# FINANCIAL ECONOMICS ECONOMICS EC3332 B-001

# Department of Economics Western University

Winter 2020

### **General Information:**

**Instructor** Jorge Cruz Lopez

Office SSC 4091

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Course Website <a href="https://owl.uwo.ca/portal">https://owl.uwo.ca/portal</a>

Office Hours Wednesdays 4:00PM to 6:00PM

**Term** Winter (January 6 to April 3, 2020)

**Lecture Times** Tuesdays 9:30AM to 11:30AM and

Thursdays 9:30AM to 10:30AM

**Lecture Location** UCC 58

Final Exam Date TBA

Final Exam Location TBA

Credits 0.50

Prerequisites <u>Economics 2220A/B, Economics 2222A/B,</u>

and Economics 2260A/B.

**Pre- or corequisites** <u>Economics 2261A/B, Economics 2223A/B.</u>

asset prices. Topics include market efficiency, portfolio choice, derivative securities, and the term structure of interest rates.

Undergraduate

**Inquiries** 

519-661-3507or SSC Room 4075 or econugrd@uwo.ca

# Registration

You are responsible for ensuring you are registered in the correct courses. If you are not registered in this course, the Department will not release any of your marks until your registration is corrected. You may check your timetable by using the Login on the Student Services website at <a href="https://student.uwo.ca">https://student.uwo.ca</a>. If you notice a problem, please contact your home Faculty Academic Counsellor immediately.

# **Prerequisite Note**

The prerequisites for this course are: **Economics 2220A/B, Economics 2222A/B, and Economics 2260A/B.** Pre-or Corequisite(s) are: **Economics 2261A/B, Economics 2223A/B.** 

You are responsible for ensuring that you have successfully completed all course prerequisites, and that you have not taken any anti-requisite courses. Lack of prerequisites may not be used as a basis for appeal. If you are found to be ineligible for a course, you may be removed from it at any time and you will receive no adjustment to your fees. This decision cannot be appealed.

If you find that you do not have the course prerequisites, it is in your best interest to drop the course well before the end of the add/drop period. Your prompt attention to this matter will not only help protect your academic record but will ensure that spaces become available for students who require the course in question for graduation.

# **Course Objectives**

The objective of this course is to introduce students to the theory and empirical methods underlying sound asset pricing and investment practices in financial markets. The course will also provide an overview of the institutional and contractual arrangements governing these markets. Topics include time value of money, risk and return trade-offs, portfolio choice, equilibrium and arbitrage pricing models, fixed income securities, financial institutions and, if time permits, selected topics on derivative securities.

## **Learning Outcomes**

After successful completion of the course, students should be able to:

- 1. Evaluate risk and return trade-offs in financial assets
- 2. Understand optimal portfolio allocation strategies
- 3. Understand the valuation of equity and fixed-income securities
- 4. Understand equilibrium and arbitrage pricing models
- 5. Develop simple investment and trading strategies
- 6. Understand the institutional environment governing financial markets in Canada

#### **Method of Instruction**

There will be two lectures per week. Lectures will consist of a combination of presentations and class discussions. In addition to the graded components of this course (see <u>Grading</u> section), readings and practice problems will be assigned every week. Readings can be found in the <u>Course Schedule and Readings</u> section of this outline. Practice problems will be posted in the course website. **Students are responsible for reviewing this material prior to each lecture.** 

Lectures are expected to be interactive and active participation is strongly encouraged and graded. During lectures, the instructor will randomly select students to present a brief summary of the assigned readings or practice problems. Students will be assigned participation marks based on the quality of their summaries and class discussions.

Please note that due to time constraints, not all assigned reading materials will be covered in class. However, students are still responsible for studying these materials as they will be included in the graded components of the course (i.e., assignments and exams).

# **Required Textbook**

There is one required textbook for this course:

Bodie, Z., Kane, A., Marcus, A.J., Switzer, L, Stapleton, M., Boyko, D., and Panasian, C. (2019), Investments, McGraw-Hill Ryerson, 9<sup>th</sup> Canadian Edition. ISBN-10: 1259271935.

## **Suggested Textbooks**

Students might want to consider using the following books to support their learning for this course and for future reference:

- Berk, J., DeMarzo, P., and Stangeland, D. (2018), Corporate Finance, Pearson Canada, 4<sup>th</sup> Canadian Edition. ISBN-10: 0134632281
- Campbell, J. (2017), Financial Decisions and Markets A Course in Asset Pricing, Princeton University Press, 1<sup>st</sup> Edition. ISBN-10: 0691160805.
- Cochrane, J. (2005), Asset Pricing, Princeton University Press, Revised Edition. ISBN-10: 0691121370.
- Hull, J., (2017), Options, Futures, and Other Derivatives, Pearson, 10<sup>th</sup> Edition. ISBN-10: 013447208X.
- Poitras, G. (2004), Security Analysis and Investment Strategy, Wiley-Blackwell 1<sup>st</sup> Edition. ISBN-10: 9781405112482.

#### **Additional Material**

Lecture notes, practice problems, assignments and other supplemental material will be available through the course website. Additional readings (e.g., book chapters, academic articles, etc.) will be available through the course website or the University Library.

Materials available for download from the course website will be posted in HTML, PDF, PowerPoint, Word or Excel format. Students should have access to these software packages.

## **Office Hours**

Students having difficulty understanding the course material, are strongly encouraged to attend office hours. It is in the best interest of students to clarify any questions that they might have regarding the course material as soon as they do not understand something. Most of the topics covered in this course require a clear understanding of concepts previously covered in class and in prerequisite and corequisite courses.

During office hours, the instructor will try to explain the concepts that need clarification. For questions involving assignments, students are required to show that they have seriously attempted to solve the assigned problems before the instructor provides any assistance. The instructor will not give the answers to any of the problems in the assignments prior to their due date.

#### **Communications**

Students should use email for communicating with the instructor outside of lectures and office hours. Questions that require typing equations or the explanation of complex concepts should be asked during office hours and will not be answered by email.

**Emails will be answered within 24 hours** <u>during weekdays only</u>. Emails sent on Fridays or during the weekend will be answered the following Monday. Emails sent during a holiday, will be answered the next working day.

All emails must be sent from valid Western University accounts. The subject should include the course code and number (ECON3332) and the email's signature should include the student's full name and student ID. Emails from third party accounts will be disregarded.

#### Grading

Participation	5%
Assignments (4 Problem Sets)	30%
Midterm Exam	30%
Final Exam	35%
Total	100%

# **Participation**

#### Work type:

Individual

#### Context:

- Students are expected to actively contribute to class discussions. During each lecture, the instructor will randomly select a few students to present a brief summary of the assigned readings and problems for that lecture.
- Students will have the option to join a **Trading Simulation Competition (TSC)**, where they can accumulate marks by placing and properly documenting trades. Additional instructions regarding the TSC will be provided during the first lecture.

#### **Evaluation:**

 Students will be evaluated based on the quality of their contributions to class discussions, as well as on their demonstrated ability to summarize, explain and apply the concepts covered in class and in the assigned readings.

# **Assignments (4 Problem Sets)**

#### Work type:

Groups (minimum 3 students, maximum 4 students)

#### Context:

- The assignments consist of four problem sets that should be solved in groups. Students
  can select their own groups, but they should remain the same group throughout the
  course.
- Students are required to submit a hard copy AND an electronic copy of their
  assignments. Hard copies should be submitted in class (one document per group).
  Electronic copies should be uploaded as a <u>single file</u> (preferably in PDF format) to the course website.
- Acceptable electronic formats for assignments are MS Word, MS Excel, and PDF. No other formats will be accepted.
- Students should always keep a hard copy of their assignments for their own records.
- Assignments must be typed and include the *Group Assignment Grading Sheet* provided in the course website.
- Equations and some calculations may be handwritten but all handwriting must be clear and legible. No marks will be given for work that is difficult to read or understand.
- All assignments (both hard and electronic copies) must be submitted by the beginning
  of the session when they are due. Students should check the course website to know
  when a new assignment is posted and when it is due.
- Assignments submitted by email will not be accepted.
- Students are expected to know how to use MS Excel, which might be required for completing assignments and other graded components of this course. Other software (e.g., R, Matlab, Python, etc.) may be used but it is not required.

#### **Evaluation:**

- Each group will be graded based on the accuracy and style of its assignments.
- In addition, each student's individual contribution will be evaluated by other group members using the *Group Assignment Grading Sheet*.
- Except for extenuating circumstances in which the student is granted accommodation according to University policies and procedures (see the *Policy on Tests, Final Exams and on Missed Academic Responsibilities* below), late assignments will not be accepted and will receive a grade of zero.
- Graded assignments will be returned to students within two weeks of their submission.

#### **Exams**

#### Work type:

Individual

#### Context:

- Students are required to write a midterm and a final exam.
- The midterm and the final exams are closed-book and closed-notes, in-class exams.
- The midterm exam will last 100 minutes. The final exam will last 160 minutes.
- Students should check the course website and the university exam schedule to confirm the date and time of the final exam.
- Both exams are cumulative and will cover all the material assigned up to the date of the exam (i.e., class notes, assignments, problems and required readings).
- Students can only use the following materials during exams:
  - Pens, pencils and erasers
  - Non-programmable calculators
  - One formula sheet
- These materials cannot be shared among students during the exams.
- The **formula sheet** for the midterm exam should not exceed one single-sided page. The formula sheet for the final exam should not exceed one double-sided page. **In both cases,** a page refers to a letter size page (215.9 × 279.4 millimeters or 8.50 × 11.00 inches).

#### **Evaluation:**

- Each exam will be graded out of 100 marks.
- Grades will be uploaded in the course website within two weeks of the exam date.

# Missing a Deadline or Exam

#### **Assignments:**

• Missing a deadline will result in obtaining a grade of zero in the corresponding course component. If students are in a situation where they cannot meet a deadline, they should contact the instructor before the deadline to discuss a possible extension. Extensions are only granted in very special circumstances and only when the student has been granted accommodation in accordance with University policies and procedures (see the Policy on Tests, Final Exams and on Missed Academic Responsibilities below).

#### Midterm Exam:

- Students unable to write an examination because of illness or other circumstances
  beyond their control must contact the instructor in writing as soon as possible explaining
  the situation in accordance to University policies. If students miss the midterm exam and
  have been granted accommodation in accordance with University policies and
  procedures, the weight of the midterm exam will be transferred to the final exam. The
  final exam for students who missed the midterm exam might be longer than that for
  students who did not miss the midterm exam in order to conduct a comprehensive
  assessment of the course material.
- Missing the midterm exam without a documented justification and accommodation granted in accordance with University policies and procedures, will result in a grade of zero for that component of the course.

#### **Final Exam:**

 Final exam deferrals will only be allowed when accommodation has been granted in accordance with University policies and procedures. Deferred exams are not granted for students who have made travel arrangements that conflict with the examination schedule. For additional information please consult the Policy on Tests, Final Exams and on Missed Academic Responsibilities.

# **Appealing a Grade**

#### **Assignments:**

If students disagree with the grade obtained in an assignment, they should submit a
written request to get their assignment regraded. Regrading requests should state why
the grade should be reviewed and they must be submitted no later than one week after
the grade for the assignment in question is released to students. Except as allowed by
University academic appeals policies (see
<a href="https://www.uwo.ca/univsec/pdf/academic policies/appeals/appealsundergrad.pdf">https://www.uwo.ca/univsec/pdf/academic policies/appeals/appealsundergrad.pdf</a>, no
claims will be accepted after one week.

#### Exams:

If students disagree with the grade obtained in the midterm exam, they should submit a
written request to get their exam regraded. Regrading requests should state why the
grade should be reviewed and they must be submitted no later than one week after the
lecture where exams are returned to students. Except as allowed by University academic
appeals policies (see
<a href="https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/appealsundergrad.pdf">https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/appealsundergrad.pdf</a>), no
claims will be accepted after this period.

# **Important Notes**

#### **Changes to Course Outline:**

• Every effort has been taken to make the information in this document as complete and as consistent as possible. However, the instructor reserves the right to modify the course outline or required material at his discretion. If this document is changed, the instructor will communicate the changes to the students registered in the course by email and an updated version of the outline will be posted on the course website.

#### Copyright:

 All lectures and all course materials, including lecture notes, presentations, supplementary notes, outlines, etc. are protected by copyright. Students may take notes and make copies of course materials for their own educational purposes only. Students may not record lectures, reproduce (or allow others to reproduce), post or distribute lecture notes, wiki material, and other course materials publicly and/or for commercial purposes without the written consent of the professor or authors.

# Course Schedule and Readings (Tentative and Subject to Change)\*:

Week	Dates	Topics	Readings	Comments
1	Jan 7, 9	Introduction: The Investment Environment, Financial Markets, Asset Classes and Instruments, Securities Trading, and Investment Companies.	Ch.1 to 4	Self Study: Ch. 2 and 4
2	Jan 14, 16	Risk, Return and the Historical Record	Ch.5	
3	Jan 21, 23	Capital Allocation to Risky Assets	Ch. 6	Due: A1 (Jan 23)
4	Jan 28, 30	Optimal Risky Portfolios	Ch.7, 9	
5	Feb 4, 6	The CAPM Index Models	Ch.9, 8	
6	Feb 11, 13	APT and Multifactor Models of Risk and Return	Ch. 10	Due: A2 (Feb 13)
7	Feb 18, 20	Spring Reading Week   Classes suspended		
8	Feb 25, 27	Feb 25: Midterm Exam		Midterm: Includes all material covered up to Week 8
9	Mar 3, 5	The EMH, Behavioural Finance and Technical Analysis Empirical Evidence on Security Returns	Ch. 11 to 13	Self study: Ch. 12
10	Mar 10, 12	Bond Prices and Yields	Ch. 14	Due: A3 (Mar 12)
11	Mar 17, 19	The Term Structure of Interest Rates	Ch. 15	
12	Mar 24, 26	Managing Bond Portfolios	Ch.16	Due: A4 (Mar 26)
13	Mar 31 Apr 2	Additional Topics (e.g., Derivatives, Security Analysis) and Review	Ch.16	
-	ТВА	FINAL EXAM		Final: Includes all material covered in the course

<sup>\*</sup> See course website for additional readings and changes

# Please Note Department Policies for 2019-2020

Remember that the University expects all students to take responsibility for their own Academic Programs. Students should also check their registration to ensure they are enrolled in the correct courses.

- 1. Guidelines and policies for the Faculty of Social Science and the Department of Economics are posted online in the current Western Academic Calendar at: <a href="http://westerncalendar.uwo.ca">http://westerncalendar.uwo.ca</a>.
- 2. Students must familiarize themselves with the "Rules of Conduct for Examinations" <a href="http://www.uwo.ca/univsec/pdf/academic policies/exam/administration.pdf">http://www.uwo.ca/univsec/pdf/academic policies/exam/administration.pdf</a>.
- 3. Cheating as an academic offence: Students are responsible for understanding what it means to "cheat". The Department of Economics treats cheating incidents very seriously and will investigate any suspect behavior. Students found guilty will incur penalties that could include a failing grade or being barred from future registration in other Economics courses or programs. The University may impose further penalties such as a notation on an official academic transcript, suspension or expulsion.
- 4. **Plagiarism:** Students must write their essays and assignments in their own words. When taking an idea/passage from another author, it must be acknowledged with quotation marks where appropriate and referenced with footnotes or citations. Plagiarism is an academic offence (see Scholastic Discipline for Undergraduate Students in the Western Calendar at <a href="http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1">http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1</a> <a href="http://westerncalendar=Live&ArchiveID=#Page\_20">http://westerncalendar=Live&ArchiveID=#Page\_20</a>).

Western University uses software to check for plagiarism and students may be required to electronically submit their work. Those found guilty will be penalized as noted in point 3.

- 5. It is a Department of Economics policy that **NO** assignments be dated, stamped or accepted by staff. Students must submit assignments in class or to the instructor during office hours.
- 6. When appealing a mark, students should refer to the Student Academic Appeals section in the current Western Academic Calendar at:

 $\frac{http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1}{\&SelectedCalendar=Live\&ArchiveID=\#Page\_14}$ 

Please note the relevant deadlines.

The Department will not consider an appeal unless an attempt has been made to settle the matter with the instructor first. Students who remain dissatisfied with the outcome may proceed with a written appeal (e-mails are not acceptable) to the Undergraduate Director in Economics, stating the reasons for their appeal. A checklist is provided at:

http://economics.uwo.ca/undergraduate/program counselling/responsibilities policies.html#ap peals.

7. Systematic adjustments of a class grade distribution (either up or down) can occur in Economics courses. The fact that grades have been adjusted is **not** grounds for an appeal.

8. Note the following add and drop deadlines:

Deadline to <u>add</u> a second term half course: January 14, 2020

Deadline to <u>drop</u> a second term half course: March 7, 2020

9. Faculty of Social Science policy states that oversleeping or misreading an exam schedule is NOT grounds for a makeup. This rule applies to midterm and final exams in the Department of Economics.

#### Policy on Tests, Final Exams and on Missed Academic Responsibilities

Students who proceed to write a test or examination must be prepared to accept the mark. Rewriting tests or examinations, or retroactive reweighting of marks, is **not** permitted. Students must book travel arrangements AFTER final exam dates have been posted; travel is not an acceptable excuse for absence from a final exam.

Students who are temporarily unable to meet academic requirements due to extenuating circumstances can follow Western University procedures to request academic consideration through the following routes:

a) Submit a Self-Reported Absence form if the conditions for submission are met (e.g., only for exams or assessments worth 30% or less of the course mark; not applicable to final exams; maximum 2 self-reported absences per academic year; see <u>link</u> for full list of conditions and info).

If the conditions for submission of a Self-Reported Absence form are not met, then:

- b) For medical absences, submit a Student Medical Certificate (SMC) signed by a licensed medical or mental health practitioner along with a request for academic consideration to Academic Counselling in the student's home Faculty (see link for full info); or
- c) For <u>non-medical</u> absences (e.g., religious or compassionate), submit appropriate documentation to Academic Counselling in the student's home Faculty (see <u>link</u> for full info).

It is strongly recommended that students notify their instructors as soon as possible. University policy is that students **must** communicate with their instructors no later than **24 hours** after the end of the period covered by either the self-reported absence or SMC, or immediately upon their return following a documented absence. Failure to follow University policy and procedures may result in denial of academic accommodation and a grade of zero. Students should also set up an appointment to meet with their instructor as soon as possible. If the instructor is not available, send an email message, copying the Undergraduate Coordinator at <a href="mailto:econugra@uwo.ca">econugra@uwo.ca</a>.

Note: Academic consideration is not normally intended for long-term, recurring absences, an existing disability, or high levels of stress related to academic performance. In such cases, students should consult their academic counsellor. See <a href="Link">Link</a> for full information.

In all cases, if the documentation submitted to request academic consideration is not acceptable, students will receive a grade of zero for the missed test, exam, or assignment.

For full information about Western University's policies and procedures for student absences and requests for academic consideration, please visit this <u>link</u>.

#### **Policies Regarding Academic Accommodation**

The Faculty of Social Science's policies regarding academic accommodation is found at <a href="http://counselling.ssc.uwo.ca/procedures/having\_problems/index.html">http://counselling.ssc.uwo.ca/procedures/having\_problems/index.html</a>. "Academic Rights and Responsibilities" are also outlined in the Western Calendar at <a href="http://westerncalendar.uwo.ca/PolicyPages.cfm?PolicyCategoryID=1&command=showCategory&SelectedCalendar=Live&ArchiveID=">http://westerncalendar.uwo.ca/PolicyPages.cfm?PolicyCategoryID=1&command=showCategory&SelectedCalendar=Live&ArchiveID=</a>. Claiming that "you didn't know what to do" is not an acceptable excuse for not following the stated procedures.

# **Policy Regarding Class Attendance**

If the instructor deems a student's class attendance as unsatisfactory, that student may be prohibited from writing the final examination. If there is intent to make use of this University policy, the student will be notified in writing.

#### **Statement on Mental Health and Support Services**

Students under emotional/mental distress should visit <a href="http://uwo.ca/health/mental\_wellbeing/">http://uwo.ca/health/mental\_wellbeing/</a> for more information and a complete list of resources on how to obtain help.