## **ECONOMETRICS II, FALL 2021**

## Homework 5. Due Friday October 8.

1. Simulate and estimate an ordered probit model using the posted Matlab code.

2. Use the posted Matlab code to simulate and estimate an exponential duration model. Truncate the outcomes at T=40 and estimate the exponential duration model with incomplete spells.

3. Assume you have a duration model with hazard  $\alpha x_i^2$ . You observe a panel of individuals for time t = 1, ..., T. Explain how you could estimate the duration model using logit estimation. (I didn't cover this, so see if you can figure it out.)