Prerequisites: MSF 8603 & MSF 8605 & MSF 8610 & MSF 8615 & MSF 8620 & MSF 8632 & MSF 8640

MSF 8626–001

Class: T 4:00 – 5:15 pm, Bartley 3042
Office Hours: TR 11:45 – 12:45 pm, and by appointment

Dr. Raisa Velthuis
raisa.velthuis@villanova.edu
Office: Bartley 2083
Phone: (610) 519–4319

Description:

This course introduces students to alternative investments, with a primary focus on hedge funds, private equity, private credit, and venture capital. The course emphasizes how these investments are structured, managed, and evaluated, including their use of active strategies, illiquidity, leverage, and incentive-based compensation.

The course begins with a statistical foundation tailored to alternative assets. We then study hedge fund strategies in depth, including global macro, equity long short, relative value, event-driven, and managed futures approaches. The second half of the course focuses on private capital markets, covering private equity and private debt fund structures, investment processes, and value creation mechanisms. The course concludes with a discussion of cryptocurrencies and endowments.

Throughout the semester, students apply concepts through workshops, discussion of real-world cases, and a project focused on venture capital investing. By the end of the semester, students will understand how institutional and retail investors gain exposure to alternative investments and understand the risks and benefits that these investments bring.

Prerequisites

A strong foundation in economics, mathematics, accounting, and statistics at the level seen in your previous coursework is recommended for this course. Assignments will require extensive use of personal computers (especially Excel) and/or calculators. During exams, only a non-programmable calculator is permitted.

Important Dates: *While unlikely, on rare occasions these dates may need to be modified.*

Thursday, February 26	**Midterm Exam**
Monday, May 11	**Final Exam, 2:30-5:00pm**

What book and other materials do I need?

Textbook: CAIA Levels I & II (2026), by Donald R. Chambers, Mark J. P. Anson, Keith H. Black, Hossein B. Kazemi, CAIA Association, Wiley & Sons. A digital version of the textbook is available on Blackboard.
The textbooks are also useful for preparation for the Chartered Alternative Investment Analyst (CAIA) exams. A limited number of scholarships are available to students each year through the academic partnership between CAIA and Villanova University. Let me know if that is of interest to you.

Readings: "Cryptofinance," Campbell Harvey. Available for free on SSRN. Additional readings will be shared on Blackboard.

Case: Details will be shared later on in the semester.

Access to news sources, Students are also strongly encouraged to read financial press, such as the Wall Street Journal or Financial Times, to reinforce the applicability of the topics that we cover in class. Refer to the Library site for info on how to access your free VSB subscriptions. Please share interesting articles with the class on our Padlet board.

Office 365: All students have free access to Office Suite products (Word, Excel, PowerPoint, Outlook), which are helpful tools for your assignments.

Calculator: A non-programmable calculator will be required for this course.

Class Methodology

The course will be a combination of lectures, discussions, case studies, and guest speakers. I will post PowerPoint slides on Blackboard to guide our discussions, but these slides may not necessarily contain all of the information discussed during class. Therefore, you should attend all classes and read the required readings for completeness.

Use of class materials and content: Students are not permitted to record, photograph, or otherwise capture any element of classes without prior, expressed permission from the course instructors. Similarly, students are not allowed to redistribute any course materials, including uploading to generative A.I. platforms. All work submitted for any assignment or exam must be the student's own work.

Grading information:

	Grade Allocation
Assignments	18%
Project & Presentation	15%
Best Exam Grade	35%
Second-Best Exam Grade	30%
Guest Speaker Attendance	2%

The final course grade will be computed using the weights displayed in the previous table. Grades will be reported and updated in the gradebook on Blackboard. At the end of the semester, I will assign letter grades according to the following scale: A: 93 to 100, A-: 90 to 92.99, B+: 87 to 89.99, B: 83 to 86.99, B-: 80 to 82.99, C+: 77 to 79.99, C: 73 to 76.99, and F: 72.99 and below.

Assignments: Several assignments will be given over the course of the semester. Applied Data assignments will require you to apply techniques discussed and developed in class to data available from the finance lab. Case assignments will require you to respond to discussion questions regarding cases that we will discuss in class.

Each assignment will be equally weighted in the calculation of your final grade. You should work on these assignments in groups. Please limit groups to no more than five students and submit only one solution set per group. You may change groups between assignments by using the group sign-up functions on Blackboard.

Concept Reviews: There will be problem sets posted to Blackboard, which you should use to improve your understanding of the material and in preparation for the exams. These exercises are ungraded and nothing needs to be turned in.

Exams: There will be two exams during the semester. Exams are to be taken in-person. I recommend that you focus your studies on understanding the main concepts and ensuring that you can work out a variety of problems that resemble but are not exactly the same as the problems you've encountered in class or on homework. If you find that you have a scheduling conflict during the final exam, please let me know as soon as possible such that alternative arrangements can be made.

Formula Sheets: Formula sheets are permitted for use on the midterm and final exams. They may be no larger than one side of a standard 8.5" x 11" sheet of paper, should contain only formulas, and no definitions or example problems. I will ask students to hand in their formula sheets following each exam. Any violation of the above rules will result in a deduction of 20% of one's exam grade. No other outside resources are permitted. Exams are <u>not collaborative</u> and should reflect <u>your own work</u>.

Project (choose one): semester-long group project, consisting of 3-4 members. Groups will present their analysis in the last week of the semester, with the accompanying writeup due on the last day of class.

- *Hedge Fund Project*: You will be required to create a hedge fund strategy and backtest its profitability. Much of what we learn in the first half of the semester will be relevant for creating your fund and testing the strategy. The final version of the project should include a summary of the fund's strategy & characteristics and data/graphics with an accompanying analysis of the fund's performance.
- *Venture Capital Fund Project:* You will be required to evaluate three startup companies within the same industry for inclusion in your venture capital fund. Much of what we learn in the second half of the semester will be relevant for designing your fund and evaluating private investments. The final version of the project should include a summary of the fund's strategy & characteristics and an analysis of the three chosen investment options including a market research analysis, valuation of the main candidate for investment, and your planned exit strategy.

Attendance: Class attendance is important, both for your retention of the material and for the benefit of class discussions and questions. However, I will not give a grade for daily attendance. These problems that we work through in class are important for you as an opportunity to solve problems related to our lecture.

Regrading policy: If you think that there are grading errors on your tests or your grade on an exam (or project) does not reflect the quality of your performance, submit the entire assessment together with a written explanation of your reasoning within a week of the return of the assessment. Any work submitted for re-grading will be subject to a complete re-grade, which means that your grade could go up, stay the same, or go down.

Course Outline:

This outline is tentative and subject to change. Please refer to the course website on Blackboard for updates on readings and homework assignments. Students should refer to the assigned readings in the outline as needed to become knowledgeable on each topic. Sections in parentheses are optional.

Week		Topic	CAIA Level I Readings	CAIA Level II Readings
1	Jan 13	What are Alternative Investments?	2.1.1, 2.1.3, 2.1.5-8, 2.2.1	
		Statistical Foundations	2.4	
2	Jan 20	Risk and Benchmarking	2.5.1, 2.5.8-11, 2.7, 2.8	(4.2), 5.3
3	Jan 27	Workshop: Applying Statistical Methods	6.1	
		Intro to Hedge Funds	2.2.7-8	
4	Feb 3	Macro Hedge Funds & Managed Futures	6.2	
		Workshop: Technical Trading Strategies		
5	Feb 10	Event Driven Hedge Funds	6.3	
		Relative Value Hedge Funds	6.4	
6	Feb 17	Equity Hedge Funds	6.5	
		Workshop: Equity Strategies		
7	Feb 24	Slack Time		
	Feb 26	**Midterm Exam**		
	Mar 3-6	*Spring Break*		
8	Mar 10	Liquid Alts	2.1.2, 4.3.6	(6.1)
		Intro to Private Equity	4.1, 2.2.5-6	
9	Mar 17	Venture Capital	Ch. 4.2	
10	Mar 24	LBOs	Ch. 4.3	
		PIPEs	Lim et al. (2018)	
11	Mar 31	Mezzanine Debt	Ch. 5.1.5-6	
12	Apr 7	Distressed Debt	5.1.1-2, 5.1.8	
13	Apr 14	Cryptocurrencies	7.1.1-4, 7.2.2	
		Endowments		2.2
14	**Apr 21**	**Project presentations**		
15	Apr 28	Wrap-up		
16	**May 11**	**Final Exam**		

Important Policy Information

Academic Integrity: When students come to Villanova, they join an academic community founded on the search for knowledge in an atmosphere of cooperation and trust. The Code of Academic Integrity of Villanova University addresses cheating, fabrication of information, plagiarism, unsanctioned collaboration, handing in work completed for another course without the instructor's approval, and other forms of dishonesty, such as discussing the content of an exam with a student who has not taken that exam. For the first offense, a student who violates the Code will receive **0** points for the assignment. The violation will be reported by the instructor to the Dean's Office and recorded in the student's file. In addition, the student will be expected to complete an education program. For the second offense, the student will be dismissed from the University and the reason noted on the student's official transcript. More details can be found on the Academic Integrity webpage. Specific penalties apply for VSB.

Artificial Intelligence: In this class, A.I. technology (e.g., ChatGPT) is allowed to support you in your homework assignments. You are also invited to use AI for research and drafting as part of your project work. Use of A.I. during exams will be considered a violation of the academic integrity policy. The A.I. Hub provides guidance on A.I. tools.

Copyrighted Materials: All course materials, including syllabi, exams, assignments, lecture slides, videos, and student work, are the intellectual property of the instructor, third parties, or the University. These materials are provided solely for use by students enrolled in this course for academic purposes and may not be shared, reproduced, or distributed in any form without permission. Published readings (e.g., book chapters, articles) are copyrighted and made available under licensed access or fair use; they may not be uploaded to websites, AI tools, or shared publicly. For more details on intellectual property and acceptable use, visit Villanova's copyright policy.

Accommodations: It is the policy of Villanova to make reasonable academic accommodations for qualified individuals who have specific learning needs and for students with disabilities. All students who need accommodations should go to Clockwork (Student Login) via myNOVA to complete the Online Intake or to send accommodation letters to professors. Go to the LSS website or the ADS website for registration guidelines and instructions. If you have any questions please contact:

- LSS at learning.support.services@villanova.edu or 610-519-5176
- ADS at ods@villanova.edu or 610-519-3209.

Unitas Statement: Villanova University, as a Catholic Augustinian institution of higher education, is committed the principle of Unitas, Unity. We recognize that an inclusive environment that is responsive to the needs of each is an integral component of the teaching and learning experience. And as such, is an essential element of the ongoing intellectual, social and spiritual development of every member of the Villanova community. Accordingly, Villanova University will be an inclusive community. We commit ourselves to cultivating an academic environment marked by genuine curiosity about different perspectives, ardent receptivity to knowledge generated through intercultural connections and a genuine sensitivity to the variety of human experiences marked by domestic and global differences.

Course Materials Funding: If procuring the textbook (or other required materials) for this course present a challenge, there are resources available. Students are encouraged to apply to VSB's Course Material Fund for assistance to cover the purchase/rental of materials through MyNova.

Wildcat Wardrobe: For students needing professional attire for an upcoming presentation, interview, Career Fair, or other experience, the Wildcat Wardrobe is a service that provides free professional and business casual attire. Visit the website to schedule an appointment or call the Career Center at 610-519-4060.

Student Personal Days: In addition to the attendance policy stated above in the syllabus, students are entitled to one excused absence for any reason that may contribute to their personal wellness. Students must advise the instructor by email before class of their intent to utilize a Personal Day as the reason for their absence. A Personal Day will not be approved retroactively. Students may, but are not required, to provide additional information regarding their absence. Additionally, a Personal Day may not:

- be used immediately preceding or following a University holiday or break period;
- be used on days when exams, presentations or other major assignments are scheduled.

A Personal Day does not grant an automatic extension for items due. Students remain responsible for all assignments, exams, presentations, etc. due on that date. It is in the instructor's discretion to determine whether any extension is appropriate given individual circumstances.

Other support: Successful people access support from others as needed. Villanova University has many supportive services that can help you as you strive to achieve your goals. I encourage you to reach out to me or other professionals on campus. The next page provides more information about some of the resources available to you.

Resources

Your Professor	Message me on Teams, e-mail me at raisa.velthuis@villanova.edu, set up a zoom call, or stop by my office at Bartley 2083.
Librarians	The Library staff assist students with critical and evaluative use of information. Furthermore, Course Reserve materials can be requested at the circulation desk on the first floor. Visit the library at Falvey Hall or call (610) 519-4270.
Learning Strategies	Learning Support Services provides learning and study skills resources for all students who wish to enhance their academic experience in preparing to meet their educational goals. These services include study skill workshops, study groups and homework help sessions for selected courses, academic coaching, accommodation support for students with disabilities, and study skills consultation. They are located in the Learning Commons in Falvey Suite 212 or call 610.519.5176.
Disability Counselors	The Office of Access and Disability Services (ADS) is the primary office at Villanova University with specialized knowledge and experience in physical disability issues.
Tutoring	Several resources are available for students seeking support with a challenging course or to enhance achievement in areas in which the student already excels. Among others, the Writing Center and the Center for Speaking and Presentation are available to help you develop important skills that are part of your class assignments.
Counseling	The University Counseling Center provides services that help students function optimally with regard to emotional, academic, social and psychological issues. The Center is well used by our student leaders and academically most talented students. For students who encounter a more difficult condition such as depression, anxiety, panic, or disordered eating, the staff is also experienced in diagnosis, crisis intervention, and treatment of these conditions. Visit at Room 206, Health Services Building or call (610) 519-4050.
Academic and Career Advisors	The VSB advising team facilitates the exploration and development of academic and career goals, including advising on internships and study abroad opportunities, and empowers students to be responsible decision-makers and active participants in defining their futures. Visit at Bartley Hall 1054 or call (610) 519-5532.
Underrepresented students	The Center for Access, Success and Achievement aims to recruit, retain, and graduate underrepresented, first generation, and Pell Eligible students through holistic support in a culturally diverse and academically excellent environment. Visit at Falvey Hall, Room 211 or call 610.519.4075.
International students	The Office of International Students and Scholars provides assistance with Immigration rights and responsibilities, Educational, social and personal counseling, Cultural adjustment issues, and Campus and community activities. Visit at Connelly Center 2nd Floor or call 610.519.7827.