# UBC SAUDER SCHOOL OF BUSINESS

#### COURSE INFORMATION

Course title:	Corporate Finance		
Course code:	BAFI 502	Credits:	1.5
Session, term, period:	2020W	Class location:	Zoom
Section(s):	301	Class times:	April 11, April 25, May 9, 2021
			8:30am-4:00pm
Course duration:	Sunday, April 11, April 25,	Pre-requisites:	BAFI 500 or BAFI 550
	May 9 and May 30 (exam)		
Division:	Finance	Co-requisites:	
Program:	РМВА		
Division: Program:	Finance PMBA	Co-requisites:	

#### **INSTRUCTOR INFORMATION**

Instructor:	Hernan Ortiz-Molina, Associate	Hernan Ortiz-Molina, Associate Professor of Finance		
Website:	https://sites.google.com/site/ho	https://sites.google.com/site/hortizmolinaubc/		
Phone:	604-822-6095	Office location:	HA 876	
Email:	ortizmolina@sauder.ubc.ca	Office hours:	Tuesdays 6:00-7:00pm	

#### **COURSE DESCRIPTION**

This course provides students with a rigorous conceptual understanding and working knowledge of fundamental issues in corporate finance, including capital budgeting, capital structure, payout policy, and valuation with leverage. More generally, the course aims to help students acquire an understanding of broad economic issues that are of wide applicability in many areas of corporate finance. It balances both corporate finance theory and practical applications. During the course students will work on problem sets and analyze / discuss cases. The course is useful to students considering careers in corporate finance, investment banking, commercial banking, and consulting.

## **COURSE FORMAT**

The course has an asynchronous component (roughly 25%-30% pre-recorded videos) and a synchronous component (roughly 70%-75% virtual class time). The videos generally contain the conceptual discussion of the topics, so it is important that you watch them in advance of our virtual meetings. A large fraction of our virtual class time will be devoted to applications of the conceptual material covered in the videos. The synchronous component is on Zoom during the scheduled class times, starting at 8:30am and ending at around 2:20pm, tentatively with a 50-minute lunch break during 11:40am-12:30pm. Learning is supported by the relevant chapters in our textbook, assignments, and practice material on Canvas.

#### LEARNING OBJECTIVES

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

- 1. Forecast a project's free cash flow, estimate its cost of capital, compute its net present value, describe sources of project value, and assess the limitations of their analyses.
- 2. Value firms or projects using multiples and describe pros and cons of this valuation approach.
- 3. Apply alternative valuation methods and identify their practicality in specific situations.
- 4. Describe the connection between a firm's financing decisions, cost of capital, and value in a broad conceptual framework; also the mechanics and effects of changes in capital structure.



- 5. Evaluate a firm's financing decisions and describe the roles of taxes, bankruptcy/distress costs, information asymmetries, agency problems, and interactions in product markets.
- 6. 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; identify which firms should pay out excess funds.
- 7. Describe important institutional details that are relevant for corporate finance practice.

#### ASSESSMENTS

<u>Weight</u>
20%
10%
20%
<u>50%</u>
<u>100</u> %

## Details of Assessments

## Group projects and case write-up:

The instructor will form groups of 4 or 5 students and publish the list on Canvas on **April 12** (day after the first class). Each group will work on the two projects and the case write up, and must upload the work on Canvas by the respective deadlines. The first project is due **Friday April 23 at 11:59pm**; the group case write up is due **Saturday May 8 at 11:59pm**; and the second project is due **Sunday May 16 at 11:59pm**. The group projects and case write up will not be accepted after these deadlines.

## Individual quiz:

The quiz will be 1.5 hours long (duration is tentative) and based on the material discussed in class to date. You will have about a week to take it during any 1.5 hour period of your choice, but to receive credit the quiz must be submitted on Canvas by **Friday May 7 at 11:59pm**. Students who for any reason choose not to submit the quiz by the deadline will have the weight automatically transferred to the final exam. The quiz is individual (i.e., joint work on this assignment is considered academic misconduct).

## Final exam:

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. The online exam will be on **Sunday May 30 (exact time TBA).** You can use a calculator; a formula sheet will be provided.

#### LEARNING MATERIALS

<u>Textbook:</u> Berk, DeMarzo, Stangeland, *Corporate Finance*, 4<sup>th</sup> Canadian Edition (BDMS); the same book you used for BAFI 500 so likely you don't need to buy it. Note that 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 \$200 and there is also an e-version for about \$50. It should be available from the UBC bookstore and other sellers. The textbook comes with access to *MyFinanceLab*. Use of this resource for additional practice is useful but entirely optional and *is not* a substitute for working on the problem

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sets. Note there is also a version of the textbook titled *Fundamentals of Corporate Finance*, by Berk, DeMarzo, Stangeland, and Marosi. The topics are also covered in this undergraduate version of the book, so you can use it if you already have it. But if you will purchase, buy *Corporate Finance* (graduate version).

<u>Case study:</u> there is one case study to purchase online directly from Harvard Business School at the following link: <u>https://hbsp.harvard.edu/import/810463</u> (available March 15). You can pay using a credit card and then download an Adobe Acrobat .pdf file with each case. The estimated cost is USD 4.25.

<u>On Canvas</u>: Videos, lecture notes, problem sets & solutions, guiding questions for cases, 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 quiz must be completed on Canvas by the deadline; students who miss the deadline will automatically have the weight transferred to the final exam; (3) exams and 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 <u>Academic Concession Request & Declaration Form</u> <u>https://webforms.sauder.ubc.ca/academic-concession-rhlee</u>. 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

# 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.

## 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 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.

# Academic Freedom and Students Studying from Outside Canada

During this pandemic, the shift to online learning has greatly altered teaching and studying at UBC, including changes to health and safety considerations. Keep in mind that some UBC courses might cover topics that are censored or considered illegal by non-Canadian governments. This may include, but is not limited to, human rights, representative government, defamation, obscenity, gender or sexuality, and historical or current geopolitical controversies. If you are a student living abroad, you will be subject to the laws of your local jurisdiction, and your local authorities might limit your access to course material or take punitive action against you. UBC is strongly committed to academic freedom, but has no control over foreign authorities (please visit <a href="http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,33,86,0">http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,33,86,0</a>

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for an articulation of the values of the University conveyed in the Senate Statement on Academic Freedom). Thus, we recognize that students will have legitimate reason to exercise caution in studying certain subjects. If you have concerns regarding your personal situation, consider postponing taking a course with manifest risks, until you are back on campus or reach out to your academic advisor to find substitute courses. For further information and support, please visit: <u>http://academic.ubc.ca/support-resources/freedom-expression</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 xwma0kwayam (Musqueam) people, who for millennia have passed on their culture, history, and traditions from one generation to the next on this site.

## **ONLINE TEACHING TOOL & REQUIREMENTS**

This course will be taught using Zoom for synchronous classes and office hours.

For this course, you are required to use a Zoom account during synchronous classes and office hours. If you do not have a Zoom account, you can create one here: <u>https://zoom.us/signup</u>. Note: creating a Zoom account requires that you provide a first name, last name, and email address to Zoom. For privacy purposes, you may consent to using your existing email address and your real name. Alternatively, if you prefer, you may sign up using an alternative email address and an anonymized name that does not identify you (i.e. Jane Doe, <u>jane.doe@email.com</u>). If you have trouble creating an account, or accessing a Zoom session, please contact <u>CLCHelp@sauder.ubc.ca</u>. You will be required to provide the email address associated with your Zoom account in a Canvas quiz for identification purposes.

To help replicate the classroom experience, make sessions more dynamic and hold each person accountable, both students and instructors are required to have their cameras on during Zoom sessions. Students who require an accommodation with regard to the "camera on" requirement must contact their instructors in advance of the first class to discuss options. As professional graduate students, students are expected to conduct themselves professionally by joining sessions on time, muting mics when not speaking, refraining from using any other technology when in-session, attending in business casual dress (at a minimum), and participating from a quiet environment. Content from synchronous sessions will be selectively recorded per instructor discretion and made available to students on Canvas for a maximum duration of the course length. This is done to allow students the opportunity to return to lecture content to solidify learnings.

# 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:

Asynchronous: 100 min of pre-recorded video to watch ahead of class

Synchronous: 270 min of virtual class plus 4 breaks (during 8:30 am - 2:30 pm)

Class (60 min)	8:30 - 9:30
Break (10 min)	9:30 - 9:40
Class (60 min)	9:40 - 10:40
Break (10 min)	10:40 - 10:50
Class (50 min)	10:50 - 11:40
Lunch break (50 min)	11:40 - 12:30
Class (50 min)	12:30 - 1:20
Break (10 min)	1:20 - 1:30
Class (50 min)	1:30 - 2:20
Office hours (optional)	2:20 - 3:00

**Note:** The (optional) office hours during 2:20 – 3:00 just means that the instructor will remain online after class, to answer questions or support students as needed. This is in addition to official office hours.

The plan for each class day is listed below. *Note it is essential that you carefully watch all required videos before attending our virtual class (listed under "asynchronous")*. It is also recommended that you look at the slides and spreadsheets associated with the material we will discuss in each virtual 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.



# Class 1 - April 11

Asynchronous	Readings / Material
v0 - Course introduction	syllabus
v1 - Overview of valuation	GH: pages 8-12
v2 - The logic of DCF analysis	BDMS: 3.3 ; 5.5 ; 8.1
v3 - Free cash flow	BDMS: 9.1 - 9.3
v5 - Terminal values, uncertainty, and Canadian depreciation	BDMS: 9.4 - 9.5
v7 - Cost of capital for the unlevered firm	BDMS: 10.6 - 10.8 ; 12.1 - 12.4 ; 12.8
v9 - The implied cost of capital	
Synchronous	Readings
v4 - FCF of the New SUV Project	Spreadsheet
v6 - Terminal values, uncertainty, and CCA in SUV Project	Spreadsheet
v8 - Estimating the cost of capital for an unlevered firm	Spreadsheet
v10 - Payback period	BDMS: 8.3
v11 - DCF valuation of a levered firm	BDMS: 7.3 (just DCF); 12.5 ; 21.1 - 21.2
v12 - Estimating the cost of capital for a levered firm	
v13 - Project vs. firm cost of capital	BDMS: 12.6 - 12.7 ; 21.5
v14 - Project vs. firm cost of capital - Applications	
v15 - IRR & hurdle rates	BDMS: 8.2 (refresher)
v18 - The capital budgeting process	

BDMS: Berk, DeMarzo, and Stangeland "Corporate Finance"
GH: J. Graham and Harvey, C., 2002, "How do CFOs make capital budgeting and capital structure decisions?", Journal of Applied Corporate Finance 15 (1)
CFOM: D Gifford Jr, CFO Magazine, 1998, "After the revolution"
MJ: M. C. Jensen, 1986, "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers", American Economic Review 76 (2), 323-329.



#### Class 2 - April 25

Asynchronous v16 - Valuation with multiples v19 - Introduction to capital structure v20 - Capital structure with perfect capital markets - MM propositions v21 - Capital structure with perfect capital markets - Understanding details v22 - Capital structure with perfect capital markets - Practical implications	Readings BDMS: 7.4 ; 22.1 ; 22.5 GH: pages 13-22 ; CFOM BDMS: 17.1 - 17.2 BDMS: 17.2 BDMS: 17.3
Synchronous v17 - Valuation with multiples - Applications	Readings
v23 - Capital structure with perfect capital markets - Leveraged recapitalization	BDMS: 17.2 ; 17.4
v24 - Capital structure with perfect capital markets - Equity issuance & dilution	BDMS: 17.4 - 17.5
v25 - Capital structure with taxes - MM propositions with corporate taxes	BDMS: 18.1 - 18.2
v26 - Capital structure with taxes - Leveraged recapitalization	BDMS: 18.3
v27 - Capital structure with taxes - MM propositions with personal taxes	BDMS: 18.4
v28 - Capital structure with taxes - Limits to tax benefits v29 - Capital structure with taxes - Applications	BDMS: 18.5
V30 - Capital structure theories - The tradeoff theory V31 - Application: Levering up with corporate taxes and costly distress	BDMS: 19.1 - 19.4

BDMS: Berk, DeMarzo, and Stangeland "Corporate Finance"
GH: J. Graham and Harvey, C., 2002, "How do CFOs make capital budgeting and capital structure decisions?", Journal of Applied Corporate Finance 15 (1)
CFOM: D Gifford Jr, CFO Magazine, 1998, "After the revolution"
MJ: M. C. Jensen, 1986, "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers", American Economic Review 76 (2), 323-329.



#### Class 3 - May 9

Asynchronous	Readings
V34 - Debt and incentives	BDMS: 19.5 - 19.7 ; MJ
V35 - Asymmetric info & other factors	BDMS: 19.8 - 19.9
V37 - Payout Policy - With perfect capital markets	BDMS: 20.1 - 20.2
V38 - Payout Policy - Taxes and other capital markets imperfections	BDMS: 20.3 - 20.6
V40 - A little more on valuation: WACC vs. APV	BDMS: 21.1 - 21-3 ; 21.6
Synchronous	Readings
V36 - Capital structure theories - Further discussion	GH: pages 13-22 ; CFOM
V33 - Costs of financial distress - the UAL experience in 2004	
V39 - Payout policy - Applications and discussion	BDMS: 20.7
V41 - A little more on valuation: LBOs & APV	
V42 - A little more on valuation: WACC vs. APV Applications	
V44 - Case study: the Sealed Air leveraged recapitalization	Sealed Air Case ; MJ

BDMS: Berk, DeMarzo, and Stangeland "Corporate Finance"
GH: J. Graham and Harvey, C., 2002, "How do CFOs make capital budgeting and capital structure decisions?", Journal of Applied Corporate Finance 15 (1)
CFOM: D Gifford Jr, CFO Magazine, 1998, "After the revolution"
MJ: M. C. Jensen, 1986, "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers", American Economic Review 76 (2), 323-329.

#### **KEY DUE DATES:**

<u>Group project 1:</u> Friday April 23 at 11:59pm on Canvas

Group case write up: Saturday May 8 at 11:59pm on Canvas

Group project 2: Sunday May 16 at 11:59pm on Canvas

Individual quiz: Friday May 7 at 11:59pm on Canvas

Final exam: Sunday May 30 (exact time TBA)

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