# Wealth Management

# **INSTRUCTOR**

John Lewis, PhD, Lecturer john-lewisjr@uiowa.edu W186 PBB

# **CLASS MEETING TIMES**

T TH 12:30 - 1:45 2229 SC

#### OFFICE HOURS

T TH 3:30 – 4:30 and by appointment, W186 PBB

#### COURSE SITE

To access the course site, <u>log into Iowa Courses Online (ICON)</u> (https://icon.uiowa.edu/index.shtml) using your Hawk ID and password

## ACADEMIC COURSE HOME

Finance Department, DEO: Erik Lie, (319) 335-0846, erik-lie@uiowa.edu

# **PROGRAM GOALS**

The Tippie College of Business Undergraduate Program has learning goals that drive decisions about curriculum and assignments within courses.

Program Goal 1: Graduates will use analytical, creative and collaborative approaches to solving complex, ambiguous problems

Program Goal 2: Graduates will demonstrate effective written, spoken and visual communication

Program Goal 3: Graduates will obtain global awareness and understanding

Program Goal 4: Graduates will demonstrate ethical reasoning

Program Goal 5: Graduates will obtain professional preparation.



# COURSE DESCRIPTION AND GOALS

The objective of this course is to teach you how to manage portfolios for private individuals using guidelines for the Certified Professional Planner Board (www.cfp.net) or become a portfolio assistant for institutional management following the Chartered Financial Analyst (www.cfainstitute.org). The CFP Board provides training and certification for financial professionals who want to manage portfolios for private individuals.

Concepts and tools covered include the financial planning process, the major classes of financial assets, financial markets, measurement of risk and return and the optimization of an investment portfolio with constraints. The base methods come from modern portfolio theory (MPT), for which Harry Markowitz won the Nobel Prize. Many of the topics we cover in this course are from Nobel Prize winning researchers.

Students will use several online tools and analytics to manage a portfolio for a hypothetical client. Students will have to adhere to the risk profile of the hypothetical client and apply the 'prudent man' rule to their investment strategy. Each student will manage a portfolio – this is not a group project.

**Interactive Brokers and Finviz:** The portfolios will be managed on the free student version of <u>Interactive Brokers</u> (www.interactivebrokers.com ) trading system via the Trading Lab. This provides simulated trading, on a wide variety of instruments (stocks, bonds, ETFs, Mutual Funds, derivatives, currencies, etc.), with transaction and market impact costs.

There are research tools in Interactive Brokers and additional resources at <u>Finviz</u> (www.finviz.com). Additional tools will be provided to students either in a spreadsheet or via a web link.

**R and RStudio**: We will also use the statistical language R and RStudio to build portfolios and compute the risk of portfolios. For the most part, you will run programs that I provide. We will spend time on R so you are familiar with it.

This semester we will use <u>Posit.cloud</u> (www.posit.cloud) for the R programs. It is a cloud system and does not require that you load programs on your computer. Posit.cloud is an online version of R and RStudio.



#### COURSE OBJECTIVES:

Course Objective 1: Determine the risk profile for a client and suggest appropriate investment strategies.

Course Objective 2: Measure investment risk and returns.

Course Objective 3: Construct an optimal investment portfolio and provide long-term monitoring of the portfolio.

Course Objective 4: Apply the best mix of investments for your client based on their financial situation, goal, risk profile and tax situation.

## MEDIA/SYSTEM REQUIREMENTS

Technical requirements for completing this class include:

- Student-provided personal computer with reliable Internet access. A wired Ethernet connection is strongly encouraged.
- If you need assistive technologies that has different computer and technology requirements, then you will be responsible for making those arrangements.
  Please check with <u>Student Disability Services</u>: (https://sds.studentlife.uiowa.edu) to determine the requirements for specific technologies and for assistance if necessary.

#### TEXTBOOK/MATERIALS

We will use free textbooks from Bookboon and the library. Go to <u>Bookboon</u> (www.bookboon.com) and sign up for a FREE student account. We will use free textbooks and not the professional books. These books are short and very focused. Therefore, we will use several books over the semester. Do not get tricked into buying the professional subscription to Bookboon. For books from the library, one can be downloaded as a plain pdf. The other book requires downloading the locked version of adobe. The library links step you through it. If you read the books online, there is nothing to download. The textbook(s) for this course are:

From the library: (PLAN)



#### Plan Your Financial Future: A Comprehensive Guidebook to Growing Your Net Worth

Keith R. Fevurly

METROPOLITAN STATE UNIV OF DENVER, DENVER, Colorado, USA

ISBN-13 (pbk): 978-1-4842-3636-9 ISBN-13 (electronic): 978-1-4842-3637-6

(WEALTH)

Wealth Management Private Banking, Investment Decisions and Structured Financial Products Dimitris N. Chorafas, ISBN13: 978-0-7506-6855-2 ISBN10: 0-7506-6855-5

From Bookboon.com:

(PORT)

Robert Alan Hill, Portfolio Theory and Financial Analysis, 2010, 1st edition, ISBN 978-87-7681-605-6

The exercises book for the above title is also a good idea to read.

#### **GRADING CRITERIA**

Final course grades will be assessed based on the student's performance in the following activities

Graded Item	Points	% of Final Grade
Participation and in class quizzes	15	15%
Assignments (10 assignments)	40	40%
Mid-Term	15	15%
Final Exam	30	30%
Total Points:	100	100%

Final course grades will be assigned based on points earned, but will be largely consistent with the recommended grade distribution described in Appendix A.

# **COURSE WORK**

# Quizzes (most classes):

At the start of some of the classes, I will do a simple quiz covering the main points of the previous class(es). These tests help you learn the important points and commit them to memory. The grade is a SCORE FROM 1 to 5.

There are more quizzes given than required for full marks. This provides a safety net if



you miss a quiz. The lowest grades are dropped over the 10 required for full marks.

#### Assignments:

There are assignments with each topic. The assignment and due dates are provided via ICON. Grading is 0, 1 or 2. The assignment is graded on effort. You do not need to answer correctly to receive 2 points. You receive 0 points for not completing the assignment. 1 point is awarded for doing some work with an incorrect answer or the correct answer with no work. Full points are received for a correct answer which shows work or an incorrect answer with full work and reasoning explained. The smart thing to do is work on the assignment, show all work and include the reasons for your answers.

#### **Exams:**

Students are required to take one midterm and one final exam. Each exam will be cumulative of the material covered to that point.

#### HOW TO GET HELP

#### **Teaching Assistants**

There is not a TA for this course.

#### **Tutoring**

Tippie and the University offers tutoring and other resources to help you succeed in this and your other courses. For more information, please visit <u>Academic Support and Tutoring (https://tippie.uiowa.edu/current-students/undergraduates/academics/advising/academic-support-and-tutoring)</u>.

#### **Tippie Career Services**

Tippie Undergraduate Career Services provides students with personalized career support, regularly updated internship and job leads, and other useful career information. Additional information and access to services can be found at <a href="https://students.tippie.uiowa.edu/tippie-resources/career-services/undergraduate-career-services">https://students.tippie.uiowa.edu/tippie-resources/career-services/undergraduate-career-services</a>.

# COURSE-SPECIFIC POLICIES AND GUIDELINES

**Al Policy:** Use of Al tools, including ChatGPT, is permitted in this course for students who wish to use them. To be consistent with our scholarly values, students must cite



any Al-generated material that informed their work and use quotation marks or other appropriate indicators of quoted material when appropriate. Students should indicate how Al tools informed their process and the final product, including how you validated any Al-generated citations, which may be invented by the Al. Assignment guidelines will provide additional guidance as to how these tools might be part of your process for each assessment this semester and how to provide transparency about their use in your work.

**Communications:** Students can expect to receive communications from the instructor (via course "Announcements" in ICON). Students are also responsible for all official correspondence sent through their University of Iowa email address. Students can expect to receive responses to email inquiries within 24-48 hours. Privacy considerations, such as federal law, may apply when using an address other than the standard University e-mail address.

**Exams:** Students are expected to take the exams at the regularly scheduled times, unless permission has been granted by the instructor at least 2 weeks in advance in writing. All exams are INDIVIDUAL WORK and collaboration on exams is not permitted under any circumstance. All exams are CLOSED BOOK. Use of any unauthorized materials during the exam is strictly prohibited and will be grounds for a grade of zero on the exam.

Attendance: Attendance in all class sessions is expected. However, unforeseen conflicts due occasionally arise. Students are expected to give adequate advance notice of an excused absence, make up the missed work and make every effort to avoid a class conflict. To ensure legitimacy, students may be asked to provide documentation upon request. Short-term illnesses will also be considered as excused absences, however students are asked to let me know prior to or even the day of the absence why they are not in class. A plan for managing longer term absences should be discussed with me to determine whether successful completion of the course is possible.

**Late Work:** Because I regard this class as I would any job responsibility, I hold you to strict standards of timeliness and ethics. Unless other arrangements have been made, assignments that are late will receive an automatic 20% grade reduction. Each following day late will result in another 20% reduction in the grade.

Inclement Weather/Class Cancellation: Although it is our intent to offer every class at its assigned time, on rare occasion there are weather or other emergency events that require that alternative arrangements are made for class delivery. If that happens, please stay alert for an email from me indicating how the class will be handled. This may include: 1) Cancelling the class completely – all reading and work that was due is expected to be completed and turned in on time through ICON; 2); Holding an online version of the class (i.e., via Zoom)– you will receive an email invitation to join the



session remotely from a computer with an internet connection – headphones are recommended; 3) using recorded videos and presenting other materials to you through ICON so we can cover the course materials asynchronously.

Class Recording Policy: Some of the sessions in this course will be recorded or live-streamed. Such recordings/streaming will only be available to students registered for this class. These recordings are the intellectual property of the faculty and they may not be shared or reproduced without the explicit, written consent of the faculty member. Further, students may not share these sessions with those not in the class, or upload them to any other online environment. Doing so would be a breach of the Code of Student Conduct, and, in some cases, a violation of the Federal Education Rights and Privacy Act (FERPA).

#### COLLEGIATE AND UNIVERSITY POLICIES AND GUIDELINES

The administrative home of this course is the Tippie College of Business, which governs academic matters relating to the course such as the add/drop deadlines, the second-grade-only option, issues concerning academic misconduct, and how credits are applied for various graduation requirements. Different colleges might have different policies.

Students at Tippie adhere to an honor code that emphasizes the importance of honesty and integrity. Student concerns about this class or your performance in it can be discussed with the instructor or the Associate Dean for Undergraduate Programs. More details about these and other policies are available on the Tippie website.

The University of Iowa is committed to the <u>protection of freedom of speech and the principles of academic and artistic freedom, to accommodating students with disabilities, and to accommodating absences due to religious holidays and military obligations. In addition, students are expected to comply with the University's Code of Student Life. The University is also committed to non-discrimination and prohibits all forms of sexual harassment, sexual misconduct, and related retaliation. The University also provides resources for student mental health as well as for the basic needs and support of students.</u>

#### TIPPIE CAREER SERVICES

Tippie Undergraduate Career Services provides students with personalized career support, regularly updated internship and job leads, and other useful career information. Additional information and access to services can be found at <a href="students.tippie.uiowa.edu/tippie-resources/career-services/undergraduate-career-services">students.tippie.uiowa.edu/tippie-resources/career-services/undergraduate-career-services</a>.



# **COURSE CALENDAR**

Topic 0: Introduction and Overview of the investment process

During class, we will discuss opening the various accounts and create the first portfolios. To make life easier, we will restrict investments to US based companies on American exchanges. We will discuss the investment process, measures of risk and return, simple strategies using ratio analysis and simple value/growth strategies.

We will also discuss the job market and the motivation for the items I am teaching you in class.

Before building portfolios, we will look at an overview of the wealth management business and why it is growing at a rapid pace.

Assignment: Select 4 industries for investment, two you believe will increase in value and two you believe will fall in value. Select 3 to 6 companies in each industry and create a portfolio in your Finviz.com account.

Topic 1: Investment strategies: Growth, GARP and Value Strategies

There are many investment strategies. We will concentrate on the three strategies of Growth, Growth at a reasonable Price (GARP) and Value. Under certain market conditions, one method may have higher returns than the other methods. We will look at the conditions which favor each method and a strategy which works over the long term.

Assignment: Build one portfolio using each strategy

Topic 2: Optimal Portfolios / Modern Portfolio Theory

Harry Markowitz won the Nobel Prize for determining a method to diversify a portfolio and reduce the overall risk while, often, increasing the return. His method of mean variance optimization can create an optimal portfolio. We will optimize the portfolio you created in the introduction section with constrained mean variance optimization. The basic portfolio optimization method has a number of shortcomings. The two main inputs are the volatilities and expected returns of the instruments. Both of these calculations are very error prone. The errors can be amplified in a simple mean variance optimizer. We will live with the shortcomings and optimize our investments with a simple optimizer



and constraints. We may look at some advanced optimization techniques at the end of the class, if time permits.

Mean variance optimization requires expected returns for each instrument. For this class, we will use a long term (5 year) mean. A full expected returns model is beyond the scope of this class.

We will compare the mean returns to CAPM. I have never had a year where CAPM outperforms mean returns. We will try again this year. Hopefully, mean returns win again.

Even though CAPM has not worked for me, Arbitrage Pricing Theory (APT) has consistently worked. We will talk about APT but not implement it.

We should see that the optimized portfolios, across the class, outperform equal weighted portfolios after a few weeks.

Assignment: Build several optimized portfolios.

#### Topic 3: Measuring Financial Risk

Nearly everyone is familiar with the idea that investment returns require accepting some level of risk. In this topic, we will look at the different types of risk (systematic and unsystematic), methods of computation and how to minimize risk. We will look at volatility of returns, value at risk and other measures of risk.

Topic 4: Know your client and determining their needs and risk profile

When you manage money for someone, you are required, by law, to invest their money in a way that is entirely beneficial to your client. You may charge a fee for your efforts. This is the 'prudent man' rule for fiduciaries (the person providing the investment advice). The fiduciary is required to perform due diligence to ensure the investments meet the needs of the client. Investment advice for someone who is 80 years old and retired is completely different than the advice for an internet tycoon with many millions in company stock. There are well established rules to determine the correct risk profile of a client. We will learn methods to establish the risk profile.



We will look at some basic value investing methods so you can build sample portfolios. At the end of the semester, we will learn some advanced techniques to build better portfolios.

Assignments: Determine the risk profile of your client and create a report with your recommendations.

Topic 5: Insurance

The number one reason for personal bankruptcy is medical expenses. Insurance can keep that cause of bankruptcy to a minimum. Some medical insurance is more efficient than other types. We will look at some of the options for medical insurance and discuss the trade-offs. This is a very rapidly changing market. The only constant is the increase in price for coverage.

We will take a quick look at other coverage and strategies for minimizing your costs.

Life insurance can be a useful tool for wealth management. We will look at Irrevocable Life Insurance Trusts and how they fit into estate planning.

Insurance companies also sell products for retirement. We will cover those products in the next section and discuss why this is usually not a good deal for the consumer.

Topic 6: Time value of money in retirement

We will put the time value of money into practice. We will look at several scenarios where you (meaning you the student) can drastically change your life by making some moderate investments early in your working career. With a slight decrease in your current expenditure (after you land your first job), you can become a millionaire by the time you are 50 years old.

Assignment: Use the following calculators to determine your risk tolerance:

https://www.calcxml.com/do/inv08

https://personal.vanguard.com/us/FundsInvQuestionnaire

https://intelligent.schwab.com/public/intelligent/insights/blog/determine-your-risk-

tolerance-level.html

Topic 7: Tax efficient Retirement Accounts



Unfortunately, there are fewer and fewer defined benefit retirement plans. The most likely programs open to you will be defined contribution programs. We will look at the difference between the two types and concentrate on the defined contribution method in class discussion. There are numerous defined contribution plans. You are probably aware of 401K programs and maybe less so with IRAs and Roth-IRAs.

Because of the time value of money, it is very important that you begin your investments as soon as you can.

There are other financial products available for retirement. These include annuities and other products from insurance companies. This is a product, which you buy for a large up-front price, and it pays a fixed payment, or a payment adjusted for inflation, for the length of the life of the holder(s). These are not very popular in America. In some countries, they are a required purchase at retirement. We will give this a brief overview. For most of you, annuities will not be a good choice. We will discuss the reasons for this in class.

#### **Topic 8: Retirement Planning**

In this topic we will examine the different accounts and strategies for the management of retirement accounts. The goal is the highest possible return and distributions which last for the life of the client. We will also discuss some methods to fix a problem where the retirement savings of a client might not last through their full retirement.

Assignment: Create a retirement plan for your client.

Topic 9: Tax Services

We will examine the difference between tax efficient and simply avoiding taxes. The goal should be maximizing returns after taxes. We will also discuss the special tax situations of high net worth individuals.

Topic 10: Mutual Funds, Exchange Traded Funds and Custody

You can use mutual funds to invest in a large number of financial instruments with one transaction. Professional managers create a pool of securities and clients buy a share of the pool. Typically, the mutual funds are based on a theme, i.e. SP500, Russell 2000, Barclay's Short-Term Bond Fund. Exchange traded funds are relatively new and provide a similar function at a lower cost and with different ground rules. We will examine both types of financial products and how you may use them in your investment strategy.



Mutual funds can have heavy load fees charged to manage the fund. We will look at some of the different fees and how they impact your investment.

You should not hold your client's cash assets but should use a custodian. We will look at several custodian companies which have services specifically for wealth management firms.

Assignment: Pick any non-index mutual fund from both Putnam Investments and a somewhat matching fund from Vanguard. Look at the prospectus and determine the total load of the fund. Assume that the fund will earn 10% for the next 5 years. Compute the return of a 100,000 USD investment made in each fund and account for the fees charged.

Topic 11: The Wealth Management business and effects of selecting a non-fiduciary advisor

This topic will be an overview of the wealth management business. We will look at how it operates, the potential for growth and market trends. We will explore the different online sources rating the different wealth management firms.

Assignment: Create virtual investments with a fiduciary and non-fiduciary advisor

Topic 12: Annuities

Annuities are a controversial topic. We will look at industry research about the benefits and drawbacks of purchasing annuities. There are some circumstances where the purchase of annuities is a good idea – such as high net worth individuals. However, for most individual investors, annuities are not the best retirement savings vehicle.

Topic 13: Trusts

There are numerous types of trusts to protect assets and ensure the use of assets under different scenarios. We will do a brief survey of different trust options.

DATE	TOPICS AND ACTIVITIES	READINGS AND ASSIGNMENTS	DUE DATE/TIME
21 Jan	Introduction		



	Grading, Course Structure and Overview		
23 Jan	Wealth Management Overview Financial Markets		
28 Jan	Finviz.com and building portfolios	Signup to finviz, posit.cloud, Datacamp and Interactive Brokers	30 Jan
30 Jan	Finviz.com and building portfolios		
4 Feb	Advanced Investment Techniques	Build Naïve Portfolios	6 Feb
6 Feb	Advanced Investment Techniques	Create value portfolio	11 Feb
11 Feb	Advanced Investment Techniques	Create GARP and growth portfolio	13 Feb
13 Feb	MPT	PORT All Chapters; Optimize portfolio and save	17 Feb
18 Feb	MPT	Portfolio based on mandate	25 Feb
25 Feb	Know Your Client	PLAN Ch 1 – 3; WEALTH Ch 2;	
27 Feb	Risk	WEALTH Ch 4, 7, 8; Modified Portfolio	6 Mar
4 Mar	Insurance	Plan Ch 4 - 7	



6 Mar	Insurance & Compounding	Investments age 21	11 Mar
11 Mar	Insurance	Insurance Recommendation	18 Mar
13 Mar	Retirement Planning		
18 Mar	Retirement Planning		
20 Mar	Review		
20 Mar	Retirement Planning	Retirement Planning Memo	8 Apr
25 – 27 Mar	Spring Break		
1 Apr	Mid Term		
8 Apr	Special Topics for HNW		
10 Apr	Tax	PLAN Ch 12,13,15,16	
15 Apr	Option Overlay		
17 Apr	Mutual Funds and ETFs	Comparison of mutual funds	22 Apr
22 Apr	Mutual Funds and ETFs		
24 Apr	Wealth Management Business		
29 Apr	Effects of selecting a non-fiduciary advisor	Investment returns from a fiduciary and non-fiduciary advisor	
1 May	Wealth Management Business		
6 May	Effects of selecting a non-fiduciary advisor	Investment returns from a fiduciary and non-fiduciary advisor	8 May



# COURSE NUMBER FIN:4340| SESSION 0001

8 May	Annuities	
8 May	Trusts	
ТВА	Final	



# APPENDIX A: TIPPIE UNDERGRADUATE GRADING GUIDELINES

Grade	Core courses	Required courses	Elective courses
Α	20%	30%	40%
В	40%	40%	40%
С	30%	25%	15%
D	10%	5%	5%

