**Behavioural Economics**  
**Dr Edward Cartwright**

My basic objective in this short outline is to give some idea of what I hope to cover in my session and why I hope it will be instructive and interesting. The session will be self-contained and so I do not expect any preparation beforehand. It will, however, be useful to read through this outline and think about how behavioural economics may be relevant to the work that you are involved in.

**A bit of background**  
The basic objective of behavioural economics is to relax the assumption, pervasive in much of modern economic theory, that economic decisions are made by fully rational, selfish, utility maximising individuals. In doing so, it gives full weight to the role that emotions and limited reasoning can play in economic decision making.

Behavioural economics has proved useful in understanding many economic issues including financial crises, donations to charity, price setting, labour supply, the equity premium puzzle, drug addiction, bargaining and so on. Indeed, behavioural economics has been the fastest growing field in economics over the last 20-30 years and can already boast an impressive list of Nobel Prize Winners.

One area where behavioural economics seems particularly useful, if currently unexploited, is designing economic policy. In particular, to know how a policy will impact at the micro level it seems crucial to really understand how people will react to that policy. Behavioural economics has shown how subtle and seemingly innocuous changes to policy can have important and counter-intuitive consequences.

**The framework of behavioural economics**  
One key thing to appreciate is that behavioural economics is not about throwing away the standard models of economics to start afresh. Instead, it is more about tweaking the models to take account of the realities of human decision making. In this sense there are four things that behavioural economics can and does do:

1. **Show that the standard model of fully rational, selfish, utility maximising behaviour can do a very good job of predicting behaviour.** This is clearly reassuring and observed in many important contexts such as auctions and markets.

2. **Show that a model of rational, utility maximising behaviour can do a good job of predicting behaviour if we put a few, non-standard, things in the utility function.** Examples of the non-standard things that have been considered are regret, envy and desires for fairness, reciprocity or conformity.

3. **Show that the limited reasoning capabilities of humans leads to fundamental biases that simply cannot be modelled within the standard modelling framework of economics.** These biases are clearly worrying to those using standard modelling framework and so it is important to know exactly when they show up.

4. **Help resolve the ambiguities that often remain in economic theory.** In particular, whenever there are multiple equilibria, economic theory loses predictive power. Behavioural economics
can help show what equilibrium would be most likely to occur by observing and modelling peoples reasoning.

It is also important to recognise that behavioural economics is not about reinventing psychology. Behavioural economics does draw on ideas from psychology but is fundamentally different. One sense in which it is different is that behavioural economics has a particular focus on issues that are of interest to economists; this is partly reflected in the four different categories discussed above. A second sense in which it differs is the tools used; behavioural economics, like psychology, does rely heavily on experiments, both in the lab and in the field, but uses game and decision theory to help frame and model insights in a formal way. In this sense behavioural economics works with models familiar to economists and provides something of a bridge between psychology and economics.

What we shall do in the session
I aim to give you a flavour of how behavioural economics works, and can yield insight, by looking in turn at examples that illustrate categories 2, 3 and 4 from above. In each case, I shall begin by distributing a set of hypothetical, and not so hypothetical, economic decisions that a person may face and ask you to look through and discuss them in groups of 3 or 4. I will primarily want you to think about what decisions you think people would make and why. You could also question what a rational, selfish, utility maximising individual would do. I have a large stock of hypothetical scenarios, so we will do as many as time permits, and this should hopefully illustrate the many issues raised in behavioural economics. We shall then look at how we can model decision making in a way that incorporates some of these issues, and look at an applied example. In practice this means we shall look at:

1. Fairness, reciprocity and inequality aversion. This will be applied to look at price and wage setting with particular emphasis on downwards rigidity.

2. Regret aversion, the law of small numbers, and confirmation bias. This will be applied to look at physician and patient behaviour in health care.

3. Risk aversion and focal points. This will be applied to look at the problems of international co-ordination efforts.

A bit of preparation
As already mentioned, the course will be self contained, so I do not expect much by way of preparation. That said, game theory is a key tool in behavioural economics, and so it may be useful to learn the basics or refresh your memory if necessary. One way to do this is go to gametheory.net and look at the lecture notes available. More generally, there is a huge amount of literature on behavioural economics that may be of interest. I shall distribute more references at the session, but four books that are accessible, and well worth reading, are:

C Camerer (2003), Behavioral Game Theory: Experiments in Strategic Interaction, Russell Sage Foundation.


The books by Frank and Thaler are easier, bedside reading. The book by Camerer is slightly more advanced. The book edited by Diamond and Vartainen may be very interesting reading to those interested in policy.

One piece of preparation that I would encourage you to do is to come up with one policy issue that you think would be interesting to look at through the lens of behavioural economics. Hopefully, we will have time, either in the lecture or after, to think through what behavioural economics might say on this issue.