

# Advanced Topics in Asset Management

## Syllabus

### Intensive Programme

Vienna, 16 to 27 March 2020

Christian Cech

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## 1. Course Information

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<b>Higher education institution</b>	University of Applied Sciences BFI Vienna
<b>Course Name</b>	Advanced Topics in Asset Management
<b>Level of course unit</b>	Master (2nd cycle)
<b>Language of instruction</b>	English
<b>Type of course unit</b>	Compulsory
<b>Mode of delivery</b>	Intensive (face-to-face and distance learning)
<b>Year of study</b>	2
<b>Semester of study</b>	4
<b>ECTS credits</b>	6
<b>Contact hours</b>	90 lecture units
<b>Course coordinator(s)</b>	Christian Cech

This intensive programme is offered over a period of two weeks (16 to 27 March 2020) as an outcome of the International Project **INTQUANT** (Creating an International Semester for Master Programmes in Quantitative Finance), Funding Scheme: Erasmus+ Strategic Partnerships (Key Action 2). This project involves four partner universities: University of Applied Sciences BFI Vienna, University of Bologna, University of Economics in Katowice and Alexandru Ioan Cuza University of Iași.

The course is organised by the University of Applied Sciences BFI Vienna in cooperation with Raiffeisenlandesbank NOe-Wien. It comprises a case study, lectures, workshops and tutorials offered by academic staff of the University of Applied Sciences BFI Vienna and financial industry professionals. Successful accomplishment will provide participants with 6 ECTS credits that can be acknowledged for the Master programmes of each partner university.

The venue is in the main building of the University of Applied Sciences BFI Vienna, Wohlmutterstrasse 22, A-1020 Vienna. Laboratories will be available for the activities within the working teams (room 3.01 in the third floor and room D.01, a computer-equipped room in the fourth floor).

## 2. Learning Outcomes

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### General learning outcomes:

At the end of this course, students are able to

- demonstrate an in-depth understanding of portfolio theory, asset management and regulatory requirements in the context of investment fund management (MiFID II)
- apply academic finance and asset management knowledge in practice
- actively solve realistic business case challenges in a team environment
- formulate and defend their points of view in a constructive manner in a team environment
- use the advantages of working in an intercultural team to develop interesting and innovative solutions to business case challenges and achieve an agreed goal
- understand how culture affects communication and interactions in international teams
- summarise, present and defend, in a clear and coherent manner, the business case findings in a team report
- demonstrate their ability to critically assess other teams' business case presentations

### Specific learning outcomes:

At the end of this course, students are able to

- apply acquired academic knowledge of portfolio theory and asset management in practice, considering also the regulatory compliance
- Develop a concept for an investment fund considering the target investor group and regulatory compliance requirements

### 3. Prerequisites and co-requisites

<b>Curriculum-based</b>	Fundamentals of Finance Introduction to Asset Management
<b>Competence-based</b>	-

Students should have a basic understanding of Modern Portfolio Theory and asset management. They are assumed to show a general interest in the area of asset management and to seek to develop practical skills in this area.

Students will prepare for the intensive programme, studying the preparatory literature provided in section 5 of this document.

Lectures, tutorials and workshops provided in the first week of the intensive programme will deepen their knowledge in portfolio theory and asset management.

The business case provided by the industry partner allows for a practical application of the academic knowledge to a real world problem setting.

### 4. Course contents

The aim of this intensive programme is to introduce participants into the practice of setting up an investment fund, considering the regulatory compliance.

Investment funds are collective investment undertakings that belong to a large number of investors. They are used to collectively invest the supplied funds in a number of typically predefined assets respectively asset classes. Investors can profit from these collective investments as their risk is reduced by diversification, as investment decisions are made by professional fund managers and as the transaction costs per transaction are typically lower than could be obtained by individual investments.

Investment funds typically target specific geographical regions or industry sectors and often limit the investment in specific asset classes (stocks, bonds, real estate etc.). Doing so, they signal their risk-return profile to investors. Also marketing prospectuses and KIDs (key investor documents) are used to communicate the investment goals and the risk-return profile. At all times fund managers must comply with regulatory requirements that focus on consumer (i.e. investor) protection.

The aim of this international workshop is to allow participants to work on a realistic business case that is designed in cooperation with our industry partner Raiffeisenlandesbank NOe-Wien. The participants will set up a (fictitious) investment fund considering its target group and will produce prospectuses complying with the regulatory requirements.

The course is organised as follows:

- **Phase 1 (offsite):** Preparatory reading and preparation for questions
- **Phase 2 (onsite):** Presence phase during the course (11 to 22 March 2019)

The onsite course will start with an introduction to intercultural learning and the presentation of the business case at the premises of Raiffeisenlandesbank NOe-Wien on the first day. After the assessment of the offsite preparation in the morning of the second day, lectures, workshops and tutorials will be offered by both academic and business professionals in the first week of the programme. The topics covered will comprise portfolio theory, data access using Bloomberg and Reuters, fund management and portfolio construction in practice and generation of prospectuses considering regulatory requirements (MiFID II). In the second week each team will work on the business case and present their results on the last day of the programme.

Each team has representatives from the different partner universities. This international diversity results in intercultural learning which is an important aim of this programme. A local expert will further enhance this learning by providing cross-cultural training, with a focus on working in international teams.

## 5. Required and recommended preparatory reading

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### Required preparatory reading for the offsite preparation

- Selected chapters from  
Bodie, Z., Kane, A., Marcus, A., 2014, Investments, 10<sup>th</sup> global edition, McGraw-Hill
  - Chapter 5.2, pp. 122-125 and Chapter 5.5. to 5.6, pp. 130-137
  - Chapter 6, pp. 168-190
  - Chapter 7, pp. 205-234
  - Chapter 8.1 to 8.3, pp. 256-271

### Recommended preparatory reading for the offsite preparation

#### Portfolio Theory:

- Ilmanen, A., Sullivan, R., 2016, Words From the Wise: Harry Markowitz on Portfolio Theory and Practice, <https://www.aqr.com/library/words-from-the-wise/words-from-the-wise-harry-markowitz>  
*An interesting interview with Harry Markowitz, the “father of modern portfolio theory”.*
- Söderlind, P., 2017, Lecture Notes in Finance 1, University of St. Gallen, <https://sites.google.com/site/paulsoderlindecon/home/courses/Fin1MiQEFall.pdf?attredirects=0&d=1>  
*These 269 pages of lecture notes start from scratch and then go into detail. The text is somewhat technical.*

- Zivot, E., 2013, Introduction to Portfolio Theory,  
<http://faculty.washington.edu/ezivot/econ424/introductionPortfolioTheory.pdf>  
*This introduction to portfolio theory (portfolios of two risky assets) contains a lot of R-programming-code as examples. The code allows you to put your “hands on the topic”. If you are not yet familiar with R coding, you can download overhead slides from an introductory course from our Moodle-platform (Cech, C., Introduction to R). Note that in this paper Value-at-Risk is (VaR) is presented as a negative value while in the majority of other papers it is presented as a positive value. Note also that in the R-code “=” is used as assignment operator rather than “<-”.*
- Koch, A., 2007, Mean Variance Analysis,  
<http://www.google.at/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwjX1MbTsaXPAhWDzxQKHSqCAPAQFggmMAE&url=http%3A%2F%2Fciteseerx.ist.psu.edu%2Fviewdoc%2Fdownload%3Fdoi%3D10.1.1.504.3872%26rep%3Drep1%26type%3Dpdf&usg=AFQjCNFjXc-Oil7kHA-TDJezhJgdLpkKvA&sig2=ZhuHO-SDn15W-slx4xFfA>  
*Another introductory paper that also deals with portfolios of more than two risky assets. This paper also presents screenshots of Excel calculations.*
- Bodie, Z., Kane, A., Marcus, A., 2014, Investments, 10<sup>th</sup> global edition, McGraw-Hill  
*Remaining chapters of the book*

#### Financial Databases:

- Wirth, M., 2016, Financial Databases – A short introduction, script

#### Intercultural Learning:

- Lewis, R., 2012, When Teams Collide: Managing the International Team Successfully, Nicholas Brealey Publishing

#### Case Study Method:

- Espen, A., Schiano, B., 2014, Teaching with Cases: A Practical Guide., Harvard Business Review Press

## 6. Learning activities and teaching methods

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Learning activities in this course consist of studying the preparatory reading, attending lectures, workshops and tutorials and group work on a case study with a focus on asset management.

### 6.1. Preparatory Reading / Offsite Preparation

Participating students will prepare themselves by studying the preparatory reading. The required reading, chapters from Bodie et al. (2014), are specified in the previous section. The assessment of the offsite preparation will be based on this required reading. It is however strongly recommended that students also consult the suggested reading, also specified in the previous section.

A short description of the business case will be sent out roughly one month before the start of the intensive programme.

3 ECTS-credits are assigned to this first phase.

### 6.2. Presence and Onsite Preparation

The onsite course will start with the presentation of the case study, followed by a series of **lectures, workshops and tutorials** given by academic staff of the University of Applied Sciences BFI Vienna and financial industry professionals. The topics include:

- Portfolio theory
- Fund management and portfolio construction in practice
- Regulatory Requirements (MiFID II)
- Financial databases
- Intercultural learning

The students organise themselves into teams with representatives from the different partner universities. In the second week these teams will work on the business case.

Each team has to write a **case study report** and submit it by Wednesday of the second week. The case report must not exceed 10 pages but may include an appendix of no more than 15 pages.

On Friday morning, the teams will present their findings to the other students and a jury. The **presentation** time per team is limited to 10 minutes followed by another 10 minutes when questions from the jury can be answered. The jury will evaluate both the written case study report and the presentation.

3 ECTS-credits are assigned to this second phase.

## 7. Assessment methods and criteria

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Students are assessed on the basis of their written examination and their case study report and presentation. The latter two are graded by a jury.

The assessment is based on the

- **written examination (30%)**
- **written case study report (30%)**
- **presentation of the case study report (40%)**

In order to pass the course, a total score of at least 50% must be achieved.

## 8. ECTS credits and workload

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The European Credit Transfer System (ECTS) is based on the work load of students. A total of 6 ECTS credits is assigned to this intensive programme. This corresponds to an average work load of 150 to 180 hours per student.

These 6 ECTS credits are assigned for the first phase (preparatory reading) and for the second phase (lectures, workshops and tutorials and work on the business case).

## 9. Timetable

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- Sunday, 15 March 2020: Arrival of the participants in Vienna
  
- **Monday, 16 March 2020:**
  - 9:00 to 9:15: **Registration**
  - 9:15 to 9:45: **Welcome and general information**  
(Christian Cech, UAS BFI Vienna)
  - 10:00 to 13:00:  
**Workshop “My world meets your world”**  
(Magdalena Berecki-Pernkopf,  
Vienna University of Business and Economics)
  - 14:30 to 16:00:  
**Presentation of the case study** by representatives of Raiffeisenlandesbank  
NOe-W on the premises of Raiffeisenlandesbank NOe-W
  - 16:30 to 18:00:  
**Social programme:**  
Guided tour through Vienna’s city centre
  
- **Tuesday, 17 March 2020:**
  - 9:00 to 10:30:  
**Assessment** of offsite preparation (written test)

- 10:45 to 13:00:  
Lecture **“Portfolio Theory”**  
(Arne Westerkamp, Spängler IQAM)
- 14:00 to 17:00:  
Lecture **“Portfolio Theory”**  
(Arne Westerkamp, Spängler IQAM)
- **Wednesday, 18 March 2020:**
  - 9:00 to 12:00:  
Lecture **“Portfolio Theory”**  
(Arne Westerkamp, Spängler IQAM)
  - 14:00 to 15:00:  
Presentation of correct test answers
  - 15:00 to 16:15:  
Tutorial **“Financial Databases – A short introduction”**  
(Martin Wirth, UAS BFI Vienna)
  - 16:15 to 17:00:  
Tutorial **“Introduction to the Moodle learning platform”**  
(Irene Mayr, UAS BFI Vienna)
  - 18:00-20:00:  
**Social programme:**  
Welcome dinner at Heuriger Schübel-Auer, a traditional Viennese tavern  
Adress: Kahlenberger Strasse 22, 1190 Vienna
- **Thursday, 19 March 2020:**
  - 9:00 to 12:00:  
Lecture **“Fund Management and Portfolio Construction in Practice”**  
(Leopold Quell, Raiffeisen Capital Management)
  - 14:00 to 17:00:  
Lecture **“Fund Management and Portfolio Construction in Practice”**  
(Leopold Quell, Raiffeisen Capital Management)
- **Friday, 20 March 2020:**
  - 9:00 to 12:00:  
Lecture **“Generation of KIDs considering regulatory requirements (MiFID II)”**  
(Robert Kotal, Raiffeisenlandesbank NOe-W)
  - Starting Friday afternoon:  
**work in international teams on the case study**
- **Monday to Wednesday, 23 to 25 March 2019:**
  - **Discussion and contact with instructors**

Christian Cech:

Monday to Wednesday, 23 to 25 March 2020, 10:00 to 17:00

<https://doodle.com/poll/ewn9c79d3hepxmwf>

Robert Kotal:

Monday 23 March 2020, 13:00-16:00

Friedrich-Wilhelm-Raiffeisenplatz 1, 1020 Vienna

<https://doodle.com/poll/qtbrhsnuyqy4rzyn>

Leopold Quell

Monday 23 March 2020, 10:00-13:00

Mooslackengasse 12, 1190 Vienna

<https://doodle.com/poll/ubhney4c3etx5nbd>

- **Wednesday 25 March 2020:**
  - Midnight: **Deadline** for uploading the case report on the Moodle platform
- **Thursday 26 March 2020:**
  - Students work in their teams on the presentation of the case report
- **Friday, 27 March 2020:**
  - 9:00 to 12:00:  
**Presentation of the case reports** by the individual teams on the premises of Raiffeisenlandesbank NOe-W
  - 17:00:  
Location “Salettl am Riesenrad”, Riesenradplatz 1, 1020 Vienna:  
**Award of the diplomas** and presentation of the winning team,  
fare-well cocktail
- Saturday, 28 March 2020: Departure of the participants