## Winter 2024 TA Job Posting for ECON 421

Please give a brief description of the course content or a link to the course outline:
This course offers an advanced treatment of topics covered in ECON 322/323 through the extensive use of matrix algebra, statistical theory and numerical methods. After a review of the required mathematics, these tools will be used to derive the least-squares estimator for the standard linear model and to conduct inference about features of the model, checking the results of theory using regression software and economic data. Then this framework will be used for theoretical generalizations of the model and their estimation using regression software. By the end of the course, students will be able to estimate a linear model and conduct accurate inference in cases where economic data violate the assumptions of the standard linear regression model. This includes methods for dealing with heteroskedastic data, observations that may be dependent over time, response distributions with heavy tails or limited range (such as binary outcomes and count variables), and observations that may suffer from selection bias.

## Any necessary knowledge or skills needed:

Please fill out this chart as closely as you can for the TA duties and hours you predict the course will be using for the entire Winter 2024 term. This will be used as an estimation only. Graduate TAs are not permitted to work more than 140 hours for the term or more than 10 hours in any given week ( 70 hours or 5 hours a week for a $1 / 2$ TA). When thinking of the duties you might have for your TA, we ask that you be mindful of this constraint and try not to come up against it. TAs own coursework comes first. Negotiations for a reasonable amount of time for returning marked assignments, etc. will occur as needed.

| Duty | Estimated <br> Hours for the <br> Term or N/A | Brief description of unusual or especially time-consuming <br> features of the duty, if any |
| :--- | :--- | :--- |
| Meetings with Course <br> Instructor |  |  |
| Class preparation |  |  |
| Attending lectures |  |  |
| Student consultation; <br> office hours |  |  |
| Lecturing |  |  |
| Conducting tutorials |  |  |
| Grading |  |  |
| Proctoring exams |  | Office hours and marking assignments |
| Other duties <br> (describe/explain) |  |  |
| Totals | 70 |  |

