

**VIII) LAUREA SPECIALISTICA IN ECONOMIA DEL SISTEMA AGRO-ALIMENTARE
SEDE DI CREMONA**

1.- Advanced Agricultural and Food Economics

PROF. DANIELE RAMA-GABRIELE CANALI

Module Cooperatives

PROF. DANIELE RAMA

COURSE AIMS

The course deals with co-operative firms in the modern agro-food economy. The focus is on the peculiarities of their nature, both from the economic and business point of view, on the competitive role these firms play into today's agro-food markets and on the evolutive trends observed for these firms as a consequence of ingoing changes into agro-food markets.

COURSE CONTENT

- The concept of co-operative.
 - Co-operatives as horizontal and vertical integration.
 - The business theory concept of co-operatives.
 - The mutualistic concept of co-operatives.
 - Principles of co-operatives.
- The economic nature of co-operatives.
 - Alternative economic objectives for agro-food co-operatives.
 - Evaluation of economic advantage for cooperative fellows (the "co-operative advantage").
 - Strengths and weaknesses of co-operatives facing their economic objectives.
- The role of co-operatives in the modern agro-food system.
 - Co-operation and supply management.
 - Co-operatives and competition in agro-food markets.
 - Co-operatives and agency-type problems.
 - Co-operatives and problems associated to members heterogeneity.
- The market reorientation of agro-food co-operatives.
 - Organizational aspects.
 - Financial aspects.
 - Marketing behavior aspects.
 - Innovations in cooperatives ownership: hybrid and converted (public) cooperatives.

- New generation cooperatives.

READING LIST

Specific references will be supplied to students during the lectures.

TEACHING METHOD

Front lectures.

ASSESSMENT METHOD

Written tests and oral examinations.

Professor Daniele Rama is available for students after lecture time, at SMEA.

Module International Trade

PROF. GABRIELE CANALI

COURSE AIMS

The aim of this course is to deepen and integrate previous knowledge about international trade with elements of international finance, relationships between market structure and trade, national and international policies and regulation. Students are expected to learn how to read and interpret on theoretically sound and empirically appropriate basis, main facts and behaviours of the most important economic agents on the international market, with specific emphasis to the agricultural and food market.

COURSE CONTENT

- Elements of international finance and interaction with international trade.
- Market structure, imperfect competition and international trade.
- Multinational firms and international trade.
- Strategic Trade Policies.
- Evolution of WTO negotiations and agreements for agricultural and food products.

READING LIST

Reference text books are

KRUGMAN-P. AND M. OBSTFELD, *International Economics: Theory and Policy*, 6th edition, Addison-Wesley-Longman, 2003.

T. A. PUGEL, *International Economics*, 12th edition, Mc Graw – Hill, 2004.

For further readings

G.M. GROSSMAN, *Imperfect competition and international trade*, MIT Press, Cambridge, 1991.
CHOI-E. KWAN-J. HARRIGAN (eds.), *Handbook of International Trade*, Vol. I, Blackwell, 2003.
B. NAVARETTI, G. AND A.J. VENABLES, *Multinational Firms in the World Economy*, Princeton University Press, 2004.

Journal articles and other reading material will be indicated during lectures.

TEACHING METHOD

The course is based almost entirely upon traditional class lectures. A personal assignment will be required to students, involving writing a critical short paper about a scientific paper provided by the lecturer.

ASSESSMENT METHOD

The evaluation will be based on a final written exam for a share of 90% of the final grade. The remaining 10% of the final score will be based upon the evaluation of a personal assignment.

NOTES

Further information can be found on the lecturer's webpage at <http://www2.unicatt.it/unicattolica/docenti/index.html>.

Students will have the possibility to meet personally the lecturer for clarifications or other information after classes or by e-mail (gabriele.canali@unicatt.it).

2.- Advanced Industrial Organization

PROF. DANIELE MORO-STEFANO BOCCALETTI

Module Game Theory and Market Structure

PROF. DANIELE MORO

COURSE AIMS

This course will focus on Game Theory and its applications in economic problems. Game Theory studies situations in which economic agents rationally take into account their interactions and behave strategically. The course will develop the basic framework and theory to analyze games of strategy.

COURSE CONTENT

- The meaning of 'game'.
- Representing games: the extensive form and the normal form.
- Games with perfect information.

- Strategic Games: Nash equilibrium, dominated actions (strategies); iterated dominance; best response functions; symmetric games.
- Applications: oligopoly models.
- Strategic Games: mixed strategy Nash Equilibrium.
- Extensive Games: strategies and outcome; Nash equilibrium; subgame perfect equilibrium; backward induction.
- Applications.
- Games with imperfect/incomplete information.
 - Bayesian Games.
 - Extensive games with imperfect information: strategies; Nash equilibrium; beliefs and sequential equilibrium; signaling games.
 - Applications.

READING LIST

M.J. OSBORNE, *An introduction to game theory*, Oxford University Press, 2004.

A. DIXIT-S. SKEATH, *Games of Strategy*, W.W. Norton & Company, 1999.

THEACHING METHOD

The course is organized with 3.5 credit units; lectures will be supported by computer presentations. Examples will be presented.

ASSESSMENT METHOD

Final examination and assignments.

Professor Daniele Moro will receive students after classes or by appointment (phone: 0523/599292).

Module Technology and Innovation

PROF. STEFANO BOCCALETTI

COURSE AIMS

The course covers several topics that refer to the firm's strategic behaviour in imperfectly competitive markets. The attention is mainly devoted to the theoretical underpinnings of the models. The students are presumed to be familiar with the standard content of an undergraduate microeconomics course and with the material presented in the game theory module.

COURSE CONTENT

Barriers to entry

- Sunk costs
 - Entry deterrence
- Innovation and dynamics of industry evolution

- Research and development
- Patents
- Innovation and market structure

Product differentiation

- Location models
- Market for differentiated goods

Quality

- Quality attributes
- Choice of the optimal quality
- Vertical and horizontal differentiation

Reputation and information

- Asymmetric information: moral hazard, adverse selection
- Quality signalling
- Advertising

READING LIST

E. RASMUSEN, *Games and information. An Introduction to Game Theory*, Second Edition, Blackwell, 1994.

O. SHY, *Industrial Organization. Theory and Applications*, The MIT Press, 1995.

For each topic, further papers and other materials will be indicated.

TEACHING METHOD

The course includes 12 lectures.

ASSESSMENT METHOD

Assignments and a written examination.

Professor Stefano Boccaletti will receive students after classes or by appointment (0523/599228).

3.- Applied Agricultural and Food Economics

PROF. PAOLO SCKOKAI

COURSE AIMS

The course aims to introduce students to some basic econometric tools applied to food and agricultural data. Special attention will be given to those models that can

be applied in a business environment.

COURSE CONTENT

ADVANCED TOPICS IN REGRESSION ANALYSIS

- Review of the multiple regression model.
- The use of the multiple regression model.
- Serial correlation and heteroscedasticity.
- Instrumental variables.
- Forecasting.
- Models using panel data.
- Models of qualitative choice.
- Problems related to the estimation of systems of equations.
- Introduction to simulation models.

SELECTED APPLICATIONS IN AGRICULTURAL AND FOOD ECONOMICS

- Food demand estimation.
- Agricultural supply estimation.
- Qualitative choices by consumers and/or producers.
- Agricultural commodity market models.

READING LIST

Selected readings from the following textbook

R.S. PINDYCK-D.L. RUBINFELD, *Econometric Models and Economic Forecasts*, 4^a ed., McGraw-Hill, 1998.

Further readings on specific topics will be provided by the instructor.

TEACHING METHOD

The course consists of five credits of lectures and includes some tutorial computer sessions.

ASSESSMENT METHOD

There will be one final exam, integrated by some individual work carried out during the course.

NOTES

Further information can be found on the instructor's webpage or on the Faculty notice board.

Professor Paolo Sckokai will receive students after class in the SMEA offices.

4.- Business Planning and Control

PROF. EMANUELE VENDRAMINI

COURSE AIMS

The course presents the fundamentals of business planning and control systems which support economic decisions, motivate desired behaviours and evaluate performances in agribusiness organizations.

It is designed to produce knowledge of concepts and techniques about:

- Budget system and process. Budgeting in agribusiness organizations play both a leading and a constraining role in planning and control of operations. Budget variances are useful to management to ensure that services, operations and expenditures stay on target. Links between accounting information and personnel incentives are essential.

Topics:

- Business Planning.
- Strategic Planning (Swot and Pest analysis, BCG matrix).
- The program and control cycle.
- The budget system.
- The budget process.
- Budget variance.
- Incentives and compensation system (links).
- Performance evaluation and strategy. The design of management accounting system should facilitate the successful implementation of strategy. It's important for agribusiness organizations to integrate it with a multi-dimensional set of performance indicators in order to properly evaluate their strategic and managerial results. Many organizations develop balanced score card and report their results to stakeholders.

Topics:

- Performance measures and indicators.
- Performance evaluation.
- The Balanced scorecard.
- Accountability tools.

The second half of the course will be focused on the control cycle and the links between strategic planning and managerial controlling.

COURSE CONTENT

The course structure will be the following:

- Strategic and business planning.
- The swot and pest analysis.
- From planning to programming.

- The “making of a strategic plan”.
- The PPBC system.
- Cost accounting and budgeting.
- Traditional budgeting vs performance budgeting.
- The control cycle.
- From performance measurement to performance management.

READING LIST

B. BOWHILL, *Business Planning and Control: Integrating Accounting, Strategy, and People*, Wiley, 2008.

TEACHING METHOD

Teaching methods include formal lectures as well as the discussion of short cases and exercises. Participants are expected to study all assigned materials during the entire course, better if immediately after each class meeting. In addition, they will also be required to complete and TURN IN specific homework assignments which will count toward the final grade.

The instructors may devote a part of each class to the discussion and illustration of selected items from the assigned materials. The objective of these discussions is to clarify to students specific topics because of their special relevance or difficulty. Class participation is encouraged. In particular, participants are encouraged to ask questions and to request that particular points be explained in more detail if they remain confused or uncertain about items discussed or if concepts remain unclear.

ASSESSMENT METHOD

The grading system is as follows:

Class participation	20%
Assignment A	20%
Assignment B	20%
Final exam (case study):	40%

Professor Emanuele Vendramini will receive students by appointment (room 571 2nd floor Faculty of Economics).

5.- Economia Ambientale

PROF. GABRIELE CANALI

OBIETTIVO DEL CORSO

Obiiettivo del corso è quello di far acquisire agli studenti le conoscenze relative ai principali strumenti economici utilizzabili per la comprensione e l’analisi dei temi dell’economia ambientale, con particolare riferimento alle relazioni tra sistema agro-

limentare e ambiente.

PROGRAMMA DEL CORSO

1. Sviluppo economico e sostenibilità (cenni).
2. Economia delle risorse naturali.
 - a. Le risorse rinnovabili.
 - i. Il livello ottimo di risorsa in diverse condizioni.
 - ii. Il problema dell'estinzione.
 - iii. Il valore economico della biodiversità.
 - b. Le risorse non rinnovabili.
 - i. L'uso ottimo delle risorse non rinnovabili.
 - ii. Misurazione e scarsità delle risorse naturali.
3. Economia dell'inquinamento.
 - a. Il livello ottimale di inquinamento.
 - b. Gli strumenti per il raggiungimento del livello ottimo di inquinamento.
 - i. Approccio di Coase e permessi negoziabili.
 - ii. Tasse e sussidi.
 - iii. Standards e multe.
 - c. Il problema dei rifiuti.
4. La valutazione economica dei beni ambientali.
 - a. Beni ambientali e mercato.
 - b. Metodi diretti ed indiretti per la loro valutazione economica.
 - c. La gestione economica delle risorse ambientali.
5. Le certificazioni ambientali (cenni).

BIBLIOGRAFIA

Testo consigliato

D.W. PEARCE-R.K. TURNER, *Economia delle risorse naturali e dell'ambiente*, Il Mulino, Bologna, 1991.

Altre letture saranno indicate dal docente nel corso delle lezioni.

DIDATTICA DEL CORSO

Il corso prevede lezioni in aula e alcuni seminari tenuti da esperti e operatori. E' prevista la possibilità, per gli studenti che lo desiderino, di fare un lavoro guidato di approfondimento su un tema di interesse, che viene valutato per il giudizio finale.

METODO DI VALUTAZIONE

La valutazione si basa su una prova intermedia scritta e su un esame finale orale.

Il Prof. Gabriele Canali riceve gli studenti dopo le lezioni in ufficio presso l'Istituto di

6.- Financial and Commodities Futures Markets

PROF. FRANCESCO BRAGA

COURSE AIMS

An introduction to the study of the theory and applications of futures, options and other derivative instruments for marketing, hedging, investment and speculative purposes. Emphasis is placed on applications of agrifood and financial instruments to real business situations.

COURSE CONTENT

- To provide enthusiastic support and encouragement to students interested in the pursuit of disciplinary and professional activities in this area.
- To provide the opportunity for students to apply theoretical concepts in a simulated business setting, in order to develop specific analytical and communication skills.
- To assist the student in the development of applied professional skills in the areas of agricultural and financial price risk management.
- To provide students with a theoretical base that would prepare them to write the licensing exam set for commodity brokers by the Canadian Securities Institute.

Based on these objectives, the following specific goals have been set. At the end of the course the students will be able to:

- understand the working of futures, futures options and other derivative instruments
- search, gather and critically evaluate relevant market information
- conduct fundamental and technical analysis
- critically assess the different risks faced by a given market position
- set clear marketing, investment and speculative objectives
- critically assess the relative benefits (and limitations) of strategies based on different derivative instruments to achieve these objectives, given the constraints faced by the firm
- implement monitor and adjust the strategy as appropriate given current market conditions
- present, explain and defend the merits of the selected strategy.

At the end of the course the students will have developed a thorough understanding of the economic and business aspects of these markets, and will therefore be able to prepare a thorough analysis of market conditions, relate these to a firm's business

objectives, design a logical strategy, and implement it. This course provides a unique hands-on experience at utilising derivative instruments for the achievement of marketing, risk management, and speculative objectives.

Course Content

Topics covered in the course, by class

Class Topic

1-3	Risk, Hedging, Risk Management and Corporate Governance.
4-8	Risk components, Basic instruments, Risk management strategy development.
9-12	Risk profiles, options, options strategies.
13-15	Basis for commodities and financials
16-19	Technical analysis
20-21	Financial Futures
22-23	New carbon (CO ₂ e) markets
24	Review

READING LIST

Classroom notes will be provided in class. Notes do not replace a textbook, rather they complement it.

Recommended

W.D. PURCELL-S.R. KOONTZ, *Agricultural Futures and Options*, Principles and Strategies, Second Edition, , Prentice Hall, 1999 (ISBN 0-13-779943-8).

J. HULL, *Options. Futures and Other Derivatives*, 5th Edition, , Prentice Hall Finance Series, 2003, ISBN 0-13-009056-5.

Both Purcell's and Hull's books are excellent; indeed they complement each other. Please note that the second edition of Ag Futures and Options is substantially different from the first one, it now has a much expanded coverage of financials. If you have a used first edition, please consider purchasing also Hull's textbook; by itself it may not be sufficient.

Overall, Purcell & Koontz's book offers a more "applied" approach. What I like about it is its technical analysis explanation. Easy reading. If you like this professional discipline, and you like a strong ag. emphasis, this book is a joy to read. Hull's text is excellent, but unfortunately it does not cover tech. analysis and has no serious ag references. This text is a conventional senior undergraduate / MBA textbook. It provides a lot of extremely useful material, in a user-friendly format. It is a little more challenging than Purcell's text.

TEACHING METHOD

30% class participation, 70% final written exam.

7.- Strategic Management and Leadership

PROF. CHRISTIAN STADLER

COURSE AIMS

Students should gain an overview of business studies and should develop their capability to analyze, discuss and develop solutions regarding challenges in the business setting.

COURSE CONTENT

This course is concerned with fundamental issues of management. The emphasis will be on the formulation of business strategy and its implementation as well as organizational and leadership issues. Strategy is concerned with answering two central questions: 1) what businesses should we participate in? and 2) how should we compete? Managing an enterprise successfully requires an answer and successful implementation of the conclusions. To achieve this marketing, organizational, and leadership issues need to be taken into account. In this course, students learn concepts and frameworks that are useful for analyzing and formulating business strategies. Students also develop skills for identifying managerial issues, finding alternative ways to deal with those issues, and evaluating alternative plans of action. In addition, students learn specific analytical techniques for diagnosing the competitive position of a business, evaluating business strategies, and identifying and analyzing specific business options. Finally, they will discuss leadership and organizational issues that affect the long-term performance of companies.

READING LIST

- J.B. BARNEY, *Firm resources and sustained competitive advantage*, Journal of Management, 17, 99-120, 1991.
- A. CHANDLER, *Strategy and Structure*, MIT Press, Cambridge, MA, 1962.
- R.M. GRANT, *Contemporary Strategy Analysis*, Blackwell Publishing, Oxford, 2009.
- M.E. PORTER, *Competitive Advantage*, Free Press, New York, 1980.
- B. WERNERFELT, *A resource-based view of the firm*, Strategic Management Journal, 5, 171-180, 1984.

TEACHING METHOD

Lectures. Teamwork and Discussions. Presentations. Case Studies.

ASSESSMENT METHOD

Teamwork. Case studies. Written exam.

Professor Christian Stadler will receive students at the times posted.

8.- Topics in Industrial Organization (Monographic Course)

LECTURER'S NAME AND COURSE INFORMATION ARE TO BE FOUND ON NOTICE BOARD.
