

- Faculté des sciences économiques
- [www.unine.ch/seco](http://www.unine.ch/seco)

### Principles of Finance (5EN1010)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
<b>Bachelor en mathématiques</b>	<b>Cours: 2 ph TP: 2 ph</b>	Voir ci-dessous	6
<b>Bachelor en sciences économiques</b>	<b>Cours: 2 ph TP: 2 ph</b>	Voir ci-dessous	6
<b>Pilier principal B A - économie</b>	<b>Cours: 2 ph TP: 2 ph</b>	Voir ci-dessous	6
<b>Pilier principal B A - management</b>	<b>Cours: 2 ph TP: 2 ph</b>	Voir ci-dessous	6

ph=période hebdomadaire, pg=période globale, j=jour, dj=demi-jour, h=heure, min=minute

#### Période d'enseignement:

- Semestre Printemps

#### Equipe enseignante

Professor Tim Kroencke  
Institute of Financial Analysis  
Rue A.-L. Breguet 2  
2000 Neuchâtel  
Tel. +41 32 718 1385, Email: [tim.kroencke@unine.ch](mailto:tim.kroencke@unine.ch)

Loïc Maréchal, teaching assistant, PhD candidate  
Institute of Financial Analysis  
Rue A.-L. Breguet 2  
2000 Neuchâtel  
Tel. +41 32 718 1577, Email: [loic.marechal@unine.ch](mailto:loic.marechal@unine.ch)

Louis Mangeney, teaching assistant, PhD candidate  
Institute of Financial Analysis  
Rue A.-L. Breguet 2  
2000 Neuchâtel  
Tel. +41 32 718 1333, Email: [louis.mangeney@unine.ch](mailto:louis.mangeney@unine.ch)

#### Contenu

This course introduces students to the core concepts of modern finance. Students will learn how to value bonds and equities, the benefits from diversification, how to construct optimal portfolios, how to determine risk premia, the concept of market efficiency, the investment behavior of individual investors and common investment strategies employed by professionals (e.g., mutual funds, hedge funds, pension funds).

#### Tentative Course Outline:

- 1: Financial Decision Making and the Law of one Price
- 2: The Time Value of Money
- 3: Interest Rates
- 4: Valuing Bonds
- 5: Valuing Stocks
- 6: Capital Markets and the Price of Risk
- 7: Mid-Term
- 8: Optimal Portfolio Choice and the CAPM
- 9: Implementing the CAPM
- 10: Investor Behavior and Capital Market Efficiency
- 11: Utility Theory and Introduction to Portfolio Management
- 12: Review

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## **Principles of Finance (5EN1010)**

### **Forme de l'évaluation**

Mid-term exam (ME): in-class 90-minutes written exam.

Final exam (FE): 120-minutes written exam during the last lecture of the semester. The final grade is computed as follows: Max [0.40 ME + 0.60 FE; FE].

If you miss the mid-term exam, your grade will equal that of the final exam.

Retake exam: 120-minutes written exam (100%) during the exam session.

Neither documents nor connected devices are permitted during the exams. A simple calculator is permitted and a cheat sheet (one page DIN-A4, back and front, handwritten). In case of violation of these rules, the students are in a situation of fraud and the unauthorized items will be removed. The exam could be deemed as failed.

### **Documentation**

Berk, J., and P. DeMarzo (2017): Corporate Finance, Fourth Edition (Global Edition). (BDM)

A French translation is available:

Berk, J., and P. DeMarzo (2017): Finance d'entreprise, 4e édition, édition françaises par Gunther Cappelle-Blancard et Nicolas Coderc.

### **Pré-requis**

Recommended: Statistique descriptive, Mathématiques appliquées 1 & 2.

### **Forme de l'enseignement**

Two hours lecture

Two hours exercise

### **Objectifs d'apprentissage**

Au terme de la formation l'étudiant-e doit être capable de :

- Illustrate whether portfolios of financial assets are efficient
- Assemble conceptual knowledge
- Describe the concept of diversification and optimal portfolio formation
- Explain the concept of the Law of One Price as a unifying principle of valuation in finance
- Measure the risk and return of financial investments
- Evaluate whether financial assets are fairly priced
- Apply asset pricing models to evaluate the pricing of bonds and equities
- Explain important concepts of asset pricing and portfolio management orally or in writing

### **Compétences transférables**

- Apply knowledge to new situations
- Entrepreneurial thinking
- Communicate in a second language
- Decision making
- Intellectual rigor and curiosity