

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

## Research in Financial Analysis (5AF2021)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
<b>Master en finance</b>	<b>Cours: 4 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 Automne

### Equipe enseignante

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

Emanuele Guidotti, Research and Teaching Assistant  
Institute of Financial Analysis  
Rue A.-L. Breguet 2  
CH-2000 Neuchâtel  
Tel. +41 32 718 1330 Email: [emanuele.guidotti@unine.ch](mailto:emanuele.guidotti@unine.ch)

### Contenu

This course covers important and controversial topics in empirical finance. First, we will review the theories proposed in the literature to explain the behavior of financial markets. We then discuss the empirical methods that can be utilized to test these theories. Finally, we implement the empirical methods to confront the theories with the empirical data.

We will study the time-series properties of the aggregate stock market, the cross-sectional behaviour of individual stocks, and how to implement an event study to measure the effect of an economic event on the broad market or the value of a company. We cover the classic literature (the work of six Nobel Prize winners) as well as recent advances in finance.

This course is designed to make students familiar with research in financial analysis (topics, methodologies, implementation, and writing). Databases such as CRSP, Compustat, and Thomson Reuters are introduced. Hands-on! After two hours of lecture, we will learn step-by-step how to implement workhorse methods in finance using Matlab during guided exercises. The course is complemented by a weekly homework and assignments in which you will be asked to review and present the results of articles recently published in leading academic journals.

Tentative course outline:

Introduction  
Risk and Return, Modelling Time-Series Data  
Linear Regressions  
Return Predictability: Short-run  
Return Predictability: Long-run  
Modelling Cross-Sectional Data  
Asset Pricing: Time-Series Tests  
Asset Pricing: Cross-Sectional Tests  
The Cross-Section of Individual Firms  
Big Data Asset Pricing  
Event Studies

### Forme de l'évaluation

Work during the semester (50%): Take-home assignments; mainly based on recent publications in leading finance journals.  
120 minutes final written exam (50%) during the exam session.  
Re-take exam: 120 minutes written exam (100%) during the exam session.

Allowed tools (written exam): Simple calculator, cheat sheet (one page DIN-A4, back and front, handwritten NOT printed)

In case of violation of these rules, the students are in situation of fraud and the unauthorized items will be removed. The exam could be deemed

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### Documentation

Campbell, J., Lo, A., MacKinlay, C., 1997, "The Econometrics of Financial Markets", Princeton University Press.  
Linton, O., 2019: Financial Econometrics: Models and Methods. Cambridge University Press.  
Journal articles provided on moodle.

### Pré-requis

Asset Pricing, Quantitative Methods for Finance (or Econometrics), Portfolio Management, Programming.

### Forme de l'enseignement

Lectures: two hours per week.  
Computer-lab session: two hours per week.

### Objectifs d'apprentissage

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

- Formulate principles of conducting (own) research
- Distinguish whether financial decisions are efficient
- Illustrate important topics of portfolio management orally or in writing
- Recognise controversial and important research topics in finance
- Describe important research methods in finance
- Employ research methods to develop tests of theories
- Work with tight deadlines
- Use time-series and cross-sectional datasets
- Evaluate whether financial assets are fairly priced
- Measure the impact of news on individual companies or the market
- Communicate empirical results to a larger audience
- Assemble an appropriate financial research methodology to develop new and innovative solutions
- Carry out analysis with statistical software packages

### Compétences transférables

- Manage a project
- Apply knowledge to new situations
- Carry out critical and evidence-based analyses
- Carry out a critical analysis
- Provide a substantiated recommendation
- Discuss complex issues and interactions
- Discuss complex issues

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