

**ECO 1011 H1F**  
**Mathematics and Statistics**  
**for PhD and MA Doctoral Stream Students**  
Department of Economics, University of Toronto  
Summer 2012

**Instructor:** Prof. Martin Burda  
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**Dates:** August 20 – September 7, 2012, every working day  
**Times:** 10:00 am – 4:00 pm

**Location:**  
**Weeks 1&2:** WI 1017 (Wilson Hall, 40 Willcocks Street)  
**Week 3:** MP 134 (McLennan Physical Labs, 255 Huron Street and 60 St George 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 expected 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 is based on the following:

Task	Weight	Due date
Term Test 1	50 %	August 29, 2012
Term Test 2	50 %	September 7, 2012