

MSc Responsible Procurement and Supply Chain Management

September 2024 – April 2025



CODE: Tbc
Course title: RESPONSIBLE SUPPLY CHAIN STRATEGY
Term: FALL

Teaching hours: 24 hours
Number of credits: 3
Teaching language: ☒English ☐French
Course leader: Mihalís Giannakis
Speakers: Mihalís Giannakis

≡ **COURSE DESCRIPTION**

This module introduces the core area of Supply Chain Strategy (SCS). It has been developed to help students develop skills in designing business models and managing business processes of responsible supply chains. It focuses on how organisations can achieve strategic fit between supply chain processes and **sustainable** business strategies. Specifically, the structural elements of supply chain decision making areas will be analysed, i.e., make or buy decisions, the design of supply networks, the design and management of business contracts, supplier relationship management, the development of strategies for the coordination of activities across the supply chain and management of supply chain performance. By adopting a holistic strategic view of SCM as a source of superior performance it will prepare students to develop leadership skills that are essential for supply chain professionals.

≡ **COURSE OBJECTIVES**

- Define the strategic role of Supply Chain Management as a source of competitive advantage
- To classify the underlying dimensions of responsible supply chain strategies.
- Analysis of advanced supply chain concepts, tools and techniques, covering supply chain design, supply chain coordination supply chain performance, sustainable supply chain risk management.
- To identify where responsible supply chain management fits within the business decision-making strategies by building on other subject areas that have been taught in RPSCM program.
- To prepare students for a variety of industrial and business roles

≡ **TACKLED CONCEPTS**

- supply chain strategy
- SC sustainable strategic fit and scope
- Sustainable supply chain metrics and drivers
- Supply chain performance management
- Supply chain integration: sourcing strategies
- Supply network design
- Supplier relationship management
- Distribution strategies
- Supply chain dynamics - The bullwhip effect
- Simulation role playing game: the beer game
- Sustainability-related supply chain risks
- Supply chain sustainability – closed loop supply chains Supply chain resilience

≡ **LEARNING METHODS**

Lectures
Case analysis and discussion
Role-playing games

Teamwork
Student presentations

≡ **ASSIGNMENTS AND EXPECTED WORK**

Exam (60%)– an individual closed book 2-hour exam at the end of the course covering the learning objectives of the course.

Continuous Assessment (40%) – At the beginning of the course student groups will be assigned a group report about a case study or a hot topic in SCM, to be presented at the end of the course. Students need to submit a joint group final report (60% of the continuous assessment) and also make a presentation of their findings (40% of the continuous assessment).

≡ **BIBLIOGRAPHY – COURSE MATERIAL**

Main book: Chopra, S., & Meindl, P. (2016). *Supply Chain Management: Strategy, Planning, and Operation*. (6th ed.) Essex, NE: Pearson Education.

Additional reading: Johnsen, T., Howard, M., & Miemczyk, J. (2014). *Purchasing and supply chain management: a sustainability perspective*. Routledge. Electronic copies of selected chapters to be provided.

A selection of seminal articles and cases on supply chain management will be available on Blackboard.

≡ **EVALUATION METHODS**

Exam: 50%

Continuous assessment: 50%

≡ **SESSIONS**

- **SESSION 1: Introduction to the module and to supply chain strategy**
 - LECTURE: 02h00
 - This session introduces you to the supply chain strategy module. You will be allocated to syndicate groups to support your learning. The session will focus on the strategic importance of supply chains; key decisions relating to supply chain management and the importance of supply chain performance
- **SESSION 2: Achieving sustainable strategic fit and scope**
 - LECTURE: 02h00
 - We will discuss why achieving strategic fit is critical to a company's overall success. We will describe how a company achieves sustainable strategic fit between its supply chain strategy and its competitive strategy. We will emphasize the importance of expanding the scope of strategic fit across the supply chain.
 - Case: Inditex
- **SESSION 3: Supply chain metrics and drivers**
 - LECTURE: 02h00
 - In this session we will link key financial measures of firm performance to supply chain performance. We introduce several supply chains related and cross-functional drivers that determine the performance of any supply chain. We will define several operational and sustainability related metrics that can

be used to gauge the performance of each driver and its impact on strategic fit and financial performance.

- Case Study: Seven-Eleven Japan

○ **SESSION 4: Supply chain performance management**

- LECTURE: 02h00
- This session will be about the need to understand the 'costs-to-serve'. Concepts related to customer value are discussed in this session. We will present and analyse the supply-chain operations reference-model (SCOR); a process reference model that has been developed as a cross-industry standard diagnostic tool for supply-chain management.
- Case study: Walmart

○ **SESSION 5: Supply chain integration: responsible sourcing strategies**

- LECTURE: 02h00
- This session discusses the 'make or buy' decision that organisations face and its implications for supply chain synthesis and introduces fundamental issues of the design of responsible supply chain strategies.
- Case study: Thomas Medical Systems

○ **SESSION 6: Supply network design**

- LECTURE: 02h00
- The goal of this session is to discuss issues to be considered when designing a supply chain network. We will discuss strategic and conceptual issues related to supply network design, which will bring to the surface all the issues that a firm must consider when designing their supply chain network. The importance of distribution in supply chains will be highlighted.
- Case study : Nokia

○ **SESSION 7: Supplier relationship management**

- LECTURE: 02h00
- Supplier relationship management is concerned with the strategic choices for inter-organisational synergies that depend on how individuals, groups and organisations interact with each other. We explore current thinking in business-to-business relationships with a particular interest in transaction cost economics, game theory and the phenomenon of trust. Supplier relationship management implies that companies work in 'partnerships' with the most important suppliers. But what does that mean in practice and when are other forms of relationships more appropriate? In this session we take a critical look at the relevance of partnerships, and we evaluate partnership concepts such as trust and dependency
- Case Study: Buyer-Supplier Relations

○ **SESSION 8: Distribution strategies**

- LECTURE: 02h00
- Logistics and Distribution strategies deal with the effective flow and storage of goods and services and the related information management between the point of origin and the point of consumption. This session will introduce you to the subject of distribution strategies and the impact they may have on supply chain performance. It will explore the role of sustainable logistics in the organisations and in the economy in general and examine the key interfaces of logistics with transportation management and other elements of SCM.

○ **SESSION 9: Simulation role playing game: the beer game**

- LECTURE: 02h00

- The Beer Game forms a very important part of the module. It is rooted in the System Dynamics academic discipline and demonstrates with clarity how supply chain structure affects decision making behaviour and subsequently supply chain strategic choices. Useful insights can be generated in the way that sustainable supply chains can be created by managing the dynamic behaviour of supply chains.
- **SESSION 10: Supply chain dynamics - The bullwhip effect**
 - LECTURE: 02h00
 - One of the most fundamental questions surrounding supply chain strategy. Supply chains demonstrate an almost 'natural' dynamic in the way that materials flow through them. The notion of the 'Forrester' or 'Bullwhip' effect is an important and problematic issue for supply chains. In this session you will experience firsthand the dynamics of supply chain coordination and the problems they cause.
 - Video from the System Dynamics society
- **SESSION 11: Sustainability-related supply chain risks**
 - LECTURE: 02h00
 - In this session we discuss how to manage sustainability-related risks in global supply chains. We differentiate sustainability risks from supply chain operational risks and identify their drivers. We present an analytical framework based on the Failure Mode and Event Analysis (FMEA) on how to analyse these risks and propose mitigating strategies to manage them.
- **SESSION 12: Supply chain innovations**
 - LECTURE: 02h00
 - Traditional supply chains are rapidly transforming into more advanced, more complex processes that are driven by digital technology, artificial intelligence and other innovations. In this section will discuss prominent supply chain innovations as well as how organisations can develop strategies foster innovation along their supply chains

CODE: Tbc

Course title: SALES, DEMAND AND OPERATIONS PLANNING

Term: FALL

Teaching hours: 24 hours

Number of credits: 3

Teaching language: ☒English ☐French

Course leader: Antoine Gautier

Speakers:

≡ **COURSE DESCRIPTION**

The course is the heart of SC planning and aim to give students the foundation to understand what Sales & Operations Planning is about. The course is the heart of the SC planning (forecasting, sales & demand & operations planning - S&OP, master planning, order fulfilment and available-to-promise, short term planning and distribution planning), with a focus on quantitative aspects of the planning process. Students learn how to structure S&OP which is the lung of any Supply Chain. This course focuses on defining, executing, and improving the S&OP process. Students will be introduced to the appropriate stakeholders of S&OP, the importance of S&OP to corporate performance, S&OP cadence, and the use of decision support tools to bring S&OP to the next level. Business cases will be used to show concrete examples of companies where S&OP is effectively applied. Students explore how SC function interact with other departments and orchestrate S&OP with marketing, finance, production, purchasing.

≡ **COURSE OBJECTIVES**

Students should learn the objectives of the S&OP, how to set up and run a S&OP process within a company

≡ **TACKLED CONCEPTS**

- S&OP definitions & overviews
- The 5 steps of S&OP process
- Good practices of setting up S&OP
- Demand forecasting: Qualitative and quantitative approaches, forecast accuracy, managing the forecast process
- Supply planning & stock management : RCCP, macro-BOM, stock policy
- S&OP organisation
- KPI & continuous improvement
- Spreadsheet Formulation & Solution
- Link to short-term planning: sales & operation execution

≡ **LEARNING METHODS**

Mix of theory and real-life examples

Use of The Fresh Connection game

≡ **BIBLIOGRAPHY – COURSE MATERIAL**

Sales and Operations Planning: The How-To Handbook, 3rd Ed, Thomas F. Wallace & Robert A. Stahl

Orchestrating Success – Richard C. Ling & Walter E. Goddard

Demand Management Best Practices – Colleen Crum & George E. Palmatier

Enterprise Sales and Operations Planning - Colleen Crum & George E. Palmatier

≡ **NECESSARY SOFTWARE – HARDWARE**

Fresh connexion game. The Fresh connection is a realistic simulation game of a supply chain management situation. The concept is simple: A business is in trouble and you need to turn it around with the help of your teammates. This serious game allows you to experience the impact of each decision taken and to implement an S&OP process, as well as to get to grips with a large part of the standard Supply-chain practices and their link with finance.
Cost to be defined (pending).

≡ **EVALUATION METHODS**

Exam: 50%

Continuous assessment: 50%

If you think that your course might benefit from a different evaluation method instead of exam, please put your propositions here. It will be studied and validated (or not) by DPR.

≡ **SESSIONS**

- **SESSION 1:**
 - LECTURE 02h00
 - S&OP definitions & overviews
 - The 5 steps of S&OP process 1/2
- **SESSION 2:**
 - LECTURE: 02h00
 - The 5 steps of S&OP process 2/2
- **SESSION 3:**
 - LECTURE: 02h00
 - Good practices of setting up S&OP
- **SESSION 4:** LECTURE: 02h00
 - Demand forecasting: Qualitative and quantitative approaches, forecast accuracy, managing the forecast process
- **SESSION 5: Case study 1**
- **SESSION 6:**
 - LECTURE: 02h00
 - Supply planning & stock management : RCCP, macro-BOM, stock policy
- **SESSION 7:**
 - LECTURE: 02h00
 - S&OP organisation
 - KPI & continuous improvement
- **SESSION 8:**

- LECTURE: 02h00
 - Spreadsheet Formulation & Solution
 - Link to short-term planning: sales & operation execution
- **SESSION 9: Business game 1/4 : S&OP & SC strategy**
 - **SESSION 10: Business game 2/4**
 - **SESSION 11: Business game 3/4**
 - **SESSION 12: Business game 4/4**

CODE: Tbc
Course title: SUPPLY CHAIN DIGITAL TRANSFORMATION
Term: FALL

Teaching hours: 24 hours
Number of credits: 3
Teaching language: ☒English ☐French
Course leader: (Filled in by Program)
Speakers: Redouane EL Amrani

≡ COURSE DESCRIPTION

Digital Disruption is shaking up the *status quo* of every industry and redefining the way consumers engage and companies compete. However, many firms, large & SMEs, try to transform their business without changing their “business as usual” culture, process, and capabilities. Digital transformation is no longer a question of ‘if’ but rather ‘how fast?’ Digital Transformation is the profound change of business and organizational models to fully leverage the changes and opportunities brought by digital technologies. Therefore, companies need to establish a digital transformation strategy to govern and manage these complex challenges and changes. In this course, emphasis will be on the management of digital transformation, from both process and system perspectives, as well as issues and opportunities in innovating through technology.

≡ COURSE OBJECTIVES

The aim is to understand digital disruption, to analyze how digital transformation is impacting industries and business models. Upon completion of this course, participants will be able to:

- Clarify and precise basic concepts of Digital disruption, Digital Economy, Digital Transformation
- Understand the concepts of Digital Transformation vs Organizational Transformation and apply them to business processes
- Define main pillars and blocks Digital Transformation Strategy
- Explore the role digital technologies have in obtaining a strategic competitive advantage.
- Analyze Digital Technologies used in back-office and front office of organizations (IA, Big Data, Blockchain and Cloud Computing) and explore their role in obtaining a strategic competitive advantage.
- Change Management for Digital Transformation: Human Capital & Digital Talent Gap
- Understand the organizational, behavioral, and political issues surrounding digital transformation in an organization.

≡ TACKLED CONCEPTS

- Digital Transformation, Digital Disruption & Digital Optimization
- Digital Transformation vs Organizational Transformation
- Blocks Digital Transformation Strategy Concept
- Digital Transformation & Industry 4.0
- Digital Transformation & Digital Ecosystems
- Disruptive digital technologies: Big Data, Cloud Computing, Enterprise Systems

≡ LEARNING METHODS

This course will combine short lectures, in-class discussions, readings, exchange of personal experiences, videos, articles, case presentation and discussion, etc. All these learning methods are

used to discuss the current digital transformation concepts, principles and practices in use in the enterprise and its environment. Each session is designed to explore practical issues in the use of disruptive digital technologies to influence or implement corporate and competitive strategy of an enterprise. In order to gain maximum benefit from the course, course participants are expected to:

- Complete all assigned reading prior to the designated class
- Prepare assigned activities in advance of the class for which they are assigned.
- All class sessions are designed to augment, rather than repeat/duplicate assigned reading.

≡ **ASSIGNMENTS AND EXPECTED WORK**

Students are invited to learn the necessary concepts and to complete the assigned reading and empirical applications prior to the respective session. During the course, students will be asked to deal with a series of short problem-solving exercises, to participate in focused class workshops, to deal with a corporate case and to submit a written corporate assignment team-project report. Following the course completion, students are to sit a final exam.

≡ **BIBLIOGRAPHY – COURSE MATERIAL**

- Bailey D.E., Faraj, S., Hinds, P.J., Leonardi, P.M., Von Krogh, G. (2022), “A Relational View of Emerging Technology: : A Relational Perspective on Emerging Technology and Organizing”, *Organization Science*, 33(1): 1–18
- Bodrozic, Z., Adler, P., (2022), “Alternative futures for the digital trans-formation: A macro-level Schumpeterian perspective”, *Organization Science*, 33(1):105–125.
- Canhoto, A., Quinton, S., Pera, R., Molinillo, S., Simkin, L. (2021), “Digital strategy aligning in SMEs: A dynamic capabilities perspective”, *Journal of Strategic Information Systems*, 30 (3).
- Cap Gemini (2017), Transform to the Power of Digital, on: [https://www.capgemini.com/wp-content/uploads/2017/07/Transform to the Power of Digital.pdf](https://www.capgemini.com/wp-content/uploads/2017/07/Transform-to-the-Power-of-Digital.pdf)
- El Sawy, O. Kræmmergaard, P. Amsinck, H., Vinther, A. (2016). How Lego Built the Foundations and Enterprise Capabilities for Digital Leadership, *MIS Quarterly Executive* (15:2), 141-166.
- Hanelt, A. Bohnsack, B. Marz, D. Antunes, C (2021), A systematic review of the literature on digital transformation: insights and implications for strategy and organizational change, *Journal of Management Studies*, 1-36
- Hansen, R. Sia, S. (2015). Hummel’s digital transformation toward omnichannel retailing: Key lessons learned. *MIS Quarterly Executive*, 14, 51-66.
- Hartl, E., Hess, T., (2017), “The role of cultural values for digital transformation: Insights from a Delphi study”, 23rd Americas Conference on Information Systems, Boston, 10-12 August.
- Hein, A. Schreieck, M. Riasanow, T. Setzke, D. Wiesche, M., Böhm, M., (2020). Digital platform ecosystems. *Electronic Markets*, 30(1), 87–98.
- Hess, T., Matt, C., Benlian, A. Wiesböck, F. (2016). Options for formulating a digital transformation strategy. *MIS Quarterly Executive*, 15(2).
- Jacobides M, Cennamo C, Gawer A, (2018), Towards a Theory of Ecosystems, *Strategic Management Journal*, 39/8, 2255-2276.
- Karimi, J. Walter, Z, (2015), The role of dynamic capabilities in responding to digital disruption: a factor-based study of the newspaper industry, *Journal of Management Information Systems*, 32 (1), 39-81
- Kim J, Paek B, Lee H. (2022), “Exploring Innovation Ecosystem of Incumbents in the Face of Technological Discontinuities: Automobile Firms”. *Sustainability*, 14(3):1606.
- Llopis-Albert, C., Rubio, F., Valero, F. (2021). Impact of digital transformation on the automotive industry. *Technological Forecasting and Social Change*, vol. 162: 120343.

≡ **EVALUATION METHODS**

Participant's grade will reflect the way in which they present and support their topics and positions in the various learning activities used in this course.

- Continuous Assessment : 50 %
- Final Exam : 50%

≡ **SESSIONS**

- **Session 1 & 2: Managing Businesses in the digital world**
 - Challenges of Operating in the Digital World: Why Digital Disruption Matter?
 - Digital Transformation : Physical, Digital & Phygital.
 - What is the price of your organization's survival: the most critical questions about Digital Transformation?
 - Incumbents' Dilemma: how to deal with Digital Disruption?
 - Role of Digital Transformation in achieving competitive advantage and operational efficiency
 - Companies' cases: Nokia, Kodak, Blockbuster
- **Session 3 & 4 : Opening the Black Box of Digital Transformation**
 - What's Digital transformation? What is not Digital Transformation?
 - Why are Companies reinventing themselves?
 - Digital transformation is a journey, not a destination
 - Why is Digital Transformation complex & risky?
 - Companies' cases: GE, Ford, Nike & Corning
- **Session 5 : Industry 4.0, New Challenges for Digital Transformation**
 - Digital Transformation & Industry 4.0: Why, How & What?
 - Digital Transformation of Manufacturing in the 4th Industrial Revolution
 - Digital Platforms, Digital Twin, Industrial IoT, Digital Ecosystems
 - Industry 4.0 Strategy and Implementation: Benefits and Challenges
 - Companies' cases: Siemens, GE, BMW, Faurecia
- **Session 6: Main Pitfalls of Digital Transformation and How to Avoid them**
 - Digital Transformation & Technological Determinism
 - Digital Transformation & Strategic Alignment
 - Digital Transformation & Organizational Maturity
 - Digital Transformation & Human Assets vs. Digital Skill Gap
 - Digital Transformation & Data Quality
 - Digital Transformation & Operational Backbone Integration
 - Companies' cases: VW, Adidas, L'Oréal
- **Session 7 & 8 : Blockchain & Digital Transformation**
 - What is Blockchain and how to use it in Business
 - Integration of Blockchain with Supply Chain & Logistics
 - Using Blockchain based solutions in supply chain and logistics
 - Benefits & Limitations of Blockchain usage in SCM & Logistics
 - Blockchain Technology Implementation : Steps Towards a Successful Blockchain Project Implementation
 - Blockchain demo platforms
- **Session 9 : Using Cloud Computing to enable Digital Transformation**

- The role of Cloud Computing in supporting Digital transformation
 - Cloud types & Characteristics: SaaS / PaaS / IaaS
 - Cloud Computing Value, Limits and challenges
 - On-Premise vs. Cloud computing: Hybrid IT Challenges & Strategies
 - Companies' cases: AWS, Ali Baba, Mohawk
- **Session 10 : Enterprise Systems : The Operational Backbone of any Digital Transformation**
 - Why are Enterprise Systems the Operational Backbone for Digital Transformation?
 - Operational Excellence in the Digital Transformation Age.
 - Enterprise Systems Implementation strategies / Operations and Post-Implementation
 - The Future of Enterprise Systems in the New Digital World
 - Companies' cases: SAP, Salesforce, Workday
 - **Session 11 & 12: Articles & case studies presentations: Company experience with Digital Transformation projects from different industries**

CODE: Tbc

Course title: DISTRIBUTION AND TRANSPORTATION MANAGEMENT

Term: FALL

Teaching hours: 24 hours

Number of credits: 3

Teaching language: ☒English ☐French

Course leader: (Filled in by Program)

Speakers:

≡ **COURSE DESCRIPTION**

This course aims to provide academic frameworks for managing and taking decisions in the fields of distribution and logistics. We explore the various aspects of logistics in companies and determine which ones are strategic, those which can be outsourced.

≡ **COURSE OBJECTIVES**

Students learn to critically evaluate the advantages of Incoterms for a company in terms of services to customers, to control costs and to manage responsibilities. They will discuss the relevance of international transport as strategical tools for a company, from a legal obligations perspectives, to various regimes and possibilities of international customs rules. They learn how to evaluate and classify payment means in accordance with the global strategy of the firm, critically evaluate the impact of fluctuation of currencies on the TCO, critically evaluate and engage the possibility of outsourcing logistics in part or in whole taking in consideration the disruptions of the Transport & Logistics industry / market.

≡ **TACKLED CONCEPTS**

- Incoterms 2020
- Transport means, 1PL to 5PL
- Payment means, customs management
- Currency risks
- Management of the information flow
- Disruptions in the Transport & Logistics industry / market
- Outsourced logistics strategies
- Information system applications in logistics

≡ **LEARNING METHODS**

- Interactive lecture sessions
- Presentation and discussion of case studies
- Group work and presentations
- Individual writing and analysis

≡ **BIBLIOGRAPHY – COURSE MATERIAL**

MANGAN, John ; LALWANI, Chandra ; BUTCHER, Tim JAVADPOUR, Roya (2011). Global Logistics and Supply Chain Management.

Additional readings e.g. articles on Blackboard

≡ **EVALUATION METHODS**

Continuous assessment 50% + written exam 50%

≡ **SESSIONS**

○ **SESSION 1: Introduction and course overview**

- LECTURE: 02h00
- This session introduces strategies regarding logistics, transport and distribution. It highlights the links between logistics and marketing strategies. Get the right product delivered to the right customer, at the right time and right cost. In order to do so, companies have to make decisions regarding distribution strategies and choose a distribution network.

○ **SESSION 2: Case study**

- LECTURE: 02h00

○ **SESSION 3: Incoterms 2010 and 2020**

- LECTURE: 02h00
- definition and goals of Incoterms 2010
- detailed study of each Incoterm
- impact of Incoterm on total cost
- obligations between buyers and sellers
- Incoterms 2020: modifications and improvements

○ **SESSION 4: Case study**

- LECTURE: 02h00

○ **SESSION 5: International customs**

- LECTURE: 02h00
- international customs system
- various regimes
- calculation of rights and taxes, customs clearance
- import/export documents

○ **SESSION 6: international customs system: exercises**

- LECTURE: 02h00

○ **SESSION 7: Transport means**

- LECTURE: 02h00
- main actors and transportation means
- how to choose the right transportation means and partner
- 1 to 3 PL and more

○ **SESSION 8: Case study**

- LECTURE: 02h00
- Application exercise about international transportation.

○ **SESSION 9: Management of currency risks**

- LECTURE: 02h00
- what is the risk with currencies?

- various methods of currency risk management
 - selection of the adapted method
 - study case: Lunetic
- **SESSION 10: Payment means**
 - LECTURE: 02h00
 - various payment means
 - focus on cash against documents and letters of credit
 - case study: Intermed (oral presentation by teams)
- **SESSION 11: Process and Information system applications in logistics**
 - LECTURE: 02h00
 - WMS (warehouse Management System)
 - Case study : supply chain provider for aerospace manufacturer
 - Operational process (order fulfilment) and information system
- **SESSION 12: Process and Information system application in logistics**
 - LECTURE: 02h00
 - TMS (Transport Management System)
 - Case study 'distribution center in retail network of consumer goods' : Operational process (warehousing, picking, transport) and information system

CODE: Tbc

Course title: SUSTAINABLE OPERATIONS MANAGEMENT

Term: FALL

Teaching hours: 24 hours

Number of credits: 3

Teaching language: ☒English ☐French

Course leader: Leonardo Marques

Speakers: Leonardo Marques

≡ **COURSE DESCRIPTION**

The course aims to provide the foundations and key frameworks of Operations Management (OM). The course covers key terminology, concepts and management tools that are part of OM as a Business discipline. The course explores interconnections with other areas of management, such as marketing, strategy, and finance. Therefore, the issues addressed are relevant not only for those who wish to specialize in OM, but also for those who intend to follow other areas of expertise within the Management discipline. The course revisits core concepts under the light of sustainability and that extent that this pressures changes in the way we define and manage Operations.

≡ **COURSE OBJECTIVES**

The main goal of this course is to provide students with a sound conceptual understanding of OM, its strategic importance, and its links with other business functions. The course emphasizes OM applications by using theory in conjunction with problem solving tools, so that students may apply their acquired knowledge to real business problems and work better with people from other departments of the firm.

≡ **TACKLED CONCEPTS**

- Process flow, process analysis, process typology, process layout
- Operations strategy and the impact of sustainability
- Capacity management
- Inventory and waste management
- Quality management
- Lean operations
- Transparency and sustainability in Operations management

≡ **LEARNING METHODS**

Lectures, business game, exercises, case studies.

≡ **ASSIGNMENTS AND EXPECTED WORK**

Prior to class: reading book chapters (available online) and reports, preparing case studies and exercises. In-class: quiz, case study presentation and discussion and tutorial of exercises.

≡ **BIBLIOGRAPHY – COURSE MATERIAL**

Slack, N; Brandon-Jones, A. Operations Management, Pearson Higher Ed.: 8th/9th Eds.

- 8th Edition: 2 physical copies + digital copy:

https://knowledge-hub.audencia.com/index.php?lvl=notice_display&id=35327

- 9th Edition: 3 physical copies + digital copy:

https://knowledge-hub.audencia.com/index.php?lvl=notice_display&id=38551

≡ **EVALUATION METHODS**

Exam: 60%

Continuous assessment: 40%

≡ **SESSIONS**

- **SESSION 1: Introduction to Operations Management**
 - LECTURE: 02h00
 - Presentation of the course syllabus. Historical perspective of the Operations function. Defining Operations Transparency.
- **SESSION 2: Process analysis**
 - LECTURE: 02h00
 - Sandwich simulation game. Process analysis exercise and tutorial.
- **SESSION 3: Operations typology and layout**
 - LECTURE: 02h00
 - Fundamentals of operations typology (4Vs) and operations layout.
- **SESSION 4: Operations strategy and sustainability**
 - LECTURE: 02h00
 - Defining operations strategy. The five performance objectives. Sustainability as a new performance objective.
- **SESSION 5: Fundamentals of inventory management**
 - LECTURE: 02h00
 - Fundamentals of inventory management. Case study presentations (Case Shimizu). Revision of sessions 1 to 4.
- **SESSION 6: Inventory and waste management**
 - LECTURE: 02h00
 - Inventory management techniques. Managing waste in operations management.
- **SESSION 7: Capacity management**
 - LECTURE: 02h00
 - Capacity management. Capacity strategies. Key performance indicators.
- **SESSION 8: Fundamentals of quality control**
 - LECTURE: 02h00
 - Fundamentals of quality control. Statistical process control (SPC). Sustainability as quality?
- **SESSION 9: Quality management**
 - LECTURE: 02h00
 - Quality management. Case study presentations (Case Laboratory Argentina). Revision of sessions 6 to 8.
- **SESSION 10: Lean and just-in-time**
 - LECTURE: 02h00
 - Lean operations. Lean as a philosophy. Just-in-time principles.
- **SESSION 11: Lean and value stream mapping**

- LECTURE: 02h00
- Value stream mapping tutorial. Lean, waste management and sustainability.
- **SESSION 12: Trends of sustainability and transparency in operations**
 - LECTURE: 02h00
 - Sustainability and transparency in operations. Groupwork activity.

CODE: Tbc
Course title: GREEN LOGISTICS MANAGEMENT
Term: FALL

Teaching hours: 24 hours
Number of credits: 3
Teaching language: ☒English ☐French
Course leader: Osama Meqdadi
Speakers: Osama Meqdadi

≡ COURSE DESCRIPTION

This course aims to provide academic frameworks for analyzing and taking supply chain and logistics decisions in a sustainable way. Building on general supply chain and logistics concepts and models (which are prerequisites), this course focuses specifically on the challenges and opportunities presented by sustainability and the implications of these on supply chain and logistics models and practices. The course provides the necessary skills and knowledge to enable students to understand many of the issues surrounding the subject of green or sustainable logistics. For instance, the course develops the ability to appreciate the environmental impact of the various modes of transport, logistics and supply chain operations, reverse logistics activities and how to improve energy efficiency within the logistics and transport sectors. It also explores how companies can control and develop their supply chains to ensure compliance with environmental and social standards and how they analyze their carbon footprint. We explore trends in urban logistics.

≡ COURSE OBJECTIVES

This unit will help students to:

- Appreciate the role of logistics within the context of supply chain management
- Demonstrate a systematic understanding of the concepts and approaches of logistics used to analyse and resolve environmental issues
- Assess the new practices in logistics

≡ TACKLED CONCEPTS

The key concepts include:

- The financial impact of logistics
- Logistics infrastructure and transportation modes
- Third-party logistics
- Green logistics and reverse logistics
- Logistics 4.0 and trends in green logistics

≡ LEARNING METHODS

The course will employ:

- Interactive lecture sessions
- Numerical exercises
- Presentation and discussion of case studies
- Group management - presentation

≡ **ASSIGNMENTS AND EXPECTED WORK**

An important part of the assessment for this course is a group project. Each group will deliver a written report before the specified submission date. Each group will do an oral presentation and details of the presentation will be conveyed to the students in advance. The assessment grade will be based on the written report and oral presentation. Details of the assignment will be provided to the students at the beginning of the course.

≡ **BIBLIOGRAPHY – COURSE MATERIAL**

Core textbook

In this unit, we will be using chapters from different textbooks.

- Grant et al. *Sustainable Logistics and Supply Chain Management*. KoganPage – 3rd Edition
- Johnsen, T. E. et al. *Purchasing and Supply Chain Management*. Routledge. - 2nd Edition
- Additional readings e.g. case studies and articles will be made available on Blackboard.

≡ **EVALUATION METHODS**

40% Group Assessment

60% Individual Examination: closed book exam

≡ **SESSIONS**

- **SESSION 1: Introduction and course overview**
 - LECTURE: 02h00
 - This session provides an overview on the logistical and SCM activities. This includes the role of logistics in the globalized supply chains. The details of the assignment will be distributed to the students and groups are assigned.
- **SESSION 2: Logistics concepts and impact on financial performance**
 - LECTURE: 02h00
 - The session discusses the various logistics concepts and elements and the impact of logistics on companies' bottom-line. Importance of logistics in competitiveness of companies and their operations performance is highlighted.
- **SESSION 3: Logistics infrastructure and transportation modes**
 - LECTURE: 02h00
 - This session provides an understanding on the various modes of transportation, their pros and cons and impact of transportation modes on logistics and financial results.
- **SESSION 4: Global logistics networks**
 - LECTURE: 02h00
 - The session discusses global logistics networks. An inherent part of global supply chains and logistics networks is risks management which the session will cover in detail.
- **SESSION 5: Green logistics strategy**
 - LECTURE: 02h00
 - The session discusses the green logistics strategies. This includes logistics and supply network design, cost trade-offs and green logistics performance measurement.

- **SESSION 6: Reverse logistics**
 - LECTURE: 02h00
 - The session discusses reverse logistics and recycling activities. This includes the factors required for implementing reverse logistics and regulatory frameworks.
- **SESSION 7: Green transportation**
 - LECTURE: 02h00
 - The session focuses on impact of transportation on environment and covers issues of CO₂ emission, fuel consumption and congestion. The role of technology is highlighted in reducing transportation impact on environment.
- **SESSION 8: Green warehousing**
 - LECTURE: 02h00
 - The session discusses the contribution of storage facilities, warehousing and distribution centers to the environmental issues. The session discusses the approaches to reduce warehousing impact on the environment.
- **SESSION 9: Logistics 4.0 and trends in Green Logistics**
 - LECTURE: 02h00
 - The session introduces the integration of digitalization aspects in logistics activities. This includes the impact of digitalization on the flow of information and raw materials through various stages of supply chain.
- **SESSION 10: Green logistics case study**
 - LECTURE: 02h00
 - A case study will be provided to the students and discussion will take place in the class.
- **SESSION 11: Group Presentations - Part 1**
 - LECTURE: 02h00
 - Each group will present the assignment findings and answer the questions.
- **SESSION 12: Group Presentations - Part 2**
 - LECTURE: 02h00
 - Continuation of the group presentations and course wrap-up.

CODE: Tbc
Course title: PURCHASING MANAGEMENT

Term: FALL

Teaching hours: 24 hours
Number of credits: 3
Teaching language: ☒English ☐French
Course leader: CONSTANT François
Speakers:

≡ COURSE DESCRIPTION

This course is an introduction to purchasing management, focusing on sourcing process. It will tackle the main concepts of strategic sourcing, supplier selection, sourcing to contract process (S2C) and Procure to Pay (P2P) with a strong emphasize on category management. It tackles the main concepts of strategic sourcing process, supplier selection and RFx. Students will learn how to profile a sourcing category, how to define a relevant sourcing strategy, and how to select the best supplier portfolio for their business context, using responsible approach. It develops analytical skills and risk management skills in a purchasing environment.

≡ COURSE OBJECTIVES

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

- Evaluate the role of purchasing and sourcing in the firm's organization.
- Implement a 7-step process to select suppliers for a specific category of purchase.
- Critically analyze a sourcing strategy and the maturity of an existing sourcing process.
- Adapt a sourcing strategy based on sourcing risks
- **TACKLED CONCEPTS**

- Sourcing process (using 7-steps approach), Kraljic matrix.
- Category management
- Global sourcing, volume concentration, price optimization
- Make or buy, supplier relationship restructuring, product/process optimization
- RFI, RFQ, RFx
- Supplier selection, Supplier audit, Supplier management.
- Total cost of ownership (TCO), price formula, cost breakdown.
- Sourcing Risk management

≡ LEARNING METHODS

The course will be a combination of lectures on purchasing management, short case studies, in-class simulation exercises, discussions.

Examples are drawn from various industrial sector: automotive, textile, IT, consumer electronics, etc. Because a significant portion of this course is built on a sequential process, students' attendance at every class and wholehearted classroom participation are integral to its success.

For nearly every class meeting, we provide information on one or more compulsory readings (books or journal's articles) related to the topics covered in that class. In addition to these compulsory pre-readings, you may find helpful to read additional session's "Recommended Readings" to develop your knowledge further.

≡ **ASSIGNMENTS AND EXPECTED WORK**

50% Written exam

50% Group report+poster presentation in class: students will work in teams of four to complete a final project for the course, which consists of a presentation in class. Students will be assigned to a team. The final presentation will give the team an opportunity to demonstrate what its members have learned about sourcing strategies. The group has to choose a company + a sourcing category and present the maturity of the sourcing strategy, using tools seen in class. Their analysis will be discussed during a Q&A session (10' pres + 5' Q&A). All members of the team will receive the same grade, but it can be adjusted individually according to the peer-review assessment launched after the presentation.

Homework/Exercises/readings asked to students to prepare the session or in-class exercises)

≡ **BIBLIOGRAPHY – COURSE MATERIAL**

O'brien, J. (2019). Category management in purchasing: a strategic approach to maximize business profitability. (4th ed.). Kogan Page. + Ebook

Monczka, R-M., Handfield, R-B., Giunipero, L-C., Patterson, J-L. (2021). Purchasing and supply chain management. (7th ed.). Cengage. + Ebook

Additional readings supplied on Blackboard during the course

≡ **EVALUATION METHODS**

Exam: 50%

Continuous assessment: 50%

If you think that your course might benefit from a different evaluation method instead of exam, please put your propositions here. It will be studied and validated (or not) by DPR.

≡ **SESSIONS :**

- **1/ Introduction to purchasing management and to strategic sourcing**
 - COURS : 02h00
 - In this session we explain the reasons why purchasing has become a strategic function for companies. We define purchasing and supply chain management in relation to related concepts, such as strategic sourcing, category management, purchasing process, supplier management.
 - Pre-readings:
 - 1/ O'Brien book / Chapter - 01: Introducing category management (pp 5 to 42)
 - 2/ O'Brien book / Chapter - 02: The principles of category management (pp 43 to 77, including noting of category management in retail + public sector);
- **2/ Sourcing process: step 1**
 - COURS : 02h00
 - This session presents the first stage of the strategic sourcing process. This first stage consists of various tasks, aiming to classify and to better understand what needs to be purchased: categorization activities, defining internal needs (tech specs) and understanding supply market. This step 1 poses the bases of what must be done prior to make any sourcing decision.
 - Pre-readings:
 - 1/ O'Brien book / Chapter - 03: Laying the groundwork for success (pp 78 to 100) +

Stage 1 : initiation (pp 101 to 158)

- 2/ SPENDMATTERS - Indirect category sourcing savings _ April2013 (pdf)

- 3/ Kraljik - Purchasing must become supply management -1983 (pdf)

- 4/ TESLA - Vertical integration strategy (pdf)

○ **3/ Sourcing process: step 2.1**

- COURS : 02h00

- This session presents the different possible strategies which can be chosen to implement a relevant sourcing. Building on the findings from step 1, we assess the supply market complexity and how impactful is the category on the firm's business. We position the category on a tetra-categorization matrix. Then, various strategies are described and classified in a "diamond of strategies", which shows two different approaches to source a supplier: 1/ leverage purchasing power and 2/ create an advantage. It gives a particular look at the appropriateness of supplier partnership restructuring.

- At the end of this session, the professor will introduce the TEAM WORK (group assignment), and show examples of what is expected. Professor will assign groups. Students will have 1 hour to work in team and to ask questions to the professor.

- Re-readings:

- 1/ O'Brien / Chapter 5 (Stage 2: Insights pp158 to 238).

- 2/ Strategic sourcing at DOD (pdf)

- 3/ The Long-Tail Strategy for IT outsourcing ((pdf from MIT press review)

○ **4/ Sourcing process: step 2.2**

- COURS : 02h00

- Following up of Sourcing process step 2.

○ **5/ Team work Q&A + examples**

- COURS : 02h00

- Time devoted to check the progress of each team about Team work, show examples of past studies. Q&A session.

○ **6/ Sourcing process: steps 3**

- COURS : 02h00

- In this session we discuss the importance of asking suppliers to fill in a RFI (Request For Informations). We critically analyse a real-case RFI. We review various methods to assess suppliers' compliance to standards through the supplier assessment process (from a single visit to a full audit).

- Pre-readings:

- 1/ O'Brien book / Chapter 6 (STage 3: Innovation). This chapter examines how the outputs of preliminary steps suggest different solutions of how the category can be sourced in the future.

- 2/ Article "how-to-write-an-rfp-s" (pdf)

○ **7/ Purchasing decision simulation: case study about a supplier selection (BOSCH CASE)**

- SIMULATION / JEUX DE RÔLES : 03h00

- This real-world exercise illustrates a case of purchasing decision: students work in teams and are expected to select a supplier among a shortlist of 6 pre-selected suppliers, by analysing supplier offers (including financial criteria and non-financial criteria). Making a sourcing decision is an important step of the sourcing process: this case illustrates what a purchasing manager needs to embrace in his daily tasks. This exercise may introduce the 7-step process seen later in the module.

- Pre-readings:

- 1/ Case introduction.

- **8/ Debrief case study**
 - COURS : 02h00
- **9/ Sourcing process: step 4-5**
 - COURS : 02h00
 - Step 4 is a short (but critical) milestone in which purchasing has to put bases of the coming RFQ and negotiation processes. It is a tactical approach for preparing “how” we will send the RFQ (Request For Quotation).
 - Step 5: RFQ. The supplier selection stage is explained through a case study: the use of The critical activities of the quotation will be discussed, from defining the RFQ criteria and template, through the RFQ follow-up process, until the final decision.
 - Pre-readings:
 - 1/ O'Brien book / Chapter - 07: Stage 4: Implementation
 - 2/ RFQ for IT equipments (pdf).
- **10/ Sourcing process - steps 6-7**
 - COURS, ETUDE DE CAS ET EXERCICES : 02h00
 - Wrap-up of the whole sourcing process, examples of sourcing strategies and discussions around possible impact of current economic context on sourcing strategies.
- **11/ Group presentations 1/2**
 - RESTITUTION DES TRAVAUX DE GROUPE : 02h00
 - Students have to present their team work. This team work consists in a maturity assessment, focusing on a real sourcing strategy. After choosing the company of their choice and one single sourcing category, students describe the firm's context, its purchasing and sourcing strategy (three first steps of the sourcing process only), critically analyze this sourcing strategy, and make recommendations for improvement. This presentation and the related written report is part of the assessment (counts for 50% of the final grade for the module)
- **12/ Group presentations 2/2**
 - RESTITUTION DES TRAVAUX DE GROUPE : 03h00
 - Students have to present their team work. This team work consists in a maturity assessment, focusing on a real sourcing strategy. After choosing the company of their choice and one single sourcing category, students describe the firm's context, its purchasing and sourcing strategy (three first steps of the sourcing process only), critically analyze this sourcing strategy, and make recommendations for improvement. This presentation and the related written report is part of the assessment (counts for 50% of the final grade for the module)

CODE: Tbc

Titre du cours /Course title: SUPPLIER RELATIONSHIP MANAGEMENT

Term: FALL

Heures d'enseignement /Teaching hours: 24 hours

Crédits /Number of credits: 3

Teaching language: ☒English ☐French

Responsable de cours /Course leader:

Enseignants /Speakers: Rhona Johnsen, Thomas Johnsen, Osama Meqdadi

≡ DESCRIPTION DU COURS /COURSE DESCRIPTION

This course aims to look at how to develop supplier relationships as a critical element in current purchasing and supply management practice. The focus of the course is on the development and management of close long-term buyer-supplier relationships which add value to the companies involved. Supplier relationships are viewed as conduits to supplier capabilities and a stream of potential opportunities in long-term partnerships.

The course covers key issues in the development and management of buyer-supplier relationship management (SRM). The characteristics of relationships, the specificities of asymmetric relationships and the balance of power and development of trust in relationships are introduced. Supplier partnerships and portfolio models and international buyer-supplier partnerships and networks are discussed. Recent developments in research related to customer attractiveness, relational capital, social procurement, supplier diversity and inclusion are introduced.

≡ OBJECTIFS DU COURS /COURSE OBJECTIVES

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

- Identify key issues in the development and management of buyer-supplier relationships, partnerships and networks
- Analyse the characteristics and specificities of buyer-supplier relationships, partnerships and networks
- Develop strategies for enhancing the evolution and management of buyer-supplier relationships, partnerships and networks

≡ CONCEPTS ENSEIGNES /TACKLED CONCEPTS

- Buyer-supplier relationship development
- Characteristics of asymmetric relationships
- Balance of power & development of trust in relationships
- Supplier partnerships & portfolio models
- International buyer-supplier partnerships & networks
- Customer attractiveness & preferred customers
- Relational capital
- Social procurement, supplier diversity & inclusion

≡ METHODES PEDAGOGIQUES /LEARNING METHODS

The module will employ:

- Interactive lecture sessions
- Presentation and discussion of case studies and academic articles

- Group work and presentations

≡ **TRAVAIL ATTENDU /ASSIGNMENTS**

- Article review (group)
- Scenario activity and report (individual)

≡ **BIBLIOGRAPHIE – RESSOURCES DU COURS /BIBLIOGRAPHY – COURSE MATERIAL**

Recommended Text

Johnsen, T.E., Howard, M., Miemczyk, J. (2019) *Purchasing and supply chain management: a sustainability perspective*, Routledge.

≡ **MODALITES D'EVALUATION /EVALUATION METHODS**

50% individual case scenario activity and report
50% group article review presentation

≡ **SEANCES /SESSIONS**

- **SESSION 1: Introduction to the course & assessment. Buyer-supplier relationship development & management. (RJ)**
 - LECTURE: 02h00
 - This session introduces key themes and frameworks related to supplier relationship management.
 - process of development of buyer-supplier relationships
 - structure & characteristics of buyer-supplier relationships
 - asymmetric relationship development & management issues
 - power & trust in relationships
 - managing the 'dark side' of relationships
- **SESSION 2: Developing supplier partnerships: Case Westlands Helicopters (TJ)**
 - LECTURE: 02h00
 - This session is based on a case study of a UK helicopter manufacturer, which has decided to implement strategic purchasing. As part of this development, the company wants to change the way it works with key suppliers: developing strategic partnerships. We use the case study to explore the need for a new approach to the strategic supplier selection process and a shift from supplier assessment to supplier *relationship* assessment methods.
- **SESSION 3: Supplier relationship portfolio models (TJ)**
 - LECTURE: 02h00
 - Building on the well-known Kraljic portfolio matrix, we explore alternative portfolio models and what these can add to Kraljic analysis. We run an exercise to simulate how the analysis can be used in practice.
- **SESSION 4: Implementing SRM in practice: the role of relational capital (RJ)**
 - LECTURE: 02h00
 - In this session the concept of relational capital is introduced and explained as a key issue in developing long-term value and capabilities for organizations through interaction in buyer-supplier relationships and networks.
- **SESSION 5: Customer attractiveness & preferred customers (RJ)**
 - LECTURE: 02h00

- The concept of “preferred suppliers” is well-established in purchasing and supply management. This session turns this idea upside down and explores how a company can become the “preferred customer” of its key suppliers. We also consider the related concept of customer attractiveness and the impacts of being an attractive customer.
- **SESSION 6: International buyer-supplier collaboration, partnerships & networks (RJ)**
 - LECTURE: 02h00
 - This session focuses on the development & management of international relationships & partnerships. We discuss internationalization process theories and approaches, partnership evolution & relationship management challenges in the international context
- **SESSION 7: Introduction to the ‘International buyer-supplier relationship case scenario’ (RJ)**
 - LECTURE: 02h00
 - In this session we will introduce the case, the context and readings to support preparation for the assessment for the ‘International buyer-supplier relationship case scenario’. Students will be advised on the materials available and the required approach and expectations for the assignment.
- **SESSION 8: SRM case activity**
 - LECTURE: 02h00
 - This session focuses on a case activity which develops knowledge of the challenges of SRM in different sectors and settings. (TJ)
- **SESSION 9: International buyer-supplier relationship case scenario: group preparation and strategy development (RJ)**
 - CASE ACTIVITY: 02h00
 - This session enables students to discuss their instructions, develop their strategies and assign group roles before playing out the role assigned to them for the case scenario implementation in the next session.
- **SESSION 10: International buyer-supplier relationship case scenario implementation (RJ)**
 - CASE ACTIVITY: 02h00
 - In this session students play out the case scenario and perform individual roles.
- **SESSION 11: Article review presentations**
 - GROUP PRESENTATIONS: 02h00
 - The final two sessions will be dedicated to the presentations made by student groups. These sessions focus on students’ evaluation of an assigned article covering key themes of the course. The article reviews are part of the course assessment.
 - Student groups will present their reviews of articles that have been assigned and that form part of the course assessment. Class discussions will be developed around the article reviews.
- **SESSION 12: Article review presentations**
 - GROUP PRESENTATIONS: 02h00
 - Student groups will present their reviews of articles that have been assigned and that form part of the course assessment. Class discussions will be developed around the article reviews.

CODE: Tbc
Course title: CSR AND GLOBAL SOURCING
Term: FALL

Teaching hours: 24 hours
Number of credits: 3
Teaching language: ☒English ☐French
Course leader: Céline Louche
Speakers: Céline Louche and Thomas Johnson

≡ **COURSE DESCRIPTION**

The course explores corporate social responsibility (CSR) in a global sourcing context. Global sourcing presents opportunities for companies but also a wide range of risks and challenges related to social and environmental issues such as forced labor, decent work, health and safety risks or over exploitation of resources. Increasingly consumers, retailers and other stakeholders are putting pressure on companies to identify and address unacceptable practices like these in their supply chains.

≡ **COURSE OBJECTIVES**

The course will examine the relevance of CSR to global sourcing practices and strategies and will provide insights into the implementation and challenges of responsible global sourcing. Through this course, the students will:

- Identify social and environmental risks and challenges of global sourcing
- Develop a research process for finding purchasing data needed to make informed decisions.
- Conduct a sustainable purchasing audit.
- Establish sustainable purchasing goals, policies, and practices.

≡ **TACKLED CONCEPTS**

- CSR & Sustainability
- Social and Environmental Sustainability in global sourcing
- Supply Chain Collaboration
- Global Networks

≡ **LEARNING METHODS**

Lectures, Exercises, Case studies, Guest speakers

≡ **ASSIGNMENTS AND EXPECTED WORK**

Students will be expected to do some reading (case study or articles) to prepare each session

≡ **BIBLIOGRAPHY – COURSE MATERIAL**

Core Text:

Johnsen, T.E., Howard, M. and Miemczyk, J. (2018) Purchasing and Supply Chain Management: a Sustainability Perspective. 2nd edition. Routledge. ISBN-978 1-13-806476 -8. (1st edition also approved for course.)

Recommended reading:

Carroll, A.B., 2016. Carroll's pyramid of CSR: taking another look. International journal of corporate social responsibility, 1(1), p.3.

Porter, M., Kramer, M. 2011. Creating shared value. How to reinvent capitalism - and unleash a wave of innovation and growth. Harvard Business Review, January-February

Lawrence, A. T. (2010). Managing Disputes with nonmarket Stakeholders: Wage a Fight, Withdraw, Wait, or Work It Out? California Management Review, 53(1): 90-113

Villena, V. H., & Gioia, D. A. (2020). A more sustainable supply chain. Harvard Business Review, 98(2), 84-93.

≡ **EVALUATION METHODS**

Exam: 50%

Continuous assessment: 50%

≡ **SESSIONS**

- **SESSION 1: Introduction to the course and to CSR**
 - LECTURE: 02h00
 - In the first part of this session, the course structure and expectations will be introduced. We will then discuss the societal challenges our society faces. You will be introduced to the concept of sustainability and corporate social responsibility, its roots and development.
- **SESSION 2: CSR related standards and frameworks**
 - LECTURE: 02h00
 - During this class, we will explore the CSR related framework and standards, with a special focus on Sustainable Development Goals (SDG).
- **SESSION 3: The global sourcing process**
 - LECTURE: 02h00
 - Based on a case study, we will examine how a 5-stage global sourcing process model can be applied.
- **SESSION 4: Global sourcing category risks**
 - LECTURE: 02h00
 - In this session, we will examine the different global sourcing risks in purchase categories. We will run an exercise using a tool to analyse in particular industries and countries.
- **SESSION 5: Understanding the firm in its network of stakeholders**
 - LECTURE: 02h00
 - In this session, we will first discuss the importance of the stakeholder perspective and get a better understanding of stakeholders' expectations. We will then learn how to identify, prioritize and engage with stakeholders.
- **SESSION 6: Modern slavery**
 - LECTURE: 02h00
 - In this session, we will explore the issue of modern slavery in order to understand what modern slavery is and how it occurs in the supply chain but also the impact it can have on businesses.
- **SESSION 7: Monitoring suppliers in the context of responsible global sourcing**
 - LECTURE: 02h00
 - Supplier assessment & supplier sustainability monitoring

- Role of third parties: NGOs and platform providers & Example EcoVadis
 - Kraljic matrix revisited: managing sustainable sourcing across different purchase categories
 - We use the case of Danone to understand how a systematic process for monitoring suppliers and appropriate follow-up action
- **SESSION 8: Beyond monitoring: Case Danone**
 - LECTURE: 02h00
 - Many companies limit their responsible global sourcing to supplier monitoring relying on questionnaires and audits. More advanced companies use developmental approaches to help suppliers to create the necessary capability and mindset changes. We use the case of Danone to understand how a systematic process for monitoring suppliers and appropriate follow-up action.
 - **SESSION 9: Responsible global sourcing the coffee industry: case Lavazza**
 - LECTURE: 02h00
 - The coffee industry faces social sustainability challenges with reports of labour problems in lower tier suppliers as well as environmental challenges caused by packaging. We examine how Lavazza try to diffuse sustainability into its global supply network.
 - **SESSION 10: Partnerships for responsible global sourcing: Part 1**
 - LECTURE: 02h00
 - In this session, we will explore the relationship between businesses and NGOs. We will especially focus our attention on partnership initiatives between the two to address CSR issues in global sourcing.
 - **SESSION 11: Partnerships for responsible global sourcing: case study - Part 2**
 - LECTURE: 02h00
 - During this session, we will continue to explore the notion of partnership through a case study.
 - **SESSION 12: Assignment group presentations**
 - LECTURE: 02h00
 - This session will be devoted to group presentations. Each group will present the outcome of their project and answer questions from the audience.

CODE: Tbc
Course title: SUPPLY CHAIN FINANCE
Term: SPRING

Teaching hours: 24 hours
Number of credits: 3
Teaching language: ☒English ☐French
Course leader: GAVALAS Dimitris
Speakers: GAVALAS Dimitris

≡ **COURSE DESCRIPTION**

The course provides an integrated framework of modern principles and practices in applied Supply Chain Finance (SCF), for companies operating in a competitive and risky globalized setting. Among the eight sessions of the course, the basics of Corporate Finance will be discussed and crucial modules of SCF will be unfold.

≡ **COURSE OBJECTIVES**

Identify the main networks in Supply Chain
Identify the key enablers in SCF
Identify the early adopters of SCF solutions
Recognize the key market challenges responsible for the growing interest in SCF

≡ **TACKLED CONCEPTS**

Fundamental Properties of SCF
Critical Corporate Financial Management Decisions
Strategic Investment Decisions of Companies
Financing Companies and Cost of Capital
SCF solutions including approved payables finance, dynamic discounting, reverse factoring, p-cards and receivables finance
Pricing, legal documentation and technological requirements for SCF platforms
Regulatory issues facing the SCF industry
Tackled concepts

≡ **LEARNING METHODS**

The course will consist of a combination of lectures, case presentations, and class discussion. The syllabus of the course will be covered in 12 sessions (24 hours -see schedule below). The lecture/discussion component will be devoted to presentation and discussion of concepts, frameworks, financial analytical techniques, and improvement strategies that may be deployed to drive greater supply chain management performance. The books serve as background information for understanding lecture content and casework materials as well as problems to build financial skills.

≡ **ASSIGNMENT AND EXPECTED WORK**

Participation & Continuous Assessment - Appropriate expressions of interest, and meaningful contributions to class activities are expected, valued, and graded. All reading assignments must be delivered on time. Students should maintain an awareness of current business dynamics and apply their knowledge to class discussions. Oral contributions to class discussions and activities, and completion of any take-home and inclass related exercises will contribute in course's added value.

Continuous assessment: 25%

Assignments: 25%

Written exam: 50%

≡ **BIBLIOGRAPHY – COURSE MATERIAL**

Recommended books:

Hoffman, E. and Belin, O., (2011) *Supply Chain Finance Solutions, Relevance-Propositions-Market Value*. Springer.

Meggison, W.L., Lucey, B.M. and Smart, S.B., (2008). *Introduction to Corporate Finance* Cengage Learning EMEA.

≡ **EVALUATION METHODS**

50 % : Exam

50 % : Coursework

≡ **SESSIONS**

- **1/ The Supply Chain Finance Industry**
 - COURS MAGISTRAL : 03h00
 - Market constituents, enablers, challenges
 - Current market size
 - Prospects for growth
- **2/ The Supply Chain Finance Industry**
 - COURS: 02h00
 - Market penetration
- **3/ Financial Statements**
 - COURS MAGISTRAL: 03h00
 - The Balance Sheet
 - The Income Statement
 - Taxes
 - Cash Flow
- **4/ Working with Financial Statements 1½**
 - COURS MAGISTRAL: 02h00
 - Standardized Financial Statements
 - Ratio Analysis
- **5/ Working with financial statements 2/2**
 - COURS: 02h00
 - The DuPont Identity
 - Using Financial Statement Information
- **6/ Long-Term Financial Planning and Growth**
 - COURS MAGISTRAL: 02h00
 - Financial Planning Models
 - External Financing and Growth
 - Financial Leverage
- **7/ Products and Solutions**
 - COURS MAGISTRAL : 02h00

- Working Capital
- Receivables financing
- **8/ Products and Solutions**
 - COURS: 02h00
 - Reverse factoring
 - Approved payables financing
 - Dynamic discounting
- **9/ Stakeholders and Market Participants**
 - COURS MAGISTRAL: 03h00
 - Buyers
 - Suppliers
 - Global commercial banks
 - Technology providers
 - Enablers
- **10/ Risk and regulation**
 - COURS MAGISTRAL : 03h00
 - Internal risk management
 - Regulation and Basel III
 - Compliance
 - Accounting issues
- **11/ Automation tools**
 - COURS MAGISTRAL: 02h00
 - Automations tools
 - e-invoicing
- **12/ Collaboration**
 - COURS : 02h00
 - Bilateral collaboration
 - Collective collaboration

CODE: Tbc
Course title: CIRCULAR SUPPLY CHAINS

Term: SPRING
Track: 1 – Sustainable and Resilient PSCM

Teaching hours: 24 hours
Number of credits: 3
Teaching language: ☒English ☐French
Course leader: Leonardo Marques
Speakers: Leonardo Marques and Osama Meqdadi

≡ **COURSE DESCRIPTION**

This course covers the transition from traditional supply chain thinking which is linear, to closed-loop or circular supply networks. Students will gain insights into the impacts of linear production systems and how circular economy and related supply chains are offering a first answer to these challenges. The course will provide insights on how to orchestrate socio-technical changes towards the circular economy and enhance new value creation in SCM. The course discusses the growing scarcity of critical raw materials and related strategies for mitigating and adapting to this scenario. The course also introduces related theories and concepts underlying circular systems, in particular social networks as a fruitful lens to understand circularity. At the end of the course, students will be able to understand how circular business models can be developed and implemented while conscious of the changes along the supply chains provoked by such business models, and how to identify opportunities and challenges on the way of implementing circular supply chains.

≡ **COURSE OBJECTIVES**

The main goal of this course is to provide students with a sound conceptual understanding of what is needed to properly plan and implement circular supply chains. Tackled concepts include circular economy, circular business models, industrial symbiosis, life cycle assessment, social network analysis, and circular supply networks. The objective is to allow students to understand the different strategies supporting the transitions from linear to circular models, such as narrowing, slowing, and closing, as well as the implications to supply chain management.

≡ **TACKLED CONCEPTS**

- Circular economy
- Circular economy strategies (narrowing, slowing, and closing)
- Circular business models
- Industrial symbiosis
- Life cycle assessment, social network analysis, and circular supply networks.

≡ **LEARNING METHODS**

Lectures, business game, exercises, case studies.

≡ **ASSIGNMENTS AND EXPECTED WORK**

Prior to class: reading book chapters and reports, preparing case studies and exercises. In-class: business game simulations, quiz, and case study presentation.

≡ **BIBLIOGRAPHY – COURSE MATERIAL**

Slack, N; Brandon-Jones, A. Operations Management, Pearson Higher Ed.: 8th/9th Eds.

- 8th Edition: 2 physical copies + digital copy:

https://knowledge-hub.audencia.com/index.php?lvl=notice_display&id=35327

- 9th Edition: 3 physical copies + digital copy:

https://knowledge-hub.audencia.com/index.php?lvl=notice_display&id=38551

≡ **EVALUATION METHODS**

Exam: 60%

Continuous assessment: 40%

≡ **SESSIONS**

○ **SESSION 1: Introduction to Circular Economy**

- LECTURE: 02h00
- Presentation of the course syllabus. Historical perspective of the Circular Economy.

○ **SESSION 2: Resource scarcity and the De-growth movement**

- LECTURE: 02h00
- Reports on resource scarcity. Origins, theoretical landscape and the de-growth discourse.

○ **SESSION 2: Circular Economy landscape**

- LECTURE: 02h00
- The circular economy landscape. Regulatory environment. Non-governmental environment.

○ **SESSION 4: Process analysis for circularity**

- LECTURE: 02h00
- Revisiting process analysis for circularity. Life cycle assessment (LCA).

○ **SESSION 5: The governance of circular supply chains**

- LECTURE: 02h00
- Social network analysis. Revisiting governance in circular supply chains.

○ **SESSION 6: Designing circular supply chains**

- LECTURE: 02h00
- Groupwork activity.

○ **SESSION 7: Circular economy strategies: Narrowing**

- LECTURE: 02h00
- The narrowing strategy. Definition, governance, supply network configuration. Case studies.

○ **SESSION 8: Circular economy strategies: Slowing**

- LECTURE: 02h00
- The slowing strategy. Definition, governance, supply network configuration. Case studies.

○ **SESSION 9: Circular economy strategies: Closing**

- LECTURE: 02h00

- The closing strategy. Definition, governance, supply network configuration. Case studies.
- **SESSION 10: Industrial symbiosis**
 - LECTURE: 02h00
 - Defining industrial symbiosis and relating to circular supply chain strategies.
- **SESSION 11: Hybrid strategies and trends in circular supply chains**
 - LECTURE: 02h00
 - Trends in circular supply chains. Innovative cases across the globe.
- **SESSION 12: Innovative cases of circular supply chains**
 - LECTURE: 02h00
 - Groupwork final presentation.

CODE: Tbc
Course title: Sustainable & Circular Procurement
Term: SPRING
Track: 1 – Sustainable and Resilient PSCM

Teaching hours: 24 hours
Number of credits: 3
Teaching language: ☒ English ☐ French
Course leader: (Thomas Johnsen)
Speakers: (Thomas Johnsen; Osama Meqdadi; David Allcock)

≡ COURSE DESCRIPTION

The *Sustainable & Circular Procurement* course evaluates sustainable procurement not only from a risk management perspective but also from a value creation perspective. We examine both environmental and social sustainability challenges. In the light of recent criticisms of the concept of sustainability, we take a critical look at sustainability and explore alternative and even more ambitious concepts that seek to go beyond sustainability to reimagine procurement's role in supply chains including circular procurement.

≡ COURSE OBJECTIVES

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

- Assess the relevance and challenges of sustainable purchasing and supply chain management, especially in terms of potential environmental and social risks in extended supply chains and networks
- Critically evaluate the concept and practices of supplier sustainability monitoring
- Apply and critically evaluate procurement maturity models
- Critically evaluate the concepts of closed-loop or circular supply chains and the role of sustainable innovation

≡ TACKLED CONCEPTS

- Environmental sustainability
- Environmental impact
- Due diligence and sustainable procurement standards
- Scope 1-3
- Social sustainability
- Supply networks and ecosystems
- Circular procurement
- Modern slavery
- Supplier inclusiveness and diversity
- Public procurement

≡ LEARNING METHODS

Lecture presentations of theoretical concepts and methods, in-class participation via group discussion, case studies, role play and exercises. Presentation by practitioners complement the theoretical inputs by professors. Learning methods will inspire students to reflect critically on the concept of sustainability and related concepts as well as the application of methods and tools.

≡ ASSIGNMENTS AND EXPECTED WORK

The assessment will be based on an individual exam and a group assignment: a written report based on sustainable procurement maturity analysis of a company of own choice.

≡ **BIBLIOGRAPHY – COURSE MATERIAL**

Johnsen, T., Howard, M., & Miemczyk, J. (2018). *Purchasing and supply chain management: a sustainability perspective*. Routledge. Second Edition.

Villena, V. H. (2019). The missing link? The strategic role of procurement in building sustainable supply networks. *Production and Operations Management*, 28(5), 1149-1172.

≡ **EVALUATION METHODS**

Exam: 50%

Continuous assessment: 50%

≡ **SESSIONS**

- **SESSION 1: Introduction: Sustainable Procurement and Risks (TJ)**
 - LECTURE: 02h00
 - This session introduces the topic of sustainable & circular procurement and gives an overview of the course. We explore the drivers of sustainable procurement and discuss the risk mitigation versus value creation perspectives. We place sustainable procurement in the context of supply networks and ecosystems.
- **SESSION 2: Sustainable procurement: due diligence and standards (TJ +DA)**
 - LECTURE: 02h00
 - This session examines regulatory, legal frameworks and standards that have developed in recent years and the implications of these for sustainable procurement. We also explore trends in future due diligence developments. The session incorporates a guest presentation by David Allcock who will explain due diligence in practice from an industry perspective.
- **SESSION 3: Sustainable procurement strategy and maturity (TJ)**
 - LECTURE: 02h00
 - This session examines sustainability from a strategic perspective and introduces models of sustainable procurement maturity and how to apply these. We discuss the limitations of maturity models.
- **SESSION 4: A critical look at the concept of sustainable procurement (TJ + DA)**
 - LECTURE: 02h00
 - We critically evaluate the concept of sustainable procurement, discussing the implications and potential limitations of the concept in light of recent debate about the need to *reduce* or *eliminate* the harm that companies do through their supply chains. David Allcock gives a guest presentation based on his experiences in the oil and gas industry (where he is managing the transition towards renewable energy and circularity), discussing what the trade-off between reducing or eliminate harm means in practice.
- **SESSION 5: Circular procurement (TJ)**
 - LECTURE: 02h00
 - The decision to adopt a closed-loop supply strategy has significant implications for the firm in terms of sustainable procurement. Closed-loop supply chains require considerable investment in time and resources, initially in understanding the configurations of information flow and parts distribution that serve the product while in

use, and then in developing a collection system which takes back or 'harvests' the product at its end-of-life, while integrating the cooperation of customers, suppliers and not-for-profit organizations. This session examines the implications of circular supply chains for procurement management. Case study: Desso Carpets.

- **SESSION 6: Environmental impacts and Scope 3 emissions (TJ)**
 - LECTURE: 02h00
 - This session focuses on how to analyze a company's environmental impacts and the concepts of scope 1,2 and 3 emissions. We evaluate how a company can calculate its scope 3 emissions.
- **SESSION 7: Supplier inclusiveness and diversity (SDI) (OM)**
 - LECTURE: 02h00
 - This session identifies different types of diversified suppliers and approaches that companies adopt to enhance supplier diversity in their supply networks. We explore the role of procurement in integrating diversified suppliers in supply networks and the main challenges that face procurement function when engaging in supplier diversity and inclusion programs.
- **SESSION 8: Social Impact Through Procurement – Part One (OM)**
 - LECTURE: 02h00
 - The session focuses on how the procurement function induces social impact. We also examine supplier diversity relationship management and the main distinguishing features compared to traditional supplier relationship management. We examine measures of social impact through social procurement activities.
- **SESSION 9: Social Impact Through Procurement – Part Two (OM)**
 - LECTURE: 02h00
 - This session is dedicated to discussing case studies on social procurement. The discussion is supported by videos and examples on social procurement. At the end of the session, students can draw managerial practices on social procurement and SDI programs implementation in supply networks.
- **SESSION 10: Worker conditions and the case of modern slavery (DA)**
 - LECTURE: 02h00
 - This session explores human rights risk descriptors and a case studies of Rana Plaza and the fishing industry. We discuss risk assessment and management. Students perform a role play.
- **SESSION 11: Sustainable public procurement (TJ)**
 - LECTURE: 02h00
 - Public procurement represents around 25–30% of GDP in developing countries making government the single largest customer within many countries. Due to such high levels of spend, governments have realized that they can use their economic influence to drive changes towards growth, innovation and sustainability. Governments increasingly seek to deliver policy objectives through public procurement initiatives, for example, by investing in large scale projects to create economic growth during the economic crisis. However, public procurement is a very complex process influenced by extensive regulation and political interests amongst stakeholders. In this session we identify some of the particular characteristics and challenges of public procurement, especially those that concern sustainability.
- **SESSION 12: Mapping sustainability in supply networks (TJ)**
 - LECTURE: 02h00

- In this session, we examine the use of mapping techniques as a way of developing supply chain transparency. We also explore various digital tools and platforms that can be applied by procurement professionals to obtain transparency over sustainability supply chain risks, including *Prewave* (TBC) and *Riskmethods* (TBC).

CODE: Tbc

Course title: Renewable Energy Supply Chain Management

Term: SPRING

Track: 1 – Sustainable and Resilient PSCM

Teaching hours: 24 hours

Number of credits: 3

Teaching language: ☒English ☐French

Course leader: Mihalis Giannakis

Speakers: Mihalis Giannakis

≡ **COURSE DESCRIPTION**

The energy industry is diverse, complex, very dynamic and growing at a very rapid pace. It also has a major impact on many areas of the world's economy and politics. This course is designed to introduce students to the fundamentals of renewable energy value chains, from energy production to energy use, including an understanding of the role of different forms of energy, market structures, investment dynamics and the evolving nature of the energy system. Anyone working in or interested in the energy industry will greatly benefit from a better understanding of the different parts of the renewable energy supply chains and how they are integrated and managed. Students will not only develop a good understanding of the energy supply chain, but also how and where value is created in different parts of the renewables supply chains. We will also consider broader issues affecting energy such as the economic environment, climate change and sustainability.

≡ **COURSE OBJECTIVES**

By successfully completing this course, students should recognize and be able to articulate the key elements of the businesses in each of the different renewables supply chains, the latest technologies that drive the energy transition agenda and how value is created in the supply chain.. The course objectives include:

- Understand the global energy market structure and its component value chains
- Appreciate how and why energy value chains have changed over time and how and why they are expected to change going forward.
- Identify the relationships between the different renewable energy value chains
- Develop an awareness of implications that the broader economic, policy, sustainability and societal trends have on energy supply chains.

≡ **TACKLED CONCEPTS**

Renewable energies supply chain management (solar, wind, hydrogen, nuclear, hydro, thermal, bioenergy, tidal, geothermal); distributed energy resources; digitalization and sustainability; electricity distribution

≡ **LEARNING METHODS**

We will bring “real life industry experience” on different parts of the value chain through:

- Lectures
- Case analysis and discussion

- Guest presentations of leading managers in the energy sector
- Teamwork
- Student presentations

≡ **ASSIGNMENTS AND EXPECTED WORK**

Exam (60%)– an individual closed book 2-hour exam at the end of the course covering the learning objectives of the course.

Continuous Assessment (40%) – At the beginning of the course student groups will be assigned a group report about a case study or a hot topic in renewable energy supply chains, to be presented at the end of the course. Students need to submit a joint group final report (60% of the continuous assessment) and also make a presentation of their findings (40% of the continuous assessment).

≡ **BIBLIOGRAPHY – COURSE MATERIAL**

Main book: There is no single textbook that covers all the topics of the renewable energies supply chain management. However, we will use material from the following sources:

A selection of seminal article and cases on supply chain management will be available on Blackboard.

≡ **EVALUATION METHODS**

Exam: 60%

Continuous assessment: 40%

≡ **SESSIONS**

- **SESSION 1: Introduction to the module and the energy supply chain**
 - LECTURE: 02h00
 - This session introduces you to the renewable energy supply chain module. You will be allocated to syndicate groups to support your learning. The session will focus the key drivers of the global energy system – Energy markets supply and demand structure, trends and main drivers are presented.
- **SESSION 2: Critical issues of energy transition**
 - LECTURE: 02h00
 - We will discuss one of the great global challenges of our time: how do we deliver dependable global energy in a way that mitigates the effects of human-induced climate change, encourages sustainability, and meets the sometimes competing economic needs of many different countries
 - Case Study: Adapting to Climate Change: The Case of Suncor Energy and the Alberta Oil Sands
- **SESSION 3: Supply Chain Strategy in Energy Industries**
 - LECTURE: 02h00
 - We will build on responsible supply chain strategy lectures and discuss the crucial elements of the energy supply chain, we will examine key technologies and crosscutting topics, and includes actions that energy organizations are employing develop clean energy supply chains.
 - Case Study: Pazgas

- **SESSION 4: - Renewable Energy Technologies – Solar**
 - LECTURE: 02h00
 - **Sessions 4-7** provide a deep analysis on the evolution of supply chains in renewable energy industries. Understanding how supply chains evolve during the development of renewable energy industries is critical to provide a comprehensive understanding of the approaches and policies that can foster sustainable development. We will analyse the photovoltaic (solar), wind, hydrogen, nuclear, hydro, geothermal, tidal and bioenergy supply chains. For each renewable energy industry, we illustrate the anatomy of the supply chain, and will discuss the tools and methodologies for the analysis, planning, design and optimization of their supply chains. We will examine the available technologies for energy production, storage, transport, distribution and energy conversion, providing a cross cutting perspective on their sustainability. Environmental, social and economic aspects are considered, allowing for a more complete life cycle assessment of the entire supply chain.
 - Case study: Ilumexico: A Built-for-assembly Supply Chain Strategy
- **SESSION 5: - Renewable Energy Technologies – Wind**
 - LECTURE: 02h00
 - Case study: SkySpecs: A New Horizon for Wind Energy
- **SESSION 6: - Renewable Energy Technologies – Hydrogen**
 - LECTURE: 02h00
 - Case study : Genvia
- **SESSION 7: - Renewable Energy Technologies – Hydro, Nuclear, Geothermal, Biomass, Tidal**
 - LECTURE: 02h00
 - Case Study: The Future of Nuclear Energy in a Carbon-Constrained World
- **SESSION 8: Digitalisation in the energy supply chains**
 - LECTURE: 02h00
 - This session focuses on how to create value by combining digital technology, people and supply chain strategies. We will discuss the current attitudes to, and challenges and opportunities for digitalization in the energy industry. Digitalization is an important instrument for the energy transition and an enabler of two key industry trends: decarbonization and decentralization, both critical to enabling the energy transition humanity needs so desperately to deliver
- **SESSION 9: Blockchain and smart contracts in the energy supply chain**
 - LECTURE: 02h00
 - In this session we will discuss with industry examples how the blockchain technology along the supply chain could revolutionize the energy industry. Blockchain and smart contracts offer the opportunity to store data from transactions or shipments in a database that is kept up-to-date and where all parties involved can confirm its accuracy. Smart contracts provide the opportunity to automate transactions or exchanges of money. This session will examine the use cases for blockchain, its strengths and weaknesses, and current pilot projects
 - Case Study: VAKT
- **SESSION 10: Energy Storage Supply Chains**

- LECTURE: 02h00
 - Clean and renewable energy sources such as wind and solar are by nature intermittent and located far away from consumer demand. Given constraints such as these, the challenge is how to design new supply chain systems for cost-effective renewable energy delivery to end consumers. In this session we will discuss the development of the energy storage markets, the different energy storage technologies and identify critical issues for the management of their supply chains.
 - Case study : Electricity Storage and Inventory Management at Eandis
- **SESSION 11: Decarbonizing the power grid with distributed energy resources**
 - LECTURE: 02h00
 - This session discusses how the electricity generation and distribution networks can be decarbonized with the development of energy systems and a control strategy for managing distributed energy resources. These distributed energy resources are primarily solar photovoltaic panels, home-storage systems, electric-vehicle chargers, and heating, ventilation, and air-conditioning systems.
 - Case study: Powernet
- **SESSION 12: Guest speaker - Renewable Energy Contract Management**
 - Student presentations and module wrap up
 - LECTURE: 02h00

CODE: Tbc
Course title: Supply Chain Risks and resilience

Term: SPRING

Track: 1 – Sustainable and Resilient PSCM

Teaching hours: 24 hours

Number of credits: 3

Teaching language: ☒English ☐French

Course leader: Jérôme Le Maire

Speakers: Jérôme Le Maire

≡ **COURSE DESCRIPTION**

This module provides understanding and methodology to detect/ evaluate external and internal risks existing on supply chain and will bring methodology (stress test, supplier evaluation) and tools (technology) to increase the resilience of supply chain in the current VUCA world

≡ **COURSE OBJECTIVES**

This module will allow the student to properly understand typical weakness of any supply chain, the way to detect it depending on the localization (capacity planning , supplier management , logistic network) and about the main field of actions/ projects to increase the resilience

≡ **TACKLED CONCEPTS**

- Supply Chain resilience, a company challenges and not just a logistic issue
- Challenges in evaluating Supply Chain risks
- Integrated business planning as a key element for Supply Chain Resilience
- Supply Chain based on PESTEL approach
- Flexibility versus standardization in logistics
- Scenario Planning, how to consider several plans as one is not enough
- Stress test (Supply Planning / Logistic planning / Supplier planning)
- Business Continuity plan
- Risk evaluation and stock management (is Just in Time the right approach?)
- How can we learn from military logistics strategy?
- Changes in Supply Chain score card
- Technology & Data to increase Supply Chain resilience
- Technology and risk, Importance of master data (purchasing and supply chain)
- How damaging the Earth is creating additional risks for Supply Chain
- Supply Chain resilience and R&D

≡ **LEARNING METHODS**

- Introduction to major risks foreseen for any supply chain (geopolitics, demand / supply issue, cyber security, etc.....)
- Introduction of existing methodology and tool to detect and increase resilience
- Business case: Covid / Electronic crisis / Suez Canal crisis
- Learning by doing

≡ **ASSIGNMENTS AND EXPECTED WORK**

In class exercise around 2 core exercise:

- (1) WHAT IF exercise based on PESTEL approach where with some data the students will have to detect planning bottleneck and identify best way to convince management or the necessity to invest in new production capacity
- (2) prepare a standardize evaluation questionnaire to be used for a risk maturity assessment (act as a future consultant about supply chain risks assessment)

≡ **BIBLIOGRAPHY – COURSE MATERIAL**

Supply Chain resilience: Is there a holy grail?, December 8,2021 podcast Mc Kinsey
Briefing EU Resilience of Global supply chain November 2021

≡ **EVALUATION METHODS**

Exam: 50%

Continuous assessment: 50%

≡ **SESSIONS**

- **SESSION 1: Supply Chain risks in a VUCA World**
 - LECTURE: 02h00
 - What are the core sources of Supply Chain disruption expected to continue in future
 - Recover and Absorb approach
- **SESSION 2: Evaluate the risks**
 - LECTURE: 02h00
- **SESSION 3: Planning evaluation: Stress Test WHAT IF scenario**
 - LECTURE: 02h00
 - How to develop scenario?
 - How to run simulation?
 - How to share results with Top management
- **SESSION 4: Scenario Planning**
 - LECTURE: 02h00
 - Introduction to scenario Planning
 - How to deal with scenario planning
 - Main difficulties foreseen
- **SESSION 5: Technology and Supply chain risks**
 - LECTURE: 02h00
 - How technology can support the assessment and increase of resilience
 - Challenges foreseen regarding master data management
- **SESSION 6: Paradigm Change from a Just in Time Supply Chain to a robust one**
 - LECTURE: 02h00
 - What is news?
 - What to learn from the military experience?
- **SESSION 7: Consequences of a more resilient Supply Chain from organization and skills**
 - LECTURE: 02h00
 - What will change for SCM organigramme?
 - New skills required

- How to develop the resilience culture inside Supply Chain Team
- **SESSION 8: Performance Score Card**
 - LECTURE: 02h00
 - How to adjust KPI system
- **SESSION 9: Introduction to WHAT IS exercise and Maturity assessment**
 - LECTURE: 02h00
 - Introduce the 2 exercises
- **SESSION 10: Final WHAT IF presentation**
 - LECTURE: 02h00
 - Final review of the main conclusion from teams
- **SESSION 11: Final presentation Resilience assessment 1/2**
 - LECTURE: 02h00
 - Final review of the assessment tool and methodology from teams
- **SESSION 12: Final presentation Resilience assessment 2/2**
 - LECTURE: 02h00
 - Final review of the assessment tool and methodology from teams

CODE: Tbc

Course title: BUSINESS INTEGRATION, SYSTEMS AND ENTERPRISE APPLICATIONS

Term: SPRING

Track: 2 – Digital and Innovative PSCM

Teaching hours: 24 hours

Number of credits: 3

Teaching language: ☒ English ☐ French

Course leader: Konstantina SPANAKI

Speakers: Konstantina SPANAKI

≡ COURSE DESCRIPTION

The module provides both conceptual and working resources for students with the use of SAP HANA technology. The content approaches real-world digitalization topics using an integrated process perspective of the organization with the associated systems and enterprise applications. The organizational processes are discussed within the context of execution around the systems and technology in the company but also the interrelated functions with each of them. Students through this course, can get a deep appreciation for the role of SAP HANA cloud platform and systems in efficiently managing processes from multiple functional perspectives. In specific, the module includes foundations of enterprise systems and concepts for end users and stakeholders. Also, the business integration of the processes is discussed in depth through the lecture and the use of the systems in labs using the Global Bike Case study. The focus is to get an understanding and use also various functions of SAP HANA technology in practice, while understanding the core concepts around enterprise technology and digitalization. The module can inform students with no prior business background, but also students from various business disciplines (SCM, Accounting and Finance, HR, Marketing, business administration etc.) as the focus is on the systems, the processes and the integration of them.

≡ COURSE OBJECTIVES

1. Conceptual knowledge and understanding:

- a. Critically assess the benefits, limitations and implications for organisations of applying enterprise systems and platforms.
- b. Explain how key business processes and practices can be effectively supported through the adoption of enterprise platforms (in premise and on cloud);
- c. Describe and explain the material requirements planning process, as embedded in an enterprise system environment.
- d. Critically evaluate the potential of SAP platform to provide an integrative framework for managing and controlling costs across the organisation.
- e. Explain the process by which digital business strategy is formulated and implemented.

2. Subject-Specific - Cognitive Skills

- a. Use SAP software to explore the business processes for a case study organization (Global Bike Case study supported by SAP University Alliance);
- b. Use SAP HANA platform to model the business processes of a manufacturing organisation.

3. Key Transferable Skills

- a. Work in groups, to develop a business proposal about the case organization.
- b. Use sophisticated contemporary information technology confidently and effectively.

≡ COMPETENCES VISEES /LEARNING GOALS

Learning Goal 1: LG1 - Reflective Analysis

Learning Objective 1: LO1 - Use of conceptual knowledge in applied situations for complex problems related to technology and processes

Outcomes: Lev 1 - Identify and examine the best fit digital strategy for transforming and integrated core business processes

Learning Goal 2: LG2 - Confidence and flair

Learning Objective 2: LO2 – Using the latest business technology and platforms while communicating in a foreign language in a professional context

Outcomes: Lev 2 - Obtain technical skills and confidence through the use of SAP HANA platform, in a real case scenario as it is designed for educational purposes

Details Use the appropriate technical/professional terms of the relevant disciplinary field in a foreign language

≡ **TACKLED CONCEPTS**

- Introduction to Business Processes
- MRP, ERP and business Technology
- Digital Business Strategy and Systems Implementation
- The evolution and implementation of Enterprise Systems
- Integrated End-to-End Processes in an organization using Enterprise Systems
- The Digital transformation and the integration of business processes

≡ **LEARNING METHODS**

Lectures, IT lab Exercises, Case studies, Assignments

≡ **ASSIGNMENTS AND EXPECTED WORK**

- In-class test and group work (assessing LO1 – Reflective Analysis of complex situations)
- Group Assignment (assessing LO2 – Use of SAP HANA platform and communicate in a foreign language in a professional context & LO1 – Reflective Analysis of complex situations)
- Exam (assessing LO1 – Reflective Analysis of complex situations)

≡ **BIBLIOGRAPHY – COURSE MATERIAL**

Recommended textbooks:

- Monk, E., & Wagner, B. [2013]. Concepts in enterprise resource planning. Cengage Learning.
- Magal, S. R. & Word, J. [2012], Integrated Business Processes with ERP Systems, Wiley.
- Bradford, M. [2020] Modern ERP: Select, Implement, and Use Today's Advanced Business Systems, fourth edition,

Additional readings and case studies will be indicated during the course by the instructor.

≡ **NECESSARY SOFTWARE – HARDWARE**

SAP HANA Educational version with GBI data configuration (Cloud version, the credentials for system access will be provided by the instructor)

≡ **EVALUATION METHODS**

30 % Group Assignment (Reflective essay and application of SAP)

20% Multiple choice test (like the format of SAP Certification tests)

50 % Exam (Essay questions and reflective understanding of conceptual aspects)

≡ **SESSIONS**

- **SESSION 1: Introduction to key Business Processes**
 - LECTURE: 02h00
- **SESSION 2: The evolution and implementation of Enterprise Systems**
 - LECTURE: 02h00
- **SESSION 3: Integrated End-to-End Processes in an organization using Enterprise Systems**
 - LECTURE: 02h00
- **SESSION 4: The Global Bike Inc. Company Case Study and SAP HANA Technology**
 - LECTURE and IT LAB Exercises: 02h00
 - SAP HANA Navigation
- **SESSION 5: The Procurement Process in SAP ERP**
 - LECTURE: 02h00
- **SESSION 6: An overview of the integrated processes in SAP HANA platform (PART 1)**
 - IT LAB Exercises: 02h00
 - The Procurement Process
- **SESSION 7: The Fulfilment Process in SAP ERP**
 - LECTURE: 02h00
- **SESSION 8: An overview of the integrated processes in SAP HANA platform (PART 2)**
 - IT LAB Exercises: 02h00
 - The Fulfilment Process
- **SESSION 9: The Production Process in SAP ERP**
 - LECTURE: 02h00
- **SESSION 11: An overview of the integrated processes in SAP HANA platform (PART 3)**
 - IT LAB Exercises: 02h00
 - The Production Process
- **SESSION 12: The Digital transformation and the integration of business processes**
 - LECTURE: 02h00

CODE: Tbc
Course title: AI applications and data analytics

Term: SPRING
Track: 2 – Digital and Innovative PSCM

Teaching hours: 24 hours
Number of credits: 3
Teaching language: ☒English ☐French
Course leader: (Filled in by Program)
Speakers: Redouane EL Amrani

≡ COURSE DESCRIPTION

Artificial Intelligence (AI) and data analytics are rapidly emerging as the most important and transformative technologies of our time. Recent advances, particularly in machine & deep learning, a computer's ability to improve its performance without human instruction, have held to a rapid proliferation of new applications that are changing the game for companies in almost all industries. AI and data analytics can help accomplish many business activities with greater accuracy and at a fraction of the time; it would take humans to do the same.

The effects of AI will only be magnified in the coming decade, as industries transform their core processes and business models to take advantage of its capabilities. Companies need to establish an AI and data strategy to govern and manage these complex challenges and changes. In this course, emphasis will be on the management of AI and data analytics in supply chain management, from both process and system perspectives, as well as issues and opportunities in innovating through technology.

≡ COURSE OBJECTIVES

In this course, we'll learn about more advanced machine learning methods that are used to tackle problems in the supply chain. Upon completion of this course, participants will be able to:

- Understand the basic concepts of AI and data analytics by applying them to SCM processes.
- Explore the role AI and data analytics technologies in obtaining a strategic competitive advantage and act on the tremendous opportunities AI offers in SCM area.
- Give managers an understanding of the growing deployment of AI and usage of data analytics in SCM and logistics.
- Understand when, and when not, to rely on AI and the role of big data in fueling AI algorithms
- Understand ethical and privacy issues surrounding AI in organization and the limits and dangers of blindly relying on algorithms

≡ TACKLED CONCEPTS

- Artificial Intelligence : Machine Learning, Deep Learning, Reinforcement learning
- Business Intelligence & Big Data
- AI project : PoC approach, testing environment, deployment phase
- AI strategy & project
- Data analytics and visualization
- Ethics & AI

≡ **LEARNING METHODS**

This course will combine short lectures, in-class discussions, readings, exchange of personal experiences, videos, articles, case presentation and discussion, etc. All these learning methods are used to discuss the current AI concepts, principles and practices in use in the SCM and its environment. Each session is designed to explore practical issues in the use of AI technologies to influence or implement corporate and competitive strategy of an enterprise SCM. In order to gain maximum benefit from the course, participants are expected to:

- Complete all assigned reading prior to the designated class
- Prepare assigned activities in advance of the class for which they are assigned.
- All class sessions are designed to augment, rather than repeat/duplicate assigned reading.

≡ **ASSIGNMENTS AND EXPECTED WORK**

Students are invited to learn the necessary concepts and to complete the assigned reading and empirical applications prior to the respective session. During the course, students will be asked to deal with a series of short problem-solving exercises, to participate in focused class workshops, to deal with a corporate case and to submit a written corporate assignment team-project report. Following the course completion, students are to sit a final exam.

≡ **BIBLIOGRAPHY – COURSE MATERIAL**

- Toorajipour R., Sohrabpour V., Nazarpour A., Oghazi P., Fischl M. (2021), « Artificial intelligence in supply chain management: A systematic literature review », J. Bus. Res., 122, pp. 502-517
- Amirkolaii, K. N., Baboli, A., Shahzad, M. K., & Tonadre, R. (2017). Demand forecasting for irregular demands in business aircraft spare parts supply chains by using artificial intelligence (AI).
- Byun, S.-E., Han, S., Kim, H., & Centrallo, C. (2020). US small retail businesses' perception of competition: Looking through a lens of fear, confidence, or cooperation. Journal of Retailing and Consumer Services, 52,
- Camarillo, A., Ríos, J., & Althoff, K.-D. (2018). Knowledge-based multi-agent system for manufacturing problem solving process in production plants. Journal of Manufacturing Systems, 47, 115–127.
- Canhoto, A. I., & Clear, F. (2020). Artificial intelligence and machine learning as business tools: A framework for diagnosing value destruction potential. Bus. Horiz. Artificial Intelligence and Machine Learning, 63, 183–193
- Dimitrakopoulos, G., Uden, L., Varlamis, I., 2020. Chapter 16 - Transportation network applications, in: Dimitrakopoulos, G., Uden, L., Varlamis, I. (Eds.), The Future of Intelligent Transport Systems. Elsevier, pp. 175–188

≡ **EVALUATION METHODS**

Participant's grade will reflect the way in which they present and support their topics and positions in the various learning activities used in this course.

- Continuous Assessment : 50 %
- Final Exam : 50%

≡ SESSIONS

- **SESSION 1: / LECTURE: 02h00**
 - Introduction AI : Demystifying AI in the digital age
 - AI and Digital Transformation
 - AI pillars, challenges and strategies
 - AI impacts in Business and Industries
 - AI Project Critical Success Factors
 - AI Bias & Ethics
- **SESSION 2: / LECTURE: 02h00**
 - Machine Learning:
 - Supervised, Unsupervised and Reinforcement Learning
 - Deep Learning
 - AI platforms & eco-system
- **SESSION 3: / LECTURE: 02h00**
 - AI application in different industries
 - How can AI be used in supply chain?
 - Using AI-based solutions in supply chain and logistics
 - What is the future of AI in supply chain?
- **SESSION 4, 5 & 6: LECTURE: 06h00**
 - IT Project vs. AI Project
 - PoC vs. PoV
 - How to start an AI project
 - Industrialization of an AI project
 - Data-driven approach in AI projects
 - Quiz
- **SESSION 7 & 8: / LECTURE: 04h00**
 - Why Organizations need Big Data Analytics within Digital Transformation?
 - Big Data strategy, technics and tools
 - Explore the role of Big Data in obtaining an organizational competitive advantage
 - Big Data Ecosystem & Solutions (Hadoop, MongoDB, MapReduce)
 - Companies cases : Procter & Gumble, Coca-Cola, Gap
- **SESSION 9 & 10: / LECTURE: 04h00**
 - Business Analytics to Support Decision Making
 - Data Analytics and Visualization
 - Tableau Training :
- understand the basic concepts & components of data visualization
- derive valuable insights from large and varied data sets
- create meaningful, functional, and impactful visualizations
 - Understand the architecture and the network in BI & Big Data strategy.
 - Explain the role of Big Data and in improving IS performance.
- **SESSION 11 & 12: (Title) / LECTURE: 04h00**
 - Articles & case studies presentations: Company experience with AI projects

CODE: Tbc
Course title: Purchasing and Innovation Management
Term: SPRING
Track: 2 – Digital and Innovative PSCM

Teaching hours: 24 hours
Number of credits: 3
Teaching language: ☒English ☐French
Course leader: Thomas Johnsen
Speakers: Thomas Johnsen; Francois Constant

≡ **COURSE DESCRIPTION**

Building on previous learning in purchasing management, the Purchasing and Innovation Management course analyses in more depth some key areas in which procurement is increased expected to act strategically and contribute to value creation beyond making cost savings. In particular, we explore complex organisational and strategic issues and how procurement can contribute to new product development and innovation.

≡ **COURSE OBJECTIVES**

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

- Describe different forms and degrees of innovations
- Identify sources of innovation
- Evaluate the rationale for the involvement of a range of external partners
- Explain the role of core competencies in exploiting technological trajectories
- Apply enabling mechanisms and structures to encourage creative and innovative behaviour
- evaluate the methods of early supplier involvement in new product development and innovation and assess the potential performance implications of these practices
- evaluate the methods of early purchasing involvement in new product development and innovation and assess the potential performance implications of these practices
- explain new trends in sourcing innovation through supply networks including sourcing from start-up companies

≡ **TACKLED CONCEPTS**

- Innovation: incremental, radical, discontinuous, disruptive
- Innovation strategy
- Networks
- Open innovation
- New product and service development
- Creativity
- Core competencies and incompetencies
- Lead users
- Technology-push and demand-pull
- Absorptive capacity
- Exploration and exploitation
- Commercialisation
- Intellectual property rights and patents
- Early supplier involvement (ESI)
- New product development (NPD)
- Early procurement involvement (EPI)

- The NPD process: stage-gate models
- Absorptive capacity
- Ambidexterity
- Cross-functional integration
- Design to X

≡ **LEARNING METHODS**

As this course is at an advanced level, the idea is to engage students in debate and critical reflection on the strategic role and contribution of procurement management. There will therefore be extensive use of practical case studies as well as academic journal articles. As part of the course, student will make presentations based on article reviews so students will be required to critically assess the theoretical and/or empirical basis of concepts and models and the extent to which these are appropriate in varied contexts.

≡ **ASSIGNMENTS AND EXPECTED WORK**

The assessment will be based on two assignments: a journal article review group presentation and a written report based on procurement maturity analysis. Both assignment will incorporate individual assessment.

The article review exercise is specifically designed for students to develop an ability to critically assess concepts and models presented in academic and practitioner articles by evaluating the theoretical and empirical bases underpinning these.

≡ **BIBLIOGRAPHY – COURSE MATERIAL**

Tidd, J. Bessant, J. K. (2018) *Managing Innovation: Integrating Technological, Market and Organizational Change*, 6th Edition, Wiley.

Legenvre, H., Gualandris, J., 2018. Innovation sourcing excellence: three purchasing capabilities for success. *Business Horizons* 95–106.

≡ **NECESSARY SOFTWARE – HARDWARE**

If you do not know precisely which software to use, please put here the description of desired functionalities and DSI department will help you to choose based on functionality / price. Please privilege cloud-based software.

≡ **EVALUATION METHODS**

Exam: 50%

Continuous assessment: 50%

If you think that your course might benefit from a different evaluation method instead of exam, please put your propositions here. It will be studied and validated (or not) by DPR.

≡ **SESSIONS**

○ **SESSION 1: Introduction: Purchasing and innovation management**

- LECTURE: 02h00
- This session introduces Purchasing and Innovation Management and gives an overview of the course. We discuss the meaning of innovation and different types of innovation. We introduce the different stages of the innovation process and the importance of innovation strategy.

○ **SESSION 2: Sources of innovation**

- LECTURE: 02h00
- This session examines the different sources of innovation and the concepts of demand-pull versus technology-push. We evaluate the trend from “closed innovation” to “open innovation” and crowd-sourcing. We also explore the role of different types of inter-organizational network and innovation search strategies/spaces. We explore the theoretical concepts of absorptive capacity.
- **SESSION 3: New product and service development**
 - LECTURE: 02h00
 - This session examines the stages of the new product development (NPD) process and the link between product and process development. We explore the special case of new service development. We evaluate the need for design for manufacture.
- **SESSION 4: Building innovative organisations**
 - LECTURE: 02h00
 - We explore key issues such as leadership, organization structures, communication and motivation in building and sustaining a creative and innovative organization. We examine the need for cross-functional integration and team working.
- **SESSION 5: Capturing the benefits of innovation**
 - LECTURE: 02h00
 - This session explores how companies can be sure to capture the value of innovation. We look at the relationships between different types of knowledge, innovation and performance. We pay unpack the issue of intellectual property (IP) and how to protect IP. We explore innovation benefits beyond business impact to consider social benefits and sustainability. Finally, we share frameworks for auditing innovation.
- **SESSION 6: Early supplier involvement in new product development & innovation: Case Airbus A380**
 - LECTURE: 02h00
 - New product development time and cost can be reduced significantly through early supplier involvement (ESI). We explore some practical models and tools for ESI and using an assessment model. We explore how practices need to change when companies are faced with discontinuous innovation. The case of Airbus A380 is used to illustrate ESI challenges and lessons from practice.
- **SESSION 7: Supply network-enabled innovation**
 - LECTURE: 02h00
 - We critically evaluate the concept of ESI when companies embark on discontinuous innovation. We unpack how innovation needs to be managed within supply networks and the new concept of supply network-enabled innovation. We discuss the implications for supplier relationships. We explore the role of procurement in innovation.
- **SESSION 8: Procurement's role in innovation**
 - LECTURE: 02h00
 - In this session, students will investigate why and how Procurement can contribute to the firm's innovation capabilities. We evaluate new challenges faced by Procurement, including contracting with start-ups, adapting Procurement organization design, the concept of "champions" to support the innovation exploration phase, and using digital tools to explore innovation. All these new activities are part of the Procurement function enlargement adopted by the most advanced companies.
- **SESSION 9: Hard control on Open Innovation: case study ALSTOM**
 - LECTURE: 02h00

- In this session, students will investigate how purchasing can use open innovation to capture innovations from suppliers. The case emphasizes how suppliers can take advantage of open innovation practices, when not well managed by the buying firm. Problems like knowledge leakage or Intellectual Property (IP) rights are discussed. The case highlights how suppliers can use data from the buying company to their own profit, and suggest various methods for purchasers to deal with sensitive data.
- **SESSION 10: Sourcing from start-ups**
 - LECTURE: 02h00
 - Procurement teams are increasingly realizing that they need to look beyond the traditional supply base and search for new opportunities to contribute to their company's success. This sometimes includes working with start-ups! Firms are surrounded with innovative start-ups, incubators who are gradually taking prominent roles. Procurement teams can contribute throughout various stages of collaboration with start-ups. To do so, they need specific tools and processes, as the traditional approaches to source suppliers are no longer valid. In this session, students will discover best practices for Procurement to collaborate with start-ups.
- **SESSION 11: Public procurement innovation**
 - LECTURE: 02h00
 - The public sector may not generally be associated with innovation but there is wide recognition that public sector – at national and local levels – need to innovate. For example, the covid pandemic demonstrated the need to introduce innovation in the healthcare sector. In this session we explore the regulatory constraints that public procurement operates within and the opportunities for introducing innovation in a public sector context.
- **SESSION 12: Tbc**
 - LECTURE: 02h00

CODE: Tbc
Course title: International business law & ethics

Term: SPRING
Track: 2 – Digital and Innovative PSCM

Teaching hours: 24 hours
Number of credits: 3
Teaching language: ☒English
Course leader: Caroline Erol
Speakers: Caroline Erol

≡ **COURSE DESCRIPTION**

The module provides students with an overview of the legal and ethical issues at the various stages of the supply chain, from contractual negotiation to choosing the most suitable distribution network, keeping in mind the international context in which business transactions take place and the impact of e-commerce on the purchasing model.

≡ **COURSE OBJECTIVES**

At the end of this course, students will be able to :

- Have a basic understanding of the legal systems revolving around the supply chain and recognize when and where legal and ethical issues may arise
- Have the necessary knowledge to convey purchasing needs and ethical requirements into contractual terms
- Identify legal and ethical issues arising out of an international business context

≡ **TACKLED CONCEPTS**

The topics in the units focus upon:

- Introduction to law and legal systems
- Contract law & ethics
- International private law
- The Vienna Convention on Contracts for the International Sale of Goods (CISG)
- Competition law & ethics issues in the supply chain
- Compliance & ethics issues in the supply chain
- (Intellectual property ?)

≡ **LEARNING METHODS**

The module employs:

- Interactive lecture sessions
- Presentations and discussions of case studies
- In-class Group work/presentations

≡ **ASSIGNMENTS AND EXPECTED WORK**

- Assigned readings to prepare before coming to class
- After each in-class lecture, students work in small groups on problems related to the topics of the day and submit it to the professor for a Pass/Fail grade

≡ **BIBLIOGRAPHY – COURSE MATERIAL**

Raymond Wacks, A very short introduction to law, Oxford Press, 2008

Ian Longdin, Legal aspects of purchasing and supply chain, Liverpool Academic Press 2009

Ingeborg Schwenzer, Mariel Dimsey, Christina Fountoulakis, International Sales law: a guide to the CISG, Bloomsbury Publishing, 2019

≡ **EVALUATION METHODS**

Exam: 60%

Continuous assessment: 40% (20% midterm + 20% in class assignments)

≡ **SESSIONS**

- **SESSION 1: Introduction**
 - LECTURE: 02h00
 - Course overview; Introduction to business law, ethics, & international law ; Definitions of key legal concepts
- **SESSION 2: Basics of contract law**
 - LECTURE: 02h00
 - Characteristics, requirements for validity, effects, contractual liability, breach, sanctions and remedies
- **SESSION 3: Negotiating a commercial contract**
 - LECTURE: 02h00
 - Contract as a risk management tool, overall organization of a contract, overview of main clauses: obligations of parties, penalty, confidentiality, exclusivity, dispute resolution, force majeure, choice of law...
- **SESSION 4: International private law**
 - LECTURE: 02h00
 - Applicable law to an international dispute, competent jurisdiction to resolve the dispute (arbitral/judicial), enforcement of judgment/award (Brussels Regulation ; Rome Regulation; New York Convention)
- **SESSION 5: Vienna Convention on Contracts for the International Sale of Goods (part 2)**
 - LECTURE: 02h00
 - Introduction to the CISG (main regulation in terms of sale of goods in international business)
 - Applicability of the CISG, General provisions, Formation of contract
- **SESSION 6: Vienna Convention on Contracts for the International Sale of Goods (part 2)**
 - LECTURE: 02h00

- Obligations of Seller and Buyer, Fundamental breach and effects, Remedies, Damages calculation
- **SESSION 7: Midterm examination**
 - LECTURE: 02h00
 - Review session + Midterm exam
- **SESSION 8: Competition law issues in the supply chain (part 1)**
 - LECTURE: 02h00
 - Horizontal competition law issues: exchange of sensitive information; price cartels; collusive behavior
- **SESSION 9: Competition law issues in the supply chain (part 2)**
 - LECTURE: 02h00
 - Vertical competition law issues: retail price maintenance; prohibition to sell online
- **SESSION 10 : Compliance and ethics (part 1)**
 - LECTURE: 02h00
 - Introduction to the notion of compliance & ethics
 - History of compliance regulations
- **SESSION 11: Compliance and ethics (part 2)**
 - LECTURE: 02h00
 - Understanding the structure and role of an anti-corruption compliance program : risk assessment, due diligence of commercial partners; conflicts of interests...
- **SESSION 12: Preparation for final exam**
 - LECTURE: 02h00
 - Review session

ELECTIVES

Course title: THE ECONOMICS OF CONTEMPORARY GEOPOLITICS

Teaching hours: 24 hours

Number of credits: 3

Teaching language: ☒English

COURSE DESCRIPTION

Proposing a general introduction to geopolitics, this course will discuss some of the most prominent frameworks in the field (clash of civilizations, "flat world" hypothesis, cultural imperialism, geopolitics of the anthropocene, systemic approaches, etc.), enabling students to reflexively make sense of the many global challenges they are facing. In particular, this course will question the impact of contemporary geopolitical trends on the new economy and on the changing ways of living, with a focus on the geopolitical trends associated with global warming.

Course title: Deviance, Fraud and Corruption

Teaching hours: 24 hours

Number of credits: 3

Teaching language: ☒English

COURSE DESCRIPTION

The corporate crimes are obviously morally wrong, legally unacceptable but unfortunately not so rare. As a matter of fact, research suggests that 37% of worldwide firms declared to have been victim of fraud in the previous two years (PWC, 2014). Commercial organisations could be the victims of diverse frauds including asset misappropriation, corruption, accounting fraud, cybercrime, investment fraud or unfair trading. Not only participating to this course is important for future executives willing to increase their awareness regarding economic crimes, but also the goal is to help them in their efforts to fight corporate frauds. In this respect, the most important question is for future managers: what should do an executive facing an economic fraud?