

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

Winter 2020

Pigott 102

Wednesday 6:00 p.m. – 8:40 p.m.

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

Instructor: Jot Yau, PhD, CFA
Professor of Finance

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Office hours:	Wednesday 4:00 pm–5:45pm, and other times by appointment

OFFICE HOURS AND COMMUNICATING WITH ME

I am very flexible in scheduling appointments outside of scheduled office hours. Don't hesitate to request an appointment, and I will set it up. I request that you forewarn me since it allows me to give you full attention to your needs that you deserve and not be distracted by my other engagements. To avoid disappointment when you stop by, please let me know when you are coming in during the scheduled office hours.

I check my e-mails in the SU account (jyau@seattleu.edu) regularly when the school is in session. Alternatively, you can send me email via CANVAS conversation. 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 this 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 techniques of professionally 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 and for those who would take Hedge Funds (FINC 5335)

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 (ISBN9781307345858), which you can purchase online from the publisher (see eBook purchase instructions posted on Canvas) is composed of chapters 5-10, 24, 27, and 28 from *Investments* by Bodie, Kane and Marcus, 11th edition, McGraw-Hill, 2018 (ISBN 9781259277177).

B. Class materials including notes (Notes 1-9) 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	25%
Final Exam	25%
Term Project	
First Report (individual effort).....	20%
Final Report (2 or 3-person Team effort).....	20%
Course participation	<u>10%</u>
Total	100%

(1) EXAMS

Two exams: **In-class, closed book** mid-term and final exams. Exams will have a mix of concept questions and numerical problems (ranges from 40%/60% to 60%/40%, targeting 50%/50%).

(2) PORTFOLIO TERM PROJECT

The project has two parts. The first part, an individual effort, entails the construction of an optimal portfolio and measurement of its performance using a self-created, customized EXCEL-based optimization model. The second part, which is a 2 or 3-person team effort, entails the construction of optimal portfolios under various scenarios and reporting of the results (in the form of a report) to the CIO. **Data, guidelines, and instructions** for the term project are posted on the course website at CANVAS in due course.

(3) COURSE PARTICIPATION

The distinctive advantage of being taught in a classroom environment (vis-à-vis online distance learning) is the opportunity to interact with the professors 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).

To facilitate active learning, I assign some end-of-chapter problems for you to prepare before class. You should get ready to explain your answers or demonstrate your work in class. Your satisfactory answers and relevant discussion will be counted towards your individual class participation (see below). You do not need to submit any written work for this.

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 lectures. 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 lectures. 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 lectures.</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 POLICY

Regular class attendance is 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.**

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.

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 and 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.

ELECTRONIC GADGETS POLICY

The use of laptops, iPads, tablets, PDAs, blackberrys, mobile phones of any kind, or any other handheld electronic gadgets, is not allowed in class. Violations will be penalized by the deduction of course participation score (up to the maximum 10 points) toward the course grade.

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. Under extreme circumstances or for a pre-approved class absence, audio taping a class session will be allowed on a case-by-case basis and with the express permission of the instructor. The student will be responsible for making all necessary arrangements. Students will need to adhere to the appropriate agreed upon use of the content material of these audio/video tapes.

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:** oiie@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
- **Do** the end-of-chapter problems and be ready to **present and discuss** your answers in class when asked. Your response will be counted toward course participation. However, no written submission is required.

Date	Topics	Assigned reading*	Assignment Due*
Jan 8	- Course Overview/Term Project - Portfolio Management Process and Framework - Investment Policy Statement (IPS)	**Kwan; Notes 1; B28 (ignore §28.5).	B28-CFA#5
Jan 15	- Project assign #1 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 (§24.1); TN1; TN2.	B24 #1, 5-7 B5-CFA#3-6
Jan 22	- 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 29	- Portfolio Theory (I): Capital Allocation - Risk-Free and Risky Assets - Risk Tolerance - CAL vs. CML	Notes 4A; B6 (§6.2).	<u>Project Assign#1 due</u> B6 #13-19; B6-CFA#4-9
Feb 5	<u>Mid-term Exam</u>		
Feb 12	- Term Project Assignment #2 - Portfolio Theory (II): Efficient Diversification of Risky Assets - Markowitz theory	Notes 4B; B7 (§7.1-7.4); B7 Appendix A.	

Feb 19	- Portfolio Theory (III): Asset Allocation Risky & Risk-Free Assets - CAPM	Notes 4B Notes 5 (A); B9	B7 #4-8; B7-CFA#9, 12 B9 #10-12, 21, 23; B9-CFA#2
Feb 26	- CAPM (cont'd) -Single Index Model & Sharpe optimization	Notes 5 (B); B8 (§8.1-8.3)	B8 #5, 6, 8-14
Mar 4	– Multifactor Models • Theory of Active Portfolio Management: Treynor-Black Model	Notes 6; B10 Notes 7; B8 (§8.4-8.5); B27(§27.1, skim the rest).	B8 #17-18
Mar 11	– Portfolio Performance Evaluation • Benchmarks • Style Investing • Returns-Based Style Analysis	Notes 8; B24 (§24.1); **Richards. Notes 9; **Ben Dor & Jagannathan (pp. 3-26).	Project Assign#2 due B24 #9, 21; B24-CFA #4-6.
Mar 18	Final Exam 6:00pm-7:40pm		

* **Bxx** – Original chapter page number from *Investments*, 11th edition by Bodie, Kane and Marcus;
Bxx # - refers to the end-of-chapter problems from the original chapter Bxx
CFA# - refers to the end-of-chapter CFA problems

** 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. (Will be handed out in class).
2. Richards, T.M. "Alternatives to Broad Market Index," AIMR, 2001. (Will be handed out in class).
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> (For reference only)
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 Required Reading.