STAA57H3 Project Description

Project Question

For the course project, you will investigate the question:

"Is university education worth the investment?

This is a broad and open-ended question, so you are not expected to address it in its totality. Your goal is to focus on one or more *specific aspects* of the question, which you will tackle with the help of data and the techniques you learned in class. For example, you can look at the average salary of a STEM BSc, or the expected time it takes to amortize a degree in Statistics. The actual choice of research questions is up to you, and so is the choice of appropriate data to address them.

Data Sources

There are no fixed data assigned to the project, rather, you have to select the data you will use based on the question(s) you want to address. UofT members have access to a wealth of Canadian data through CHASS portal and <odesi>, both of which provide individual records (i.e. microdata) for several nationwide surveys conducted by Statistics Canada. A good place to start are the following data:

- Education Data
 - Tuition and Living Accommodation Costs (TLAC)
 - Student Financial Survey (SFS)
 - National Graduates Survey (NGS)
- Employment Data
 - Labour Force Survey (LFS)
 - Canadian Income Survey (CIS)
- General
 - Canadian Census

Other available resources are UofT's Data Library and the Government of Canada's Open Data Portal. You can also collect your own data, e.g. using web scraping to extract information from online job postings.

Deliverables

You will have to deliver three items for the project: a proposal, draft, and final report.

• Proposal: The proposal must outline the selected research questions and data used to answer them. The purpose of the proposal is to ensure that you have done the necessary preliminary reading, and you have though about the questions you want to address. It is also an opportunity to get guidance on the project. The proposal will be a short (max 2-page) document, due by Feb 13, and will be worth 20% of the project marks (i.e. 4% of the final marks).

- Draft: The draft must include the basic core of your analysis and results. Again, the purpose is to make sure you are on track, and that you have an opportunity to receive feedback and make corrections. The draft is due by Mar 20, and will be worth 20% of the project marks (i.e. 4% of the final marks).
- Final Report: The final report will be in the form of a set of slides (max 12), and you will have to give a 3-minute presentation of your results. You will also have to submit the full code that you used for your analysis and for generating the slides. The final report, is due by April 5, and will be worth 60% of the project marks (i.e. 12% of the final marks).

You will be provided with templates and assessment rubrics for these deliverables.

Teamwork

The project is to be completed in teams of up to 4 students. Team selection will be based on the results of an online survey (through CATME); if you do not fill in the survey you will be assigned to a random team. There will be another survey later in the course, where each student will evaluate their teammates. The purpose of this survey is to assess the contribution of each team member to the project. The final project marks for each student will be determined by the overall project marks, adjusted by an individual contribution factor for each student.

References

Below are some articles related to the project that you might find useful:

- Postsecondary Education in Canada: Returns to University, College and Trades Education(Canadian Public Policy)
- Education in Canada: Key results from the 2016 Census (Statistics Canada)
- Is the university experience worth the cost? (The Globe and Mail)
- Is getting a bachelor's degree still worth it? (Canadian Business)