MCGILL UNIVERSITY

Desautels School of Management

SPRING 2017 EXCHANGE REPORT



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Bachelor of Science in Quantitative Finance, Class of 2018

January

I arrived in Montreal on January 1st, 3 days before the school officially start so as to make myself ready for the coming semester. Instead of living on campus, I rent a single room in EVO Montreal. The first thing I did after unloading my packages was walking along Rue St. Catherine, the major shopping street in the city, to equip myself with daily necessities. As for course registration, exchange students need to drop at the administrative office and talk with the advisor while making registration. Like HKUST, McGill also has the add/drop period which lasts for 2 weeks, granting students the freedom to choose curriculums that suit them best.

February

After adapting ourselves in the first month, February is the month for most exchange students to step out of the comfort zone and explore the city with newly-met friends! The city exploration is accompanied with self-exploration. It's always a pleasure to walk down the panes and hear the clatter of horse's hoofs. It's a bit sad that during the months that I stayed, the city was under construction. So, be extra careful when crossing the road especially in winter term as the road is extremely slippery! Students can register for OPUS card in Berriugam station in Montreal. Having the card on hand, we can enjoy unlimited times of travel by means of transport.

March

Most midterm exams and presentations took place in the beginning of March, also the spring break. Therefore, it's wise to plan ahead. The spring break usually lasts for 10 days in McGill and it serves as a great opportunity to travel around. I went to Quebec City, Toronto and Ottawa during the break. There are intercity trains in major cities in Canada which are super convenient with WIFI in the cabin. You can also take Greyhound or Megabus.

April

April is the month to wrap up. Due to the workload of finals, the student density in libraries is much higher than usual. As the temperature also climbed up, the snow melts and people start to shed off their clothes. There's finally a sense of Spring in town!

Part 2 - General Exchange Information

Visa procedures

For local Hong Kong students staying in Canada for 6 months or less, visa is not required. For mainland China students, we need to apply for tourist's visa (student category).

For more information, check http://www.canadainternational.gc.ca/hong_kong/.

Accommodation

I stayed in Evo Montreal during exchange and I really love the residential experience. I lived in a studio and the monthly rent is 1100 CAD. Overall, the living experience is amazing. There's 7/24 security, providing a worry free environment. Walking downstairs for several minutes, the subway station will be right in front of you. There are supermarkets and the entrance of underground city is only 5-min walk. Evo also host yoga, cooking and boxing lessons for free, which enables a vibrant lifestyle.

Mcgill offered on-campus housing in my year and some exchange students also chose to live on campus so as to fully immerse themselves with local students. There's also a rental group on facebook. Though never use it myself, I heard that some friends of mine got housing information from the group.

Some useful links:

http://www.mcgill.ca/students/housing/fees-applying/undergrad-downtown-fees

http://www.evomontreal.com/

Courses

In total I took four courses:

Fine 442: CAPITAL MARKETS & INSTITUTIONS

The course is designed to provide a strong background in the field of macro-finance which will prepare students for further study in this area. We will study money, banking and capital markets. In particular, we will focus on risks faced by financial institutions and techniques of risk mitigation.

Explain the role of the financial system, the function of direct and indirect financial markets and the role of financial institutions.

Explain the characteristics and yield measurements of money market instruments.

Explain the characteristics and yield measurements of bond market instruments.

Explain what Strips are.

Discuss the central bank's financial statements and how it conducts monetary policy.

Discuss the depository institutions' financial statements.

Explain the profitability-versus-safety trade-off faced by depository and non-depository institutions.

Describe how financial institutions manage their liquidity risk.

Describe how financial institutions measure interest rate risk.

Discuss how financial institutions can minimize their interest rate risk.

Explain the methods employed by banks to manage the credit risk.

Discuss the foreign currency risk involved in foreign lending and related hedging techniques.

Explain loan sales, securitization of Mortgages and the details of CMO & Pass-through.

Describe the capital requirement faced by banks.

FINE 451: FIX INCOME ANALYSIS

Below are topics we covered:
Bond pricing, yields, and returns
Bond arbitrage
Forward rates and bond futures
Term structure of interest rates
Duration, Convexity, and bond hedging
Carry and Slide
Floating rate bonds
Interest rate swaps
Inflation linked bonds
Corporate bonds and credit risk
Credit Default Swaps
Bonds with embedded options
Caps and Floors

FINE 443: APPLIED CORPORATE FINANCE

Practicing managers have always faced complex problems that require skill, experience and knowledge. However, the challenge today is greater than ever in the face of the following developments in the recent decades: the world-wide product, capital, and managerial markets have become highly integrated, sophisticated, and yes, more volatile; policy making, especially financial policy making, has become more rigorous deriving from the benefits of the computing revolution and the financial engineering revolution; and academics have developed new and sophisticated theories for understanding and coping with many of the financial management problems encountered by corporations, e.g., risk management.

As the skills and knowledge needed by managers have increased, so has the need for students to be trained in both practical and theoretical natures of finance problems facing managers and to have the tools and skills to solve them. The purpose of this course is to provide an applied corporate finance view of the business world by joining theory and practice.

ECON 338: INTRO TO ECONOMETRICS 2

Students should have the equivalent of ECON 227 to take this course, namely familiarity with simple and multiple regression, together with a bit of matrix technique, principally through EXCEL. Some knowledge of calculus is highly desirable. The main thrust of the course is forecasting methods, although some additional topics appear. Some real data sets, including the well-known Box-Jenkins airline data, will be used for examples and problems. Work will be done using statistics software, such as MINITAB and EXCEL.

Topics we covered:

Review of matrix methods in regression

Time-series models, transformations

Gauss-Markov Conditions

Durbin-Watson statistic, Cochrane-Orcutt prodedure.

Multiple regression with indicator variables for seasons, deseasonalisation

Stationarity, finite differences, log transformations

Exponential smoothing

Holt-Winters methods

Seasonal models

Backshift operator, ARIMA, Box-Jenkins models

Chow Test

Social Clubs & Networking Opportunities

i met most of the exchange friends during frosh. The school will also send regular emails to keep everyone posted on social events. There's also a Facebook group where every Mcgill students are welcome to join. Teammates from the same class can also be resources for networking almost people get to know each other based on mutual friends. It can be your professor, people live next door, students interested in the same club... You can make new friends everywhere in Mcgill!

Health & Safety

It's very important to keep healthy during exchange as the medical system may be completely different. most students would go to school clinic. Though cheap, there are really limited quota and the illness may be delayed. Generally speaking, the medical system in Montreal wasn't very convenient and it may take you weeks to get a thorough check... Be sure to keep warm in the extreme coldness as many friends of mine had caught cold which is a real suffer under such a low temperature.

Food

As I lived off campus, so I didn't get the meal plan. I went to St. Catherine for food most of the times... there're several nice places to eat near school - Atti, Kantapia, Opiano... So popular that there's such a high chance you will meet your classmates or even professor here!

Climate

Needless to say that the temperature is lower than what you expected. There's still blizzard in March... the frequency of snowing is so high and the temperature started to rise one week before I leave... what a shame!

Communication

My monthly phone plan is under Fido. Recommend!

Banking

Bank of Montreal has a debit card which has master functions, which suits the need for exchange student a lot. There's a limit of max 30 times of usage.

Transportation

I applied for the OPUS student card at Berri-uqam station. the monthly fee is 50 cad without limit on usage.

Checklist

- √ winter clothes (goose jacket)
- ✓ gloves, scarf and winter boots

- \checkmark battery, powerbank
- ✓ adaptors
- $\checkmark~$ computer, calculator, USB, camera... daily electronics
- $\checkmark \quad \text{related identification documents}$