

## Principles of Finance

07.09.2021

### General Information

|                                |   |
|--------------------------------|---|
| <b>Module Code</b>             | W.MRAFB51.19  |
| <b>Programme</b>               | Bachelor of Science / International Business Administration |
| <b>Type of Module</b>          | Core module in major  |
| <b>Level of Module</b>         | Advanced  |
| <b>ECTS Credits / Workload</b> | 6 ECTS Credits (180 hours)                                  |

### Module Dependencies

|                          |  |
|--------------------------|--|
| <b>Pre-requisites</b>    | W.ALFIM21 (Corporate Finance)                                      |
| <b>Follow-up modules</b> | W.MRAFB61 (Banking)<br>W.MRAFB62 (International Financial Markets) |

### Module Aims

This course provides a first introduction into the principles of finance and investments. Students have a solid understanding of present value analysis and discounting, equity analysis, derivatives securities (forward, futures and options), and risk management.

## Submodule 1: Financial Mathematics and Equity Analysis

|                                |                             |
|--------------------------------|-----------------------------|
| <b>Submodule code</b>          | MEA                         |
| <b>ECTS Credits / Workload</b> | 1.5 ECTS Credits (45 hours) |

### Learning Outcome 1

Students understand the basic financial mathematics used in finance and the principles of equity valuation.

|  | <b>Importance</b> | <b>Relevant NQF-Descriptors</b> |
|--|-------------------|---------------------------------|
| Subject knowledge and skills: Students state the principles of equity valuation. Students apply the basic financial mathematics used in finance and the methods of equity valuation. | high              | knowledge; application          |
| Problem-solving: Students interpret the results of a corporate valuation and reflect the method used.  | medium            | judgement                       |

### Content Outline

#### 1. How to Calculate Present Values

Future Values & Present Values  
Growing Perpetuities/Annuities  
Continuous Compounding

#### 2. Valuing Bonds

Present Value Formula to value bonds  
Term Structures of interest rates  
Real and Nominal interest rates

#### 3. The Value of Common Stocks

How common stocks are valued  
Estimating the cost of capital

Valuing a Business by DCF

#### 4. NPV and Other Investment Criteria

Net present value

Internal rate of return

Using the NPV / IRR rule

#### 5. Equity Valuation Models

Valuation by comparables

DCF model

Intrinsic, market value & FCF valuation

#### 6. Financing and Valuation

WACC

Valuing businesses

Using WACC in practice

#### 7. Financial Statement Analysis

The major financial statements

Profitability measures, ratio analysis

Comparability problems

### Teaching and Learning Methods

**Contact Hours** exercises; lecture

**Directed Study** individual work; group work; online training; compulsory reading

### Workload

**Contact Hours** 12 lessons / 9 hours (20%)

**Directed Study** 4 lessons / 3 hours (6.7%)

**Private Study** 33 hours (73.3%)

### Assignments and Assessments

| Assessment Type     | Quantity   | Weight | Form        | Evaluation Type | Time            |
|---------------------|------------|--------|-------------|-----------------|-----------------|
| Written examination | 45 minutes | 100%   | closed book | grades          | end of semester |

## Submodule 2: Derivatives and Risk Management

**Submodule code** DRM

**ECTS Credits / Workload** 1.5 ECTS Credits (45 hours)

### Learning Outcome 1

Students understand derivatives (forward, futures and options) and the principles of financial risk management.

|   | Importance | Relevant NQF-Descriptors |
|---|------------|--------------------------|
| Subject knowledge and skills: Students explain derivatives (forward, futures and options) and the principles of financial risk management. Students value derivatives (forward, futures and options). | high       | knowledge; application   |
| Problem-solving: The students develop strategies to hedge against financial risks.  | medium     | judgement                |

### Content Outline

#### 1. Option markets

Option Contract

Values of options

Option Strategies & Parities

#### 2. Forward Futures Markets

Futures and Forward contracts

Margin accounts of futures contracts

Future prices vs expected spot

#### 3. Swaps, and Risk Management

Swaps

Hedging interest rate risk

Hedging commodity prices

### Teaching and Learning Methods

|                       |  |
|-----------------------|--|
| <b>Contact Hours</b>  | exercises; lecture                                   |
| <b>Directed Study</b> | individual work; online training; compulsory reading |

### Workload

|                       |                            |
|-----------------------|----------------------------|
| <b>Contact Hours</b>  | 12 lessons / 9 hours (20%) |
| <b>Directed Study</b> | 4 lessons / 3 hours (6.7%) |
| <b>Private Study</b>  | 33 hours (73.3%)           |

### Assignments and Assessments

| Assessment Type     | Quantity   | Weight | Form        | Evaluation Type | Time            |
|---------------------|------------|--------|-------------|-----------------|-----------------|
| Written examination | 45 minutes | 100%   | closed book | grades          | end of semester |

## Submodule 3: Case Studies Corporate Finance

|                                |                           |
|--------------------------------|---------------------------|
| <b>Submodule code</b>          | CSF                       |
| <b>ECTS Credits / Workload</b> | 3 ECTS Credits (90 hours) |

### Learning Outcome 1

Students apply the principles of finance to real cases studies by using genuine market data.

|   | Importance | Relevant NQF-Descriptors |
|---|------------|--------------------------|
| Problem-solving: Students develop solutions for real cases. | high       | application; judgement   |

### Content Outline

Preparation, presentation and discussion of different real live case studies in the field of Corporate Finance.

#### The major topics covered are:

- Present Value Calculations, Bond & Equity Valuations
- Net Present Value Calculations and IRR Rules
- Financing and Valuations
- Options and Risk Management

### Teaching and Learning Methods

|                       |  |
|-----------------------|--|
| <b>Contact Hours</b>  | seminar; presentations; discussion; case studies |
| <b>Directed Study</b> | individual work; group work                      |

### Workload

|                       |                               |
|-----------------------|-------------------------------|
| <b>Contact Hours</b>  | 18 lessons / 13.5 hours (15%) |
| <b>Directed Study</b> | 6 lessons / 4.5 hours (5%)    |
| <b>Private Study</b>  | 72 hours (80%)                |

### Assignments and Assessments

| Assessment Type       | Quantity   | Weight | Form                | Evaluation Type | Time            |
|-----------------------|------------|--------|---------------------|-----------------|-----------------|
| Written examination   | 45 minutes | 50%    | specified resources | grades          | end of semester |
| Oral group assignment | 15 pages   | 50%    | case study          | grades          | during semester |