## **ECO 1011 H1F**

# Mathematics and Statistics for PhD and MA Doctoral Stream Students

## Department of Economics, University of Toronto Summer 2015

**Instructor:** Prof. Martin Burda

**Office:** Economics Department, room 234

**Contact:** martin.burda@utoronto.ca; phone 416-978-4479

TA: Congfei Li

**Contact:** <u>congfei.li@mail.utoronto.ca</u>

**Dates:** August 24 – September 11, every working day (except Sep. 7 holiday)

**Times:** 10:00 am - 4:00 pm

**Location:** ES B142 (Earth Sciences B142 at 5 Bancroft Ave and 33 Willcocks St.)

### **Course Description**

The course provides an intensive introduction to rigorous mathematical and statistical analysis at the graduate level. Topics include probability theory, statistical estimation, hypothesis testing, regression, static optimization in vector spaces, and optimization of dynamic systems. Statistical software will be used in class assignments. All PhD and MA students in the doctoral stream are required to take the course.

#### Course Materials

Course materials consist of lecture notes that will be presented during the class time. There is no textbook for the course.

#### **Evaluation**

The final grade (credit or no credit) is based on the following:

Task	Date
Term Test 1	September 2, 2015
Term Test 2	September 11, 2015

Credit for the course is earned by scoring at least 50% on Term Test 1, and at least 50% on Term Test 2.