

**KING'S COLLEGE LONDON**  
**(University of London)**

**King's Business School**

**6SSMN961: APPLIED ECONOMETRICS**

**2019-20**

**Problem Set 3**

**Hand-in instructions:**

The deadline for submission is **Monday 21 October at 10.00 am via KEATS**.

The file that you upload on KEATS should contain two parts:

- Short written answers to the questions
- The Stata output in pdf format

You can merge two pdf files using Acrobat Professional or an online pdf merger.

You should name the file with your student number as follows: **Studentnumber.pdf**. This is very important to ensure that your work can be identified.

1. Download the data TeachingRatings.dta from the course page. This dataset contains data on teaching evaluations for 463 professors at the University of Texas, and various attributes of the professor and the course.
  - a. Run a regression of **course\_eval** on **beauty**. What is the slope coefficient? Is it statistically significantly different from zero?
  - b. Run a regression of **course\_eval** on **beauty** and **female**. What is the coefficient on beauty now? Explain in detail why the result is different from part (a)
  - c. Add an interaction term between **female** and **beauty**. What is the interpretation of the coefficient on this interaction term?
  - d. Run a regression of **course\_eval** on **beauty**, **female**, an interaction between **female** and **beauty** and the additional controls **minority**, **age**, **onecredit**, **nnenglish** and **intro**. Explain whether these additional controls have a significant effect on teaching ratings.