

SYLLABUS A.A. 2014-2015

Department of Economics and Business

Name of degree course: Business Finance

Course name in English: Firm and market Economics (Advanced microeconomics: production and markets)

Name and title of teacher: Roberto CELLINI - Full Professor

Student receiving timetable: Wednesday 16.00 -18.00; Thursday 10.00 -12.00

Student receiving place: room 10, IV floor

Reference Type of teaching activity: Major

Reference Scientific Sector: SECS/P01; **Teaching code:** 73026

Year of course: II ; **Semester:** II

Total number of credits (n° of modules) : 9 (3); **Overall work (expressed in hours):** 225 (1 credit = 25 hours)

Number of hours to attribute to lectures and individual study: : lectures: 60 hours; individual study: 165 hours.

Teaching organisation: lectures

Ways of delivery: front lectures

Attendance: normally obligatory

General Objectives of teaching in terms of expected results of learning:

1. **Knowledge and understanding:** The course aims at presenting the advanced economic models about production (in particular, the canonical dual theory of production under perfect competition) and the main (advanced) models of imperfect competition. A relevant part of the course resorts to game theory tools.
2. **Applying knowledge and understanding:** The student has to be able to apply the theoretical knowledge acquired in order to analyse specific case studies (concerning production choice and market strategies), and numerical exercises. The case studies and the numerical exercises are provided by the teacher during the lectures.
3. **Making judgements:** The student will be able to understand which theoretical model is the most appropriate to describe and analyse real situation. He/she will be also able to understand pros and cons of different models, along with their weakness and strength points.
4. **Communication skills:** During the course the student has to improve and develop the knowledge of a technical and economic language (with particular reference to production and market strategies) ; the student has to use it in an appropriate way as an useful instrument of communication, especially with the aim of introducing herself /himself in the job market.
5. **Learning skills:** The student will be able to understand which theoretical concept is appropriate to deal with specific cases from the real world and from experimental evidence: He/she will be able to solve and analyse numerical exercises.

Propedeuticity: None (however, a good knowledge of *basic microeconomics* is required)

Course syllabus: *FIRST MODULE: (1) Technology and production; (2) Duality in production theory theory; (3) market allocation under perfect competition in the short- long- run; SECOND MODULE: (4) Monopoly and monopolistic competition; (5) price discrimination; (6) advertising models; (7) non profit-oriented firms (behavioural theory of firm, managerial firms, labour-managed firms, public-sector firms); THIRD MODULE: (8) Game theory (basic and advanced topics, limited to non-cooperative games); (9) firm's choice under interdependence.*

Reference text: (1) P. Coto-Millan *Utility and Production*, Phisica Verlag - Springer, Heidelberg, 2003 (only pp. 93-168) ; Gravelle and Rees, *Microeconomics*, Pearson (selected Chapters); (3) L. Lambertini, *Game Theory in the Social Sciences: A reader friendly Guide*, Routledge, Londra 2011 (without Ch. 10).

I MODULE (3 CFU)

Module Title: Canonical dual theory of production.

Teaching program: *(1) Technology and production; (2) Duality in production theory theory; (3) market allocation under perfect competition in the short- long- run.*

Reference text: (1) P. Coto-Millan *Utility and Production*, Phisica Verlag - Springer, Heidelberg, 2003 (only pp. 93-168, and related exercises in the last Part). Additional papers delivered by the teacher.

II MODULE (3 CFU)

Module Title: Imperfect competition

Teaching program: *(4) Monopoly and monopolistic competition; (5) price discrimination; (6) advertising models; (7) non profit-oriented firms (behavioural theory of firm, managerial firms, labour-managed firms, public-sector firms);*

Reference text: Gravelle and Rees, *Microeconomics*, Pearson (selected Chapters)

III MODULE (3 CFU)

Module Title: Game theory applied to market behaviour

Teaching program: *(8) Game theory (basic and advanced topics, limited to non-cooperative games); (9) firm's choice under interdependence.*

Reference texts: (3) L. Lambertini, *Game Theory in the Social Sciences: A reader friendly Guide*, Routledge, Londra 2011 (without Ch. 10).

Teaching methods: lectures, discussions and statements in class, case studies, exercises (solved during the classes).

Evaluation: to ascertain the attainment of course objectives and is carried out by means of

- **written test** YES (Compulsory). Four out of five questions/exercises have to be answered / solved. Each answer is evaluated up to 8 points; 18/30 is the minimum grade to pass the exam .
- **oral test:** ON REQUEST, AFTER HAVING PASSED THE WRITTEN EXAMINATION.

How and when to do the written test: The written examinations take place according to the official calendar plan. However the students who attend the lectures regularly, can split the exam into two parts, during the lecture term.

Statistical data on exam marks attained by students: A percentage above 80% *of the attending students* pass the examination at the first time they take it.

Notes: Attending lectures is highly recommended.