

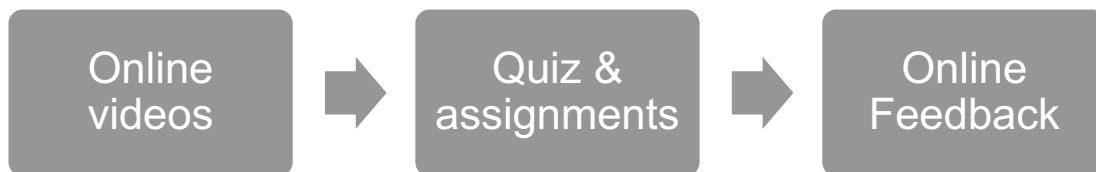
SYLLABUS

Module Summary

The ability to reason with numbers is not only important for a career in management, but can be a fascinating part of intellectual development. The course intends to equip participants with the skills required to interpret and understand quantitative data, and provide a foundation for the knowledge required in other subjects. We will take a broad view of how statistical techniques have developed as a means for humans to cope with risk and uncertainty, and look at real-world examples of how organisations use, abuse, and are fooled by numerical data.

Course Structure

The course is planned in the following way:



Course Objectives

At the end of this module, students should be able to:

- Understand how quantitative methods impact managerial judgement
- Sharpen cognitive capacity to deal with numbers and statistical techniques, at an individual level and within a team
- Uncover original applications of the course material to business history

Learning Outcomes

Knowledge and understanding:

- Develop judgement over alternative methods and techniques
- Understand and utilise basic statistical methods

Skills:

- Communicate quantitative information effectively at a written level

- Improve numerical literacy

Reading List

Participants are recommended to read:

Davenport, Thomas H., (2006) "Competing on Analytics" Harvard Business Review

The following textbook can be used for reference throughout the course:

[1] Curwin, J. and Slater, R. (2008) Quantitative Methods For Business Decisions, 5th Edition, Thomson (6th edition)

In addition to the above you are advised to read one of these books:

- Bernstein, Peter L., (1996) Against the Gods: The Remarkable Story of Risk, John Wiley & Sons
 - Taleb, Nassim, (2001) Fooled by Randomness, Texere
 - Blastland, M. and Dilnot, A. (2007) The Tiger that Isn't: Seeing through a world of numbers, Profile Books
 - Mlodinow, Leonard (2008) The Drunkard's Walk: How Randomness Rules our Lives, Pantheon Books
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Assessment

- 60% Individual quizzes
There are 14 quizzes to complete throughout the course. We will count your 12 highest scoring ones.
- 40% Individual report
You will be required to prepare and submit an individual report.

Course structure

Topic	Subject	Topics	Reading
1	Introduction	<ul style="list-style-type: none"> • Quantitative Methods • Statistical Literacy • Descriptive Statistics 	[1] Ch. 1, 2, 6, 7
2	Probability	<ul style="list-style-type: none"> • Probability Theory • Bayes Theorem • Factorials, Permutations and Combinations 	[1] Ch. 9

3	Probability Distributions	<ul style="list-style-type: none"> • Normal Distribution • Binomial Distribution • Poisson Distribution 	[1] Ch. 10, 11
4	Inferential Statistics	<ul style="list-style-type: none"> • Inferential Statistics • Taxi for Professor Evans • Significance Tests • Student's T Test 	“Taxi for Professor Evans” [1] Ch. 12, 13
5	Modelling	<ul style="list-style-type: none"> • Correlation • The Suitcase Case • Time Series 	“The Suitcase Case” [1] Ch. 15, 16, 17

Professor's Profile

Anthony J. Evans is professor of economics at ESCP Europe Business School. He has published in a range of academic and trade journals and is the author of *Markets for Managers* (Wiley, 2014). His work has been covered by most broadsheet newspapers, and he has appeared on *Newsnight* and the BBC World Service. He is a member of the Institute of Economic Affairs' Shadow Monetary Policy Committee.

He specialises in teaching Managerial Economics at the MBA and Executive MBA level. Using a combination of lectures, case discussion and practical simulations he has introduced over 2,000 current and future managers to the economic way of thinking. He has taught for ESCP Europe, Cotrugli Business School, Danube University, and Helsinki School of Economics, as well as designing and managing custom programmes.

Anthony participated in the Global Colloquium for Participant-Centred Learning at Harvard Business School in 2009 and spent Fall 2011 as a Fulbright Scholar-in-Residence at San Jose State University. He received his MA and PhD in Economics from George Mason University, USA, and a BA (Hons) from the University of Liverpool, UK.

He is a UEFA qualified soccer coach and lives in Hertfordshire with his wife and two children.