



SÍLABO

Nombre del curso: Certificaciones Internacionales
Código: 1F0108
Departamento académico: Finanzas
Prerrequisito(s): Créditos cursados 140
Semestre académico: 2023-1
Sección: A

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I. Sumilla

El seminario de Certificaciones Internacionales tiene como objetivo el aprendizaje de los conceptos financieros evaluados en el sílabo de uno de los siguientes exámenes: CFA nivel I, CFA nivel II, o FRM nivel I, a través de la práctica constante de ejercicios de nivel similar al de los exámenes reales. Para ello, previamente, el alumno deberá seleccionar el examen de interés y sobre la base de ello, se asignará el rol de exámenes y temas correspondientes.

Gran parte de los temas cubiertos en dichos exámenes ha sido tratada en los distintos cursos del pregrado de la carrera de Finanzas, por lo que el seminario buscará afianzar los conocimientos asociados a tales cursos.

II. Competencias del Perfil General del Egresado

Generales

- Líder globalmente competitivo, particularmente en las áreas de finanzas y administración de portafolios, cuya demanda laboral ha sido creciente en los últimos años
- Agente de Cambio: Asumiendo un rol activo en los cargos asociados a administración de portafolios.
- Exigencia en la calidad de trabajo: el curso exige una disciplina rigurosa que sea la base de formación financiera del alumno

Específicas

- Liderazgo dentro del entorno financiero actual, desplegando las últimas técnicas financiera en el futuro ambiente laboral

III. Metas (LG) y objetivos de aprendizaje (LO)

La meta del curso es que el alumno aprenda los LOS (Learning Outcome Statement) que el CFA Institute evalúa en el examen del nivel I y II, así como los LO (Learning Objectives) que el Instituto GARP establece para el examen FRM nivel I.

Para ello, el alumno deberá aprender los LOS agrupados en las siguientes áreas:

CFA Level I

I. Ethical and Professional Standards

- A. Ethics and Trust in the Investment Profession
- B. Code of Ethics and Standards of Professional Conduct
- C. Guidance for Standards I–VII
- D. Introduction to the Global Investment Performance Standards (GIPS)
- E. Ethics Application

II. Quantitative Methods

- A. Time Value of Money
- B. Organizing, Visualizing, and Describing Data
- C. Probability Concepts
- D. Common Probability Distributions
- E. Sampling and Estimation
- F. Hypothesis Testing
- G. Introduction to Linear Regression



III. Economics

- A. Topics in Demand and Supply Analysis
- B. The Firm and Market Structures
- C. Aggregate Output, Prices, and Economic Growth
- D. Understanding Business Cycles
- E. Monetary and Fiscal Policy
- F. Introduction to Geopolitics
- G. International Trade and Capital Flows
- H. Currency Exchange Rates

IV. Financial Statement Analysis

- A. Introduction to Financial Statement Analysis
- B. Financial Reporting Standards
- C. Understanding Income Statements
- D. Understanding Balance Sheets
- E. Understanding Cash Flow Statements
- F. Financial Analysis Techniques
- G. Inventories
- H. Long-Lived Assets
- I. Income Taxes
- J. Non-Current (Long-Term) Liabilities
- K. Financial Reporting Quality
- L. Applications of Financial Statement Analysis

V. Corporate Issuers

- A. Corporate Structures and Ownership
- B. Introduction to Corporate Governance and Other ESG Considerations
- C. Business Models & Risks
- D. Capital Investments
- E. Working Capital & Liquidity
- F. Cost of Capital - Foundational Topics
- G. Capital Structure
- H. Measures of Leverage

VI. Equity Investments

- A. Market Organization and Structure
- B. Security Market Indexes
- C. Market Efficiency
- D. Overview of Equity Securities
- E. Introduction to Industry and Company Analysis
- F. Equity Valuation: Concepts and Basic Tools

VII. Fixed Income

- A. Fixed-Income Securities: Defining Elements

- B. Fixed-Income Markets: Issuance, Trading, and Funding
- C. Introduction to Fixed-Income Valuation
- D. Introduction to Asset-Backed Securities
- E. Understanding Fixed-Income Risk and Return
- F. Fundamentals of Credit Analysis

VIII. Derivatives

- A. Derivative Instrument and Derivative Market Features
- B. Forward Commitment and Contingent Claim Features and Instruments
- C. Derivative Benefits, Risks, and Issuer and Investor Uses
- D. Arbitrage, Replication, and the Cost of Carry in Pricing Derivatives
- E. Pricing and Valuation of Forward Contracts and for an Underlying with Varying Maturities
- F. Pricing and Valuation of Futures Contracts
- G. Pricing and Valuation of Interest Rates and Other Swaps
- H. Pricing and Valuation of Options
- I. Option Replication Using Put-Call Parity
- J. Valuing a Derivative Using a One-Period Binomial Model

IX. Alternative Investments

- A. Categories, Characteristics, and Compensation Structures of Alternative Investments
- B. Performance Calculation and Appraisal of Alternative Investments
- C. Private Capital, Real Estate, Infrastructure, Natural Resources, and Hedge Funds

X. Portfolio Management and Wealth Planning

- A. Portfolio Management: An Overview
- B. Portfolio Risk and Return: Part I
- C. Portfolio Risk and Return: Part II
- D. Basics of Portfolio Planning and Construction
- E. The Behavioral Biases of Individuals
- F. Introduction to Risk Management
- G. Technical Analysis
- H. Fintech in Investment Management

CFA Level II

I. Ethical and Professional Standards

- A. Code of Ethics and Standards of Professional Conduct
- B. Guidance for Standards I-VII
- C. Application of the Code and Standards

II. Quantitative Methods

- A. Basics of Multiple Regression and Underlying Assumptions
- B. Evaluating Regression Model Fit and Interpreting Model Results
- C. Model Misspecification
- D. Extensions of Multiple Regression
- E. Time-Series Analysis
- F. Machine Learning
- G. Big Data Projects

III. Economics

- A. Currency Exchange Rates: Understanding Equilibrium Value
- B. Economic Growth
- C. Economics of Regulations

IV. Financial Statement Analysis

- A. Intercompany Investments
- B. Employee Compensation: Post-Employment and Share-based
- C. Multinational Operations
- D. Analysis of Financial Institutions
- E. Evaluating Quality of Financial Reports
- F. Integration of Financial Statement Analysis Techniques



G. Financial Statement Modeling

V. Corporate Issuers

- A. Analysis of Dividends and Share Repurchases
- B. Environmental, Social, and Governance (ESG) Considerations in Investment Analysis
- C. Cost of Capital: Advanced Topics
- D. Corporate Restructuring

VI. Equity Investments

- A. Equity Valuation: Applications and Processes
- B. Discounted Dividend Valuation
- C. Free Cash Flow Valuation
- D. Market-Based Valuation: Price and Enterprise Value Multiples
- E. Residual Income Valuation
- F. Private Company Valuation

VII. Fixed Income

- A. The Term Structure & Interest Rate Dynamics
- B. The Arbitrage Free Valuation Framework
- C. Valuation & Analysis: Bonds with Embedded Options
- D. Credit Analysis Models
- E. Credit Default Swaps

VIII. Derivatives

- A. Pricing & Valuation of Forward Commitments
- B. Valuation of Contingent Claims

IX. Alternative Investments

- A. Overview of Types of Real Estate Investment
- B. Investments in Real Estate through Private Vehicles
- C. Investments in Real Estate Through Publicly Traded Securities
- D. Private Equity Investments
- E. Introduction to Commodities & Commodity Derivatives

X. Portfolio Management and Wealth Planning

- A. Exchange-Traded Funds: Mechanics & Applications
- B. Using Multifactor Models
- C. Measuring & Managing Market Risk
- D. Backtesting and Simulation
- E. Economics and Investment Markets
- F. Analysis of Active Portfolio Management
- G. Trading Costs and Electronic Markets

FRM Part I

Foundations of Risk Management

I. Risk Management Overview

- A. The Building Blocks of Risk Management
- B. How Do Firms Manage Financial Risk?
- C. The Governance of Risk Management
- D. Credit Risk Transfer Mechanisms

II. Pricing Models and Enterprise Risk Management

- A. Modern Portfolio Theory and Capital Asset Pricing Model
- B. The Arbitrage Pricing Theory and Multifactor Models of Risk and Return
- C. Principles for Effective Data Aggregation and Risk Reporting
- D. Enterprise Risk Management and Future Trends

III. Case Studies and Code of Conduct

- A. Learning from Financial Disasters
- B. Anatomy of the Great Financial Crisis of 2007-2009
- C. GARP Code of Conduct

Quantitative Analysis

IV. Probability and Statistics

- A. Fundamentals of Probability
- B. Random Variables
- C. Common Univariate Random Variables
- D. Multivariate Random Variables

V. Sample Moments and Hypothesis Testing

- A. Sample Moments
- B. Hypothesis Testing

VI. Regression Analysis

- A. Linear Regression
- B. Regression with Multiple Explanatory Variables
- C. Regression Diagnostics

VII. Forecasting, Correlation, and Machine Learning

- A. Stationary Time Series
- B. Non-Stationary Time Series
- C. Measuring Returns, Volatility, and Correlation
- D. Simulation and Bootstrapping
- E. Machine Learning Methods
- F. Machine Learning and Prediction

Financial Markets and Products

VIII. Financial Institutions, Markets, and Central Clearing

- A. Banks
- B. Insurance Companies and Pension Plans
- C. Fund Management
- D. Introduction to Derivatives
- E. Exchanges and OTC Markets
- F. Central Clearing

IX. Forwards, Futures, and Foreign Exchange

- A. Futures Markets
- B. Using Futures for Hedging
- C. Foreign Exchange Markets
- D. Pricing Financial Forwards and Futures
- E. Commodity Forwards and Futures

X. Options

- A. Options Markets
- B. Properties of Options
- C. Trading Strategies



D. Exotic Options

XI. Interest Rates, Fixed Income Securities, and Swaps

- A. Properties of Interest Rates
- B. Corporate Bonds
- C. Mortgages and Mortgage-Backed Securities
- D. Interest Rate Futures
- E. Swaps

Valuation and Risk Models

XII. Measuring Risk and Volatility

- A. Measures of Financial Risk
- B. Calculating and Applying VaR
- C. Measuring and Monitoring Volatility

XIII. Credit Risk, Country Risk, Operational Risk, and Stress Testing

- A. External and Internal Credit Ratings

- B. Country Risk: Determinants, Measures, and Implications

- C. Measuring Credit Risk

- D. Operational Risk

- E. Stress Testing

XIV. Fixed Income Valuation

- A. Pricing Conventions, Discounting, and Arbitrage

- B. Interest Rates

- C. Bond Yields and Return Calculations

- D. Applying Duration, Convexity, and DV01

- E. Modeling Non-Parallel Term Structure Shifts and Hedging

XV. Option Valuation

- A. Binomial Trees

- B. The Black-Scholes-Merton Model

- C. Option Sensitivity Measures: The "Greeks"

IV. Resultado de aprendizaje

El alumno está preparado para rendir alguno de los exámenes (CFA I, II, o FRM I) exitosamente.

V. Contenidos

Schweser Notes:

- CFA level 1
- CFA level 2
- FRM part 1

VI. Estrategias Didácticas

- **Mini mocks:** En cada sesión programada se tomará un examen virtual en donde se evaluará un tema en particular.
- **Ejercicios:** Cada alumno deberá realizar un quizz virtual del tema tratado en clase.

VII. Evaluación

Ponderación	Instrumento	Criterio de evaluación
Nota de Trabajo: 60%	Mini mocks: 65% (cada uno vale lo mismo)	El tema determinado por el profesor. Cada alumno recibirá el solucionario luego de brindado el examen.
	Quizzes: 35% (cada uno vale lo mismo)	
Examen Final: 40%	Examen Final: 100%	LOS del examen CFA I, II o FRM I

- Las únicas notas que se redondean son las que se suben al POWER CAMPUS.
- Se anula la nota más baja de los *mini mocks* y la nota más baja de los *quizzes*.
- Si alguno falta a un *mini mock* tendrá cero, salvo presentar justificación válida dentro de las siguientes 48 horas.

VIII. Normas

Las clases comienzan a la hora exacta. La tolerancia es de 15 minutos.



Está prohibido grabar video o audio durante la clase sin la aprobación del profesor o el jefe de práctica, según corresponda.

Está prohibido usar celulares durante la clase.

Está prohibido el uso de calculadoras programables. Calculadoras permitidas para los exámenes:

1. CFA I y II:

- Texas Instruments BA II Plus (including BA II Plus Professional)
- Hewlett Packard 12C (including the HP 12C Platinum, 12C Platinum 25th anniversary edition, 12C 30th anniversary edition, and HP 12C Prestige)

2. FRM I:

- The Texas Instruments BA II Plus (both versions), including the BA II Plus Professional
- Hewlett Packard 10B II, 10B II+, 20B
- Hewlett Packard 12C, including the 12C Platinum and the Anniversary Edition

IX. Referencias

Obligatoria:

- Schweser Notes CFA L1 2023.
- Schweser Notes CFA L2 2023.
- Schweser Notes FRM P1 2023.



X. Cronograma (tentativo, en función al examen seleccionado)

Semana	Fechas	CFA Level I	CFA Level II	FRM Part I	Materiales (Lecturas, Audiovisuales, Casos...)
1	24/03/2023 19:30	Introducción a los exámenes CFA y FRM			www.cfainstitute.org www.garp.org
2	31/03/2023 19:30	Quantitative Methods		SS1. Risk Management Overview	Schweser Notes
3	LIBRE (Semana Santa)				
4	14/04/2023 19:30	Economics		SS2. Pricing Models and Enterprise Risk Management / SS3. Case Studies and Code of Conduct	Schweser Notes
5	21/04/2023 19:30	Financial Reporting & Analysis		SS4. Probability and Statistics	Schweser Notes
6	28/04/2023 19:30	Financial Reporting & Analysis		SS5. Sample Moments and Hypothesis Testing / SS6. Regression Analysis	Schweser Notes
7	05/05/2023 19:30	Corporate Issuers		SS7. Forecasting, Correlation, and Machine Learning	Schweser Notes
8	LIBRE (Exámenes Parciales)				
9	19/05/2023 19:30	Equity Investments		SS8. Financial Institutions, Markets, and Central Clearing	Schweser Notes
10	26/05/2023 19:30	Fixed Income		SS9. Forwards, Futures, and Foreign Exchange	Schweser Notes
11	02/06/2023 19:30	Derivatives		SS10. Options	Schweser Notes
12	09/06/2023 19:30	Alternative Investments		SS11. Interest Rates, Fixed Income Securities, and Swaps	Schweser Notes
13	16/06/2023 19:30	Portfolio Management		SS12. Measuring Risk and Volatility	Schweser Notes
14	23/06/2023 19:30	Ethical and Professional Standards		SS13. Credit Risk, Country Risk, Operational Risk, and Stress Testing	Schweser Notes
15	30/06/2023 19:30	Ethical and Professional Standards		SS14. Fixed Income Valuation / SS15. Option Valuation	Schweser Notes
16	01/07/2023 (Tentativo)	Examen Final			Schweser Notes

Lima, marzo de 2023