

# What will I learn studying Economics at university?

[www.warwick.ac.uk/economics](http://www.warwick.ac.uk/economics)

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16<sup>th</sup> July 2012

Slides available at

[go.warwick.ac.uk/slovelady](http://go.warwick.ac.uk/slovelady)

# Introduction

Economics is the study of .....

# What is Economics?

- A way of thinking
  - Not just a set of rules or graphs
  - The process can be more important than the outcome!
- You will learn technical skills
  - Maths, Econometrics, Game Theory
- You will learn to apply Economics as a type of “science” anywhere in “society”

# Research in Applied Economics

- Our core 3<sup>rd</sup> year UG dissertation
  - Do video games make you more violent?
  - Measuring risk by observing poker players
  - Modelling football transfers using international trade theory
  - What are the incentives to commit crime
  - Is there a wage premium for being attractive?
  - How to increase blood donations

# Examples of my research

- Consulting for Birmingham City Council
- How does memory play a role in Economics?
- Are happier people more productive?
  - And how can we make them happier!
- How do emotions guide our decisions?
  - Specifically regret
- Can we test behavioural economics?

# The common denominator

- All these topics involve *thinking like an economist*
- There is a process to our analysis
  - Develop sensible theory
  - Test the theory with good data
  - Learn about your theory to refine it further
- This methodology need not be limited to “traditional” topics!

# Topics and tools

- What you will learn at University tends to fall into two areas
- Topics
  - Here are the ideas of other people
  - Here is their model
  - Here is what we can learn from this
- Tools
  - Here is something which allows you to build your own models and analysis

# Topics

- Taking the first year of the Warwick Economics (L100) course as an example, you will study
  - Microeconomics
  - Macroeconomics
  - Economic History and Development
- How are these different from what you might currently study?



# Microeconomics

- You might currently be studying demand and supply
- But where do these come from?
- Why do some people demand apples?
  - And some demand oranges?
- Why do some firms supply oranges?
  - And some supply apples?

# Microeconomics

- You will study the fundamental concepts in microeconomics
- Like **preferences**
- A *preference* is the most basic of human relationships we can describe
- If I give you option A and option B, which one do you want?

# Microeconomics

- We make some assumptions about preferences
  - You either prefer A to B, B to A, or are indifferent between them
  - If you prefer A to B, and B to C, then you also prefer A to C
- Then use mathematics to turn this “philosophy” into “economics”

# Microeconomics

- We do this through a **utility function**
  - Which gives a mathematical ordering to our preferences
- Once we have the maths in place, we can start to draw graphs!
  - Such as an **indifference curve**
  - Which can be developed into a demand curve

# Microeconomics

- The basic idea is to assume as little about people as is possible
  - I don't want to presume everyone likes apples!
- Then see how much about the world we can understand
  - Demand and Supply
  - Profit and Loss
  - Taxes and Subsidies

# Macroeconomics

- The world is recovering from a financial crisis
  - Slowly recovering!
- What should we do next?
- If we want to understand this, we need to understand the complex interactions between our key measures of economic performance
  - And the tools we can use to affect them!

# Macroeconomics

- There are two key differences between school and university level macroeconomics
- One is the role of **time**
  - We are not just interested in how economic policy affects today, but also tomorrow
  - What will drive long run growth?
  - If I change interest rates today, when will we see the impact on the economy?

# Macroeconomics

- The other is the role of **expectations**
  - What happens if everyone expects a country to raise interest rates?
  - What happens if everyone expects prices to fall?
  - And what sets expectations?
- Modern macroeconomics aims to model all these complex interactions
  - Using maths to answer the questions



# Economic History

- Recessions have happened before
  - What lessons can we learn from the past?
- We want to alleviate poverty
  - Why are some countries rich and some countries poor?
- The world population is exploding
  - Can we feed everyone?

# Economic History

- Economic History is important to study because it can give context to our current situations
- It helps us understand what has driven growth in the past
  - So what we should fund to drive growth in the future
- And helps us learn from our mistakes!

# Tools

- Tools in economics help us answer our own questions, and understand the answers of others
- You will study three main tools at Warwick
  - Maths
  - Econometrics
  - Game Theory

# Maths

- We build theoretical models of the world using maths, because it is objective
  - It's a universal language
  - We can incorporate ideas together
  - And easily develop new ones
- Sometimes we get mathematical “solutions” to our model
  - What do they mean?
  - What happens if reality is different?

# Econometrics

- Econometrics is an application of statistics for economics
  - Understanding that we might be dealing with people and not just numbers!
- We use it to test theories with data
  - How much of the data is explained by our model?
- You will use it to answer your own research questions!

# Game Theory

- Game Theory is a specific tool kit used for situations of *strategic interaction*
  - What I want to do depends on what you are going to do
    - And vice versa
- Games like rock paper scissors and tic tac toe have analogies in the real world
  - Auction theory
  - Studying competition in markets

# Thinking like an economist

- Once you have learnt these topics and tools
  - You will see economics in action in the world around you
  - Be able to understand market outcomes, human behaviour and economic policy
  - Be able to construct objective analysis to inform others and say what should happen next!

# If you are interested....

- Warwick offers lots of courses which involve economics
  - Economics, Economics and Industrial Organisation, Economics Politics and International Studies
  - Visit [go.warwick.ac.uk/study](http://go.warwick.ac.uk/study) or [go.warwick.ac.uk/economics](http://go.warwick.ac.uk/economics) for more info
  - Warwick Economics is Top 5 in the UK
    - 3<sup>rd</sup> in The Times for 2013
    - 4<sup>th</sup> in The Complete University Guide for 2013



# Answer Time!

- Economics is the study of ....
  - Money?
  - Markets?
    - Demand and Supply?
    - Prices?
  - Firms?
  - Allocation of scarce resources?
  - People?
  - Choice?

# Q&A

- If you have any further questions, you can post them on the **Official Warwick Economics Q&A Thread** on
  - **The Student Room** forum
  - [www.thestudentroom.co.uk](http://www.thestudentroom.co.uk)
    - Forums
      - Economics / University of Warwick
  - You can read our FAQ's and questions by other applicants and students