Department of Economics University of Toronto 2017 Fall

Course ECO220Y1Y Quantitative Methods in Economics-L0101

Time and Location

- Monday 11:00-13:00 in KP108
- Tuesday 18:00–21:00 in KP108

See the section "Course Schedule" below on the details of the class times. Dr. Yu will teach the lectures, and the TA will teach the tutorials.

Instructor Victor Yu

E-mail victor.yu@utoronto.ca

(Please mention that you are a student in ECO220 in your email. Otherwise your email may be replied at a later time. Avoid attachments in your email.)

Office hours Monday 2–4 PM in GE164*

Tuesday 2–4 PM by appointments only

*Dr. Yu does not have an office at the St. George campus. If possible, please communicate with Dr. Yu using email. If you have to talk to Dr. Yu in person, please email him to book an appointment either on Monday 2–4 or Tuesday 2–4. Dr. Yu will book a room in the Department of Economics at 150 St. George, for the appointment. Most likely the room is GE164.

Teaching Assistant Marc-Antoine Chatelain

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Website Blackboard

Textbook Sharpe, DeVeaux, Velleman, Wright: Business Statistics, Third Custom Canadian

Edition for ECO220, Pearson 2017

| Marking | Date | Time | Weight | Location | |
|---------|----------------------------|---------------|--------|-----------------|--|
| Scheme | Test 1 2017–10–10 (Tue) | 6–8pm 15% | - | | |
| | Test 2 2017–11–14 (Tue) | 6–8pm 15% | | | |
| | Test 3 2018–01–16 (Tue) | 6–8pm 16% | HA | .401, HA410 | |
| | Test 4 2018–02–27 (Tue) | 6–8pm 17% | BA | 2185, BA2195 | |
| | Test 5 2018–04–03 (Tue) | 6–8pm (option | onal)* | EX320 | |
| | DACM (five online tests)** | | 12% | Oct 2, Nov 13, | |
| | | | | Jan 15, Feb 26, | |
| | | | | Apr. 2 | |
| | Final Exam | | 25% | - | |

- * Test 5 is an optional test. It covers all the material in this course. If you miss one term test, the missing test score is assumed equal to test 5. If you miss more than one test, the first missing test score is assumed equal to test 5 and the other missing tests scores are zero. If you have written all 5 tests and if the lowest score of tests 1–4 is less than test 5, then this lowest score is replaced by test 5; otherwise test 5 score is discarded. It is to your advantage to write test 5.
- ** The Data Analysis Course Module (DACM) complements our course and is required for all sections of ECO220Y1Y. It runs from September through April. You will dive into lots of real data and research and replicate key findings. There are five modules (A through E) and five online tests. The DACM Handbook (on the DACM portal site) guides you through this required year-long module.

Course Schedule

| Week Date Chapter | | | | | | |
|-------------------|---|--|--|--|--|--|
| 1 | 2017–09–11 (Mon) | Lecture 1 1–4 Statistics, Data, Population, Sample | | | | |
| | 2017–09–12 (Tue) | DACM tutorial (6–7pm) | | | | |
| | | Lecture 2 (7–8:30pm) | | | | |
| 2 | 2017–09–18 (Mon) | Lecture 3 5 Quantitative data | | | | |
| | 2017–09–19 (Tue) | DACM tutorial (6–7pm) | | | | |
| | | Lecture 4 (7–8:30pm) | | | | |
| 3 | 2017–09–25 (Mon) | Lecture 5 6 Scatterplots, Association, Correlation | | | | |
| | 2017–09–26 (Tue) | Course tutorial (6–8pm) | | | | |
| | Online TEST in DACM (Module A) due Oct 2 | | | | | |
| 4 | 2017–10–02 (Mon) | Lecture 6 6 Scatterplots, Association, Correlation | | | | |
| | 2017–10–03 (Tue) | DACM tutorial (6–7pm) | | | | |
| | | Course tutorial (7–8:30pm) | | | | |
| 5 | 2017–10–09 (Mon) | Thanksgiving Day, no class | | | | |
| | 2017–10–10 (Tue) | Test 1 (6–8pm) | | | | |
| 6 | 2017–10–16 (Mon) | Lecture 7 7 Linear Regression | | | | |
| | 2017–10–17 (Tue) | DACM tutorial (6–7pm) | | | | |
| | Lecture 8 (7–8:30pm) | | | | | |
| 7 | 2017–10–23 (Mon) | Lecture 9 7 Linear Regression (continued) | | | | |
| | 2017–10–24 (Tue) | DACM tutorial (6–7pm) | | | | |
| | | Lecture 10 (7–8:30pm) | | | | |
| 8 | 2017–10–30 (Mon) | Lecture 11 8 Randomness and Probability | | | | |
| | 2017–10–31 (Tue) | Course tutorial (6–7pm) | | | | |
| | Online TEST in DACM (Module B) due Nov 13 | | | | | |
| | 2017–11–06 (Mon) Reading Week, no class | | | | | |
| | 2017–11–07 (Tue) Reading Week, no class | | | | | |
| 9 | 2017–11–13 (Mon) | Lecture 12 9 Random Variables, Probability Distribution | | | | |
| | 2017–11–14 (Tue) Test 2 (6–8pm) | | | | | |
| | (Location to be announced) | | | | | |

| 10 2017–11–20 (Mon) | 2017–11–20 (Mon) Lecture 13 10 Sampling Distributions | | | | | |
|--|--|--|--|--|--|--|
| 2017–11–21 (Tue) | | | | | | |
| 11 2017–11–27 (Mon) | Lecture 14 11 Confidence Intervals for Proportions | | | | | |
| 2017–11–28 (Tue) | DACM tutorial (6–7pm) | | | | | |
| Course tutorial (7–8:30pm) | | | | | | |
| 12 2017–12–04 (Mon) | Lecture 15 11 Confidence Intervals for Proportions | | | | | |
| 2017–12–05 (Tue) | DACM tutorial (6–7pm) | | | | | |
| Course tutorial (7–8:30pm) | | | | | | |
| winter break | | | | | | |
| 13 2018–01–08 (Mon) | Lecture 16 12.1–12.10 Testing Hypotheses on proportions | | | | | |
| 2018–01–09 (Tue) L e | ecture 17 12.1–12.10 (continued) | | | | | |
| 14 2018–01–15 (Mon) | 14 2018–01–15 (Mon) Course tutorial(11am–1pm) | | | | | |
| | Test 3 (6–8pm) HA401, HA410 (Haultain Building) | | | | | |
| 15 2018–01–22 (Mon) | Lecture 18 13.1–13.4 Confidence Intervals and Hypothesis | | | | | |
| | Tests for the Means | | | | | |
| | ecture 19 13.5–13.7 (continued) | | | | | |
| | Lecture 20 14.1–14.4 Comparing Two Means | | | | | |
| 2018–01–30 (Tue) | DACM tutorial (6–7pm) | | | | | |
| | Lecture 21 (7–8:30pm) | | | | | |
| 17 2018–02–05 (Mon) | Lecture 22 14.1–14.4 Comparing Two Means (continued) | | | | | |
| 2018–02–06 (Tue) | Course tutorial (6–8pm) | | | | | |
| 18 2018–02–12 (Mon) | Lecture 23 18.1–18.5 Inference for Regression | | | | | |
| 2018–02–13 (Tue) | Lecture 24 19.1–19.8 Understanding Regression Residuals | | | | | |
| 2018–02–19 (Mon) | Family day, no class | | | | | |
| 2018–02–20 (Tue) | Reading week, no class | | | | | |
| 19 2018–02–26 (Mon) | Course tutorial(11am-1pm) | | | | | |
| 2018–02–27 (Tue) | Test 4 (6–8pm) BA2185, BA2195 (Bahen Centre Inf) | | | | | |
| 20 2018–03–05 (Mon) | Lecture 25 19.1–19.8 Understanding Regression Residuals_ | | | | | |
| 2018–03–06 (Tue) Lecture 26 DACM tutorial (6–7pm) | | | | | | |
| 21 2019 02 12 (Mon) | Lecture 25 (7–8:30pm) Lecture 27 20.1–20.4 Multiple Regression | | | | | |
| 2018–03–12 (Woll) 2018–03–13 (Tue) | DACM tutorial (6–7pm) | | | | | |
| Course tutorial (7–8:30pm) | | | | | | |
| 22 2018–03–19 (Mon) | Lecture 28 20.1–20.4 Multiple Regression (continued) | | | | | |
| 2018–03–19 (Woll) 2018–03–20 (Tue) | Lecture 29 20.1–20.4 Multiple Regression (continued) | | | | | |
| 23 2018–03–26 (Mon) | Lecture 30 21.1–21.6 Building Multiple Regression Models | | | | | |
| 2018–03–20 (Woll) 2018–03–27 (Tue) | Lecture 30 21.1–21.0 Building Wuldiple Regression Wodels Lecture 31 (continued) | | | | | |
| 24 2018–04–02 (Mon) | Lecture 32 Summary | | | | | |
| 2018–04–03 (Tue) | Test 5 (6–8pm) EX320, Exam Centre | | | | | |
| 2018–04–09 to 2018–04–30 Final exam period | | | | | | |
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Exercises from textbook

Work out at least 10 odd-numbered exercises from each chapter in the textbook. The more questions you work on, the better you will understand the material.

Statistics Tables

We use the following statistics tables in this course:

- Standard Normal Table
- Student's *t*–table
- *F*–table

These tables are posted in Blackboard and they will be attached to your tests and the final exam. These statistics tables look different than the statistics tables in the textbook. Make sure that you know how to read the statistics tables posted in Blackboard.