Techniques for Managerial Decisions

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Extended syllabus
The course

**Purposes**

- Provide students with analytical and conceptual tools useful to examine and solve decision problems in business, markets and firms.
- Use analytic models and adequate data to support decisions.
- Interpret the output of analytical models to propose appropriate solutions and take “good decisions”.

**Prerequisites**

- Basics of calculus (bachelor level).
- Familiarity with the software Excel is welcome.
Remark

This course has been conceived for students enrolled to the Master Program in *International Management* offered by the Department of Management.

The participation of students enrolled to other programs and international students is welcome.

Bachelor students should be aware that the techniques used in class, the teaching methodologies and the examination procedures are designed for a master’s level course.
Textbook
(also available in ebook).
(you can also use the 4.th edition available at the BEC)

We shall cover only chapters 11, 15 of the book.
(some topics are not on the book. I’ll provide the related material).

Teaching material

- Slides
- Case studies
- Excel sheets
- Other recommended readings
Moodle platform

Starting from this edition, I will use intensively the Moodle (online) platform offered by Ca’ Foscari.

All students willing to take the exam are requested to officially enroll in the online Moodle course called **EM6053**. (here)

To this aim, you need to insert the enrollment key “TMD1819”, when requested.

All the materials, exercises, slides, case studies, mockups, quizzes, ... will be uploaded on this online page.
Organization of the lectures

I will make a blended use of slides (theory, case description) and Excel (implementation of methodologies, discussion of results and solutions).

Usually, the materials related to the forthcoming class are posted in advance. Therefore, you can download them and have them ready (maybe even read them!) before the class.

You are encouraged to bring your own laptop in order to experience "live" the methodologies.
Examination policy

The evaluation is based on a written exam and on a mandatory assignment.

- **Assignment (10%):** Students will be proposed one situation in which some of the methodologies seen in class have to be implemented in order to take a "good" decision.

- **Written exam (90%):** Students will be proposed one theoretical question and two more practical questions to be solved using the techniques analyzed in class.

The assignment is evaluated with points from 0 to 3.
The final exam with points from 0 to 27.
The final score is the sum of the two.

18/30 is the minimum grade to have the 6 CFU.
Mandatory activities on Moodle

In order to self-assess ongoing learning and knowledge, I will post on Moodle some *mandatory quiz sessions* (probably two of them).

To take part at the exam, all proposed quizzes must be completed with at least 70% of success. The deadline for the quizzes coincides with the deadline for enrollment in the exam list.

*Students who are not compliant with this rule, will not be allowed to take the written exam.*
Examination policy - Not attending students

The program for not attending students (non frequentanti) is the same as for attending students.

Concerning the evaluation policy, students not attending the class are expected to follow exactly the same rules as attending students.

Not attending students are also requested to solve with a passing grade the quizzes on Moodle in order to take part at the written exam.
Assignment

- The assignment is related to the material analyzed in class. The candidate is expected to be able to recognize, organize and process the significant data at hand, in order to solve the proposed problem.

- The solution of the proposed activity has to be uploaded through the Moodle platform and will be evaluated by the instructor.

- The final grade for the assignment will range from 0 to 3 points.
Covered topics and structure of the course

1. Quantitative tools to support decisions. Why, when and how to use quantitative tools?

2. The hierarchization of a decision problem and multicriteria decision methods:
   - SMART (Simple Multi-Attribute Rating Technique);
   - AHP (Analytic Hierarchy Process).

3. Mathematical representations of complex operations and large projects:
   - Petri nets;
   - Critical Path Analysis (CPA);
   - Pert analysis and project risk management.
Ca Foscari is an Inclusive University

• If you have a motor, visual, auditory or other disability, or a specific learning disorder, we invite you to do two things:
  1. Talk to your course instructor
  2. Contact the office of disability support services: disabilita@unive.it
• Contact the office of disability support services (disabilita@unive.it) for general information: to find out what you are entitled to by law, and to request support and accommodation - www.unive.it/disabilita