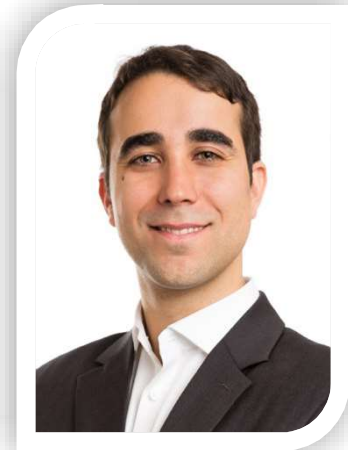# AUTUMN TERM

BUSI40010: Business Economics

Andre Veiga
Email: a.veiga@imperial.ac.uk

MODULE DESCRIPTION

Economics provides us with tools for analysing the world and aiding decision-making by individuals, businesses and governments. It is also a great tool for understanding how to optimally run a business, or for making the world a better place. Sometimes those two things are the same, often they are not - that is definitely something we will discuss.

This module aims to give you an overview of many of these tools and of the insights that can be obtained with them. We will concentrate on the tools most relevant to businesses, but also study individual decisions and government policy.

LEARNING OUTCOMES

By the end of this module, you will be able to:

- Define key concepts in economics such as Nash equilibrium and Adverse selection.
- Recognise how common social institutions reflect economic concepts, such as demand and supply.
- Discuss economic articles in a newspaper such as the Financial Times or The Economist.
- Calculate the outcomes of simple quantitative economic questions.
- Appraise the welfare merits of simple government regulations and interventions.

MODULE CONTENT (this structure may vary slightly)

- Consumer choices and demand
- Firm costs, production decisions and supply
- Market equilibrium
- Monopoly, perfect competition and oligopoly
- Externalities and public goods
- Risk and Insurance
- Cooperation and Collusion
- Adverse selection and moral hazard.

TEACHING APPROACH

Teaching is delivered by (10 x 2 hour) sessions. Sessions will normally be based on a combination of lectures, class discussion, group presentations, guest talks and case study analysis. This approach encourages the achievement of the various module learning outcomes by ensuring the acquisition of knowledge and facts, as well as the development of critical appreciation of the learnt theory and concepts and how these can be applied to real-world contexts.

You are expected to participate actively during lectures with questions and comments. You will also be questioned during the lectures. There will be online resources to help in the analysis of economic models, which will be referred to during the module.

REQUIREMENTS

No previous knowledge of economics is required.
However, you will need to have the following mathematical background:
- Calculus in multiple variables. You should know how to maximize a differentiable function $f(x_1, x_2)$ with respect to just x_1, or to both x_1 and x_2. You should understand first order and second order conditions for identifying extrema of functions.
- Probability. You should know what probability is. You should be familiar with binomial and normal probability distributions. You should know what mean and variance is. You should know how to compute the mean and variance of a probability distribution.
- Solving systems of 2 equations.

ASSESSMENT

- Group coursework 40%
- Exam 60%