Année universitaire 2026/2027

Sciences des organisations Londres - 1re année de Licence

Responsable pédagogique : BORYS **SOLOVIOV** - https://dauphine.psl.eu/recherche/cvtheque/soloviov-borys

Crédits ECTS : 60

LES OBJECTIFS DE LA FORMATION

The first year of the Bachelor's degree in Economics and Management consists of a core block of general education modules in Economics, Management, Law, Social Sciences and quantitative disciplines.

- Successfully integrating high school graduate students into university life by supporting them in the transition from secondary to higher education;
- Ensuring the acquisition of an autonomous academic working method;
- Bringing students from different backgrounds in terms of their previous academic year to the same level;
- Ensuring the acquisition of fundamentals in Management, Economics, Social Sciences, Law and Quantitative Disciplines;
- Giving students their first access to business experience through an internship or a regular job.

MODALITÉS D'ENSEIGNEMENT

Teaching is mainly provided in seminars in classes of about 30 students. The academic year is divided into 2 semesters; each semester comprises 12 weeks, with an extra induction week. Students follow 21 core courses + 1 elective course, which is a foreign language taught at UCL (University College London) spread over both semesters. The level of students and learning outcomes are assessed mainly by:

- a continuous assessment mark (approximately 50% of the mark) which includes one or two in-class tests, the participation mark of students during classes, and assignments whose specifications are defined in the module handbooks.
- a final exam mark (approximately 50% of the mark)

Début des cours : mi septembre Beginning of classes: mid-September Fin des cours : mi mai End of classes: mid-May Examen d'appel : mi juin Resit exams: mid-June

ADMISSIONS

- Ce cursus s'adresse à tous les étudiantes et étudiants mais plus particulièrement à celles et ceux ayant un**profil académique international** très prononcé (Lycées français de l'étranger, établissements internationaux de l'hexagone ou sections internationales). Peuvent candidater également les étudiantes et étudiantes issus de **bacs internationaux**.
- **Un résultat officiel de test de langue est obligatoire pour candidater (niveau B2 minimum : IELTS SELT Consortium (British Council) : IELTS Academic for UKVI ; LanguageCert : LanguageCert International ESOL SELT B2 (Listening, Reading, Writing, Speaking) ; Pearson : PTE Academic UKVI ; PSO Services (UK) Ltd : Skills for English.**

POURSUITE D'ÉTUDES

Students who validate year 1 of their bachelor’s degree are automatically enrolled in year 2.

PROGRAMME DE LA FORMATION

- Semestre 1
  - Tronc commun
    - Introduction to Management
    - Financial Accounting
    - Macroeconomic Data
    - Microeconomics - Consumer behaviour theory
    - Economics: an introduction
    - Sociology : Birth of the Social Question
    - Introduction to EU law and European legal system
    - Mathematical tools
    - Computer Sciences : Excel/VBA
    - Global Ethical and Political Issues
    - English and Communication
    - Soft Skills and Employability
  - Options
    - Elective Foreign Language at UCL
- Semestre 2
  - Tronc commun
    - Introduction to Management
    - Financial Accounting
    - Introduction to Macroeconomics
    - Microeconomics - Producer behaviour theory
    - Social sciences and methods : State and Democracy
    - English Law and legal reasoning
    - Optimisation in Mathematics
    - Ecological challenges : Planetary Boundaries
    - English and Communication
    - Soft Skills and Employability
  - Options
    - Elective Foreign Language at UCL

DESCRIPTION DE CHAQUE ENSEIGNEMENT

SEMESTRE 1

Tronc commun

Introduction to Management

ECTS : 2

Enseignant responsable : MICHAEL **ABEYTA** (https://dauphine.psl.eu/recherche/cvtheque/michael-abeyta)

Langue du cours : Anglais

Volume horaire : 18

Description du contenu de l'enseignement :

DESCRIPTION OF CONTENTS: PROGRAMME 1. Introduction to Management 2. Culture of organizations 3. Influencing and Leadership 4. Motivation 5. Managing change and Innovations 6. Communication in management 7. Corporate Social Responsibility 8. Question and answer session

Compétences à acquérir :

This course has three main aims, and these directly relate to the major themes that will be emphasized throughout. The course aims to: 1. Provide a comprehensive introduction to the key elements of the business organization, and to competing theories and models of the firm and its environment, and to provide a critical perspective on the main functional areas of management. 2. Build a foundation of knowledge on the different theoretical approaches to management and decision making. 3. Develop analytical skills to identify the links between the functional areas in management, organizations, management practices, and the business environment.

Bibliographie, lectures recommandées :

The course will use as its primary source: Boddy, D. (2014) Introduction to Management, 6th Edition, Pearson Education

Financial Accounting

ECTS : 3

Enseignant responsable : HANDY **TAN**

Langue du cours : Anglais

Volume horaire : 18

Description du contenu de l'enseignement :

Financial accounting plays a crucial role in the allocation of resources in the economic system while the information that it facilitates is used by a wide number of different agents in their respective decision-making processes. The objective of the course is to enhance students' ability to capture economic transactions using the accounting system and to elaborate compact information about the firms' value and the wealth created by the firm in a given time period. In addition to preparing this information, students should be able to understand and interpret this information as it is provided in the firms' statements (i.e. balance sheet, income statement and the notes).

Compétences à acquérir :

Cet enseignement vise à fournir aux étudiants une culture comptable suffisante pour intégrer les grandes évolutions du capitalisme. La comptabilité est ici perçue comme étant l'instrument du capitalisme financier. Pour cette raison, une dimension historique et comparative est largement ancrée dans l'enseignement.
Cette approche ne fait pas l'économie de l'apprentissage des techniques comptables visant à enregistrer les flux économiques et financiers qui traversent l'entreprise. L'idée est de bien faire comprendre qu'un résultat comptable est une construction sociale, fruit de tensions entre acteurs aux intérêts divergents (actionnaires, salariés, Etat,…).
La dimension internationale fait partie intégrante de l'enseignement car les systèmes comptables continentaux et anglo-saxons sont systématiquement mis en perspective et discutés.

Mode de contrôle des connaissances :

un contrôle continu (50%) et un examen (50%)

Macroeconomic Data

ECTS : 1

Enseignants : PASQUALE **FORESTI**, JASON **LERMYTE**

Langue du cours : Anglais

Volume horaire : 9

Description du contenu de l'enseignement :

This course focuses on the crucial macroeconomic concepts: gross domestic product, economic growth, inflation, the interest rate, unemployment. First, the course examines how economic agents relate by analysing national accounts. Then, there is an investigation onto the causes of long term growth. This is followed by a study of the financial sector. With all these instruments, there is an analysis of the determinants of aggregate supply and aggregate demand distinguishing between the short-run and the long-run, with a special focus on how monetary and fiscal policy work. The course finishes with a study of the recent financial crisis.

Compétences à acquérir :

Learning Outcomes On completion of this module, students will be able to: 1. Explain what macroeconomics is 2. Identify the main issues studied by macroeconomists 3. Analyse the national accounts system **Course objectives** The main objective of this course is for students to understand how the economy works. Other objectives include the analysis of the main macroeconomic variables and how these relate to each other; as well as what determines economic growth in the long-run and well as in the short-run.

Mode de contrôle des connaissances :

Grading Criteria Participation 5% Quiz 10% Group Report 35% Final Exam 50%

Bibliographie, lectures recommandées :

- Allin, P. & Hand, D., (2015), Getting the Measure of Modern Life, Significance, Vol. 12, No. 1, pp. 40-42.
- Boarini, R., Johansson, A. & Mira d'Ercole, M., (2006), Alternative Measures of Well-Being, OECD Social, Employment and Migration Working Paper, No.33.
- Deustche Bank Research, (2006), Measures of Well-Being.
- Lequiller, F., and Blades, D. (2016), Understanding National Accounts, 2nd Edition, Paris:
- OECD.
- Oulton, N., (2012), Hooray for GDP!, LSE Growth Commission.

Microeconomics - Consumer behaviour theory

ECTS : 3

Enseignant responsable : NAZIA **MANSOOR**

Langue du cours : Anglais

Volume horaire : 18

Description du contenu de l'enseignement :

The course aims at developing the economic theory of the consumer. Consumption allocation between different goods, trade-off between labour and leisure, optimal intertemporal allocation of resources will be the main topics of this semester.

Compétences à acquérir :

By the end of this module, students will have demonstrated: **Knowledge** 1. An ability to define microeconomics, to differentiate it from macroeconomics, to understand its methodology, approach and the main assumption used to describe a pure and perfect competitive framework. 2. An ability to understand the concept of budget constraint, indifference curve, utility function, Marginal Rate of Substition (MRS) and to use them to determine an optimal allocation of consumption goods and to build the individual demand function of a consummer. 3. An ability to determine a demand elasticity (price or revenue), to categorise the different types of goods depending on those elasticities to understand the concept of substitution and income effect. 4. An ability to analyse the trade-off between leisure and labour for a consumer and how to deduce from it the supply of labour function. 5. An ability to analyse the trade-off between consumption of present goods and future goods (consumption vs saving), and the capacity to link these microeconomic concepts with financial concepts and instruments. **Skills** 6. An ability to determine mathematically and graphically a Marginal Rate of Substitution and to interpret the result obtained. 7. An ability to compute mathematically and illustrate graphically a Marshalien demand function using indifferences curves, utility functions, Marginal Rate of Substitution and the budget constraints of the

consummers. 8. An ability to determine (mathematically and graphically) and to interpret how the demand would evolve when parameters are changing. 9. An ability to determine (mathematically and graphically) the different elasticities and to interpret the results obtained. 10. An ability (1) to determine mathematically and graphically the optimal allocation between leisure and labour (2) to deduce from it the supply of labour and (3) to interpret the results obtained. 11. An ability (1) to determine mathematically and graphically the optimal allocation between present goods and future goods (2) to deduce from it the saving function and (3) to interpret the results obtained. 12. An ability to use and adapt economic concepts studied in class on new topics, situation, context. **Values and Attitudes** 13. An ability to take responsibility for their studies in and outside of class and to be proactive and take initiative for further individual development. 14. An ability to work effectively, and appropriately with others in class.

Mode de contrôle des connaissances :

Grading Criteria Mid Term Exam 1 25% Mid Term Exam 2 25% Final Exam 50%

Bibliographie, lectures recommandées :

Microéconomie Comportement des agents et concurrence parfaitFranck Bien & Sophie Meritet PEARSON (2016)

Economics: an introduction

ECTS : 1

Enseignant responsable : JASON **LERMYTE**

Langue du cours : Français

Volume horaire : 12

Sociology : Birth of the Social Question

ECTS : 4

Enseignant responsable : VALERIE **BERNARD** ()

Langue du cours : Anglais

Volume horaire : 36

Description du contenu de l'enseignement :

The course is designed to introduce students to the sociological study of society. Sociology focuses on the systematic understanding of social interaction, social organization, social institutions, and social change. Major themes in sociological thinking include the interplay between the individual and society, how society is both stable and changing, the causes and consequences of social inequality, and the social construction of human life. Understanding sociology helps discover and explain social patterns and see how such patterns change over time and in different settings. By making vivid the social basis of everyday life, sociology also develops critical thinking by revealing the social structures and processes that shape diverse forms of human life.

Compétences à acquérir :

- Show the relevance and reality of structural factors in social life
- Place an issue in a larger context (identify systemic elements; identify stakeholders; list unintended consequences)
- Describe, explain, and predict aspects of social problems
- Debunk individualistic explanations of behavior and identify social patterns
- Recognize the difference between dispositional and sociological explanations
- Recognize the difference between empirical and normative statements
- Identify and offer explanations for social inequality
- Analyze labor force issues
- Perform a content analysis of texts or news to identify possible sources of bias
- Critique the media
- Transform a topic of interest into a researchable, sociological question
- Describe the elements of the scientific method in the social sciences
- Understand basic elements of an ethical code of conduct for social scientists
- Unpack the ¿causal nexus¿, e.g., correlation, time order, elimination of alternative explanations
- Interpret descriptive statistics
- Evaluate the methodological processes and limits of research (e.g., bias, generalizability)
- Critically assess web sites and electronic resources

- Set up a data table properly and read and interpret a table correctly
- Distinguish levels of analysis
- Posit intervening factors and spurious relationships in social life
- Show awareness of probabilities and contingencies
- Recognize that counterfactual anecdotes do not invalidate sociology
- Understand the intersection of biography and history
- Take the role of the other

Coefficient : 1

Bibliographie, lectures recommandées :

- Haralambos, M., Holborn, M., Chapman, S. and Moore, S. (2013) Sociology Themes and Perspectives 8TH ed London: HarperCollins.
- Nado, A, 2004.Crtical Whiteness studies and the Challenges of being a White ally' Borderlands e-journal, volume 3 number 2
- Scott J, 2014. Oxford Dictionary of Sociology, New York, USA: Oxford University Press

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Introduction to EU law and European legal system

ECTS : 3

Enseignant responsable : BORYS **SOLOVIOV** (https://dauphine.psl.eu/recherche/cvtheque/soloviov-borys)

Langue du cours : Français

Volume horaire : 24

Mathematical tools

ECTS : 4

Enseignants : MARIA **DYMOVA**, YONGJO **LEE**

Langue du cours : Anglais

Volume horaire : 36

Description du contenu de l'enseignement :

Week 1: Derivatives and Bijection Week 2: Convexity Week 3: Antiderivatives Week 4: Integration Week 5: Integration by part Week 6: Wrap up and past papers

Compétences à acquérir :

Learning Outcomes On completion of this module, students will be able to: work confidently with derivatives work confidently with simple limits calculation define a bijection define an inverse function work confidently with simple integration and integration by part **Course Objectives** The main purpose of this module is to give tools to students for other math modules (statistics, Optimisation, linear algebra, financial math, microeconomics…)

Mode de contrôle des connaissances :

Grading Criteria Final exam:100%

Coefficient : 1

Computer Sciences : Excel/VBA

ECTS : 2

Enseignant responsable : MD **SHAIKH**

Langue du cours : Anglais

Volume horaire : 18

Description du contenu de l'enseignement :

1. Introduction: algorithms and programs 2. Values, types and variables 3. Assignment and expression 4. Reading instruction 5. Program structure:¿ Decision making 6. Program structure: Loops 7. Functions 8. Consolidation week 9.

Writing own functions 10. String and String methods 11. List: Creation, access and traversal 12. List: Operators and methods 13. Character strings and lists in function 14. Files

Compétences à acquérir :

Introduce computational logic and programming syntax Explore various ways of writing a program solution for a given problem statement Develop the essential technological background for students' work life.

Pré-requis obligatoires

There is no prerequisite module. Basic knowledge of mathematical concepts is expected.

Mode de contrôle des connaissances :

Midterm Examination : 50% Final Examination : 50%

Bibliographie, lectures recommandées :

Core Sources

1. Excel 2019 Power Programming with VBA by Michael Alexander (Author), Dick Kusleika (Author)
2. https://support.office.com/

Supplementary and Secondary Sources

1. https://www.excel-easy.com/vba.html
2. https://www.homeandlearn.org/

Global Ethical and Political Issues

ECTS : 2

Enseignant responsable : ANICEE **VAN ENGELAND**

Langue du cours : Anglais

Volume horaire : 18

English and Communication

ECTS : 3

Enseignant responsable : WIYAH **ISHAK**

Langue du cours : Anglais

Volume horaire : 21

Description du contenu de l'enseignement :

This course will focus on all four language skills: reading, writing, listening and speaking. It will also include English for Academic Purposes, as well as English in Business Contexts.

Compétences à acquérir :

Learning Outcomes On completion of this module, students will be able to:

1. Produce higher-quality written essays in a more academic style
2. Deliver more structured and professional presentations
3. Use a wider range of lexical items related to risk, management & team-building
4. Use the passive voice and the modal perfect (particularly in the context of job satisfaction reports)
5. Use vocabulary pertaining to grammatical categories

Course Objectives The main objectives of this course will be to continue to improve the overall English level of students combined with greater awareness of academic norms and expectations.

Mode de contrôle des connaissances :

Grading Criteria Participation 20% Essay 20% Presentation 10% Final Exam 50%

Coefficient : 1.5

Soft Skills and Employability

Langue du cours : Anglais

Volume horaire : 7.5

Description du contenu de l'enseignement :

Soft Skills and Employability aims at supporting students' reflections about their studies and professional projects in connection with their personal life while growing as individuals and learning how to interact with others and collaborate. Its main general objective during the three years of the bachelor's degree is to help each student start the process of finding his/her place in the working society and envisioning him/herself working happily and contributing to the world.

This first-year Soft Skills and Employability module introduces students to the foundational interpersonal and professional skills needed to navigate both academic environments and future workplaces.

Focusing on key areas such as effective listening, giving and receiving constructive feedback, CV writing, and digital awareness, the module equips students with tools to communicate clearly, collaborate with others, and present themselves professionally.

Through a blend of interactive workshops, reflective exercises, and real-world scenarios, students will begin to build the confidence and competencies necessary for personal and career development.

Compétences à acquérir :

This is done through the development of the following three transversal competences:

- Adapting to new situations by becoming aware, experimenting with new tools or practices and using the group.
- Building one's pathway by formalising one's skills, identifying one's achievements and the areas that remain to be developed, and expressing one's values.
- Interacting and collaborating in a university context by seeing the workshop group as the beginnings of a working group, developing attentive listening to others, and by sharing tasks and roles within a group.

Options

Elective Foreign Language at UCL

ECTS : 2

Enseignants : HENRIETTE **KORTHALS ALTES**, BEGONA **MIRONES MUNOZ**, ALMUDENA **SANCHEZ VILLEN**

Langue du cours : Français

Volume horaire : 24

Description du contenu de l'enseignement :

One second Foreign Language to pick at UCL : German, Spanish, Mandarin, Italian, Portugese, Ducth, Japanese, Arabic

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SEMESTRE 2

Tronc commun

Introduction to Management

ECTS : 2

Enseignant responsable : MICHAEL **ABEYTA** (https://dauphine.psl.eu/recherche/cvtheque/michael-abeyta)

Langue du cours : Anglais

Volume horaire : 18

Financial Accounting

ECTS : 2

Enseignant responsable : HANDY **TAN**

Langue du cours : Anglais

Volume horaire : 18

Description du contenu de l'enseignement :

Topic 1: Conceptual Framewok, Liabilities, Loss contingencies and employment costs. Topic 2: Inventory. Topic 3: Revenue recognition Topic 4: Receivables. Topic 5: Tangible assets Tema 6: Intangible assets.

Compétences à acquérir :

By the end of the course students should be able to: - Solve any new accounting problem using the knowledge acquired in this and previous courses. - Understand the effect of accounting policies on the figures reported on the financial statements. Skills development: -Initiative and self-learning -The ability to select and assign priorities within restricted resources and to organize work to meet tight deadlines -Work in teams. -Present, discuss, report and defend views effectively. Attitudes: - Compliance with the fundamental ethical principles. - Commitment to continual improvement and lifelong learning.

Mode de contrôle des connaissances :

un contrôle continu (50%) et un examen (50%)

Introduction to Macroeconomics

ECTS : 4

Enseignants : PASQUALE **FORESTI**, JASON **LERMYTE**

Langue du cours : Anglais

Volume horaire : 36

Description du contenu de l'enseignement :

This course focuses on the crucial macroeconomic concepts: gross domestic product, economic growth, inflation, the interest rate, unemployment. First, the course examines how economic agents relate by analysing national accounts. Then, there is an investigation onto the causes of long term growth. This is followed by a study of the financial sector. With all these instruments, there is an analysis of the determinants of aggregate supply and aggregate demand distinguishing between the short-run and the long-run, with a special focus on how monetary and fiscal policy work. The course finishes with a study of the recent financial crisis.

Compétences à acquérir :

Learning Outcomes: On completion of this module, students will be able to: 1. Explain what determines economic growth in the long run 2. Analyse the financial system 3. Understand how aggregate demand and aggregate supply work **Course Objectives:** The main objective of this course is for students to understand how the economy works. Other objectives include the analysis of the main macroeconomic variables and how these relate to each other; as well as what determine economic growth in the long-run and well as in the short-run.

Mode de contrôle des connaissances :

Mid-term 1 : 25% Mid-term 2 : 25% Final Exam : 50%

Coefficient : 1

Bibliographie, lectures recommandées :

- Daudin, G., LeBlanc, E., Patureau, L. and Lanata Briones, C. T. (eds) (2016) Macroeconomics: Major Issues, Paris: Pearson.
- Dervis, K. (2012). Convergence, Interdependence and Divergence, Finance & Development, pp.10-14
- Pritchett, L. (1997). Divergence, Big Time, Journal of Economic Perspectives, vol. 11, no.3, pp. 3-17
- Rodrick, D. (2011). The Future of Economic Convergence, mimeo.
- Sachs, J.D. & Warner, A.M. (1995). Economic Convergence and Economic Policies, NBER Working Paper, no 5039.

Microeconomics - Producer behaviour theory

ECTS : 3

Enseignants : PASQUALE **FORESTI**, JASON **LERMYTE**

Langue du cours : Anglais

Volume horaire : 18

Description du contenu de l'enseignement :

The course aims at (1) developing the economic theory of the producer, (2) introducing the concepts of partial equilibrium, surpluses, and deadweight loss and (3) presenting the concept of general equilibrium and pareto efficiency.

Compétences à acquérir :

By the end of this module, students will have demonstrated: **Knowledge** 1. An ability to understand/use the following concepts/tools : a production function (Cobb-Douglass), an isoquant, a Marginal Rate of technical Substitution of factors of production (MRTS), a marginal and an average productivity, a production (marginal, average) cost function. 2. An ability to analyse the concept of return to scale (increasing-decreasing-constant) and its implication. 3. An ability to determine how a producer determines its optimal allocation of factors of production (construction of the demand functions of factors of production). 4. An ability to analyse the producer short term optimal quantity in a pure and perfect competitive framework (which leads to the construction of the individual supply function of goods). 5. An ability to understand the long term dynamic and the establishment of the equilibrium at the branch level. 6. An ability to understand/use the following concept/tools : partial equilibrium, surpluses, deadweight loss and how they evolve with public intervention. 7. An ability to determine a general equilibrium (with and without production) and how to assess of its efficiency (using Pareto criteria). **Skills** 8. An ability (1) to determine mathematically and graphically an isoquant, a Marginal Rate of technical Substitution of factors of production (MRTS), a marginal and an average productivity, a production cost function, a marginal cost and an average cost and (2) to interpret, explain comment the results obtained. 9. An ability (1) to determine mathematically and graphically an optimal allocation of factors of production (construction of the demand functions of factors of production) and (2) to interpret, explain comment the results obtained. 10. An ability to determine mathematically and graphically (1) the profit and shut down thresholds of a firm (2) a short term optimal quantity produced by a firm in a pure and perfect competitive framework and (3) the construction of the individual supply function of goods for a firm. 11. In a context of pure and perfect competition, an ability (1) to determine mathematically and graphically a partial equilibrium, surpluses (or change in surpluses) for each economic agents and, deadweight-losses and (2) to interpret, explain comment the results obtained. 12. In a context of pure and perfect competition, an abillty (1) to determine mathematically and graphically a general equilibrium (with or without production), (2) to demonstrate whether this equilibrium is pareto optimal or not (3) to analyse how this equilibrium could be impacted if some parameters were to change. 13. An ability to use and adapt economic concepts studied in class on new topics, situation, context. **Values and Attitudes** 14. An ability to take responsibility for their studies in and outside of class and to be proactive and take initiative for further individual development. 15. An ability to work effectively, and appropriately with others in class.

Mode de contrôle des connaissances :

un contrôle continu (50%) et un examen (50%)

Social sciences and methods : State and Democracy

ECTS : 4

Enseignant responsable : ANICEE **VAN ENGELAND**

Langue du cours : Anglais

Volume horaire : 36

Description du contenu de l'enseignement :

This course is an undergraduate-level introduction to political science. The course, in broad terms, comes in two halves. The first part deals with different aspects of international politics most relevant to the Euro-Atlantic area, examining shifts in the European security environment as well as the institutional mechanisms for managing competition amongst nation-states in the contemporary world. Here, the aim is to furnish students with an understanding of the way in which international relations have evolved since the end of the Cold War. The second part deals more directly with the foundations of political organisation, critically evaluating with students key concepts such as democratic govoernance, freedom and social movements. Focusing on political order in the domestic and international contexts, this course explores the nature of political organisation and the causes of conflict. It is a course in its own right to reflect on the political underpinnings of the contemporary European states system. But it also serves as a foundation for more specialised courses in Political Science/ International Relations at the graduate level.

Compétences à acquérir :

This module introduces the principles of political organisation in both domestic and international politics. By the end of this course, students will have acquired the empirical knowledge, theoretical understanding and transferable skills necessary to analyse, explain and evaluate institutions, politics and legitimacy. Students should further be able to discuss critically, and write knowledgeably, about major issues in politics. At the end of the course, students should be able to think, talk and write in an informed, critical and theoretical manner about on-going developments in political organisation in domestic and international system.

Mode de contrôle des connaissances :

Etude de cas : présentation et rapport (50%) et dissertation (50%)

Coefficient : 1

English Law and legal reasoning

ECTS : 3

Enseignant responsable : CLAIRE **MARZO**

Langue du cours : Français

Volume horaire : 24

Coefficient : 1.5

Optimisation in Mathematics

ECTS : 4

Enseignants : MARIA **DYMOVA**, YONGJO **LEE**

Langue du cours : Anglais

Volume horaire : 36

Description du contenu de l'enseignement :

This subject tries to teach: - derive functions of one or two real variables - obtain notions of topology and its applications in IR^2 - know how to find stationary points and find their nature for functions of one or two real variables - know the Taylor formulas (first and second order) and their applications - know how to optimize functions of two real variables with explicit restrictions - pose and solve problems taken from an economic situation with a mathematical model.

Mode de contrôle des connaissances :

Grading Criteria Midterm 1 25% Midterm 2
25% Final Exam 50%

Coefficient : 1

Bibliographie, lectures recommandées :

- Isabelle Cato, Ivan gentil, Geneviève Pons. Mathématiques - Éléments de calculs différentiels pour l'économie. , Ellipses

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Ecological challenges : Planetary Boundaries

ECTS : 2

Enseignant responsable : AUDE **GRASSET** (https://moodle.psl.eu/course/view.php?id=28186)

Langue du cours : Anglais

Volume horaire : 18

Description du contenu de l'enseignement :

The first-year (L1) course unit provides an understanding of the environmental and systemic challenges posed by the three major ecological crises: climate, biodiversity, and the over exploitation of natural resources in a finite world. It presents the nature and anthropogenic causes of these global and systemic issues, as well as the connections between them.

Course themes will be allocated over 9 sessions:

Climate and energy:

- Climate change.
- Water cycle
- Fundamentals of energy
- The Kaya equation and critiques of technologies

Biodiversity and ecosystems:

- Biodiversity and ecosystem services
- Climate change and biodiversity collapse: what do we know and how do we know it?

Resources and society:

- Natural resources and their geopolitical implications
- Environmental justice
- Ecological economics

Human–nature relations:

- History of human–nature interactions

Action levers: climate, biodiversity, and resources

Compétences à acquérir :

Adopt a systemic approach:

- Develop a systemic understanding of sustainability challenges through a multi- and transdisciplinary perspective.
- Be able to critique the human–nature divide and reflect on the fact that humans are part of nature, not separate from it.
- Know how to identify and categorise the services provided by ecosystems.
- Identify and analyse the various causes of social and environmental inequalities.

Project oneself into the future:

- Become aware of what is at stake: what crossing planetary boundaries implies.
- Situate current Earth-system trends and future projections in relation to past developments.
- Understand how models and scenarios are constructed.

Pré-requis obligatoires

An open mind and a desire to act

Pré-requis recommandés

A keen desire to learn about climate and biodiversity issues in a world of finite resources.

Mode de contrôle des connaissances :

Ma Petite Planète Challenge, group presentations, final MCQ

Bibliographie, lectures recommandées :

Figueres, C & Rivett-Carnac T. “The Future we Choose.” Manilla Press, 2020

Robinson, M. “Climate Justice.” Bloomsbury Publishing, 2018.

Thunberg, G. “The Climate Book.” Penguin Books, 2022

English and Communication

ECTS : 3

Langue du cours : Français

Volume horaire : 21

Description du contenu de l'enseignement :

Séance
Cours
1
Villes Mondiales
2
Villes Mondiales (2) / Migrations / économies
3
Régions Mondiales (EU / NAFTA)
4
Régions mondiales (Chine/Côte Ouest des Etats-Unis)
5

Mondialisation économique
6
Mondialisation (production et chaîne de distribution)
7
Mondialisation (succès)
8
Mondialisation (problèmes)
9
Mondialisation et culture (Hollywood story)
10
Mondialisation et culture
11
Mondialisation et culture
12
Mondialisation et culture

Bibliographie :
- Arjun Appadurai, Modernity At Large: Cultural Dimensions of Globalization, 1996

Compétences à acquérir :

Proposer une étude de l'environnement moderne mondial, tout en faisant travailler compétences linguistiques (renforcement lexical de l'anglais de spécialité, expression écrite et orale) et de communication.

Mode de contrôle des connaissances :

un contrôle continu (50%) et un examen (50%)

Coefficient : 1.5

Soft Skills and Employability

ECTS : 1

Enseignant responsable : CLOTILDE **DE CACQUERAY**

Langue du cours : Anglais

Volume horaire : 7.5

Description du contenu de l'enseignement :

Soft Skills and Employability aims at supporting students' reflections about their studies and professional projects in connection with their personal life while growing as individuals and learning how to interact with others and collaborate. Its main general objective during the three years of the bachelor's degree is to help each student start the process of finding his/her place in the working society and envisioning him/herself working happily and contributing to the world.

This first-year Soft Skills and Employability module introduces students to the foundational interpersonal and professional skills needed to navigate both academic environments and future workplaces.

Focusing on key areas such as effective listening, giving and receiving constructive feedback, CV writing, and digital awareness, the module equips students with tools to communicate clearly, collaborate with others, and present themselves professionally.

Through a blend of interactive workshops, reflective exercises, and real-world scenarios, students will begin to build the confidence and competencies necessary for personal and career development.

Compétences à acquérir :

This is done through the development of the following three transversal competences:

- Adapting to new situations by becoming aware, experimenting with new tools or practices and using the group.
- Building one's pathway by formalising one's skills, identifying one's achievements and the areas that remain to be developed, and expressing one's values.
- Interacting and collaborating in a university context by seeing the workshop group as the beginnings of a working group, developing attentive listening to others, and by sharing tasks and roles within a group.

Mode de contrôle des connaissances :

Module validation if the student has participated in 6.5 hours of workshops.