COURSE SYLLABUS

UNIVERSITY OF REGINA

PAUL J. HILL SCHOOL OF BUSINESS - FACULTY OF BUSINESS ADMINISTRATION

INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT (BUS 497-001)

January 8 – April 11, 2019 (winter) (CLASSROOM: ED 621; HRS: 4 pm - 6:45 pm Wednesday)

INSTRUCTOR: Dr. Arturo Rubalcava
OFFICE: Ed 565.5
PHONE: (306) 337-2388
OFFICE HOURS: Tuesdays 1:00 p.m. – 3:00 p.m.

Note: If these scheduled times are not convenient for you, I will certainly attempt to accommodate you at other times, providing you make an appointment in advance.

PREREQUISITES: BUS 290 and BUS 395
You should have working knowledge on intermediate micro and macroeconomics, mathematics and statistics including exponential, logarithmic functions, algebraic expressions, probability distributions, moments of distributions, hypothesis testing, and regressions. Additionally, you should have working knowledge of Excel to be applied in above areas.


Additional Material: References to relevant course websites, articles, class notes, and assignments will be posted on UR Courses.

CALENDAR DESCRIPTION
The course examines the principles and techniques of investing in financial assets. Topics include asset allocation, security selection, performance measurement, stocks, bonds, and derivatives.

This course aims to help students in understanding concepts from: (1) The role and operation of financial markets, (2) Modern Portfolio Theory, (3) Asset Pricing Models, (4) Methods for analyzing securities, (5) Portfolio measurement and (6) Derivatives.

TEACHING METHODS
Because of the size of the class, course material will be presented in primarily a lecture format. The lectures will concentrate on developing the key concepts and providing real-world applications. However, class participation is strongly encouraged. Feel free to ask questions and/or raise discussion points during the lectures.

Always study the relevant text chapters before you come to class. Quizzes will be given at the beginning of the class and will be based mostly on material that you read in advance to the topic to be presented. These quizzes correspond to basic concepts and main ideas of the material to be covered. Reading in advance will help answer questions during class, should I direct one your way. No make-up quizzes will be given for any reason.

The topics to be covered are sequentially interrelated. It is very important you make the effort to grasp the basic concepts from the beginning chapters of your course outline since these concepts are needed to understand subsequent topics as the semester advances.

Students are also strongly encouraged to keep current on financial and business news. The Globe and Mail and the National Post are two excellent sources for such information, and students should get in the habit of reading at least one of these newspapers daily.

EVALUATION
• Two Midterm Exams 40%
(25% weighting for your highest score and 15% for your lowest score)

- **Final Exam**: 35%
- **Group Project**: 15%
- **Quizzes**: Approximately 10. Five questions each quiz: Multiple choice and/or true and false type of questions. **No make-up quizzes.** I’ll consider only the best 8 scores.
  - **Total**: 10%

**Midterm Exams:**
The midterm exam will be written on:
- Wednesday, February 13, 2019 (1¼ hrs)
- Wednesday, March 27, 2019 (1¼ hrs)

The first midterm will relate to course material covered up to that point. The second midterm will relate to course material covered between the first and second midterms. The *approximate* midterm exam format consists of three parts. Part I: True/False questions (20%), Part II: Multiple choice questions (30%), and Part III: open questions - qualitative and/or quantitative (50%): **Note:** In Part III, for quantitative problems you **must** show procedure to get marks. If you only provide the final answer, even if it is correct, **no** points will be granted. Check on UR Courses the icon folders, which contain samples of previous midterm exams and assignment questions. Formulas to answer the exams will be provided if needed.

**Final Exam:**
The final exam will be written on:
- Wednesday, April 17, 2017 (Hrs: 2:00 pm - 5:00 pm; Classroom TBA)

The final exam is **comprehensive** in nature, meaning that it covers material from the **entire** course. The exam format is similar to the first and second midterm tests.

**NOTE:** For all exams bring a calculator. Sharing your calculator with your classmates during exams is not allowed. The calculator should have at least the following functions: \( \ln \), exponential \( e^x \), \( x^y \), and \( 1/x \) in case you need them. A financial calculator is highly recommended.

**Team Project**
The team project consists of forming a portfolio of securities that you will be following along the semester. Maximum number of students in a team is 5. You are required to apply the techniques learned in class to enhance the performance of your portfolio. You can get the data needed for the project on [http://ca.finance.yahoo.com/](http://ca.finance.yahoo.com/); choose companies that you think will perform well over the next 13 weeks (From Jan 2nd to March 31st, 2019). You will have to submit the **first** report at the latest on February 27th, in which you show the stocks that you selected as well as their expected returns, variances and covariance (for each pair of securities in your portfolio and the overall bordered covariance matrix), the expected return and the standard deviation of your portfolio (based on the weights you selected for each stock). A **second** report is due on March 20th (e.g., spreadsheets showing the determination of the minimum variance portfolio with and without short sales using Excel Solver). The final report is due the last class (April 10th) and shows the evolution of your portfolio all along the semester, as well as the change you made on your portfolio **after** including the **optimization procedure** and the corresponding efficient portfolio. **Limit yourselves to Canadian stocks listed on the TSX that you can find in yahoo website.** If you included stocks listed on U.S. major stock markets (e.g., NYSE and NASDAQ) you have to convert the U.S. stock prices to Canadian prices using the appropriate exchange rate. The number of stocks in each portfolio is 10. **More details on the project will be posted on UR Courses.** Try to start your project as soon as you can to avoid any rush at the end. For a late submission of the project, there will be a **10% penalty for every hour** past the deadline. Remember that this is a group project; if a member of the group does not do her/his work on time and the submission of the project is delayed the entire team will be penalized.

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STUDENT RESPONSIBILITIES

1. Every effort should be made by you to ensure you write the **midterm exams during their scheduled times**. If a situation arises that makes it absolutely impossible for you to do this, you must let me know in advance (preferably as far in advance as possible).

   In the case of illness, you must provide me with a **physician's certificate** clearly stating that the illness prevented you from being able to write the exam.

   If you must miss the midterm due to illness or other extenuating circumstance, **no make-up exam** will be given. Instead, the **15% weight of the midterm** will be transferred to the final exam (i.e., 50%).

   **However, this weight transfer will not happen automatically. I will only transfer the weight if you provide me with a written request to do so** (i.e. if you do not write a midterm, and do not provide me with a written request to transfer the weight of the midterm to the final, you will automatically receive a grade of zero on the midterm). This **written request must explain the reason why you are unable to write the midterm, and must state that you wish to transfer the weight of the midterm to your final**.

   I will submit your written request and/or medical attestation to the Records Management of the Faculty of Business Administration at the end of the term.

2. Every effort should be made to ensure you are available to write the Final Exam during its scheduled time. If you are absolutely unable to write the Final during its scheduled time, you must see the general office in the faculty in which you are enrolled and formally request a deferred exam. **Deferred exams will only be granted in cases of exceptional circumstances (i.e. serious illness of the student, compassionate family reasons, etc.)**.

   Deferred exams will **not** be granted for any factors that are within the control of the student - i.e. travel plans, work conflicts, timetabling conflicts with exams in other courses, etc. Please adjust your schedule accordingly.

3. Regular class attendance is expected. If you must miss a class, it is your responsibility to get notes, assignments, etc., from a classmate.

4. Familiarize yourself with the University's general **Academic Regulations** as explained in the 2018-2019 Undergraduate Calendar, particularly those that pertain to **Academic Misconduct** (pages 40 and 41).

   (See **https://www.uregina.ca/student/registrar/resources-for-students/academic-calendars-and-schedule/undergraduate-calendar/index.html**)

   The Faculty of Business Administration has included in the Undergraduate Calendar a statement in section 10.5.4 as follows:

   **Students enrolled in Business courses at the University of Regina are expected to adhere rigorously to principles of intellectual integrity. Plagiarism is a form of intellectual dishonesty in which another person’s work is presented as one’s own. Plagiarism or cheating on examinations/assignments is a serious offence that may result in a zero grade on an assignment, a failing grade in a course, or expulsion from the University.** (Page 141).

   (See **https://www.uregina.ca/student/registrar/resources-for-students/academic-calendars-and-schedule/undergraduate-calendar/index.html**)

5. If there is any student in this course who, because of a **disability**, may have a need for accommodations,
please come and discuss this with me, as well as contacting the Centre for Student Accessibility at 306-585-4631. (See http://www.uregina.ca/student/accessibility/).

6. Communicating with me regarding any course-related matters (questions concerning the material, coverage of exams, etc.) must be done either:
   • by person (i.e. during my scheduled office hours, or by making an appointment),
   • by telephone, or
   • by email through UR Courses.

7. If you want to talk to me outside of class-time, please plan-ahead. Either make use of my scheduled office hours, or make an appointment to see me. Last-minute (ex. just before an exam) requests by students to talk to me cannot always be met, so planning-ahead is important.

Faculty of Business Administration Participant Pool:

Students can earn up to 2 marks for participating in research projects. These marks will be added to your final grade as long as you have passed the final exam AND passed the class. Research marks will NOT be considered if a student has not passed the final exam or class on his or her own work.

The Participant Pool provides students with the opportunity to participate in research studies to earn bonus credits that they can allocate toward eligible business classes (to a maximum of 2% per class).

For more information about our participant pool and to sign up for the studies, please visit the faculty website at https://www.uregina.ca/business/ and then find Pool of Research Participants under Quick Links. From there go to Sona Systems.

SCHEDULE OF TOPICS

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<thead>
<tr>
<th>Date</th>
<th>Topics</th>
<th>Chapter</th>
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<tbody>
<tr>
<td>Jan 9-16</td>
<td>- Introduction</td>
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<tr>
<td></td>
<td>- The Investment environment</td>
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<td></td>
<td>- Financial Markets and Instruments</td>
<td>2</td>
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<tr>
<td>Jan 16-23</td>
<td>- Trading on Securities Markets</td>
<td>3</td>
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<tr>
<td></td>
<td>- Return and Risk</td>
<td>4</td>
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<tr>
<td>Jan 30- Feb 6</td>
<td>- Capital Allocation</td>
<td>5</td>
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<tr>
<td></td>
<td>- Optimal Risky Portfolios</td>
<td>6</td>
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</tbody>
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**éal 13** - 1ST MIDTERM EXAM (75 min)

**éal 18-23** Midterm Break 😊

Feb 13-27  - The CAPM                                                  | 7       |

Feb 27 Due Date for 1st project report

Feb 27- Mar 6 - Index Models and the Arbitrage Pricing Theory            | 8       |

Mar 6 -13  - Bond Prices and Yields                                      | 12      |
Mar 13-20  - The Term Structure of Interest Rates                        | 13      |
Mar 20 Due Date for 2nd project report

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Mar 27 - 2nd MIDTERM EXAM (75 Min)

Mar 27  - Macroeconomics and Industry Analysis  15
Apr 3   - Equity Valuation Models  16
Apr 10  - Active Management and Performance Measurement  21
          - Options and other Derivatives

April 10  Due Date for Final Project in its entirety

April 17 (W) - FINAL EXAM: Comprehensive. It includes all material covered during the term.

Note: The above schedule is approximate only. I reserve the right to change the above schedule. I’ll notify you in advance if any change needs to be made.