

#### **COURSE INFORMATION**

Course title: Corporate Finance

Course code: BAFI 502 Credits: 1.5 Session, term, period: 2023W, 2 Class location: HA 133

Section(s): 301 Class times: 8:30am-4:00pm

Course duration: Class: Apr 7, Apr 21, May 5 2024 Pre-requisites: BAFI 550

Division: Finance Co-requisites: --

Program: PMBA Final Exam: May 19 2024 (details TBA)

#### INSTRUCTOR INFORMATION

Instructor: Hernan Ortiz-Molina, Associate Professor of Finance

Website: https://sites.google.com/site/hortizmolinaubc/

Phone: 604-822-6095 Office location: HA 876 / Zoom link on Canvas Email: Office hours: Wed 7:00-8:00pm (Zoom)

### **COURSE DESCRIPTION**

This course teaches students how to develop a financial plan and value a project or business. It asks important questions such as: how much money do you need to run your business or project, what is your business or project worth, what will it cost to raise financing, what is the ideal financing mix for your firm, and when/how to pay back investors. Students undertake hands-on practical applications involving spreadsheet analysis as well as learning the underlying corporate finance concepts. The course is designed for students considering careers in, or that involve aspects of: corporate finance, banking, venture capital, entrepreneurial finance, investments, mergers & acquisitions, strategic planning and decision-making, management consulting and general business management. This is an <u>intensive course</u> which involves a fair amount of preparation/study time and other activities outside regular class times.

### **COURSE FORMAT**

In addition to regular class time, the course requires that you prepare for each class by watching prerecorded instructional videos. The videos contain the conceptual discussion of many topics covered in
class, so it is <u>very important</u> that you watch them carefully in advance of our classes. A large fraction of
our class time will be devoted to applications of the material covered in the videos. We will also use our
class time for discussion and problem solving. Learning is also supported by the relevant chapters in the
textbook, assignments, and additional practice material on Canvas. For each class, you will watch up to
65 minutes of pre-recorded video ahead of class and then attend class during 8:30-4:00pm. Last, should
any health issues impede the instructor's ability to teach in person, the backup plan is to use Zoom as
needed, so please make sure you have a Zoom account up and running just in case.

# **LEARNING OBJECTIVES**

By the end of this course, students will be able to:

- Develop a financial plan to operate a business or project including estimating funds required and burn rate
- Forecast a project's free cash flow, estimate its cost of capital, compute its value, describe sources of project value, and assess the limitations of such an analysis
- Value firms or projects using multiples and alternative methods and identify their practicality in specific situations

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- Consider valuation techniques and issues for raising market financing, bank financing or venture capital and undertaking mergers & acquisitions
- Describe the connection between a firm's financing decisions, cost of capital, and value and the mechanics and effects of changes in firm capital structure.
- Evaluate a firm's financing decisions and describe the roles of taxes, bankruptcy/distress costs, information asymmetries, agency problems, and interactions in product markets.
- Evaluate a firm's decision to pay out its excess cash to investors or to retain it in the firm, and whether to do it using dividends or repurchases, and identify which firms should pay out vs retain excess funds.

### **ASSESSMENTS**

## *Summary*

Component	Weight
Online quizzes	30%
Group project	20%
Participation / Engagement	10%
Final exam (online)	40%
Total	100%

# Details of Assessments

# **Individual online quizzes on Canvas:**

The objective of the quizzes is to help students build an understanding the conceptual material discussed in class and to provide feedback on their progress ahead of the final exam. You will work on two online quizzes that are individual (i.e., joint work on these quizzes is considered academic misconduct) and must be completed by the specified deadlines. Students who do not submit a quiz by the specified deadline will receive a grade of zero in that quiz unless the MBA office approves an academic concession, in which case the weight will be allocated to the remaining quiz. You can take each quiz anytime during the specified period the quiz is open but must submit it before the deadline. Once you start a quiz, you have a limited amount of time to complete it and one attempt. Each quiz contains 12 choice questions and 4 problems that require calculations / numerical answers. All quizzes are open book and open notes; you can also use a calculator and Excel. It is highly recommended that you fully digest the class material and related practice before attempting these quizzes. The schedule is:

Assignment	Available	Due
Online quiz 1 (covers class 1)	April 7 (Sun) at 4:00pm	April 21 (Sun) at 11:59pm
Online quiz 2 (covers class 2)	April 21 (Sun) at 4:00pm	May 5 (Sun) at 11:59pm

# Group project:

The objective of the project is to apply the material discussed in class in a realistic situation and to develop an appreciation of the practical difficulties that financial analysts often face in doing their jobs. After the deadline to drop/add courses, the instructor will form groups of several students and publish the list on Canvas. Each group will then work on a project TBA and must upload the work on Canvas by **Sunday May 12 (at 11:59pm).** Submissions will not be accepted after the deadline. Individual grades on team assignments may be subject to adjustment based on <u>peer evaluations</u>. Reductions can be

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significant if an individual contributed little to the team. Generally, where team members are reliable and contribute, adjustments are not made. All group members must fill in the peer evaluations.

## Participation / engagement:

The objective is to stimulate the exchange of ideas in a friendly academic environment and, more generally, to stimulate student engagement with the course material. High standards of professionalism are expected both during class discussion and office hours as well as in your interactions with peers during group assignments. Questions and the sharing of ideas during class are always welcomed, but students should focus on what is directly relevant to the class material. Office hours and breaks are appropriate for any other discussion of your interest, which is also very welcomed. The instructor will broadly evaluate each student's overall contribution to the learning environment in the course, including contributions during class, office hours, breaks, or in any other relevant forum.

### Final exam:

The objective of the final exam is to assess student's understanding of the conceptual material by the end of the course. The exam will be **online** using Canvas on **May 19 2023 (time TBA)**. It is open book and notes, with a formula sheet provided, and you can use a calculator as needed. The final exam can be any mixture of multiple-choice questions, essay-type questions, and problems requiring numerical solutions as well as economic interpretation. The best way to prepare for the exam is by (i) understanding the videos, lectures notes, and class discussion of cases, (ii) reading the appropriate sections of the textbook, and (iii) working on the ungraded problem sets.

## **LEARNING MATERIALS**

<u>Textbook:</u> Berk, DeMarzo, Harford, Stangeland, Marosi, *Fundamentals of Corporate Finance*, 4<sup>th</sup> (or 3<sup>rd</sup>) Canadian Edition (BDHSM), same book as BAFI 550. We will not follow the textbook exactly, but this book still provides a great background reading for all topics we will cover in class. It is also a great reference to keep in your bookshelf as it might be useful in the course of your future career in finance. The cost new is about \$180 (3<sup>rd</sup> Ed, hardcover) and \$95 (4<sup>th</sup> Ed, kindle edition) on Amazon. You can also purchase a limited 12-month access to the eTextbook (4<sup>th</sup> Ed) from the Pearson Canada Website for \$65. The textbook does not include access to *MyFinanceLab*, a practice resource, but we **will not** use this in our course so there is no need to purchase it (we will use the more advanced practice material provided in Canvas instead).

<u>On Canvas:</u> Videos, lecture notes, problem sets & solutions, guidelines for project, additional readings, etc. Understanding the content of the videos and lecture notes is essential to do well in the course. The problem sets do not need to be turned in as they are not graded. However, they are a key part of the learning process, so work on them carefully either alone or in teams and master the material.

## **COURSE-SPECIFIC POLICIES AND RESOURCES**

### Missed or late assignments, and regrading of assessments

The standard RHL policy is that late submissions will not be accepted and will receive a grade of zero. More specifically for BAFI 502: (1) group projects and case write ups must be uploaded on Canvas by the deadline; late submissions will not be accepted and will receive a grade of zero; (2) the individual quizzes must be completed on Canvas by the deadline; students who miss the deadline and are granted academic concessions will have the weight allocated to the remaining quizzes; (3) exams and

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assignments are carefully graded by the instructor; students can ask for a regrade and grades are final after such regrade.

### Academic Concessions

If extenuating circumstances arise, please contact the RHL Graduate School program office as early as reasonably possible, and submit an <a href="Academic Concession Request & Declaration Form">Academic Concession Request & Declaration Form</a>
<a href="https://webforms.sauder.ubc.ca/academic-concession-rhlee">https://webforms.sauder.ubc.ca/academic-concession-rhlee</a>. If an academic concession is granted during the course, the student will be provided options by RHL, or by the instructor in consultation with RHL, per UBC's policy on Academic Concession.

Other Course Policies and Resources

## Not applicable to BAFI 502

# Code Plagiarism

Code plagiarism falls under the UBC policy for <u>Academic Misconduct</u>. Students must correctly cite any code that has been authored by someone else or by the student themselves for other assignments. Cases of "reuse" may include, but are not limited to:

- the reproduction (copying and pasting) of code with none or minimal reformatting (e.g., changing the name of the variables)
- the translation of an algorithm or a script from a language to another
- the generation of code by automatic code-generations software

An "adequate acknowledgement" requires a detailed identification of the (parts of the) code reused and a full citation of the original source code that has been reused.

Students are responsible for ensuring that any work submitted does not constitute plagiarism. Students who are in any doubt as to what constitutes plagiarism should consult their instructor before handing in any assignments.

# POLICIES APPLICABLE TO COURSES IN THE ROBERT H. LEE GRADUATE SCHOOL

## Attendance

Excepting extenuating circumstances, students are expected to attend 100% of their scheduled class hours. Absent students limit their own academic potential, and that of their classmates, and cause unnecessary disruption to the learning environment. Students missing more than 20% of the total scheduled class hours for a course (including classes held during the add/drop period) without having received an academic concession will be withdrawn from that course. Withdrawals, depending on timing, could result in a "W" or an "F" standing on the transcript.

## COVID-19 Policies for Attendance & Academic Concessions:

If a student feels unwell, they should stay home and send a courtesy email to each impacted instructor and cc their program manager. The student should also submit an <u>Academic Concession Request & Declaration Form</u>.

If a student suspects possible COVID-19 infection, they should use the BC Ministry of Health's <u>self-assessment tool</u>, to help determine whether further assessment or testing for COVID-19 is recommended.

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### **Punctuality**

Students are expected to arrive for classes and activities on time and fully prepared to engage. Late arrivals may be refused entry at the discretion of the instructor or activity lead. Students arriving later than halfway through a scheduled class will be treated as absent for that class.

### *Electronic Devices*

Devices such as laptops, tablets, and cell phones are not permitted to be used in class unless directed by the instructor for in-class activities. Students who do not follow the School's policy in this regard may be required to leave the room for the remainder of the class, so that they do not distract others. Research shows that students' use of laptops in class has negative implications for the learning environment, including reducing their own grades and the grades of those sitting around them.

## Citation Style

Please use the American Psychological Association (APA) reference style to cite your sources.

Details of the above policies and other RHL Policies are available at: <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,1625">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,199,506,1625</a>

### UNIVERSITY POLICIES AND RESOURCES

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available on the UBC Senate website at <a href="https://senate.ubc.ca/policies-resources-support-student-success">https://senate.ubc.ca/policies-resources-support-student-success</a>.

# Respect for Equity, Diversity, and Inclusion

The UBC Sauder School of Business strives to promote an intellectual community that is enhanced by diversity along various dimensions including status as a First Nation, Metis, Inuit, or Indigenous person, race, ethnicity, gender identity, sexual orientation, religion, political beliefs, social class, and/or disability. It is critical that students from diverse backgrounds and perspectives be valued in and well-served by their courses. Furthermore, the diversity that students bring to the classroom should be viewed as a resource, benefit, and source of strength for your learning experience. It is expected that all students and members of our community conduct themselves with empathy and respect for others.

# Academic Integrity

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating

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may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred to the President's Advisory Committee on Student Discipline. Careful records are kept in order to monitor and prevent recurrences.

## *Use of Artificial Intelligence*

Any work submitted must be your own original work, written without outside assistance or collaboration. Any use of generative artificial intelligence (AI), including ChatGPT, is not permitted and constitutes academic misconduct. Any student suspected of submitting work that includes AI generated content may be asked for preliminary work or other materials to evidence the student's original and unaided authorship. The student may also be asked to separately explain or support their work. AI identification methods may also be employed by the instructor. After review, if it is determined by the instructor that submitted work likely contains AI generated content, the work may receive a zero and may be subject to further misconduct measures set out in the <u>UBC Academic Calendar</u>.

### **COPYRIGHT**

All materials of this course (course handouts, lecture slides, assessments, course readings, etc.) are the intellectual property of the instructor or licensed to be used in this course by the copyright owner. Redistribution of these materials by any means without permission of the copyright holder(s) constitutes a breach of copyright and may lead to academic discipline and could be subject to legal action. Any lecture recordings are for the sole use of the instructor and students enrolled in the class. In no case may the lecture recording or part of the recording be used by students for any other purpose, either personal or commercial. Further, audio or video recording of classes are not permitted without the prior consent of the instructor. Students may not share class Zoom links or invite others who are not registered to view sessions.

# **ACKNOWLEDGEMENT**

UBC's Point Grey Campus is located on the traditional, ancestral, and unceded territory of the  $x^w m \theta k^w \partial \theta m$  (Musqueam) people, who for millennia have passed on their culture, history, and traditions from one generation to the next on this site.

## **COURSE SCHEDULE**

We will try to follow the schedule below in each of the three days we meet, but please be aware that we might need to deviate slightly from this plan if circumstances require it:

Class (60 min)	8:30 - 9:30
Break (15 min)	9:30 - 9:45
Class (60 min)	9:45 - 10:45
Break (15 min)	10:45 - 11:00
Class (60 min)	11:00 - 12:00
Lunch break (60 min)	12:00 - 1:00
Class (60 min)	1:00 - 2:00

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Break (15 min)	2:00 - 2:15
Class (60 min)	2:15 - 3:15
Break (15 min)	3:15 - 3:30
Class (30 min)	3:30 - 4:00

The plan for each class day is listed below. **Note it is essential that you carefully watch all required videos before coming to class**. It is also recommended that you look at the slides and spreadsheets associated with the material we will discuss in each class, even if briefly. The BDMS textbook provides a good coverage of most of the topics and reading the relevant chapters / sections will help you digest the material. The exact references are listed next to each topic.

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## Class 1 - April 7

The class deals with the valuation of firms or projects using discounted cash flow (DCF) and net present value (NPV) analyses. The goal is to understand the logic of valuation and its key elements as well as to gain insight on the key practical issues involved in valuation. We will focus on the distinction between the valuations of unlevered and levered firms or projects, the estimation of free cash flows, and the calculation of the relevant discount rates. We will also discuss when a firm's cost of capital is the right discount rate for its new projects, and the use of payback periods in capital budgeting.

Watch the videos before class as we will only briefly review that material during class time:

- Overview of valuation (10 min)
- The logic of DCF analysis (10 min)
- Free cash flow (30 min)
- Cost of capital for the unlevered firm (19 min)

Below is the conceptual roadmap for the class (again, watch the four videos ahead of class):

Topic	Readings / Material
Course introduction & overview	Syllabus
Overview of valuation (video)	BDHSM: 4.1 - 4.2 ; 4.4
The logic of DCF analysis (video)	BDHSM: 5.4 ; 8.1 – 8.3
Free cash flow (video)	BDHSM: 7.6 ; 9.1 - 9.4
FCF of the New SUV Project	Class 1 – Excel
Terminal values, uncertainty, and CCA	BDHSM: 9.4 - 9.5 / Spreadsheet
Cost of capital for the unlevered firm (video)	BDHSM: 10.4 - 10.5 ; 11.3 - 11.4
Estimating the cost of capital for an unlevered firm	Class 1 – Excel
DCF valuation of a levered firm	BDHSM: 7.6 ; 12.1 - 12.4 21.2
Estimating the cost of capital for a levered firm	Class 1 – Excel
Project vs. firm cost of capital	BDHSM: 12.5
Project vs. firm cost of capital - Applications	
Payback period	BDHSM: 8.3

Reflect on the material, work on the ungraded practice questions, and then do online Quiz 1 (graded).

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## Class 2 - April 21

The class deals with four different topics. The first is the valuation of firms or projects using multiples and making capital budgeting decisions based on the internal rate of return and hurdle rates. The second is the use of financial ratios to assess a firm's financial condition. The third is financial planning for future years and the construction of the pro-forma financial statements behind a business plan. The fourth topic is the effect of capital structure choices on firm value and cost of capital.

Watch the videos before class as we will only briefly review that material during class time:

- Valuation with multiples (23 min)
- Financial Ratios (17 min)
- Also look at Exxon Mobile spreadsheets
- Capital structure with perfect capital markets (24 min)

Below is the conceptual roadmap for the class (again, watch the four videos ahead of class):

Торіс	Readings / Material
IRR & hurdle rates	BDHSM: 8.3; 8.7
Valuation with multiples (video)	BDHSM: 7.7
Valuation with multiples - Applications	Class 2 – Excel
Financial Ratios (video)	BDHSM: 2.6
Financial Analysis of Exxon Mobile	Class 2 - Excel
Financial Planning Models (Basics)	BDHSM: 2.1 - 2.4 ; 18.1 -18.5
	Class 2 - Excel
Capital structure with perfect capital markets (video)	BDHSM: 16.1 - 16.2
Leveraged recapitalization & fallacies with perfect capital markets	BDHSM: 16.2
Capital structure with corporate taxes	BDHSM: 16.3

Reflect on the material, work on the ungraded practice questions, and then do online Quiz 2 (graded).



## Class 3 - May 5

The class deals with six topics. First, we will analyze leverage-increasing transactions with corporate taxes. Second, we will discuss three alternative valuation approaches for levered firms. Third, we will discuss theories of capital structure choices and their empirical relevance. Fourth, we will switch gears to the study of payout policy – whether firms should return cash to investors and how they should do it. Fifth, we will briefly discuss key corporate governance issues. Sixth, we will briefly discuss the nature of private equity deals and describe in detail how practitioners typically approach the valuation of young startups and mature firms that are candidates for leveraged acquisitions.

Watch the videos before class as we will only briefly review that material during class time:

- More on Valuation: WACCC, FTE, and APV (19 min)
- Also look at H&A Corp spreadsheet
- Payout policy With perfect capital markets (14 min)
- Introduction to private equity (11 min)
- Corporate governance (17 min)

Below is the conceptual roadmap for the class (again, watch the three videos ahead of class):

Topic	Readings / Material
Capital structure with corporate taxes - Leveraged recap	BDHSM: 16.3
More on Valuation: WACCC, FTE, and APV (video)	Class 3 - Excel
Discussion of Valuation Methods	
Capital structure theories - The tradeoff theory	BDHSM: 16.4 - 16.513-22
Capital structure theories - Debt and incentives	BDHSM: 16.6 - 16.7
Capital Structure Theories - Asymmetric info & other factors	BDHSM: 16.6 - 16.7
Payout policy - With perfect capital markets (video)	BDHSM: 17.1 - 17.2
Payout policy - Taxes and other capital markets imperfections	BDHSM: 17.3 - 17.7
Introduction to private equity (video)	BDHSM: 14.1
The venture capital method to value startups	Class 3 – Excel (Solar Corp)
Valuation of LBO targets - practitioner approach	Class 3 – Excel (AAA Corp)
Corporate Governance (video) (#)	BDHSM: 25.1 - 25.7
Corporate Governance – Discussion (time permitting)	

Reflect on the material and work on the ungraded practice questions.

(#) The video contains the key material (broad picture ideas) you need to understand for the final exam. If time permits, we will discuss a few applications in class as well (but otherwise the video is the key).

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# **KEY DUE DATES:**

Assignment	Available	Due
Online quiz 1 (covers class 1)	April 7 (Sun) at 4:00pm	April 21 (Sun) at 11:59pm
Online quiz 2 (covers class 2)	April 21 (Sun) at 4:00pm	May 5 (Sun) at 11:59pm
Group project	April 21 (Sun) at 4:00pm	May 12 (Sun) at 11:59pm

**Note:** given a tight schedule, these due dates cannot be changed. Make sure you plan accordingly.

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