Statistics 1

Module Code: ECO00012C
Credits: 10
Terms: 2 & 3

Contact Hours: 20 Lectures, 2 Practicals, 3 Tutorials (25 contact hours)
Module Organiser: Takashi Yamagata

Overview
The module introduces the main ideas and techniques of statistical inference, using the material covered in Probability 1. Topics will include point and interval estimation, hypothesis testing, and asymptotic statistical inference. Inference in the linear regression model is also considered: this is particularly important for its applications in Economics.

Aims and Objectives
Statistics 1 introduces students to some basic ideas and techniques of statistical inference that are routinely used in Economics, Business, and other social sciences. In addition, students are introduced to the use of statistical inference in solving problems. Students will be provided with a foundation for intermediate econometric and statistical modules offered in Stages 2 & 3.

Transferable Skills
The module emphasizes general ideas and techniques. As a result the student should be able, after successful completion, to apply these techniques to new and unseen problems.

Learning Outcomes
After successful completion of the module students are able to:
- Describe the concepts of populations, samples and sampling distributions
- Describe and be able to apply procedures for estimating quantities of interest and testing claims about such quantities
- Describe the role of correlation and simple regression in analysing the relationship between two variables, and be able to apply these tools and discuss empirical results.

Assessment
Statistics 1 is examined by means of a 1.5-hours University Closed examination.

The standard calculator for use in University examinations will be provided: no other calculator can be used. Statistical tables will be provided.

Pre-requisites
Probability 1.
Students should have a suitable non-programmable calculator. Coursework will be set given the presumption students are so equipped.

Main References