

MASTER SYLLABUS
School of Business Administration, Sonoma State University
BUS 472 Investments (4 units)

I. Catalog Description:

A study of the characteristics of securities: valuation, sources, selection strategies, and theory of portfolio management. Stocks, bonds, options, and futures markets will be included. A major term project is required.

II. Prerequisites

Courses: BUS 370.

Justification: It is assumed that the student is familiar with the fundamental concepts and theories in finance and financial accounting presented in BUS 370 and the course builds on this foundation. The course is quantitative in nature because it uses numerical examples to demonstrate complex concepts.

III. Course Learning Objectives

At the end of the course students should be able to:

- A. Describe the different forms and structures of financial markets
- B. Describe the different forms of exchange traded financial contracts
- C. Describe the Efficient Market Hypothesis and the No Arbitrage Principle of Finance and their relationship to asset pricing.
- D. Describe portfolio theory and the Capital Asset Pricing Model and their relationship to asset pricing.
- E. Carry out valuation of stocks, bonds, and options on stocks and bonds given a basis for cash flow and volatility expectations.
- F. Carry out intermarket equilibrium computations using the no-arbitrage principle.
- G. Use duration to assess the interest rate risk of bond portfolios and design hedge portfolios with futures and options to control interest rate risk.
- H. Use beta to assess the systematic risk of stock portfolios and design hedge portfolios with money market instruments, futures, and options to control for beta risk.
- I. Compare active and passive portfolio management and be able to design an optimum active portfolio in simple two-asset cases.
- J. Describe how financial engineering is used to design innovative financial contracts.
- K. Compare portfolio performance using various CAPM measures.
- L. Be able to use the internet to carry out financial research.

IV. Course Materials

A textbook is normally required. Internet resources are also assigned. A financial calculator is necessary and a laptop computer is recommended.

V. Teaching Methods

Lectures are used to present new information. Workshop-type class meetings review and reinforce the concepts presented using numerical exercises. Internet assignments and class project presentation by students are monitored and moderated by the instructor. Students work in groups and learn from each other.

VI. Evaluation Tools

Group assignments such as workshop problems and projects account for 50% of the grade. Individual assignments include in-class exams and research papers and account for 50% of the overall grade. An overall score above 60% is considered sufficient and a score above 90% is considered an excellent achievement and mastery of the material.

VII. Course Content

1. State preference theory

2. Mean-variance utility functions
3. Portfolio theory and CAPM
4. Active portfolio management
5. Portfolio performance analysis
6. Fixed income securities and yields
7. Interest rate risk of bonds
8. Discounted cash flow valuation of stocks
9. Option pricing principles
10. Stock index, interest rate, and currency futures
11. Hedge portfolios
12. Bonds with embedded options
13. Microstructure and regulatory framework of securities markets
14. Survey of exchange traded securities
15. Financial swaps
16. Financial engineering

VIII. Interdisciplinary Content

1. Topics that require graded work other than exams (and percent of course hours).
 - a. International/global issues 10%
 - b. Regulatory issues 5%
 - c. Technology issues 5%
2. Topics that do not require graded work other than exams (and percent of course hours)
 - a. Political issues 1%
 - b. Social issues 1%
 - c. Demographic Diversity 0%