



FIN321 – INVESTMENT ANALYSIS
California State University, San Marcos
College of Business Administration
Fall 2022

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Office Hours: by appointment
Recommended

Books: *Investments*, Bodie, Kane, and Marcus, 2011, McGraw-Hill Irwin
Understanding Stock Option Trading Strategies, Zera, 2010, Stephen Paul
Zera

Website: zerafinance.com

COURSE OBJECTIVES

This 4-unit course will provide students with an understanding of both investment theory and practice. Students will develop an appreciation for the relationship between risk and expected return. Spreadsheets will often be used to illustrate the material so as to improve student understanding of the concepts and to improve student spreadsheet skills. Students will continue to develop their critical thinking skills.

PREREQUISITE

FIN302 or FIN304

COURSE CONTENT

The course begins with an examination of several methods of quantifying investment return performance. We will then explore the consequences of investor risk aversion within the context of *utility of wealth analysis*. Next, we study the impact of the actions of the central bank on investor behavior.

The simultaneous determination of interest rates and bond prices and the specifics of fixed-income security valuation are discussed. Mortgage-backed securities and their derivatives will be studied. So too will be the analytical tool called *duration*. Then we turn our attention to equity valuation.

The economic principles that guide the functioning of brokers, exchanges and clearing firms are examined as we study *market microstructure*. The psychological aspects of



investing will be discussed. The distinctions between investing and trading will be highlighted as will potential combinations of the two strategies. The risks associated with the use of leverage will become well-understood by the students, as will the risks associated with short selling.

We next study the expansion of the investment opportunity space that occurs as a consequence of the use of derivative securities such as *stock options* and *futures contracts*. Students will become highly competent in the use of equity options. Students will master option pricing models, covered call and covered put strategies, and many option spread and combination strategies. The risks associated with each option trading strategy that we study will be thoroughly exposed. Particular attention will be paid to the identification of arbitrage opportunities.

We next explore *modern portfolio theory* and thoroughly examine its statistical underpinnings. The popular specification of the relationship between risk and return called the *Capital Asset Pricing Model* will be examined. Students will become familiar with the various dimensions of risk. The potential benefits of mutual fund and ETF investing are discussed.

The relationship between risk and expected return and the relevance of risk aversion to investment decisions will be recurring themes. Throughout the semester, I will enhance my lectures with analyses presented on Excel spreadsheets that I have created. You will receive these spreadsheet files for your own use.

STUDENT LEARNING OUTCOMES

Students will develop a strong understanding of the following:

- utility theory
- risk aversion
- inflation
- the pricing of fixed income securities
- the term structure of interest rates
- bond duration
- the pricing of common stocks
- short selling
- margin requirements
- market microstructure
- market efficiency



- equity options
- option pricing fundamentals
- put-call parity
- option trading strategies
- modern portfolio theory
- capital asset pricing model
- factor pricing models
- mutual funds
- ETFs

GRADING

Two exams will be given, a mid-term exam and a final exam. The final exam will not be comprehensive. Each exam will be weighted 50%. An acceptable 2500-word essay is also a requirement of this course, per University policy. The essay will be graded either *acceptable* or *unacceptable*. An essay grade of acceptable will not affect your course grade.

The following scale will determine the student's course grade:

| | | | | |
|--------|-------|-------|-------|------|
| 100-90 | 90-80 | 80-70 | 70-60 | 60-0 |
| A | B | C | D | F |

Your likelihood of earning a high grade in this course is maximized if you:

- 1) always attend class and/or view the assigned videos,
- 2) take **great** notes,
- 3) read the assigned text material if you need background information,
- 4) study your great notes daily, and
- 5) contact the professor ASAP if a concept or fact is not clear to you.

EXAMS



The exams may include multiple choice, essay, and problem-style questions. Also, oral examination may be utilized. Emphasis will be placed on the lecture material. Makeup exams will not be given.

ESSAY

Acceptable essay topics will be discussed in class or via email unless essay exams are utilized. If essay exams are used there will be no essay requirement separate from the essay exam/s.

APPROXIMATE COURSE SCHEDULE

| Week | Topic | Optional Reading |
|-------------|------------------------------------------------------------|---------------------------|
| 1,2,3 | introduction / returns / risk aversion / utility of wealth | BKM 1,2,5 Zera 1,2 |
| 4,5,6,7 | bond pricing / term structure / duration / TIIS | BKM 14,15,16 |
| 7,8 | stock valuation / dividend discount models | BKM 18 |
| 8 | exam | |
| 9 | securities markets and trading rules | BKM 3 |
| 10,11,12,13 | option pricing fundamentals / option trading strategies | Zera 3-11 |
| 14,15 | modern portfolio theory, futures | BKM 6,7,8,9,11 |
| 16 | final exam | |

The professor reserves the right to alter this syllabus at any time for any reason.

The prerequisites for this course are listed in the course catalogue. The instructor reserves the right to administratively drop, at any point, any student who has not met the prerequisites. Students choosing to withdraw from this course are responsible for doing so according to university procedures and deadlines.

CoBA Mission Statement

- Provide rigorous and relevant education, using a balance of theoretical, experiential and applied learning
- Contribute by preparing a diverse student body to become responsible and engaged citizens with a global mindset
- Collaborate among faculty, staff, students and the community in a combination of academic and applied scholarship, and professional experience

University Writing Requirement



CSUSM has established a writing requirement of 850 words for a 1-unit course, 1700 words for a 2-unit course, and 2500 words for courses of 3 or more units. To meet this requirement, each student in this course will complete the writing assignments described in this course outline.

Online Instruction Policy

You are required to watch, study and take detailed notes on each of the assigned videos listed below. Failure to do so will likely result in earning a D or F grade for the course. I expect that students will spend 10-12 hours per week viewing the videos, taking great notes and studying the material. My YouTube channel is titled “optionsgambler”.

For the midterm exam:

- 1. Investment Analysis playlist**
 - a. Investment analysis videos 1 through 7**
 - b. Bond pricing videos 1 through 7**
 - c. Treasury security auction video**
- 2. Videos 1 through 7 of “the hidden secrets of money” video series which can be found at <https://www.youtube.com/watch?v=DyV0OfU3-FU>. This is to get you to think about the concept of money. You may agree or disagree with some of the material, but I want you to be exposed to these perspectives.**
- 3. Groovy Options playlist**
 - a. Videos 1 through 9**

MIDTERM WEEK 8

For the final exam:

- 1. Groovy Options playlist**
 - a. Videos 10 through 19**
- 2. Paul Portfolio Theory playlist**
 - a. Videos 1 through 3**
- 3. Groovy Futures playlist**
 - a. Video 1**
- 4. Investment Analysis playlist**
 - a. Market microstructure videos 1 through 6**
 - b. Margin purchase and short sale videos 1 through 4**
 - c. Stock splits, stock dividends and price changes video**

Credit Hour Policy

Please note that per the University Credit Hour Policy students are expected to spend a minimum of two hours outside of the classroom each week for each unit of credit engaged in learning. For this course, it means that you are expected to spend the required



minimum number of hours each week working on readings, assignments, and preparation for class, project work, etc.

Inclusivity Statement

Our community represents a rich variety of backgrounds, experiences, demographics and perspectives and we are committed to fostering a learning environment where every individual is respected and engaged. To facilitate a dynamic and inclusive educational experience, we ask all members of the community to:

- be open to the perspectives of others
- appreciate the uniqueness their colleagues
- take advantage of the opportunity to learn from each other
- exchange experiences, values and beliefs
- communicate in a respectful manner
- be aware of individuals who are marginalized and involve them
- keep confidential discussions private

Academic Honesty

Students are expected to adhere to standards of academic honesty and integrity, as outlined in the Student Academic Honesty Policy. All assignments must be original work, clearly expressed and as free from errors as possible. All ideas/materials that are borrowed from other sources must have appropriate references to the original sources. Any quoted material should give credit to the source and be punctuated with quotation marks. The University's Academic Honesty Policy states, "The maintenance of academic integrity and quality education is the responsibility of each student within CSUSM and the CSU system. Cheating and plagiarism in connection with an academic program at a campus is listed as an offense for which a student may be expelled, suspended, put on probation, or given a less severe disciplinary sanction." The instructor is required to report all instances or possible academic dishonesty to the Dean of Students. Please see the online version for more details at:

<https://www.csusm.edu/dos/about/polpro.html>

Learning Accommodations

Students requiring reasonable accommodations because of a disability must be approved for services by providing appropriate and recent documentations to the Office of Disability Support Services (DSS). Students authorized by DSS to receive reasonable accommodations should meet with me during my office hours in order to ensure confidentiality.



The instructor will endeavor to adhere to the above schedule, but modifications to the syllabus may be made to enhance learning outcomes. If changes are made, students will be informed during class. **It is the students' responsibility to stay aware of any changes.**