Course objective:

The main objective of the course is to study the fundamental aspects of decision theory of the firm. The analysis focuses on understanding how the firm chooses the quantity produced and how this quantity is produced. Initially we use a competitive partial equilibrium model in which both prices of goods produced and the factors of production are given. Subsequently, we analyze the general equilibrium with production. In both cases we carry out an analysis of social welfare. Finally, we study market failures related to the existence of public goods and externalities.

Specific skills of the course:
1) To be able to apply acquired knowledge to the resolution of analytical exercises.
2) Capacity for analysis and synthesis.
3) Development of writing communication skills.

1.- To be able to characterize in a mathematical way how firms make choices in such a way as to maximize profits taking into account market and technology constraints.
2.- To be able to derive a supply curve using the profit-maximization model.
3.- To be able to formalize the results and to interpret them in economic terms, as well as to implement comparative static analysis in order to study the effect of changes in key economic variables in those results.
4.- To be able to identify, assess and model some economic aspects related to efficiency, general equilibrium and market failures.

Cross-cutting skills of the course:
1.- C3: Provide well-reasoned arguments and make decisions on relevant issues with the ability to be critical. Analyze the information from different perspectives: oral, analytical and graphical reasoning.
2.- C6: Development of writing communication skills, especially in the development of clear and consistent reporting.
3.- C8: Ability to work in a group, with responsibility and respect, initiative and leadership skills. Emphasis is given to pupils taking part in the group project processes.

TEMARIO

1. Production.
1.1. Marginal product and the Rate of Technical Substitution.
1.2. Returns to scale.
1.3. Examples.
1.4. Technical Progress.

2. Production cost.
2.1. Economic Costs.
2.2. Cost-minimizing input choices.
2.3. The expansion path of the firm.
2.4. Cost functions.
2.5. Short-run, long-run distinction.

3. Supply by a competitive firm.
3.1. Profit maximization.
3.2. Short-run supply by a competitive firm.
3.3. Profit maximization and input demand.
3.4. Long-run supply by a competitive firm.
3.4. Producer surplus.

4. The supply of industry and the competitive equilibrium.
4.1. Short-run market supply.
4.2. Short-run market equilibrium.
4.3. Long-run market supply.
4.4. Long-run market equilibrium.
4.5. Economic efficiency and welfare analysis.

5. General equilibrium and welfare economic.
5.1. Efficiency of a competitive economy.
5.2. General competitive equilibrium in Production economics.
5.3. The First Theorem of Welfare Economics.
5.4. The Second Theorem of Welfare Economics.

6.1. Externalities and allocative inefficiency.
6.2. Solutions to the externality problem.
6.3. Public goods and allocative inefficiency.
6.4. Lindhal pricing of public goods.

**TIPOS DE DOCENCIA**

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<th>GA</th>
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Leyenda:
- M: Maqistral
- S: Seminario
- GA: P. de Aula
- GL: P. Laboratorio
- GO: P. Ordenador
- GCL: P. Clínicas
- TA: Taller
- TI: Taller Ind.
- GCA: P. de Campo

**Aclaraciones :**
This course is best suited to a lecture format, although there will also be practical sessions and seminars. In the practical sessions the lecturer will solve some exercised related to the subject. In the seminars, students will be asked both to solve individually multiple-choice questions covering the issues developed in lectures and practical sessions and to solve in groups practical cases or theoretical questions.

**EVALUACION**
- Examen escrito a desarrollar
- Examen escrito tipo test
- Realización de prácticas (ejercicios, casos o problemas)
- Trabajos en grupo

**Aclaraciones :**
Grading will be based on both the results of the different seminar assignments (30% of the final mark) and a final exam (70% of the final mark). In the seminars, students will be asked both to solve individually multiple-choice questions covering the issues developed in lectures and practical sessions and to solve in groups practical cases or theoretical questions. The date of the final exam will be established by the Deanship.
Dates for the partial evaluations will be made public via the Moodle platform at the beginning of the course. Those pupils who have done the evaluation tests throughout the course do not attend the final exam will be given the No Attendance grade. Some students may have the right to get the full mark in a final exam. In the second round, the final exam (on the date established by the Deacon) will be worth 100% of the final grade.

**MATERIALES DE USO OBLIGATORIO**
- Basic bibliography and a collection of workouts provided by the lecturers of the subject (the collection of workouts would be published at Moodle before studding each topic).

**BIBLIOGRAFIA**

**Bibliografía básica**

**Bibliografía de profundización**

**Revistas**
Direcciones de internet de interés