

**SEATTLE UNIVERSITY
ALBERS SCHOOL OF BUSINESS AND ECONOMICS
FINC 5120: Portfolio Management**

Winter 2021

Online Synchronous

**IMPORTANT: PLEASE TURN THE WEBCAM ON DURING CLASS.
TURN THE MIC ON WHEN YOU SPEAK.**

Tuesday 6:00 p.m. – 8:40 p.m.

Course CANVAS website: <https://seattleu.instructure.com>

Instructor: Jot Yau, PhD, CFA

Professor of Finance

Email address

jyau@seattleu.edu

Virtual office hours (by appointments only, 30 minutes each)

Tuesday and Thursday 4:00pm-5:30pm

Appointments for other times (30 minutes each)

Monday and Wednesday afternoons after 2pm

OFFICE HOURS AND COMMUNICATING WITH ME

I am flexible in scheduling appointments outside stated office hours. Don't hesitate to request an appointment, and I will send you a Zoom invitation when the time slot is available.

Please request an appointment by sending it to my SU account (jyau@seattleu.edu) since I check that email account regularly when the school is in session. Alternatively, you can send me email via CANVAS conversation and I am happy to provide you with assistance and quick feedback by e-mail. Should your question either require a long answer (i.e., more than two sentences) or be beneficial to other members of the class to listen, I will bring the answer to class.

For announcements and information sent to an individual member of the class as well as requests that involve personal information (e.g., grades), I will disseminate them to your e-mail account at Seattle University ONLY. Please make sure your SU e-mail account is able to accept incoming e-mails at all times and check it regularly.

COURSE OBJECTIVES AND OVERVIEW

This course introduces the portfolio management process through an examination of the conceptual as well as implementation issues relating to the construction and management of diversified portfolios. Thus, our goal is to learn the professional techniques of managing large portfolios. Please be aware that this class is not geared towards personal finance and investment.

The portfolio management process consists of an integrated, consistent set of steps by which an investment manager creates and maintains appropriate combinations of investment assets. It draws upon the framework advocated by the CFA Institute and used by many investment professionals. It is a dynamic and flexible process, complete with feedback loops, monitoring, and adjustment.

In managing large portfolios, the asset management industry relies on the speed and memory power of modern computers that render the quantitative analysis of massive data feasible. In this class, project assignments are used to enhance your understanding of the portfolio management process and allow you to acquire hands-on experience by using EXCEL spreadsheets to model and solve portfolio optimization/asset allocation problems. As such, this is a quantitative course.

In addition, you will be exposed to both the practical concerns and theoretical debates in the area of portfolio management.

This course satisfies the learning objectives of the MSF program, which can be found at: <http://www.seattleu.edu/albers/inner.aspx?id=99532#msf>.

What this class WILL attempt to do for you:

- Expose you to the best practices in the portfolio management field
- Expose you to the latest theory and evidence in the investment/portfolio management field
- Provide hands-on experience in developing portfolio optimization tools
- Enable you to develop and evaluate your own asset allocation
- Provide foundation knowledge in portfolio management for those who pursue the Chartered Financial Analysts (CFA) or Chartered Alternative Investment Analyst (CAIA) professional designations

What this class WILL NOT attempt to do for you:

- Teach you proven methods of “beating” the market (neither can professional money managers consistently beat the market)
- Teach you about personal finance (You should take FINC 5345)
- Teach you about fixed income portfolio management (You should take FINC 5555)
- Teach you about derivatives (You should take FINC 5105)

PREREQUISITE

FINC 5100 Investments

IMPORTANT: You must have already taken FINC 5100. You cannot take this class concurrently with FINC 5100. No exceptions.

Also, this course presumes that you have completed introductory courses in basic math, finance, accounting and statistics. Specifically, you are expected to have proficiency in (i) algebra; (ii) accounting principles including financial statements and financial ratios; (iii) basic statistics, including knowledge in probability distributions (mean and variance) and regression analysis; (iv) *Excel* spreadsheet modeling, and (v) internet skills such as searching, email, downloading files,

etc. If you have not completed the necessary coursework or do not feel comfortable with the requisite skills, you will find the concepts introduced in this course difficult. Please see me if you have any questions regarding the prerequisites

REQUIRED TEXT AND READING MATERIALS

Teaching materials are drawn from the textbook (eBook), newspapers, journal articles, and/or periodicals. There are assigned chapters for each class. I expect students come to class prepared for the materials that will be covered that day. You will find the materials much easier to grasp if you have read the assigned materials and attempted the end-of-chapter problems in advance.

A. There is one required text (eBook).

The required text is an eBook that you can purchase online from the publisher. The eBook (ISBN9781307667868), which you can purchase online from the publisher (see eBook purchase instructions in “Important Information About the Course” posted on Canvas – Module – Class materials) is composed of chapters 5-10, 24, 27, and 28 from *Investments* by Bodie, Kane and Marcus, 12th edition, McGraw-Hill, 2021 (ISBN 9781260013832).

B. Class materials including all Notes posted on CANVAS.

Handouts distributed in class. These include supplemental readings such as journal articles and newspaper clippings.

RECOMMENDED NEWSPAPERS AND JOURNALS

- The Wall Street Journal – Highly recommended
- The Financial Times – Highly recommended
- The Journal of Portfolio Management
- The Journal of Alternative Investments

REQUIREMENTS AND GRADE DETERMINATION

Mid-term Exam	20%
Final Exam	25%
Term Project	
First assignment (individual effort)	5%
Second assignment (individual effort)	10%
Final Report (3-person Team effort).....	20%
Assigned end-of chapter problems (2).....	10%
Course participation	<u>10%</u>
Total	100%

(1) EXAMS

Two exams: In-class mid-term and final exams (time-constrained, typically 100-120 minutes). Exams will have a mix of concept questions and numerical problems (ranges from 45%/55% to 35%/65%, targeting 50%/50%).

(2) PORTFOLIO TERM PROJECT

The project is a three-part assignment. The first part, an individual effort, entails the setting up of an optimal portfolio a self-created, customized EXCEL-based optimization model. The second part entails performance measurement of various asset classes and optimal portfolios using the model created. The third part, which is a 2- or 3-person team effort, entails the construction and analysis of optimal portfolios under various scenarios, and the reporting of results to the Chief Investment Officer of a university endowment fund. Data, guidelines, and instructions for the term project are posted on CANVAS (Modules – Term Project) in due course.

(3) ASSIGNED END-OF-CHAPTER PROBLEMS

Assigned end-of-chapter problems will be collected twice, before the mid-term exam and the final exam. Suggested solutions will be posted on Canvas after the assignments have been collected. Please submit them to Canvas by the due dates listed in the class schedule.

(4) COURSE PARTICIPATION

The distinctive advantage of being taught in a classroom environment (despite via Zoom) is the opportunity to interact with the professor who would hopefully enlighten you and your classmates who would share their experience with you. I also believe that learning requires active participation. Thus, as is typical with advanced graduate courses, class participation is expected and strongly encouraged since active discussion enriches the learning process. Class attendance and your input are therefore vital to the success of everyone's learning. I strongly encourage you to share your ideas and appreciate your generation of meaningful discussions in class. Frivolous comments/remarks or discussions irrelevant to the current discussion, however, will have a negative impact on your course participation grade.

I often pause to ask for questions and always call for questions at the beginning of class. Asking sensible questions in class will stimulate your thinking (as well as mine). I cannot promise you that I know all the answers, but I will do my best. Sometimes, you may be lucky to hit on some potential exam questions. Involving in class discussions with your opinion may enrich the discussion by giving a different perspective to the class to consider. Should you foresee that you would miss class, I would appreciate if you would inform me in advance. Note that frequent absence from class may significantly affect your grade (see grading policy below).

Grading Criteria for Course Participation

90% or more	Attended all weekly sessions. Extremely involved in almost all class discussions related to topics covered in this class. Significantly helped create an exciting class discussion related to topics covered in class on a regular basis. Regularly provided insights regarding relevant outside reading material. Often talked with professor outside of class regarding course material.
80% or more	Attended 8 or more weekly sessions. Involved in almost all class discussions related to topics covered in this class. Helped create an exciting class discussion related to topics covered in

	<p>class on a regular basis.</p> <p>Occasionally provided relevant outside reading material with some comments.</p> <p>Occasionally talked with professor outside of class regarding course material.</p>
60% or more	<p>Attended 7 or more weekly sessions.</p> <p>Occasionally got involved in class discussions related to topics covered in class.</p> <p>Did not detract from creating an exciting class discussion or provide comments/remarks irrelevant to current discussions.</p> <p>Did not distract the class or professor's lecturing by any means including, but not limited to, the use of electronic gadgets.</p> <p>Provided some relevant outside reading material.</p> <p>Once talked with professor outside of class regarding course material.</p>

ATTENDANCE/CLASS ETIQUETTE POLICY

Regular class attendance and proper etiquette are expected during the term. Regular class attendance is defined as attending at least 9 (including mid-term exam) of 10 scheduled sessions. **Leaving early from any class and/or coming in 30 minutes late will count as absence for half a class.** Please carefully read the document - Synchronous FAQs 21QW- posted on Canvas.

GRADING POLICY

Grades are not negotiable and will only be changed in the case of math or grading error on the instructor's part. This is because of the grading method I use – “norming.” With norming, I grade each question for the whole class before I decide how much partial credit will be given against the predetermined grading key. Thus, effectively I curve your score on each question.

If you do not agree with my grading and request a re-grading of your exam, you need to write a **formal re-grading request**. When an exam is requested for re-grading, the entire exam will be re-graded based on the pre-determined grading key and not on the “normed grading key”, i.e., all previous partial credits given based on the norming process will be removed. You should be aware that **a lower score will likely result** due to this process of re-grading.

Your grade reflects satisfactory performance on all assignments and exams. Record of regular attendance is necessary for receiving full credit for class participation. See grading criteria above.

The actual course grade that you'll receive depends on your performance relative to the class, assuming all work has been satisfactorily completed. Your course grade depends on the distribution of the weighted average scores. Normally, a weighted average score of 95 or above is an A, 90 or above is A-, between 80-89 is (B-, B, B+), 65-79 is (C-, C, C+). The actual demarcation line for each grade depends on the actual distribution of all the grades. In some circumstances, I may decide to forgo the plus or minus grades.

Students often claim they did not show how much they knew on the test. Alternatively, they may indicate that they studied "real hard" but just could not grasp the material before exams.

Having been a student for over 20 years myself, I am sure that such sentiments have a certain amount of validity. But, under the present system, I must say that there is no better measure of performance by effort rather by result. Therefore, *to be fair to everybody, grades are based on performance -- not "knowledge" or effort.* Accordingly, one's efforts should be directed toward achieving the maximum performance relative to potential and input.

Although the grade that you'll receive depends on your performance, I find that performance is highly correlated to motivated efforts. Thus, my advice at this point is:

"QUANTUM POTES, TANTUM AUDE"

English translation – “As much as you are able, that you should dare to do.”

UNIVERSITY RESOURCES AND POLICIES

Academic Resources

- Library and Learning Commons (<http://www.seattleu.edu/learningcommons/>)
(This includes: Learning Assistance Programs, Research [Library] Services, Writing Center, Math Lab)
- Academic Integrity Tutorial (*found on Angel and SU Online*)

Academic Policies on Registrar website

(<https://www.seattleu.edu/registrar/academics/performance/>)

- Academic Integrity Policy
- Academic Grading Grievance Policy
- Professional Conduct Policy (*only for professional programs to which it applies*)

Notice for Students Concerning Disabilities

If you have, or think you may have, a disability (including an ‘invisible disability’ such as a learning disability, a chronic health problem, or a mental health condition) that interferes with your performance as a student in this class, you are encouraged to arrange support services and/or accommodations through Disabilities Services staff located in Loyola 100, (206) 296-5740. Disability-based adjustments to course expectations can be arranged only through this process.

HONOR CODE

Please note that students are expected to observe the University Integrity Policy at all times. Any group or individual work you are required to turn in must reflect your own thinking and effort. The use of material from previous quarters, other students and other sources of solutions is **explicitly forbidden**. You are **not** permitted to work or collaborate with other students or groups on homework assignments (end-of-chapter problems) and individual-effort assignments of the term project. When in doubt, please consult me. Cheating will result, at the very least, in a grade of zero for the assignment in question.

MAKE-UP EXAM POLICY

No make-up exams will be given without legitimate excuses and proof. If the legitimate excuses are foreseeable, they must be submitted prior to the scheduled exam. If they are unanticipated such as medical emergencies or death of family member, you should be able to produce documentation if asked. Make-up exams are usually given before the scheduled exam time, more difficult, and graded on an absolute scale. If scheduling a make-up exam is not feasible, the instructor has the discretion to redistribute the weights to the unfinished assignments but no retroactive redistribution to the completed assignments.

LECTURE RECORDING POLICY

For protection of proprietary knowledge and for a variety of other reasons, audio and videotaping of any class session is strictly prohibited without prior approval of the instructor.

I may record some of the lectures via Zoom when I believe it is needed. It is your responsibility to make sure what has been covered in class if you missed any class session.

TITLE IX POLICY

Title IX of the Education Amendments of 1972 (Title IX) prohibits discrimination based on sex in educational programs or activities that receive Federal financial assistance. This prohibition includes sexual misconduct, which encompasses sexual harassment and sexual violence. Seattle U remains committed to providing a safe and equitable learning, living, and working environment. Seattle U offers emergency, medical, and other support resources, as well as assistance with safety and support measures, to community members who have experienced or been impacted by sexual misconduct.

Seattle U requires all faculty and staff to notify the University's Title IX Coordinator if they become aware of any incident of sexual misconduct experienced by a student.

For more information, please visit <https://www.seattleu.edu/equity/>. If you have any questions or concerns, you may also directly contact the Title IX Coordinator in the Office of Institutional Equity (**email:** oi@seattleu.edu; **phone:** 206.296.2824)

Tentative Schedule for FINC 5120 Portfolio Management

Your learning is my primary concern in this course, so I may modify the schedule if, for instance, I find it necessary to spend more time on a certain topic and less on another. Thus, this schedule is subject to change. Please regularly check CANVAS for updates.

Please come to class prepared –

- **Read** the assigned readings before class; and
- **Be ready** to discuss the contents covered in previous classes when asked. Your response will be counted toward course participation.

Date	Topics	Assigned reading	Assignments
Jan 5	Course Overview/Term Project Portfolio Management Process and Framework Investment Policy Statement (IPS) Fiduciary duties and CFA Code of Ethics and Professional Standards Project assign #1 instructions	**Kwan; Notes 1; B28.	B28-CFA#1, 5
Jan 12	Project assign #2 instructions Asset Allocation (AA) Basic Inputs to Asset Allocation: - Return and Risk (forecast and historical) - Return Probability Distribution	Notes 2; Notes 3A; B5 (you review it on your own); B24 (pp.813-5); TN1; TN2.	<u>Project Assign#1</u> <u>due 6pm</u> B24 #1, 5-7 B5-CFA#3-6
Jan 19	Risk Aversion and Mean-Variance Utility Function Portfolio Math - Covariance and Correlation	Notes 3B B6 (§6.1) B7 Appendix B	B6-CFA#1-3
Jan 26	Portfolio Theory (I): Capital Allocation - Risk-Free and Risky Assets - Risk Tolerance - CAL vs. CML	Notes 4A; B6 (§6.2-6.6).	<u>Project Assign#2</u> <u>due</u> B6 #13-19; B6-CFA#4-9 <u>End-of-chapter</u> <u>problems due by 12</u> <u>noon, Jan 29</u>
Feb 2	<u>Mid-term Exam</u>		
Feb 9	Term Project Assignment #3 - Portfolio Theory (II): Efficient Diversification of Risky Assets - Markowitz theory	Notes 4B; B7 (§7.1-7).	B7 #4-8; B7-CFA#9, 12
Feb 16	Portfolio Theory (III): Asset Allocation Risky & Risk-Free Assets - CAPM	Notes 4B (cont'd) Notes 5 (A); B9	B9 #10-12, 21, 23; B9-CFA#2

Date	Topics	Assigned reading	Assignments
Feb 23	- CAPM (cont'd) -Single Index Model & Sharpe optimization -Factor Models	Notes 5 (B); B8 (§8.1-8.3) Notes 6; B10	B8 #5, 6, 8-14
Mar 2	Theory of Active Portfolio Management: Treynor-Black Model	Notes 7; B8 (§8.4-8.5); B27.	B8 #17-18
Mar 9	Portfolio Performance Evaluation <ul style="list-style-type: none"> • Benchmarks • Style Investing • Returns-Based Style Analysis 	Notes 8; B24 (§24.1); **Richards. Notes 9; **Ben Dor & Jagannathan (pp. 3-26)	<u>Project Assign#3 due</u> B24 #9, 21; B24-CFA #4-6 <u>End-of-chapter problems due by 12 noon, Mar 12</u>
Mar 16	Final Exam 6:00pm-7:40pm		

Bxx (e.g., B28) – Original chapter number from Investments, 12th edition by Bodie, Kane and Marcus (Ch. 28)

Bxx # (e.g., B24 #9) - refers to the end-of-chapter problems from the original chapter (Ch. 24, problem #9)

Bxx-CFA# (e.g., B28-CFA#5) - refers to the end-of-chapter CFA problems (Ch. 28, CFA problem #5)

**** indicates additional required readings for the course.**

1. Kwan, C. C.Y. "Portfolio Analysis Using Spreadsheet Tools," *Journal of Applied Finance*, Vol. 11, No.1, 2001, pp. 70-75.
<http://web.a.ebscohost.com.proxy.seattleu.edu/ehost/detail/detail?vid=2&sid=5db60be5-c2c6-46f2-860d-835789ab8809%40sdc-v- sessmgr03&bdata=JnNpdGU9ZWhvc3QtGjZ2SzY29wZT1zaXRI#AN=5899671&db=bth>
2. Richards, T.M. "Alternatives to Broad Market Index," *AIMR Conference Proceedings Benchmarks and Attribution Analysis*, November 8, 2001, pp. 13-20.
3. Ben Dor, A. and Jagannathan, R. "Understanding Mutual Fund and Hedge Fund Style Using Return-Based Style Analysis," pp. 3-26, NBER, 2002. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=324053

Recommended Reference

1. Sharpe, W.F. "Asset allocation: Management Style and Performance Measurement," *Journal of Portfolio Management*, Winter 1992, pp. 7-19, accessible at <http://www.stanford.edu/~wfsarpe/art/art.htm>.
2. Chow, T-M, E. Kose, and F. Li, "The Impact of Constraints on Minimum-Variance Portfolios," *Financial Analysts Journal*, Volume 72, #2, 2016, pp. 52-70. (Downloadable from SU library).
3. Ibbotson, R. "Does Asset Allocation Policy Explain 40%, 90%, or 100% of Performance?" accessible at <http://www.ibbotson.com/research/papers/toc.asp>
4. Jennings, W. W., and E.L. Podkaminer. "Introduction to Asset Allocation," 2018 CFA Exam Level III Required Reading.
5. Brunel, J.L., T.M. Idzorek, and J. M. Mulvey, "Principles of Asset Allocation," 2018 CFA Exam Level III Required Reading.
6. P. Mladina, B.J. Murphy, and M. Ruloff, "Asset Allocation with Real-World Constraints," 2018 CFA Exam Level III Required Reading.