge
- Economic Development

THE EDUCATION OF THE FUTURE

Book Chapters: Living in the Future (Chapter 6)(Optional)

SESSION 12 (LIVE IN-PERSON)

Sustainability Topics:

- Governance
- Social Challenge
- Economic Development

THE FINANCES OF THE FUTURE: BANKING AND INSURANCE

Book Chapters: Living in the Future (Chapter 7)(Optional)

SESSION 13 (LIVE IN-PERSON)

Sustainability Topics:

- Social Challenge
- Economic Development

SHOPPING IN THE FUTURE

Book Chapters: Living in the Future (Chapter 8)(Optional)

SESSION 14 (LIVE IN-PERSON)

Sustainability Topics:

- Governance
- Social Challenge
- Economic Development

SOCIAL MEDIA AND ADVERTISING IN THE FUTURE

Book Chapters: Living in the Future (Chapter 9)(Optional)

SESSION 15 (LIVE IN-PERSON)

WORKING IN THE FUTURE

Book Chapters: Living in the Future (Chapter 10)(Optional)

Book Chapters: Living in the Future (Chapter 11)(Optional)

Book Chapters: Living in the Future (Chapter 12)(Optional)

Only Chapter 10 is related to the topic of the class. I just added Chapter 11 and Chapter 12 here so you can have the book complete :-) And of course, all readings are voluntary...

EVALUATION CRITERIA

This course requires that students prepare material previously, make verbal and/or written presentations, and take an active role in the discussions of the class. Grading will be based on the following criteria:

- In-class participation (30%). If I can't remember your name when the course is over, that's definitely a bad sign ;-) Seriously, all sorts of value-added participation will be positively considered. Participation is not providing the solution to a case or to the issue being discussed, but any mental process or question that could help you, the class or myself in arriving to a conceptual goal or analysis. Good communication skills, openness to dialog and the willingness to explain complex concepts in simple terms will be positively valued. Lack of preparation for class discussion (just showing up with no background reading at all on the topic being discussed) may be negatively valued.
- Individual assignments (20%). A very short and specific individual assignment will be proposed during the course. I will not be assigning any deadlines, you will be in charge of doing so, via your class representative.
- Group assignment (30%). A group assignment will be proposed during the course. Same thing: I don't do deadlines, you'll have to organize yourselves.
- Exam (20%). The exam will involve a brief analysis of a short (two-page max) real case that will be provided on the spot. In 90 minutes, students will have to read the case, analyze it, make

certain technology and/or strategy decisions, and provide some recommendations, open laptop. A few old exams will be provided for guidance.

criteria	percentage	Learning Objectives	Comments
Class Participation	30 %		
Individual assignment	40 %		
Workgroups	30 %		

RE-SIT / RE-TAKE POLICY

Each student has four (4) chances to pass any given course distributed over two (2) consecutive academic years. Each academic year consists of two calls: one (1) ordinary call (during the semester when the course is taking place); and one (1) extraordinary call (or "re-sit") in June/July.

Students who do not comply with the 80% attendance requirement in each subject during the semester will automatically fail both calls (ordinary and extraordinary) for that Academic Year and have to re-take the course (i.e., re-enroll) during the next Academic Year.

The Extraordinary Call Evaluation criteria will be subject to the following rules:

- Students failing the course in the ordinary call (during the semester) will have to re-sit evaluation for the course in June / July (except those students who do not comply with the attendance rule, and therefore will not have that opportunity, since they will fail both calls and must directly re-enroll in the course during the next Academic Year).
- It is not permitted to change the format nor the date of the extraordinary call exams or deadlines under any circumstance. All extraordinary call evaluation dates will be announced in advance and must be taken into consideration before planning the summer (e. g. internships, trips, holidays, etc.)
- The June/July re-sit will consist of a comprehensive evaluation of the course. Your final grade for the course will depend on the performance in this exam or evaluation only. I.e., continuous evaluation over the semester (e. g. participation, quizzes, projects and/or other grade components over the semester) will not be taken into consideration on the extraordinary call. Students will have to achieve the minimum passing grade of 5 and the maximum grade will be capped at 8.0 (out of 10.0) – i.e., "notable" in the extraordinary call.
- Re-takers: Students who failed the subject on a previous Academic Year and are now re-enrolled as re-takers in a course will need to check the syllabus of the assigned professor, as well as contact the professor individually, regarding the specific evaluation criteria for them as re-takers in the course during that semester (ordinary call of that Academic Year). The maximum grade that may be obtained as a retaker during the ordinary call (i.e., the 3rd call) is 10.0 (out of 10.0).

After exams and other assessments are graded by the professor (on either the ordinary or extraordinary call), students will have a possibility to attend a review session (whether it be a final exam, a final project, or the final overall grade in a given course). Please be available to attend the session in order to clarify any concerns you might have regarding your grade. Your professor will inform you about the time and place of the review session.

- Students failing more than 18 ECTS credits after the June/July re-sits will be asked to leave the Program. Please, make sure to prepare yourself well for the exams in order to pass your failed subjects.
- In case you decide to skip the opportunity to re-sit for an exam or evaluation during the

June/July extraordinary call, you will need to enroll in that course again for the next Academic Year as a re-taker, and pay the corresponding tuition fees. As you know, students have a total of four (4) allowed calls to pass a given subject or course, in order to remain in the program.

BIBLIOGRAPHY

Recommended

- Bruce Schneier. (2023). *A Hacker's Mind.* W. W. Norton & Company. ISBN 1324074531 (Digital)
- Kim Stanley Robinson. (2020). *The ministry for the future.* Orbit. ISBN 9780356508832 (Digital)
- Mark Maslin. (2021). *Climate Change: A Very Short Introduction.* 4th. OUP Oxford. ISBN 0198867867 (Digital)
- Jenny Kleeman. (2020). *Sex Robots & Vegan Meat: Adventures at the Frontier of Birth, Food, Sex & Death.* Pegasus Books. ISBN 1643135724 (Digital)
- Xiaowei Wang. (2020). *Blockchain Chicken Farm: And Other Stories of Tech in China's Countryside.* Farrar, Straus & Giroux Inc.. ISBN 0374538662 (Digital)
- Enrique Dans. (2019). *Living in the future.* Amazon. ISBN 9798636896333 (Digital)
- Ashlee Vance. (2016). *Elon Musk: Tesla, SpaceX, and the Quest for a Fantastic Future.* Harper Collins. ISBN 0062469673 (Digital)

(I know there's a more recent book about Elon Musk written by Walter Isaacson and it's a good one, but this one serves better the purposes of the discussion)

BEHAVIOR RULES

Please, check the University's Code of Conduct here. The Program Director may provide further indications.

ATTENDANCE POLICY

Please, check the University's Attendance Policy here. The Program Director may provide further indications.

ETHICAL POLICY

Please, check the University's Ethics Code here. The Program Director may provide further indications.

UNPLUGGED THE MARKETING WORKSHOP

Grado en Administración de Empresas / Bachelor in Business Administration BBA SEP-2024 UTM-NBA.1C.m.OPT.M.A

Area Marketing and Communication

Number of sessions: 15

Academic year: 24-25

Degree course:

Number of credits: 3.0

Semester: 1º

Category: OPTIONAL

Language: English

Professor: **EMILIO LLITERAS ARAÑÓ**

E-mail: elliteras@faculty.ie.edu

Academic Background

- ICADE E-3 – Universidad Pontificia de Comillas
- Degree in Law and Business Administration- Oct 1996/June 2002
- IE Business School – Senior Management Program 2014
- The Valley Talent - PFE+; Transformación Digital de las PYMES

Corporate Experience

- 23 years of professional experience. Balanced multifunctional experience in Marketing, Trade Marketing and Sales. Member of Iberia Leadership team. Knowledge of diverse Food categories, Home and Personal Care categories, Tobacco Industry and Pharma; as well as different Retail Channels (Hyper, Super) and exclusive Spanish Tobacco/Pharma channels
- Director General UTECA Since Oct 2019
- Freelance Since Oct 2017
- IE Professor and Advisor since 2011
- Unit Head OTC Spain Sandoz– April 2014- Sept 2017
- Head of Business Development Iberia and Gibraltar Country Manager. British American Tobacco – February 2011- Nov 2013
- Category Manager Cheese Iberia (Philadelphia, El Caserio). Kraft Foods Spain – Oct 2006 – February 2011
- Brand Manager Spain (Timotei, Sunsilk). Unilever Spain - August 2002 – September 2006
- Research Executive (Sony Professionals). Sony Spain – Nov 2001 – March 2002

Office Hours

Office hours will be on request. Please contact at:

E-mail: elliteras@faculty.ie.edu

Mobile: 600 535 407 (whatsapp)

PREREQUISITES

Students must take a minimum of 3 more subjects of the Marketing track during the Semester/Year, to be able to study this Course.

SUBJECT DESCRIPTION

Marketing is into our daily life, is part of current society's DNA. From a learning perspective the theoretical part of marketing is relatively easy to understand, the beauty of marketing is to make the complete journey until you have your proposal in the consumers´ hands. In marketing there is no right or wrong, is the consumer who decides which strategy was successful and which was an absolute failure. Analysis, consumer understanding, patience, common sense and coherence are the base to have a strong marketing strategy.

Unplugged the Marketing Workshop is the space to put in practice your marketing knowledge, to develop a strong business plan covering all the marketing elements (5P: Product, Price, Place, Promotion and People), to share and learn from others perspectives.

You will experience the challenges marketers face in the day to day of a multinational company, you will feel the real life of a marketing team (innovation, analysis, doubts, decision making…)

In a nutshell, put in practice your marketing knowledge by learning by doing.

LEARNING OBJECTIVES

This course will provide the student the following knowledge and skills:

- Experience daily real live of a marketing department in a multinational company.
- Put in practice your marketing knowledge.
- Marketing Mix understanding: analysis on needs and proposal of plans.
- Global vision of a marketing plan: Strategic plan development.
- Team work benefits and challenges.

TEACHING METHODOLOGY

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. Professor's main role is to lead and guide students to achieve the learning objectives of the course. This is done by engaging in a diverse range of teaching techniques and different types of learning activities such as the following:

Learning Activity	**Weighting**	**Estimated time a student should dedicate to prepare for and participate in**

Lectures	6.7 %	5.0 hours
Discussions	26.7 %	20.0 hours
Exercises in class, Asynchronous sessions, Field Work	26.7 %	20.0 hours
Group work	26.7 %	20.0 hours
Individual studying	13.3 %	10.0 hours
TOTAL	100.0 %	75.0 hours

AI POLICY

#1 – Critical GenAI use is encouraged

In this course, the use of generative artificial intelligence (GenAI) is encouraged, with the goal of developing an informed critical perspective on potential uses and generated outputs.

However, be aware of the limits of GenAI in its current state of development:

·If you provide minimum effort prompts, you will get low quality results. You will need to refine your prompts to get good outcomes. This will take work.

·Don't take ChatGPT's or any GenAI's output at face value. Assume it is wrong unless you either know the answer or can cross-check it with another source. You are responsible for any errors or omissions. You will be able to validate the outputs of GenAI for topics you understand.

·AI is a tool, but one that you need to acknowledge using. Failure to do so is in violation of academic honesty policies. Acknowledging the use of AI will not impact your grade.

Suggested format to acknowledge the use of generative AI tools:

I acknowledge the use of [AI systems link] to [specify how you used generative AI]. The prompts used include [list of prompts]. The output of these prompts was used to [explain how you used the outputs in your work].

If you have chosen not to include any AI generated content in your assignment, the following disclosure is recommended:

No content generated by AI technologies has been used in this assignment.

PROGRAM

SESSIONS 1 - 2 (LIVE IN-PERSON)

Welcome & introductions. Discussion of the program, expectations and evaluation system

Real time Session

Introduction: Marketing Mix

Team groups definition

Objective: Set the scene of the workshop, understand the needs

SESSION 3 (LIVE IN-PERSON)

Case Study Debrief

Real time Session

Case sharing

Objective: Share and clarify doubts on case data; Learn from others experience

SESSION 4 (LIVE IN-PERSON)

Case Study Debrief
Case sharing
Objective: Share and clarify doubts on case data; Learn from others experience

SESSION 5 (LIVE IN-PERSON)

Case Study Debrief
Real time Session
Case sharing
Objective: Share and clarify doubts on case data; Learn from others experience

SESSION 6 (LIVE IN-PERSON)

Client Brief
Real time Session
Group work session: Live session
Objective: Understand the Brand reality + client needs
Group work session: Live Session; Brand Key Build up
Objective: Generate the space for Team discussion and Professor Assessment/Guidance

SESSION 7 (LIVE IN-PERSON)

Class Discussion
Doubts sharing
Objective: Share and clarify doubts; Learn from others experience

SESSION 8 (ASYNCHRONOUS)

Group work session: Live Session; Brand Key Build up
Objective: Generate the space for Team discussion and Professor Assessment/Guidance
Elevator Pitch

SESSION 9 (LIVE IN-PERSON)

Group work session: Live Session. Marketing Plan Build up
Elevator Pitch Feedback
Objective: Generate the space for Team discussion and Professor Assessment/Guidance

SESSION 10 (ASYNCHRONOUS)

Group work session: Live Session. Marketing Plan Build up
Objective: Generate the space for Team discussion and Professor Assessment/Guidance

SESSION 11 (LIVE IN-PERSON)

Group work session: Live Session. Marketing Plan Build up

Objective: Generate the space for Team discussion and Professor Assessment/Guidance

SESSION 12 (ASYNCHRONOUS)

Group work session: Live Session. Marketing Plan Build up

Objective: Generate the space for Team discussion and Professor Assessment/Guidance

SESSION 13 (LIVE IN-PERSON)

Group work session: Live Session. Marketing Plan Build up

Objective: Generate the space for Team discussion and Professor Assessment/Guidance

SESSIONS 14 - 15 (LIVE IN-PERSON)

Board Team Presentation: Case study resolution Presentation

Materials: Final Report + Group Presentation

Objective: External evaluation of each group Case resolution

EVALUATION CRITERIA

criteria	**percentage**	**Learning Objectives**	**Comments**
Class Participation	20 %		
Other	30 %		
Group Presentation	40 %		
Case	10 %		

RE-SIT / RE-TAKE POLICY

Your final grade in the course will be based on both individual and group work of different characteristics that will be weighted in the following way:

A. CLASS PARTICIPATION

Three main criteria will be used in reaching judgment about your class participation:

- Depth and Quality of Contribution: The most important dimension of participation concerns what it is that you are saying. A high quality comment reveals depth of insight, rigorous use of case evidence, consistency of argument, and realism.
- Moving Your Peers' Understanding Forward: Great ideas can be lost through poor presentation. A high quality presentation of ideas must consider the relevance and timing of comments, and the flow and content of the ensuing class discussion. It demands comments that are concise and clear, and that are conveyed with a spirit of involvement in the discussion at hand.
- Frequency: Frequency refers to the attainment of a threshold quantity of contributions that is sufficient for making a reliable assessment of comment quality. The logic is simple: if contributions are too few, one cannot reliably assess the quality of your remarks. However, once threshold quantity has been achieved, simply increasing the number of times you talk does not automatically improve your evaluation. Beyond the threshold, it is the quality of your comments that must improve. In particular, one must be especially careful that in claiming more

than a fair share of “airtime”, quality is not sacrificed for quantity. Finally, your attempts at participation should not be such that the instructor has to “go looking for you”. You should be attempting to get into the debate on a regular basis.

B. CASE STUDY WRITE-UPS

Each student must complete individually the 3 cases write-ups. For each write-up, there is an upper limit of two pages of text (assuming 11-point font size, Times New Roman)

A soft copy of the document must be delivered to the professor in class before the case discussion begins (uploaded on campus-ie).

Make sure the case write-up is easy to read. Consider using bullets, headings, etc., to make the case write-up easy to follow.

The objective of this process it to give you practice writing concise executive summaries – something that would make the reader believe that you have done a thorough analysis supporting your recommendations. This is the type of briefing that must typically be prepared for upper management – before they provide the resources for a more detailed investigation.

Good case briefs are concise, but also provide a fact-based rationale for your recommendations and implementation plan. The rationale should reflect a good understanding of the important issues of the case and may integrate previous material from the class or your experience. You might also note factors that argue against your recommendation, and how your implementation plan might minimize the impact of these factors.

C. FINAL GROUP PRESENTATION AND REPORT – Marketing Jury-

You are expected to complete a final project with your group and present it in written form. Each Group must present two documents: Final Report (deep written explanation of the decision taken, strategy and marketing plans. Max 25 pages); Strategic Presentation (Oral presentation of max. 20minutes including Q&A- that will depend on the final number of groups)

You also have to send a soft copy of the case write-up to the professor via email one hour before presenting.

This evaluation will be done by a marketing external jury based on these criteria: Strategy, Plan Consistency, innovation, execution, Presentation and plan viability. The average between the individual marks of the jury will be the one reflected in this section

Peer evaluation: no free riders will be accepted. Peer evaluation must be completed, is compulsory. In case an alumni does not complete the peer evaluation form this part will be graded as 0.

D. FINAL PRESENTATION AND REPORT INDIVIDUAL – Professor-

Individual contribution to team development, group work, individual presentation skills and final presentation and report.

You are expected to complete a final project with your group and work as a team, building ideas together, being constructive and a real team player. Individual presentation skills and clarity during Presentation and Q&A will be taken into account.

RE-SIT / RE-TAKE POLICY

Each student has four (4) chances to pass any given course distributed over two (2) consecutive academic years. Each academic year consists of two calls: one (1) ordinary call (during the semester when the course is taking place); and one (1) extraordinary call (or “re-sit”) in June/July.

Students who do not comply with the 80% attendance requirement in each subject during the semester will automatically fail both calls (ordinary and extraordinary) for that Academic Year and have to re-take the course (i.e., re-enroll) during the next Academic Year.

The Extraordinary Call Evaluation criteria will be subject to the following rules:

- Students failing the course in the ordinary call (during the semester) will have to re-sit evaluation for the course in June / July (except those students who do not comply with the attendance rule, and therefore will not have that opportunity, since they will fail both calls and

must directly re-enroll in the course during the next Academic Year).

- It is not permitted to change the format nor the date of the extraordinary call exams or deadlines under any circumstance. All extraordinary call evaluation dates will be announced in advance and must be taken into consideration before planning the summer (e.g. internships, trips, holidays, etc.)
- The June/July re-sit will consist of a comprehensive evaluation of the course. Your final grade for the course will depend on the performance in this exam or evaluation only. I.e., continuous evaluation over the semester (e.g. participation, quizzes, projects and/or other grade components over the semester) will not be taken into consideration on the extraordinary call. Students will have to achieve the minimum passing grade of 5 and the maximum grade will be capped at 8.0 (out of 10.0) – i.e., "notable" in the extraordinary call.
- Re-takers: Students who failed the subject on a previous Academic Year and are now re-enrolled as re-takers in a course will need to check the syllabus of the assigned professor, as well as contact the professor individually, regarding the specific evaluation criteria for them as re-takers in the course during that semester (ordinary call of that Academic Year). The maximum grade that may be obtained as a retaker during the ordinary call (i.e., the 3rd call) is 10.0 (out of 10.0).

After exams and other assessments are graded by the professor (on either the ordinary or extraordinary call), students will have a possibility to attend a review session (whether it be a final exam, a final project, or the final overall grade in a given course). Please be available to attend the session in order to clarify any concerns you might have regarding your grade. Your professor will inform you about the time and place of the review session.

! Students **failing more than 18 ECTS credits** after the June/July re-sits will be asked to leave the Program. Please, make sure to prepare yourself well for the exams in order to pass your failed subjects.

! In case you decide to skip the opportunity to re-sit for an exam or evaluation during the June/July extraordinary call, you will need to enroll in that course again for the next Academic Year as a re-taker, and pay the corresponding tuition fees. As you know, students have a total of four (4) allowed calls to pass a given subject or course, in order to remain in the program.

BEHAVIOR RULES

Please, check the University's Code of Conduct here. The Program Director may provide further indications.

ATTENDANCE POLICY

Please, check the University's Attendance Policy here. The Program Director may provide further indications.

ETHICAL POLICY

Please, check the University's Ethics Code here. The Program Director may provide further indications.