

## **IFIN0101: Introduction to Finance and Investment Management**

**On-Line**

**July 6 – July 17: 3:00pm-6:00pm**

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**Instructor Name(s): Christakis (Chris) Droussiotis**

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**Instructor's Website: [www.professordrou.com](http://www.professordrou.com)**

**Office Hours:** Monday/Wednesdays 10:30-12:00am

**Response Policy: <https://calendly.com/professordrou/30min>**

**Facilitator/Teaching Assistant: Office Hours: TBA**

**Response Policy: Respond to your emails within 24 hours**

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### **Course Description**

Participants learn the principles of finance and investment management, to include interest rates and compound interest, the time value of money, risk and reward, how stocks and bonds are valued, how the stock market functions, how the international financial market functions, and how to approach stock selection and portfolio management.

We explore the structure of the financial system, including the role of individual participants, investment banks, asset managers, the Central Bank, and other players in the global economy. The course connects the foundations of economics to financial markets. What is the role of risk in investment? How does the environment of the market and the broader world drive return on investments? Why have some investments done well in memorable history? Why have others not done well? How are the winners and losers of past investments explained by financial theory? What is the role of traditional investments, such as mutual funds, and of alternative investments, such as venture capital, private equity, and hedge funds?

Students generate their own investment strategies and portfolios. The course includes some asynchronous work, which students are expected to complete between class sessions.

### **Learning Objectives (LO)**

Upon successful completion of this course, you will be able to:

1. Apply the principal Time Value of Money (TVM) concepts used in financial analysis and valuation.
2. Understand Risk & Return tradeoff and the mitigation of such risk through allocation and diversification
3. Compare the risk and returns to the market and learn other measurements of calculating expected return
4. Understand how stocks and bonds trade in the secondary markets and how they are valued. Apply basic risk & return analysis based on expected cash flows (dividends or coupon payments)
5. Classify the core components of the three (3) principal financial statements: the balance sheet, the income statement, and the statement of cash flows.
6. Describe the applications and uses of common-size financial statement analysis.
7. Identify commonly used financial ratios to measure a firm's financial performance.
8. Determine the value of debt and equity securities using discounted cash flow methods (DCF) and alternative valuation techniques and use these for various transactional situations such as Mergers and Acquisition or Leveraged Buyout Outs

### **Required Materials**

Droussiotis, C. (2020), *An Analytical Approach to Investments, Finance and Credit*, Preliminary Edition. Cognella Publishing. ISBN: 978-15165491221 - Link to purchase including Active Learning: <https://store.cognella.com/99666>

### **Supplemental Readings**

I will post supplementary articles, business cases, and Power Point Lecture Notes on Canvas and on my website [www.ProfessorDrou.com](http://www.ProfessorDrou.com) on a regular basis.

### **Excel**

In addition, students are encouraged to use Excel to perform the analytical calculations discussed in the course. Most of the lectures will include spreadsheet analysis.

### **Course Policies**

#### ***Participation, Engagement, and Attendance***

Students are expected to attend every class session. This includes arriving on time and leaving only when dismissed. Class attendance is mandatory and is closely monitored. Missing class means missing an experience, an important learning moment that yields your success on an activity/assessment, and the class learning from your valuable contribution. If you need to miss class for an illness or another emergency situation, please contact your instructor before the class session. More than one absence will affect your ability to receive a program Certification of Participation. A student who misses multiple class sessions may not receive a Certificate of Participation even if those absences are excused.

If you fall ill during a class session, please return to class to inform the instructor. The instructor will assess the situation and detail the next steps. A student is not permitted to leave and/or return to a residence without the instructor's knowledge.

Please note that disruptive behavior of any kind will not be tolerated.

#### ***Late Work***

All assignments should be submitted by the due date noted in the course syllabus. Late submissions require advance notice and permission from the instructor.

#### ***Grading***

Students are expected to complete all work to the best of their ability. This means applying readings, lectures, and activities to assignments and following assignment directions carefully. For all completed assignments, students should expect meaningful and specific **feedback within 2 business days** (of the due date) that will assist in future coursework, education, or career opportunities.

While there are no final grades for Pre-College coursework, students receive an official Columbia University Certification of Participation and written evaluations from their instructors. Students are evaluated on the basis of the effort they put in, their progress over the duration of the class, and their potential for future work in the pertinent field and in college.

#### ***Course Completion***

Successful completion of your Pre-College course is determined by the instructor in consultation with program administration. Attendance, class participation, satisfactory completion of assignments and adherence to the program's community standards are all considered as part of the evaluation process.

### ***Citation & Submission***

All assignments for this course will be submitted via the **Active Learning platform**. Students are expected to upload their work directly to the designated sections by the posted deadlines. Late submissions will be subject to the course's late work policy as outlined in the syllabus.

Please note: Areas previously marked with a red X have been customized to reflect these details.

Additionally, we will review examples of plagiarism during our first-class session. This will include a discussion of what constitutes plagiarism in both written work and financial modeling assignments, as well as how to properly cite data sources, models, and external materials to maintain academic integrity.

### ***Use of Chat GPT:***

Statement permitting AI Usage with Considerations

AI generative or machine learning tools can be used to assist with course deliverables, provided that all utilized information is cited in accordance with program guidelines. In addition, note that information produced by AI generative tools may be inaccurate or outdated. Please speak with your instructor if you have questions about course specific policies relating to usage of AI generative tools.

### **Student Resources:**

*Columbia University Information Technology*

[Columbia University Information Technology](#) (CUIT) provides Columbia University students, faculty, and staff with central computing and communications services. Students, faculty, and staff may access [University-provided discounted software downloads](#).

*Columbia University Library*

[Columbia's extensive library system](#) ranks in the top five academic libraries in the nation, with many of its services and resources available online.

### ***Program Resources***

If you do not understand the course content or the instructor's expectations, please either ask during class or contact the instructor and/or facilitator outside of class times via Canvas DM or email. You are encouraged to visit designated office hours with both the instructor and facilitator as needed.

For other program and wellness-related needs, contact the Pre-College Program office at [hsp-office@columbia.edu](mailto:hsp-office@columbia.edu) or (212) 634-2799.

### **School and Program Policies**

#### ***Copyright Policy***

Please note—Due to copyright restrictions, online access to this material is limited to instructors and students currently registered for this course. Please be advised that by clicking the link to the electronic materials in this course, you have read and accept the following:

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted materials. Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be "used for any purpose other than private study, scholarship, or research." If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of "fair use," that user may be liable for copyright infringement.

### ***Academic Integrity***

Columbia University takes matters of intellectual integrity very seriously. Plagiarism is not tolerated. Plagiarism includes, but is not limited to, submitting work done by another person or purchased from any source; failure to document ideas found in sources, whether print or electronic, with appropriate notes and bibliographical references; failure to enclose borrowed phrases or sentences within quotation marks; and turning in the same assignment for two courses without advance permission from both teachers.

Plagiarism, whether intentional or unintentional, will result in dismissal from the program. Students who are unsure about the proper presentation of their work should consult their course instructor.

### ***Community Standards***

The [Community Standards](#) are designed to ensure the safety and well-being of the students and the integrity of the University. They are strictly enforced and failure to abide by them results in dismissal from the program, normally on the first offense.

The determination as to whether a student has violated the Community Standards is made by program staff, instructors, and administrators.

Students who are dismissed from the program do not receive evaluation letters or Certifications of Participation. No portion of the program cost will be refunded to a student who has been dismissed.

### ***Protection of Minors at Columbia***

Columbia University is committed to promoting a safe environment for minors who participate in our programs and activities. You can read the University's policy and access other helpful resources on the University's [website on protection of minors](#).

#### *Discrimination, Harassment or Gender-based Misconduct*

Columbia University is committed to fostering an environment that is free from gender-based discrimination and harassment, including sexual assault and all other forms of gender-based misconduct. The University recognizes its responsibility to increase awareness of such misconduct, prevent its occurrence, diligently investigate reports of misconduct, support students and others who experience gender-based misconduct, and respond fairly and firmly when students violate University policy. The University is also committed to supporting students accused of gender-based misconduct who go through the disciplinary process. In addressing issues of gender-based misconduct, all members of the University must respect and care for one another in a manner consistent with our deeply held academic and community values.

Please review [the Program's Discrimination, Harassment or Gender-Based Misconduct policy](#).

### ***Accessibility***

Columbia is committed to providing equal access to qualified students with documented disabilities. A student's disability status and reasonable accommodations are individually determined based upon disability documentation and related information gathered through the intake process. For more information regarding this service, please visit the [University's Health Services website](#).

### **Course Schedule/Course Calendar/Assignments**

Please check Canvas and website [www.ProfessorDrou.com](http://www.ProfessorDrou.com) for schedule changes and updates:

## LECTURE OUTLINE

Date	LO	Lecture	Assignments /Homework
July 6		Going over Course Syllabus. Complete “Getting to Know You” forum.  <b><u>LECTURE 1</u></b> Introductory Finance Concepts: <ul style="list-style-type: none"> <li>• Risk, Return, Time &amp; Allocation</li> <li>• Trading Securities (Stocks/Bonds)</li> <li>• Firm Specific (Financial Analysis and Valuation)</li> <li>• Transaction Analysis</li> </ul>	
	L1	<b><u>LECTURE 2 – Time Value of Money</u></b> TVM Concepts: <ul style="list-style-type: none"> <li>• One-time FV, PV, Interest, Time</li> <li>• Annuity FV, PV, Interest, Time</li> <li>• Uneven CF</li> </ul>	
July 7	L2	<b><u>LECTURE 3 – Risk, Return, Time, Alloc</u></b> Risk & Return Concepts: <ul style="list-style-type: none"> <li>• HPR, IRR and Stand. Dev.</li> <li>• Historical &amp; Scenario</li> <li>• Cov, Cor &amp; Efficient Frontier</li> </ul>	<b><u>Hwk#1 Due:</u></b> Ch 1a and 1b
July 8	L3	<b><u>LECTURE 4 – Comparative Analysis</u></b> Comparative Market Analysis Concepts: <ul style="list-style-type: none"> <li>• Beta, CAPM, Sharpe Ratio</li> </ul>	<b><u>Hwk#2 Due:</u></b> Ch 2
July 9	L4	<b><u>LECTURE 5 – Investing in Stocks</u></b> Secondary Market/Trading Stocks: <ul style="list-style-type: none"> <li>• Stock Exchanges</li> <li>• Return &amp; CF concepts (Div)</li> </ul>	<b><u>Hwk#3 Due:</u></b> Ch 3&4
July 10	L4	<b><u>LECTURE 6 – Investing in Bonds</u></b> Secondary Market/Trading Bonds: <ul style="list-style-type: none"> <li>• Bond Markets</li> <li>• Bond Analysis (CY, YTM, YTC)</li> <li>• Basic Bond Val (Duration &amp; Convexity)</li> </ul>	<b><u>Hwk#4 Due:</u></b> Ch 10
July 13	L5, 6	<b><u>LECTURE 7 – Financial Analysis</u></b> Financial Statement Analysis: <ul style="list-style-type: none"> <li>• Balance Sheet, Income Statement</li> <li>• Building Cash Flow Statement</li> </ul> Case study: Celerity Technology Company	<b><u>Hwk#5 Due:</u></b> Ch 11
July 14	L7	<b><u>LECTURE 7 (Cont.)– Financial Analysis</u></b> Financial Statement Analysis: <ul style="list-style-type: none"> <li>• Ratio Analysis</li> <li>• Projections</li> </ul> Case study: Celerity Technology Company	
July 15		<b><u>LECTURE 8 – Valuation Analysis</u></b> Introducing 6 methods of Valuation:	

Date	LO	Lecture	Assignments /Homework
	L8	<ul style="list-style-type: none"> <li>• Method#1: Stock Price</li> <li>• Method #2: Intrinsic Value</li> <li>• Method #3: DDM</li> <li>• Method #4: Trading Comparable</li> <li>• Method #5: Acquis. Comparable</li> <li>• Method #6: DCF</li> </ul> <p>Case Study: Hyatt Corporation</p>	
July 16-17	L8	<p><b><u>LECTURE 9 (Transaction Analysis)</u></b></p> <ul style="list-style-type: none"> <li>• Method #6 (Cont.): DCF Method</li> <li>• Case Study -LBO and M&amp;A</li> </ul> <p>Case Study: Alexandria Hotel</p>	<b>Project Due</b>

## EXHIBIT A - FINAL PROJECT

Please submit the entire project including the write-up and excel analysis in a PDF format.

### 1. Company Profile

- Write a brief profile of the company you are assigned to including a description of their products or services and the markets they compete in.
- Summary of their stock performance in the last quarter versus the market and closest competitors.

### 2. Financial Analysis

- The financial analysis should include, but not be limited to, the preparation of the latest 3-year financial statements (Income Statement, Balance Sheet and Cash Flow Statement) through December 31, 2025, or through last 12 months of last statement.
- Provide an explanation of the results year-over-year including ratio and trend analysis

### 3. Projections & Valuations

- Projections and Valuation Analysis for your assigned public company using Excel. The valuation analysis should calculate the assigned companies Enterprise Value using the following 3 methods of valuation:
  - Method #1 (current stock price to calculate the EV)
  - Method #4 (based current trading peer comparable)
  - Method #6 (DCF Analysis)
- In addition to the analysis, you need to provide a page or two of discussions on your analysis including the assumptions you used for driving revenues and expenses.
- Discussions on the results on your various methods of valuation and recommend if someone should **buy, hold, or sell the stock**.

### 4. Technical Analysis

- Analyze the stock performance against the market (S&P 500), generating beta coefficient and other standard deviation results using Excel's regression analysis or calculated manually.

## ASSIGNED COMPANIES

#	COMPANY	SYMBOL	SECTOR	INDUSTRY
1	Albany International	AIN	Consumer Cyclical	Textile Manufacturer
2	American Axle & Manufacturing	AXL	Consumer Cyclical	Auto Parts Manufacturer
3	AZEK Corporation	AZEK	Industrials	Building Products
4	Boyd Gaming Corp.	BYD	Consumer Cyclical	Resorts & Casinos
5	Carnival Corporation	CCL	Consumer Cyclical	Cruise Operator
6	Celanese Corporation	CE	Basic Material	Chemicals
7	Century Casino	CNTY	Consumer Cyclical	Resorts & Casinos
8	Choice Hotels International	CHH	Consumer Cyclical	Lodging
9	Constellation Brands	STZ	Consumer Defensive	Wineries & Distilleries
10	Crimson Wine Group	CWGL	Consumer Defensive	Wineries & Distilleries
11	Darden Restaurants	DRI	Consumer Cyclical	Restaurants
12	Delta Airlines	DAL	Industrials	Airlines
13	Doximity	DOCS	Technology	Digital Technology
14	Flowserve Corporation	FLS	Industrials	Specialty Industrial Machinery
15	HCA Healthcare, Inc.	HCA	Healthcare	Medical Care Facilities
16	Hormel Foods Corporation	HRL	Consumer Defensive	Packaged Foods
17	International Paper	IP	Consumer Cyclical	Paper & Packaging
18	Kellogg Company	K	Consumer Defensive	Food
19	Laureate Education	LAUR	Consumer Defensive	Education & Training Services
20	Marcus Corporation	MCS	Consumer Cyclical	Lodging
21	Marriott International	MAR	Consumer Cyclical	Lodging
22	McDolands Corporation	MCD	Consumer Cyclical	Restaurants
23	Nabors Industries	NBR	Energy	Oil & Gas Drilling
24	Royal Caribbean Cruises Ltd	RCL	Consumer Cyclical	Cruise Operator

25	Select Medical	SEM	Healthcare	Medical Care Facilities
26	Silgan Holdings	SLGN	Consumer Cyclical	Paper & Packaging
27	Starbucks Corporation	SBUX	Consumer Cyclical	Coffee shops
28	Steel Dynamics	STLD	Basic Material	Chemicals
29	TAL Education Group	TAL	Consumer Defensive	Education & Training Services
30	Texas Instrument	TXN	Technology	Semiconductors
31	Texas Roadhouse	TXRH	Consumer Cyclical	Restaurant
32	Tyson Foods	TSN	Consumer Defensive	Packaged Foods
33	U.S. Foods	USFD	Consumer Defensive	Food Distributor
34	United Airlines	UAL	Industrials	Airlines
35	Verso Corporation	VRS	Basic Material	Paper & Packaging
36	Wendy's Company	WEN	Consumer Cyclical	Restaurant
37	Wesco International	WCC	Industrials	Industrial Distribution
38	Wyndham Hotels & Resorts	WH	Consumer Cyclical	Lodging
39	Wynn Resorts	WYNN	Consumer Cyclical	Resorts & Casinos
40	Yum! Brands	YUM	Consumer Cyclical	Restaurants