

IFIN0101: Introduction to Finance and Investment Management: Course Modality: On-line Synchronous July 1 – July 12 8:00am – 11:00am

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**Office Hours:** Remote: <u>https://calendly.com/professordrou/30min</u> to book a 30-minute zoom call. **Response Policy:** I intend to log onto the course and check email daily. You should expect a response from me within 24 hours

#### **Course Overview**

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?

#### **Learning Objectives**

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 though allocation and diversification.
- 3. Compare the risk and returns to 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 (DCFs) and alternative valuation techniques and use these for various transactional situations such as Mergers and Acquisition or Leveraged Buyout Outs



# **Required Materials**

# Microsoft 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.

# Textbook(s) and Other Readings

#### **Optional Textbook (CD)**

Droussiotis, C. (2020), <u>An Analytical Approach to Investments, Finance and Credit</u>, Preliminary Edition. Cognella Publishing. ISBN: 978-15165491221 - Link to purchase including Active Learning: <u>https://store.cognella.com/97695</u>

### Supplemental Readings

I will post supplementary articles, business cases, and Power Point Lecture Notes on Canvas and on my website <u>www.ProfessorDrou.com</u> on a regular basis

### **Course Requirements: Assignments and Course Engagement**

#### **Homework Problems**

Homework Problems give you an opportunity to demonstrate your mastery of the topics covered in the course and solidify your knowledge of finance theory through the practical application of the concepts, models, and theories, discussed in class. Students are encouraged to submit a set of Homework Problems. Homework and due dates will be posted on the website.

#### **Individual Project:**

There will an excel project. Each student will build a portfolio of stocks, build a cash flow showing trades and performance metrics.

#### Attendance:

Attendance will be recorded.

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.

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 3 business days (of the due date) that will assist in future coursework, education, or career opportunities.

## **Course Policies**

## Participation, Attendance, and Class Etiquette

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 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.

Successful participation in this 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.

#### 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.

#### **Citation & Submission**

Please submit all homework and project assignments to the link below:

# https://www.dropbox.com/request/mBwmDgrUOn07pHEuxAs1

For this specific course, all written assignments must cite sources using the X format and be submitted via X. Plagiarism, whether intentional or unintentional, will result in dismissal from the program.

# Chat GPT

Al 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 Al generative tools may be inaccurate or outdated. Please speak with your instructor if you have questions about course specific policies relating to usage of Al generative tools.

#### Resources

# Columbia University Information Technology

<u>Columbia University Information Technology</u> (CUIT) provides Columbia University students, faculty, and staff with central computing and communications services. Students, faculty, and staff may access <u>University-provided</u> <u>discounted software downloads</u>.

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## Columbia University Library

<u>Columbia's extensive library system</u> 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 <u>hsp-office@columbia.edu</u> 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 <u>Community Standards</u> 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 <u>website</u> 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 <u>University's Health Services website</u>.

# **Course Schedule/Calendar**

Please check Canvas and website www.ProfessorDrou.com for schedule changes and updates:

Date	LO	Lecture	Assignments /Homework
July 1		<ul> <li>Going over Course Syllabus.</li> <li>Complete "Getting to Know You" forum.</li> <li><u>LECTURE 1</u></li> <li>Introductory Finance Concepts: <ul> <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> </li> </ul>	
	LI	LECTURE 2 – Time Value of Money TVM Concepts: • One-time FV, PV, Interest, Time • Annuity FV, PV, Interest, Time • Uneven CF	
July 2	L2	LECTURE 3 – Risk, Return, Time, Alloc         Risk & Return Concepts:         • HPR, IRR and Stand. Dev.	Hwk#1 Due: Ch 1a and 1b

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Date	LO	Lecture	Assignments /Homework
		<ul><li>Historical &amp; Scenario</li><li>Cov, Cor &amp; Efficient Frontier</li></ul>	
July 3	L3	LECTURE 4 – Comparative Analysis         Comparative Market Analysis Concepts:         • Beta, CAPM, Sharpe Ratio	Hwk#2 Due: Ch 2
July 4		NO CLASS	
July 5	L4	LECTURE 5 – Investing in Stocks         Secondary Market/Trading Stocks:         • Stock Exchanges         • Return & CF concepts (Div)	Hwk#3 Due: Ch 3&4
July 8	L4	LECTURE 6 - Investing in Bonds         Secondary Market/Trading Bonds:         • Bond Markets         • Bond Analysis (CY, YTM, YTC)         • Basic Bond Val (Duration & Convexity)	Hwk#4 Due: Ch 10
July 9	L5, 6	LECTURE 7 – Financial Analysis         Financial Statement Analysis:         • Balance Sheet, Income Statement         • Building Cash Flow Statement         Case study: Celerity Technology Company	Hwk#5 Due: Ch 11
July 10	L7	LECTURE 7 (Cont.) – Financial Analysis         Financial Statement Analysis:         • Ratio Analysis         • Projections         Case study: Celerity Technology Company	
July 11	L8	LECTURE 8 – Valuation Analysis         Introducing 6 methods of Valuation:         • Method#1: Stock Price         • Method #2: Intrinsic Value         • Method #3: DDM         • Method #4: Trading Comparable         • Method #5: Acquis. Comparable         • Method #6: DCF         Case Study: Hyatt Corporation	
July 12	L8	LECTURE 9 (Transaction Analysis         • Method #6 (Cont.): DCF Method         • Case Study -LBO and M&A         Case Study: Alexandria Hotel	Project Due