## **Financial Analysis and Corporate Finance**

## Profs. Claudio Mario Grossi – Luca Di Simone

**Module I – Financial Analysis**

## Prof. Claudio Mario Grossi

 ***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

The course aims to introduce students to an approach to business administration and to corporate finance that combines managerial pragmatism and corporate practice with academic and theoretical rigour. Hence, financial analysis, financial statements and performance measurement models will be illustrated and used, that will help students to develop knowledge and skills in line with those requested by the job market that they are about to approach shortly.

Considering the broadness of the subject matter, the lecturer has opted to focus the objectives of the course on the following aspects of corporate finance: “corporate equilibrium”; methods for measuring equilibrium; quantitative interrelationships between economic aspects, financial aspects and structural aspects that result from managerial decisions; relationships between businesses and financial intermediaries concerning the valuation of financing transactions; forecast analysis of corporate equilibrium; forecast analysis of financing needs and their sustainability.

 ***INTENDED LEARNING OUTCOMES***

* Teaching students the skills that enable them to understand financial dynamics within a company and their impact on equilibrium conditions, on risk and on its development.
* Teaching students the skills that enable them to carry out ex-post and ex-ante analyses of the financing needs of a company and to assess its sustainability and the adequacy of the adopted sources of finance.

At the end of the course, students:

* will be capable of adopting methods and models used for the analysis of the financial position of a company;
* will be capable of preparing financial forecasts and of assessing the most suitable types of financing, albeit not detailed, at least in terms of time consistency and formulation.

 ***COURSE CONTENT***

* + Financial functions within companies: evolution, present content, outlook.
	+ Key Performance Indicators in companies: concepts, types, contents of the main KPIs.
	+ Internal and external analyst: differences in roles, required skills, available tools.
	+ Corporate equilibrium/disequilibrium: concepts and measuring instruments (including the Basilea 2 rules on the subject: an overview of about 1 hour).
	+ Questionnaire focusing on the concepts, templates and indicators of financial statements, carried out, solved and discussed in class (this is also useful to revise and align knowledge).
	+ Business administration and performance: a formal model and its quantitative representation;

- the main balance sheet and economic analysis templates and their meaning;

- system of indicators and their links with companies’ financial sphere;

- assignment of a case (part one) to be carried out at home (both the text and the templates are provided on blackboard; the solutions of each step will be published the day before the following lesson).

* + Comments on the solution of the case carried out at home.
	+ Business administration and financing needs; a model measuring working capital requirements. The correct method for financing working capital.
	+ Assignment of the second part of the case, to be carried out at home.
	+ Comments on the solution of the case carried out at home.
	+ From working capital flows to total flows: complete model of analysis of financial dynamics within a company.
	+ Assignment of the third part of the case, to be carried out at home.
	+ Comments on the solution of the case carried out at home.
	+ Advanced models of return on capital analysis and of the leverage effect: four developments and real-life applications of the Modigliani/Miller theorem.
	+ Assignment of the fourth and last part of the case, to be carried out at home.
	+ Comments on the solution of the case carried out at home.
	+ From historical analysis to forecasting: Break-Even analysis applied to a real financial statement.
	+ Financial statement forecasts: economic budget and financial budget.

 ***READING LIST***

Ciaran Walsh *, Gli indici per la gestione dell’impresa*, Prentice Hall, second edition.

Non-attending students must study the following Chapters: Part two and Part three in full, and Chapters 15, 16 and 19 of Part five. There are 165 pages in total.

Attending students are not required to study the text since the exam will exclusively focus on topics covered during lessons, based on a special programme and on the material provided on Blackboard at the beginning of the course and later during the course.

Moreover, Parts one and two of the mentioned text are considered to provide knowledge that is useful and necessary in order to be able to adequately follow the course as attending students.

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 ***TEACHING METHOD***

Frontal lessons in the classroom; supervised practical work, carried out during the course; mock exams to be carried out at home, with solutions published and verified during lessons.

 ***ASSESSMENT METHOD AND CRITERIA***

Attending students have to take a specific oral exam during the first exam session. During later exam sessions during the academic year the assessment may be written or oral, as the lecturer decides, depending on the number of registered students and will be communicated well in advance. Since it is also a subject that includes quantitative methods, if at a session the “oral” mode should be specified, it must be understood that “oral exam” does not prevent the lecturer from asking students to carry out brief exercises and calculations during the session, in front of the lecturer, with a check and an immediate discussion of the solution.

As to the written exam, both of the first session and of subsequent ones in which it is possibly provided, it is divided in two parts. A first part, consisting in about 15 questions, each with a separate mark whose total is equal to 31 (thirty-one). The questions may be open or closed questions and, most of all, they may contain brief exercises and specific calculations, therefore they may be fairly “complex”. The second part includes a quantitative case, whose solution requires the correct compilation of templates and the correct carrying out of calculations on Historical Financial Statements, Financial Needs, Forecast Budgets and, in general, the calculations learnt during the course. Also in that case the marking is weighted differently depending on the required templates and calculations and, overall, the final mark is equal to 31 (thirty-one). Part one counts for 40% towards the final mark and part two counts for 60%. Hence, the final mark will be the weighted average of the marks obtained in the two parts. Depending on the result of the written exam, the lecturer will assess the need or convenience to proceed with an oral test based on the written test that was previously carried out, that may in no way “increase” the mark of the written test. Therefore, since it is indeed a check of the exam that was carried out, not a test to improve the mark, it will be carried out especially in cases in which problems arise in understanding the answers that were given, the adopted solutions, and in general in the written exam, particularly in case of inconsistencies or weaknesses that prevent the lecturer from making a correct assessment of the knowledge and learning acquired by students.

 ***NOTES AND PREREQUISITES***

The course is conceived and developed so that even students who do not have a background in bookkeeping, accounting, financial statements and financial statement analysis, may learn the fundamentals during the course that they require so as to adequately understand course topics, in order to achieve the aims and intended learning outcomes. Clearly, students who have a prior knowledge of a) structure of the statutory financial statement as required by civil law; b) accounting and double-entry bookkeeping; c) reclassification methods of statutory financial statements for quantitative performance analysis; d) elementary financial statement indices, have a head start.

Information on office hours available on the teacher's personal page at http://docenti.unicatt.it/.

**Module II - Corporate Finance**

## Prof. Luca Di Simone

 ***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

Aims of the course – The course aims to teach students the fundamentals for understanding the main company valuation techniques and extraordinary corporate transactions.

The course is divided in two macro-areas. The first covers the extremely controversial issue of company valuation; the main pricing techniques will be presented. The second part of the course covers the joint and interdependent analysis of the main extraordinary corporate transactions, such as company mergers and acquisitions (M&A) that are analysed on the basis of different operational modes and payment/transaction mechanisms. Last but not least, the course covers the main topics underlying Corporate Governance.

Intended learning outcomes – At the end of the course, students will have acquired:

* the ability to carry out the valuation of companies or of basic financial instruments through relative valuation;
* knowledge of and the ability to interpret the impact of the main financial derivatives;
* knowledge of the main financial derivatives pricing techniques;
* knowledge of the issues related to credit risk generated by a company;
* the ability to interpret the main approaches to credit risk valuation;
* knowledge of the issues concerning industrial concentration processes;
* the ability to interpret the adequacy of governance models vis-à-vis the institutional and company context;
* the ability to interpret the ownership themes that have an impact on the value of a company.

Macro list of topics that will be dealt with in lectures:

* Discounted Cash Flow models
* Relative Valuation
* Financial derivatives:
* Corporate Debt & Credit Risk
* International Finance
* Company Concentration processes:
* Corporate Governance:

***READING LIST***

R. Brealey-S. Myers-Allen-S. Sandri, *Principi di finanza aziendale*

A. Damoran, *The dark side of valuation*

J. Hull, *Fondamenti dei Mercati di Futures e Opzioni*

 ***TEACHING METHOD***

The course will be taught with frontal lectures. At the beginning of the course the Syllabus containing the topics and reading list for each planned lecture will be available so that students may follow the course knowingly and prepare themselves beforehand for critical discussions in the classroom concerning the subject of the lessons. The course may include presentations in the classroom by professionals linked to the Italian and foreign business context (such as directos, investors, managers, etc…). The course will also include the formation of working groups in a competitive business game logic, so as to offer students professional experiences in line with common corporate practice in the financial and business industry. The business game consists in the valuation of a company (defined by the lecturer) and in a virtual participation in a competitive bidding procedure for the acquisition of a share in said company.

 ***ASSESSMENT METHOD AND CRITERIA***

The exam is written and includes 30 closed questions: each correct answer corresponds to 1 mark; students are not marked down for each wrong answer and similarly if students do not answer a question no mark is given nor are they marked down.

The maximum mark for the written exam is 30/30 and it lasts 60 minutes. Pass with distinction may be obtained by taking a supplementary oral exam. The latter may also be requested by students who have lower marks and consists in two questions for an additional mark of approximately 2/30.

The exam is aimed at assessing first and foremost students’ reasoning skills and their analytical rigour on course topics.

For students who participate in working groups, the final assessment will mainly focus on the quality of their work within the team. Specifically, the business game will be marked out of thirty on the basis of three criteria: the quality of the analyses, the quality of the presentation of their work and the result of the competitive bidding. Each criterion has the same weight, hence the final mark will be the average of the marks of the three criteria.

 ***NOTES AND PREREQUISITES***

Students who attend the course are expected to have previously studied accounting, financial statements, analysis of financial statements, capital budgeting, corporate financing and investment risk. Nevertheless, the course includes a first lecture that covers essential basic concepts and the lecturer is available to inform students about specific learning materials that can help them adequately understand lectures, in order to reach the aims and intended learning outcomes.

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