UNIVERSIDAD DEL PACÍFICO

DEPARTMENT OF FINANCE
1F0228 FINANCIAL ECONOMICS I
Year 2023 – First Semester
Professor: Samuel Mongrut, Ph.D.

PROGRAM

I. Introduction

Designing and creating global diversified investment portfolios is crucial nowadays because we have better tools to invest worldwide and because investing only in domestic financial securities does not provide us with sufficient portfolio diversification. Hence, in this course we will show the basics of global investment analysis with emphasis in stocks and bonds, how to create investment portfolios, and how to measure their performance.

II. Competencies

- To analyze and evaluate stocks and bonds to create, manage and assess the performance of an investment portfolio
- To know how to use well-known financial databases and specialized software to create, monitor and evaluate investment portfolios

III. Learning goals

- To know how to apply different algorithms for portfolio optimization and know their advantages and disadvantages
- To know how to build a global investment portfolio using specialized software and standard databases in the financial industry

IV. Learning outcome

Students know how to create and assess the performance of investment portfolios under different algorithms for portfolio optimization. Theoretical sessions are virtual through TEAMS and practical sessions are face-to-face sessions unless indicated otherwise.

V. Content

Unit I: The investment background

1. Investment background: review of the time value of money.
2. Investment fundamentals: asset types, the role of financial markets, trading mechanisms, the investment process, risk and return, Time Weighted Rate of Return (TWRR) and Money Weighted Rate of Return (MWRR)
3. Stock valuation: models for valuating dividend paying stocks and models for valuating non-dividend paying stocks
4. Market-based valuation of equity, relative valuation, or valuation by multiples
5. Types of fixed income securities, risk of fixed income securities, bond pricing, yields' measures and total returns
6. Term structure theories and the yield curve
7. Interest rate risk: duration and convexity

Unit II: Portfolio theory

8. Introduction to risk and return of an investment portfolio
9. The mean-variance model of portfolio optimization
10. The risk-free asset and complete portfolios
11. The Capital Asset Pricing Model (CAPM)

Unit III: Cost of capital and market efficiency

12. Estimation of the cost of capital of private companies
13. Fundamental analysis and market efficiency
14. Portfolio performance measurement

VI. Learning strategies

We will use examples, cases and applications using specialized software and the standard databases in the financial industry

Type	Percentage
Financial databases and specialized software	50%
Case studies and exercises	50%

VII. Grading, rubric and rules

The final grade will have three important components:

Class participation	10%
Practical tests (02)	20%
Cases (03)	20%
Mid-term exam	25%
Final exam	25%

Students must solve 02 take-home practical tests, 03 cases and 02 financial challenges that must be solved in groups (mid-term exam and final exam). Class participation is tied to your participation in the "Forum" section of the BLACKBOARD. There will be 10 articles posted in the Forum that you must read and give your informed opinion on an individual basis. The informed opinion means that you must cite extra references to support your opinion in each article. Each article commented properly in the Forum will the worth 2 points, so in total you will have 20 points. I will use the following rubric to evaluate your participations in the Forum:

Points	Criteria
0	No comment
1	Non-informed comment
2	Informed comment

Although there is not an official minimum number of absences during the semester. A student who misses 05 or more lessons without a justification will be penalized with minus 05 points in his overall grade for practices (50%).

Rubric

All assignments will be graded with the following rubric:

Criteria	Score
Students make the right calculation	**10**
Students make the proper interpretation of their results	**7**
Students provide recommendations to solve the problem	**3**
Total	**20**

Basic rules for the virtual lessons

Students must observe the following rules:

- ✓ Please be punctual
- ✓ When entering, keep the microphone silent unless you want to participate
- ✓ Enter your name and last name as nickname of your connection and not an alias

VIII. References

L1: Bodie Z., Kane A. and Marcus A. (2014) Investments. 10th Edition. McGraw-Hill Irwin, 1080 pp.

L2: Fabozzi F. (2005) The Handbook of fixed income securities, 7th Edition, McGraw-Hill, 1531 pp.

L3: Pinto, J., Henry, E., Robinson, T., and Stowe J. (2010) Equity Asset Valuation, CFA Institute Investment Series, 2nd Edition, John Wiley Sons Inc., 441 pp.

L4: Reilly, F., and Brown, K. (2012) Investment Analysis and Portfolio Management, 10th Edition, South-Western Cengage Learning, 1082 pp.

IX. Schedule Group B

Week	Date	Content	Readings	Observations
1	Mo. 20/03 (T) **Th.23/03 (PR)**	Introduction Investment fundamentals	L4 (Ch. 01 and 04)	**Financial Seed 13** https://youtu.be/Q90Of8r4WRE **No Practical Session**
2	Mo. 27/03 (T) Th. 30/03 (PR)	Asset-based valuation models of equity	L3 (Ch. 03, 04 and 05)	**PR1 (Weeks 01-02)**
3	Mo. 03/04 (T) Th. 06/04 (PR)	Market-based valuation models of equity **(Inverted)**	L3 (Ch. 06)	**PR2 (Week 03)**
4	Mo. 10/04 (T) Th. 13/04 (PR)	Bonds' basics	L2 (Ch 01, 02, 05 and 06)	**PR3 (Week 04)**
5	Mo. 17/04 (T) Th. 20/04 (PR)	Structure of interest rates and yield curve	L2 (Ch.07 and 08)	**Test-1 (Weeks 01-04)** **(Take Home)**
6	Mo. 24/04 (T) Th. 27/04 (PR)	Measuring interest rate risk	L2 (Ch. 09)	**PR4 (Week 05)**
7	Mo. 01/05 (T) Th. 04/05 (PR)	**No Session**		**PR5 (Week 06)**
8	**From We. 10/05 to Fr. 12/05**	**Mid-Term Exam**		**Weeks (01-07)**
9	**Mo. 15/05 (T)** Th. 18/05 (PR)	Introduction to portfolio Theory	L1 (Ch.05)	**PR6 (Visual MVO)**
10	Mo. 22/05 (T) Th. 25/05 (PR)	Portfolio optimization	L1 (Ch. 06)	**PR7 (ECONOMATICA)**
11	Mo. 29/05 (T) Th. 01/06 (PR)	Complete portfolios	L1 (Ch. 07)	**PR8 (ECONOMATICA)**
12	Mo. 05/06 (PR) Th. 08/06 (T)	Market equilibrium: The CAPM	L1 (Ch. 08 and 09) and L4 (Ch. 05)	**PR9 (ECONOMATICA)**
13	Mo. 12/06 (T) Th. 15/06 (PR)	Cost of capital for private companies		**PT-2 (ECONOMATICA)** **(Take Home)**
14	Mo. 19/06 (T) Th. 22/06 (PR)	Market efficiency and fundamental analysis	L3. (Ch. 07) and L4 (Ch. 11)	**PR10 (Weeks 13 and 14)**
15	Mo. 26/06 (T) Th. 29/06 (PR)	Portfolio performance	L1 (Ch. 24)	**No Practical Session**
16	**From We. 05/07 to Fr. 07/07**	**Final Exam**		**Weeks (09-15)**