Econometrics I

1. **Course Objective and Overview:**
   This course provides students with entry-level knowledge and skills in econometric analysis and covers the statistical foundations for implementing empirical economic research. We focus on the topics of linear regression analysis with cross-sectional data, and study many examples and demonstrate them using a statistical software.

2. **Course Aim:**
   Aim of this course is to understand the fundamental knowledge of econometrics for empirical study and to acquire an elementary analysis method using computer software. This course serves as a stepping stone for those interested in knowing the field more intimately and going on advanced study in econometrics.

3. **Course Content:**
   A class will consist of two parts: (1) lecture on the topic, (2) computer exercises. The schedule is as follows.

   1. Course Guidance and Initial Arrangements
   2. Introduction to Econometrics and Empirical Economic Analysis
   3. The Simple Regression Model I
   4. The Simple Regression Model II
   5. Multiple Regression Analysis: OLS I
   6. Multiple Regression Analysis: OLS II
   7. Multiple Regression Analysis: Inference I
   8. Multiple Regression Analysis: Inference II
   9. Multiple Regression Analysis: OLS Asymptotics
   10. Multiple Regression Analysis: Further Issues
   11. Qualitative Information: Binary or Dummy Variables I
   12. Qualitative Information: Binary or Dummy Variables II
   13. Heteroskedasticity
   14. More on Specification and Data Issues
   15. Conclusions

4. **Course Language:**
   English

5. **Grading Method:**
   Students will be evaluated based on homework (50%) and final report (50%).

6. **Textbooks and References:**
   Modern Approach
   Mostly Harmless
   Introductory Econometrics: A Jeffrey M. South-Western 2016
   Wooldridge
   Marshall
   Joshua D. Angrist, Princeton Univ 2009
   Econometrics: An Empirical Companion
   Pischke
   Pr

7. **Related URL:**

8. **Homework:**
   Homework will be given accordingly.

9. **Other:**

   E-mail address, course website and office hours will be announced at the first class meeting. The lecture materials will be uploaded to the course website.

   Students may be asked to bring their own computer.

   Basic (undergraduate level) knowledge of Mathematics and Statistics is prerequisite.