Frankfurt School of Finance & Management
German Excellence. Global Relevance.

Frankfurt School Exchange Student Information

Overview of Summer Semester 2022 - BSc Modules (Subject to change!)

Quarter 3

- Advanced Business Modeling Using Spreadsheets**
- Blockchain
- Brand Management
- Corporate Finance
- Entrepreneurship
- Ethics
- Financial Instruments
- FX Markets and Exchange Rate Determination
- Grundlagen des Unternehmensrechts
- Leadership
- Negotiation
- Philosophy and Agent-Based Modelling
- Risk Management
- Supply Chain Management
- Trading and Sales

Quarter 4

- Accounting and Capital Markets
- Accounting and the Business Environment
- Consumer Behaviour
- Data Analytics using Machine Learning
- Digital Entrepreneurship
- Econometrics
- Financial Crimes
- Financial Markets (General Elective)
- International Healthcare Business
- Labor Markets
- Leadership
- Market Intelligence
- Marketing Strategy
- Monetary Theory and Policy
- Principles of Innovation Management
- Scale and Scope in Digital Business Models

**Please do the self-assessment test to make sure you have the level for this course!

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German Language Courses

German language course at various levels
(semester-long)

Further Information about the modules:

- The summer semester is structured in **two quarters** with the following dates:
  Q3: 31 January – 26 March 2022
  Q4: 28 March – 30 May 2022
  The last week of each quarter is the exam week. Courses are offered either in Q3 or in Q4, only the German language courses run for both quarters.

- Within each quarter the modules are usually scheduled in fixed time slots which either run for 8 academic hours on one day a week (9:30 to 16:25h), or for 4 academic hours on two consecutive evenings from 16:40 to 19:35h. Individual classes may take place on Saturdays as well.

- Each module description includes a brief description of the module and information about its requirements and examinations, as well as required textbooks and further readings related to the module. **Please note that all information in the provided modules catalogue is from last year and therefore subject to change**; only the module descriptions distributed at the start of the semester in your Online Campus are binding.

- Each module offered at FS is worth 6 ECTS and consists of 11 sessions à 4 academic hours.

- You may change (space provided) or drop courses up until the second session (second slot, that can take place on the same day than the first slot), as long as no assessment has started. You cannot drop out of a class later on; all courses you are registered for will appear on your transcript.

- The optional German classes regularly take place on Wednesdays. After registering for a course, you will be sent a questionnaire via email. The results of your questionnaire will be used to determine the appropriate course level.

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Scale and Scope in Digital Business Models
[INF73425]

Module Coordinator		Giustiziero, Gianluigi			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		-			
Content		In 1965, Gordon Moore proposed that the number of transistors on a silicon chip would double every year. Since then, Moore's Law has been delineating the superlinear scaling of technological development, an exponential progress so spectacular as to lead to a radical transformation of the economy and to the emergence of hyperscalers such as Google, Uber, Microsoft, and Amazon. The scaling course sheds light on these trends, examining some of the different and far-reaching ways technology is shaping the modern organization. It provides a unique blend of theory and practice, applying concepts from the world of technology, where venture capitalists, entrepreneurs, and managers alike discuss the strategies of technology firms in terms of scaling laws (such as Moore's Law). At the end of the course, you will be brought up to speed with the "Silicon Valley way" of doing business and with the novel techniques for strategic decision-making that are necessary to navigate the modern economy.			

<table>
<tr><td>Intended Learning Outcomes</td><td>The objectives for the course are as follows:
1. Understand the implications of digital technologies on strategy.
2. Understand how digital technologies affect environmental forces and strategic interactions between firms and their competitors.
3. Become proficient in analytical and critical thinking; develop skills in reporting conclusions effectively in written and oral form.
Knowledge:
Apply the principles of strategic decision-making to the digital economy.

Skills:
Expand and elaborate on traditional tools to examine the new business models of the digital economy.

Competence:
Critical, creative, and data-driven thinking; ability to understand and use novel strategies in the digital economy.</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>The course uses case studies, individual and group exercises, student presentations as well as conventional lectures</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td><table>
<tr><td>Type of examination</td><td>Duration or length</td><td>Performance Points</td><td>Due date or date of exam</td></tr>
<tr><td>Class participation</td><td></td><td>24</td><td>During the session</td></tr>
<tr><td>Assignments (Strategy)</td><td>tbd</td><td>36</td><td>During the semester</td></tr>
<tr><td>Written Exam</td><td>60 minutes</td><td>60</td><td>During the exam week</td></tr>
</table></td></tr>
<tr><td>Recommended Literature</td><td>• The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies | by E. Brynjolfsson and A. McAfee
• Platform Revolution: How Networked Markets are Transforming the Economy - and How to Make Them Work for You | G. Parker, M.W. van Alstyne, and S.P. Choudary
• Blitzscaling: The Lightning-Fast Path to Building Massively Valuable Companies | R. Hoffman and C. Ye</td></tr>
<tr><td>Module Structure</td><td></td></tr>
<tr><td>Usability in other Modules/Programmes</td><td>-</td></tr>
<tr><td>Last Approval Date</td><td>2021/11/24</td></tr>
</table>

Trading and Sales [FIN60155]

Module Coordinator		Dengler, Heike			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Finance			
Content		The aim of this module is to prepare students for positions in trading, sales, risk management, asset management and related areas. The module focuses on financial products/markets, financial institutions/risk management regulatory issues. The theoretical aspects will be supplemented by talks of participants and leading practitioners and hands-on front/middle office tool presentations. Topics covered include: • Balance sheet, capital and leverage, liquidity • Instruments and Markets • Cash markets: Equity, Fixed Income, FX, money markets • securities funding and financing • Derivative markets: options, swaps, CDS • securitized instruments, ABS, CDOs • Commodities and commodity derivatives • Market, liquidity and credit risk management • Asset Management • Regulation • Introduction to Front Office Systems			

<table>
<tr><td>Intended Learning Outcomes</td><td>Knowledge: On completion of this module, students have developed a broad knowledge and understanding of the principles and techniques of trading and sales, i. e. they
can understand the main drivers of financial markets
can discuss the characteristics of specific financial markets and instruments
can discuss economic cycles and their impact on financial markets
can discuss appropriate trading and investment strategies,
have an overview of the recent developments in risk management and regulation.
Skills: On successful completion of this module, students will have the proven ability to
explain, price and hedge a variety of financial products,
measure and manage market and credit risks,
efficiently retrieve financial information via front office information systems.
Competence: Students will acquire the competencies necessary to work in a front office or risk management position. More precisely, the aim of this module is to prepare students for positions in
trading,
sales,
risk management,
asset management and related areas.</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>Presentations by students, practitioners and the lecturer, discussions, practical training in the finance lab.</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td><table>
<tr><td>Type of examination</td><td>Duration or length</td><td>Points</td><td>Due Date or Date of exam</td></tr>
<tr><td>Student presentation</td><td>30 minutes</td><td>40PT</td><td>during semester</td></tr>
<tr><td>Seminar thesis</td><td>10 pages</td><td>40 PT</td><td>during semester</td></tr>
<tr><td>Oral exam</td><td>10 minutes</td><td>30PT</td><td>during/after sem ester</td></tr>
<tr><td>Oral participation</td><td></td><td>10PT</td><td>during semester</td></tr>
</table></td></tr>
<tr><td>Recommended Literature</td><td>John C. Hull, Risk Management and Financial Institutions, 5th Edition</td></tr>
<tr><td>Module Structure</td><td></td></tr>
<tr><td>Usability in other Modules/Programmes</td><td>Asset Management and Bachelor Thesis</td></tr>
<tr><td>Last Approval Date</td><td>2021/11/24</td></tr>
</table>

Labor Markets [ECO60154]

Module Coordinator		Donado, Alejandro			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Microeconomics, macroeconomics			
Content		The module presents an introduction in labor economics. Labor economics studies how labor markets work. Topics addressed include the allocation of a worker's time to the labor market, the hiring and firing decisions of firms, wage differentials, the impact on occupational health and safety regulations, the worker's decision to invest in human capital, labor market discrimination, the economic impact of labor unions, and the determinants of unemployment.			

<table>
<tr><td>Intended Learning Outcomes</td><td>Knowledge:
On successful completion of this module, students will possess knowledge:
• about the basic theories of labor markets,
• about the impact of labor unions, both on their members and on the rest of the economy, and
• about the roots of unemployment.

Skills:
On successful completion of this module, the students will have the proven ability to:
• understand the market process of wage determination through the interaction of labor supply and labor demand,
• apply standard economic principles to the analysis of labor market behavior, and
• appreciate the complex role of education in determining the structure of earnings.

Competencies:
After finishing this module, students will be able to assess:
• recent developments in global labor markets,
• appropriate policy responses for different labor market problems, and
• the effectiveness of actual and proposed government policy towards the labor market.</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>The course combines elements of a lecture with active participation from the students.</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td><table><tr><td>Type of Examintion</td><td>Duration or length</td><td>Performance Points</td><td>Date of exam</td></tr><tr><td>Written Exam</td><td>120 min.</td><td>120</td><td>End of quarter</td></tr></table></td></tr>
<tr><td>Recommended Literature</td><td>Borjas, George J. (2020), Labor Economics. Eighth edition, New York (McGraw-Hill Education).</td></tr>
<tr><td>Module Structure</td><td>1.Introduction
2.Labor Supply
3.Labor Demand
4.Labor Market Equilibrium
5.Compensating Wage Differentials
6.Education
7.Labor Market Discrimination
8.Labor unions
9.Unemployment</td></tr>
<tr><td>Usability in other Modules/Programmes</td><td>Economics, Management, Human Resources, Industrial Relations.</td></tr>
<tr><td>Last Approval Date</td><td>2021/11/01</td></tr>
</table>

Accounting and Capital Markets [ACC60112]

Module Coordinator		Becker, Gernot			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Successful participation in first semester accounting module.			
Content		Accounting is an important source of company-specific financial information publicly available to external stakeholders such as debt and equity investors. The module introduces students to using the information provided in a company's annual report for decision-making in capital markets (i.e., investment decisions). To that end, we will cover topics in financial statements analysis, structured forecasting, credit analysis and equity valuation. We will also discuss accounting topics, such as differences in accounting standards, consolidated accounting and segment reporting, which are important to understanding the information provided in the financial statements.			

<table>
<tr><td>Intended Learning Outcomes</td><td>

Knowledge:
On successful completion of this module, students will have a thorough comprehension of the concepts, quality and uses of accounting information by capital market participants. In particular, students acquire knowledge about

- the relevant reporting standards and accounting concepts underlying firms' financial statements;
- the intricacies of earnings management
- key financial ratios and the DuPont model to decompose a firm's return on equity;
- the workings of the structured forecasting approach;
- the anatomy of simple valuation models (with a focus on the residual income model).

Skills:
On successful completion of this module, students will have the proven ability to apply advanced knowledge of accounting and capital markets by

- extracting relevant information from firms' financial statements;
- analyzing the drivers of firms' profitability;
- being able to evaluate earnings management measures;
- forecasting firms' future financial statements using a structured approach;
- using the inputs derived in valuation models.

Competencies:
On successful completion of this module, students are capable of independently analyzing financial statements and critically discussing the advantages/disadvantages of distinct accounting concepts from a user's point of view. They can clearly communicate the results of their own financial statement analysis, critically discuss and evaluate the underlying assumptions of their valuation models.

</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>Presentation, small case studies and group discussions.</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td>

<table>
<tr><th>Type of examination</th><th>Duration or length</th><th>Performance points</th><th>Due date or date of exam</th></tr>
<tr><td>Group paper
Written exam</td><td>8-10 slides
90 minutes</td><td>30
90</td><td>During semester
End of semester</td></tr>
</table>

The exam date will be communicated by the program office.

</td></tr>
<tr><td>Recommended Literature</td><td>

- Lundholm/Sloan, Equity Valuation and Analysis, 5th edition, 2019.
- Additional readings as provided in the course package.

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</table>

Module Structure	The course provides the foundations of financial accounting, consolidated accounting and segment reporting. It explores earnings management intentions and possibilities. It also introduces students to financial ratios and profitability analysis. Financial ratios are applied in structured forecasting, credit analysis and equity valuation. A detailed outline will be provided in the course package.
Usability in other Modules/Programmes	The module is part of the thematic area "Managing Organisations", but the learning outcomes are beneficial for the comprehension of banking and finance modules as well.
Last Approval Date	2021/11/22

FX Markets and Exchange Rate Determination [ECO60153]

Module Coordinator		Donado, Alejandro			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Microeconomics, macroeconomics			
Content		The module presents an introduction to the theory and practice of exchange rate determination and exchange rate policies under different monetary and exchange rate regimes. Students learn to understand how foreign exchange markets function under different exchange rate arrangements and which factors have an impact on foreign exchange rate determination over different time horizons.			

<table>
<tr><td>Intended Learning Outcomes</td><td>Knowledge:
On successful completion of this module, students will have a thorough comprehension of the institutional conditions, targets, strategies, and instruments of domestic exchange rate policies, i.e. they possess knowledge:
about foreign exchange markets and foreign exchange market instruments,
about the world financial architecture, and
about recent exchange rate developments and exchange rate arrangements.

Skills:
On successful completion of this module, the students will have the proven ability to:
describe the structure and functions of the foreign exchange market,
apply theoretical concepts and analytical tools in assessing major trends in foreign exchange rate developments, and
explain how monetary and fiscal policy affect the economy under different exchange rate regimes.

Competencies:
After finishing this module, students will be able to assess:
the major determinants of changes of foreign exchange rates,
the major causes of foreign exchange rate changes, and currency turbulences, and
the causes and effects of balance of payments crises.</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>The course combines elements of a lecture with active participation from the students.</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td><table>
<tr><td>Type of Examintion</td><td>Duration or length</td><td>Performance Points</td><td>Date of exam</td></tr>
<tr><td>Written Exam</td><td>120 min.</td><td>120</td><td>End of quarter</td></tr>
</table></td></tr>
<tr><td>Recommended Literature</td><td>Krugman, Paul R. / Obstfeld, Maurice / Melitz, Marc J. (2015), International Economics: Theory and Policy. Tenth edition, Boston et al. (Pearson).
Feenstra, Robert C. / Taylor, Alan M. (2017), International Economics. Fourth edition, New York (Worth Publishers).</td></tr>
<tr><td>Module Structure</td><td>1. Introduction
2. National Income Accounting and the Balance of Payments
3. Exchange Rates and the Foreign Exchange Market: An Asset Approach
4. Money, Interest Rates, and Exchange Rates
5. Price Levels and the Exchange Rate in the Long Run
6. Output and the Exchange Rate in the Short Run
7. Fixed Exchange Rates and Foreign Exchange Intervention</td></tr>
<tr><td>Usability in other Modules/Programmes</td><td>Finance; International Business; International Management; International Trade and Economic Integration; Monetary Theory and Policy; Challenges of the European Union and the Euro Area.</td></tr>
</table>

Last Approval Date	2021/11/05

Market Intelligence [MGT70145]

Module Coordinator		Qiu, Zhuoer			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Students should master basic mathematical concepts.			
Content		Firms rely increasingly on vast amounts of data to inform marketing decisions. The goal of this course is to provide students with key skills that will equip them for a career where analytics and data-driven decision making replace management by intuition. By learning about and applying various multivariate analytic methods and techniques, students will gain a better understanding of how to turn data into insights for better marketing decisions.			
Intended Learning Outcomes		Upon completion of this course students should be able to: - Apply appropriate quantitative analyses to solve managerial problems with available data - Measure and assess the effectiveness of marketing strategies and tactics - Understand, interpret, and discuss the outputs and procedures of statistical analysis software			
Forms of teaching, methods and support		This course may include traditional lectures and discussions as well as homework assignments, group work, case studies, guest lectures, and individual applications.			

<table>
<tr><td>Type of Assessment(s) and performance</td><td>
<table>
<tr><th>Type of examination</th><th>Duration or length</th><th>Performance Points</th><th>Due date or date of exam</th></tr>
<tr><td>Group Project</td><td></td><td>30 points</td><td>During Course</td></tr>
<tr><td>Assignments</td><td></td><td>20 points</td><td>During Course</td></tr>
<tr><td>Participation</td><td></td><td>10 points</td><td>During Course</td></tr>
<tr><td>Final Exam</td><td>60 Minutes</td><td>60 points</td><td>Exam Week</td></tr>
</table>
</td></tr>
<tr><td>Recommended Literature</td><td>- Fred M. Feinberg, Thomas C. Kinnear, James R. Taylor, Modern Marketing Research, Cengage 2013.
- Andy Field, Jeremy Miles, Zoë Field, Discovering Statistics Using R, Sage 2012.
- John W. Foreman, Data Smart: Using Data Science to Transform Information into Insight, Wiley 2013.</td></tr>
<tr><td>Module Structure</td><td>In this course, the learning process will typically encompass three phases: In phase one, the theoretical concepts of a specific quantitative method will be introduced, allowing students to understand the corresponding foundational mechanisms and relationships. In phase two, students will learn how these concepts translate into actual analyses and conduct them in Excel. Having successfully mastered the knowledge transfer from concepts to applications, in phase three, students will use R to leverage the specific methods in further empirical applications. The goal of this three-phase design is to help students gain a solid understanding of important quantitative methods and equip them with the necessary knowledge for their strategic employment and evaluation.</td></tr>
<tr><td>Usability in other Modules/Programmes</td><td>Digital Marketing</td></tr>
<tr><td>Last Approval Date</td><td>2021/11/24</td></tr>
</table>

Brand Management [MGT60166]

Module Coordinator		Redler, Jörn			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Marketing			
Content		Taking a traditional view, a brand is seen as a means to distinguish a firm´s market offerings from those of others. Going beyond that, the modern view of branding considers a brand a socio-psychological construct that influences customers´ perceptions, evaluations and decisions. Therefore, brands need to be acknowledged as strategic (and intangible) assets that can provide a company long-lasting competitive advantage. This course aims to develop students' understanding of the importance of brand equity as well as how to build, measure, and manage brand equity. It also advances comprehension of the brand management process and addresses crucial mechanisms in regard to how consumers choose brands and how brands can satisfy social and psychological needs. Strategic decisions like ways to leverage brand equity, options of managing brand portfolios or the management of brands over time will be considered. Building on existing communications and consumer behavior models, the course will explore many of the issues facing a modern day brand manager.			

<table>
<tr><td>Intended Learning Outcomes</td><td>

Define core terms such as brand, brand equity, positioning, brand architecture.
Comprehend the pivotal role of brands in a modern business environment.
Be aware of important psychological mechanisms that explain brand influence.
Understand brand elements that help build brand equity.
Be able to design, implement and critically analyze brand strategies that consider brand naming, brand extension, brand stretching, brand architecture and so forth.
Appreciate how marketing and in particular marketing communications help build brand equity.
Develop an appreciation of how to measure brand equity.
Appreciate the challenges of managing a brand over time.
Be able to converse with both academic and practitioner brand specialists on a range of brand related issues.

</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>Mixture of lecture, seminar, case discussion and exercises</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td>
<table>
<tr><td>Type of examination</td><td>Duration or lenght</td><td>Performance Points</td><td>Due date or date of exam</td></tr>
<tr><td>Poster presentation</td><td></td><td>40</td><td>During Course</td></tr>
<tr><td>Written Exam</td><td>80 Min.</td><td>80</td><td>End of semester</td></tr>
</table>
</td></tr>
<tr><td>Recommended Literature</td><td>Core text:
Keller, K., Swaminathan, V.: Strategic Brand Management, 2020, Pearson.

Additional resources:
Kapferer J. N.: The New Strategic Brand Management: Advanced Insights and Strategic Thinking, 2012, Kogan Page.
Rosenbaum-Elliott, R., Percy, L., Pervan, S.: Strategic Brand Management, 2015, Oxford University Press.</td></tr>
<tr><td>Module Structure</td><td>

Brands: definition, relevance, challenges
The behavioral-scientific view on brands, and other paradigms
Band Assets
Objectives and process of brand management
Brand positioning
Brand elements
Brand touchpoints and brand communications
Brand strategies, brand architecture and brand stretch
Brand enrichment
Internal branding
Brand evaluation

</td></tr>
<tr><td>Usability in other Modules/Programmes</td><td>-</td></tr>
</table>

Last Approval Date	2021/11/25

Digital Entrepreneurship [INF40131]

Module Coordinator		Pisani, Francesco			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		No specific prerequisites are necessary			

Content	For years digitalization has been setting new paradigms for companies to find their own place in the market with the current pandemic accelerating this development. New ventures taking advantage of the current situation are constantly entering various market sectors. Major investments are pouring into selected ideas fostering rapid growth and sky rocking valuations at a global level. Entire ecosystems are impacted by these changes, and the new leaders of tomorrow are formed. Some may say that “entrepreneurs are born and not made”, but the methods and skills that lead to success are elements that can be learned. The objective of this course is to provide students with the opportunity to experience the journey of digital entrepreneurs through a mixture of theoretical insights and practical applications. The course focuses on the relevant aspects of creating and growing a digital business - from the idea generation to the scale-up phase - and provides an overview of the relevant techniques in each stage. The class structure follows the different steps in the formation of a new business and its roll-out with case studies being presented and discussed in class. During the course, students are provided with the opportunity to work in groups on a project of their choice to apply their new knowledge. Students will be required to present the progress made on their project in class including the targeted problem, its potential market size, the suggested solution, the business plan, and a pitch. The program allows students to directly hear the concepts taught in class also from successful entrepreneurs and investors.
Intended Learning Outcomes	On successful completion of this module students will have a sufficient understanding of: • the key characteristics of an entrepreneur • a structured approach to analyze business problems and to develop solutions related to them • the importance of digitalization in today’s business world • key elements depicting the development of a startup Furthermore, after completing this module, students will be able to transfer startups concepts to different business situations and develop an entrepreneurial approach to business life.
Forms of teaching, methods and support	Class sessions will be interactive, and students are expected to actively participate in discussions and exercises. To apply the techniques and methods learned in class, students will have to work on a group project that includes the formation of an idea into a venture. The module concludes with a final exam.

<table>
<tr><td>Type of Assessment(s) and performance</td><td>
<table>
<tr><td>Type of examination</td><td>Duration or length</td><td>Performance Points</td><td>Due date or date of exam</td></tr>
<tr><td>Written Exam</td><td>30 Minutes</td><td>30</td><td>Exam week</td></tr>
<tr><td>Group project presentation</td><td></td><td>90</td><td>During course</td></tr>
</table>
</td></tr>
<tr><td>Recommended Literature</td><td>Course material
Lecture slides will be provided to accompany the lecture and will be uploaded on the Canvas module page.

Main literature
• Blank, Steve, and Bob Dorf. The startup owner's manual: The step-by-step guide for building a great company. John Wiley & Sons, 2020.

Additional literature includes:
• Masters, Blake, and Peter Thiel. Zero to one: notes on start ups, or how to build the future. Random House, 2014
• Osterwalder, Alexander, and Yves Pigneur. Business model generation: a handbook for visionaries, game changers, and challengers. Vol. 1. John Wiley & Sons, 2010
• Gassmann, Oliver, Karolin Frankenberger, and Michaela Csik. The business model navigator: 55 models that will revolutionise your business. Pearson UK, 2014
• Osterwalder, Alexander, et al. Value proposition design: How to create products and services customers want. Vol. 2. John Wiley & Sons, 2014
• Bland, David J., and Alexander Osterwalder. Testing business ideas: A field guide for rapid experimentation. Vol. 3. John Wiley & Sons, 2019.
• Reis, Eric. "The lean startup." New York: Crown Business 27 (2011).
• Feld, Brad, and Jason Mendelson. Venture deals: Be smarter than your lawyer and venture capitalist. John Wiley & Sons, 2019.
• Eisenmann, Tom: Why Startups Fail: A New Roadmap for Entrepreneurial Success. Currency. 2021</td></tr>
<tr><td>Module Structure</td><td>The module is structured in various sessions that will mostly take place one day a week during the month of April. Sessions are structure to regularly provide students with the necessary insights to use for their group project and the final exam. During some of the sessions, time will be allocated for the students to present their weekly progresses on their group project.</td></tr>
<tr><td>Usability in other Modules/Programmes</td><td>Concentration in innovation management / all programs related to innovation</td></tr>
<tr><td>Last Approval Date</td><td>2021/11/22</td></tr>
</table>

Financial Crimes [FIN70963]

Module Coordinator		Mensi, Gian Marco; Santoni, Alessandro			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Basic Knowledge of Banking Accounting			
Content		This is an introductory course that will give you a solid understanding of core financial crime, fraud, bribery and corruption risks. **1) Operational Risk, Money Laundering** a) Financial Crimes phases, commonalities b) Money Laundering Strategies c) Red flags **2) Forensic accounting: spotting potential fraud analyzing financial statements** a) Earnings manipulation b) Cash-flow manipulation c) Other metrics manipulation **3) Case studies on financial accounting malpractices** **4) Cryptocurrencies and financial crimes** a) Cryptois basics b) Cryptos and criminal behavior c) chosen hacking case study			

<table>
<tr><td>Intended Learning Outcomes</td><td>Knowledge:
On successful completion of this module, students will have a thorough comprehension of the basic definitions, theories and concepts of financial crimes, i.e. they can:
• analyse financial crimes aspects from an accouting point of view,
• spot potential fraud analyzing financial statements
• describe AML requirements,
• understand the Money laundering stages
• recognize red flags related to money laundering
Skills:
On successful completion of this module, students will have the proven ability to apply financial crimes prevention concepts for bank management purposes

Competencies:
On successful completion of this module, students appreciate the importance of financial crimes prevention in a financial institution and are capable of acting at the interface between financial crimes specialists and other bank departments.</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>This course has a practical focus and is open to anyone who is interested in the subject. The course has a mix of theory (mainly based on FATF) and several business cases.</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td><table>
<tr><td>Type of Examination</td><td>Duration or Length</td><td>Performance Points</td><td>Due date or date of exam</td></tr>
<tr><td>Exam</td><td>90 minutes</td><td>90</td><td>Exam Week</td></tr>
<tr><td>Class Presentation</td><td></td><td>30</td><td>during the course</td></tr>
</table></td></tr>
<tr><td>Recommended Literature</td><td>Few suggested readings. material will be distributed in class.

1) Financial Crime in the 21st Century, Law and Policy, Nicholas Ryder, University of the West of England, UK
2) Financial Crimes Michael Levi, The Oxford, Edited by Michael Tonry</td></tr>
<tr><td>Module Structure</td><td>In this module students will develop deep understanding of the most important dimensions of financial crimes risk and learn about advanced concepts how to measure and manage this risk.</td></tr>
<tr><td>Usability in other Modules/Programmes</td><td>Bachelor Thesis (BSc_BT)All other modules of the thematic area FINANCE & BANKING.</td></tr>
<tr><td>Last Approval Date</td><td>2021/11/23</td></tr>
</table>

Accounting and the Business Environment
[ACC60138]

Module Coordinator		Wagner, Hermann A.			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Compulsory Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Financial Accounting, Managerial Accounting			
Content		Students will be assigned to small subgroups. Each group has to analyze the consolidated annual report of a specific firm. Regarding the M&A sessions the students have to analyze also specific transactions. The module is structured as follows: A short lecture (80 minutes) will introduce each of the topics outlined above. The following meeting starts with an interactive session in which the groups will explain their findings regarding the topics at hand for the respective firm/industry for which they have expertise. There will be 11 interactive sessions (each around 100 minutes) in the module.			

<table>
<tr><td>Intended Learning Outcomes</td><td>

Knowledge: Participants will deepen their factual knowledge of various accounting choices and discretion in reporting. Moreover, participants will acquire theoretical knowledge about how accounting is impacted by the business and regulatory environment.
Skills: Students will be able to analyze financial statements in the context of the environment in which a firm operates. They will also improve their oral and written communication skills.
Competencies: Students will be able to identify critical accounting methods for given industries. They will understand how the business and legal environment affects a firm’s strategy and operations and be competent to assess a) the importance and adequacy of different accounting systems (management perspective) and b) what can be learnt about a firm’s strategy, operations and performance from publicly available information (analyst’s perspective).

</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>Class sessions will combine traditional (short) lectures followed by interactive case study discussions. Students are required to contribute to these interactive sessions by presenting their findings for individual business cases. Students will be asked to prepare for the sessions by working on the respective cases. In the first sessions, we will form groups of about 4-5 students and assign a company case to each of them. Groups have to hand in a comprehensive report on the respective firm they are analyzing.</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td>
<table>
<tr><td>Type of examination</td><td>Duration or length</td><td>Performance points</td><td>Due date or date of exam</td></tr>
<tr><td>Oral exam</td><td></td><td>58</td><td>End of course</td></tr>
<tr><td>Group project: report</td><td></td><td>40</td><td>End of course</td></tr>
<tr><td>Practical application of subject matter</td><td></td><td>22</td><td>During semester</td></tr>
</table>
<u>Examination requirements:</u>

N/A
</td></tr>
</table>

Recommended Literature	Basic literature: • Abdel-Khalik, A. Rashad (2014): *Accounting for Risk, Hedging & Complex Contracts*. Routledge. (Chapter 2, 4, 12). • Anthony, Robert N.; Govindarajan, Vijay; Hartmann, Frank G. H.; Kraus, Kalle; Nilsson, Göran (2014): *Management Control Systems*. MacGraw-Hill. (Chapter 2). • Dhaliwal, Dan S.; Radhakrishnan, Suresh; Tsang, Albert; Yang, Yong George (2012). Nonfinancial Disclosure and Analyst Forecast Accuracy – International Evidence on Corporate Social Responsibility Disclosure. *Accounting Review*, 87(3), 723-759. • Ferreira, Aldónio; Otley, David (2009): The design and use of performance management systems: An extended framework for analysis. Management Accounting Research, 20(4), 263-282 • Gregory, Edward; Myers, Roslyn (2002). Help Clients Take Measure. *Journal of Accountancy*. 193(6), 53-58. • Merchant, Kenneth A. (1982): The Control Function of Management. *Sloan Management Review*, 23(4), 43-55. • Shi, Yuwei; Manning, Tom (2009): Understanding Business Models and Business Model Risks. *Journal of Private Equity*. 12(2), 49-59. • Singleton-Green, Brian (2014). Should financial reporting reflect firms' business models? What accounting can learn from the economic theory of the firm. *Journal of Management & Governance*, 18(3), 697-706. Additional sources will be provided in class.

Module Structure	Students are introduced to different business models within and across industries. In the following, significant accounting methods and challenges for different industries are reviewed, taking into account differences in firms' business models. We will discuss external accounting and different management accounting systems and their appropriateness for different industries. In this context we will discuss also risk accounting. We will also talk about general and industry-specific regulation. In the following, we talk about ethical and environmental issues and how financial statements inform about what is sometimes called corporate citizenship. We will proceed with discussing how firms account for the profitability of their investments and which kind of accounting they need for M&A transactions. 1. Business Models 2. Financial Accounting 3. Management Accounting I 4. Management Accounting II 5. Business Risk Management 6. Financial Risk Management 7. Regulatory Accounting and Competition 8. Ethical and Environmental Accounting Issues 9. Accounting for M&A I 10. Accounting for M&A II 11. Accounting for M&A III
Usability in other Modules/Programmes	Preparation for Master programms, e.g. Master in Auditing.
Last Approval Date	2021/11/24

Risk Management [FIN60145]

Module Coordinator		Kelshiker, Arun; Santoni, Alessandro			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Markets, Incentives and Ethical Management Financial Markets			

Content	Financial markets are becoming ever more complex. The persistent crisis of the global financial system results in an increased need for experts and leaders to manage financial risks in a professional way. Topics covered will include: **Bank capital, risk management and regulation** Risk factors and risk mapping Computing Value-at-Risk Credit Risk NPL, Coverage Liquidity Risk in banking supervision Capital allocation Fraud and money laundering Case studies **Understanding Global Risks** ESG Risk Management Understanding ESG Climate Risks TCFD Risk Disclosures Frameworks Biodiversity Risks Financial Ecosystem for Risk Management **Asset Allocation and Portfolio Risk Management** Asset Bubbles Managing Investment Risks Portfolio Risk Management Client Asset Allocation and Risk Profiling Global Risk Factors and Opportunities

<table>
<tr><td>Intended Learning Outcomes</td><td>Knowledge:
On successful completion of this module, students will have a thorough comprehension of the basic definitions, theories and concepts of risk management, i.e. they can:
• explain how to manage and hedge trading and banking book exposures,
• describe regulatory requirements,
• recognize risk management as a means of determining a bank’s profitability.
Skills:
On successful completion of this module, students will have the proven ability to apply risk measurement and risk management concepts for bank management purposes, i.e. they are able to:
• compute various risk measures,
• evaluate the impact of risk on prices for financial products and services,
• draw up appropriate bank-wide risk management.
Competencies:
On successful completion of this module, students appreciate the importance of risk management in a financial institution and are capable of acting at the interface between risk managers and other bank departments.</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>Mix of short lectures with discussions in class.</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td><table>
<tr><td>Type of Examination</td><td>Duration or Length</td><td>Performance Points</td><td>Due date or date of exam</td></tr>
<tr><td>Exam</td><td>90 minutes</td><td>90</td><td>Exam Week</td></tr>
<tr><td>Class Presentation</td><td></td><td>30</td><td>during the course</td></tr>
</table></td></tr>
<tr><td>Recommended Literature</td><td>Key suggested readings:

Fundamentals of Risk Management: Understanding, Evaluating and Implementing Effective Risk Management. 2018- English edition by Paul Hopkin

Risk Management in Banking (Wiley Finance) Paperback – 2015 English edition by Joël Bessis (Autor)

Risk and Asset Allocation (Springer Finance) English edition | by Attilio Meucci | 2010

The Black Swan: The Impact of the Highly Improbable: With a new section: "On Robustness and Fragility" (Incerto, Band 2) English edition | by Nassim Nicholas Nicholas Taleb | 2010

https://www.bis.org/basel_framework/index.htm?m=3%7C14%7C697</td></tr>
</table>

Module Structure	In this module students will develop deep understanding of the most important dimensions of risk and learn about advanced concepts how to measure and manage different type of risk.
Usability in other Modules/Programmes	Bachelor Thesis (BSc_BT)All other modules of the thematic area FINANCE & BANKING.
Last Approval Date	2021/11/23

Blockchain [FIN74257]

Module Coordinator		Kütt, Veronika			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		No prior knowledge necessary.			
Content		In this course, the basics of blockchain technology will be laid with a strong focus on BItcoin and its second layer scaling solution, the lightning network. We will explore the working of Bitcoin as the first blockchain being implemented (hashes, proof of work consensus mechanism, mining) as well as the macroeconomic changes it brings about, also tackling recent developments like the introduction of Bitcoin as legal tender in El Salvador. The second part will focus on Tokenization: the concepts of smart contracts and oracles and how they can be used will be explained plus discussing different forms of tokens (fungible/non-fungible, security tokens, ..) and the respective token standards. These sessions will be followed by learning how to custody one's Bitcoin and other cryptoassets. The concepts of self-custody vs. custody will be explained, the different forms of custody as welll as best practices. In the end we will examine different forms of money being issued like Central Bank Digital Currencies (CBDCs) or private money like Diem (facebook) and its macroeconomic implications.			

<table>
<tr><td>Intended Learning Outcomes</td><td>At the end of class, the learner will
have a basic understanding of Bitcoin, the Lightning network and other cryptoassets
understand the basics of Tokenization, smart contracts, oracles and its applications
be able to make transactions on open blockchain networks
have an overview of the different issued versions of money (Bitcoin, CBDCs, Diem)</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>Presentations, Group discussions, interactive part (hands-on session)</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td><table>
<tr><td>Type of examination</td><td>Duration or length</td><td>Performance Points</td><td>Due date or date of exam</td></tr>
<tr><td>Group Presentation</td><td></td><td>60</td><td>During Course</td></tr>
<tr><td>Individual Term Paper</td><td></td><td>60</td><td>Two weeks after ending of class</td></tr>
</table></td></tr>
<tr><td>Recommended Literature</td><td>Bitcoin, Blockchain und Kryptoassets (2017) - Fabian Schär
Layered Money: From Gold and Dollars to Bitcoin and Central Bank Digital Currencies (2021) - Nik Bhatia)
Mastering Bitcoin: Unlocking Digital Cryptocurrencies (2017) - Andreas Antonopoulos
Token Economy: How the Web3 reinvents the Internet (2020) - Shermin Voshmgir
The Internet of Money: A collection of talks by Andreas M. Antonopoulos - Andreas M. Antonopoulos</td></tr>
<tr><td>Module Structure</td><td></td></tr>
<tr><td>Usability in other Modules/Programmes</td><td>-</td></tr>
<tr><td>Last Approval Date</td><td>2021/11/25</td></tr>
</table>

Philosophy and Agent-Based Modelling
[PHI71566]

Module Coordinator		Hegselmann, Rainer			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Compulsory Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Strong interest in modelling and simulation, willingness to develop andprogram agent based models.			

Content	The module consists of five components 1. Component:Classical agent-based models In the first component, two classical agent-based models are analysed, in which elementary interactions between many actors generate surprising and unintended macro effects. Starting point are models by Thomas C. Schelling and James M. Sakoda. 2. Component: Agent-based models and the program of an explanatory social science At the centre of the second component is the methodological programme of understanding and explaining social macro-effects using individual decisions and actions at a micro-level. 3. Component: Agent-based models of opinion dynamics The formation and dynamics of opinions is a paradigmatic field of application of agent-based models. The third component will focus on the so-called bounded confidence model and some of its extensions. For example, radicalisation and polarisation processes will be modelled and analysed. 4. Component: Meta-theory–from a philosophy of science point of view The fourth component deals with basic meta-theoretical problems of modelling and simulation. The focus is on the role of idealisations and the epistemic consequences of the use of computers. 5. Component: Joint development of simple agent-based models in NetLogo This component is application and development oriented. Different models of simple social dynamics are developed together in the NetLogo development environment. The fifth module component does not stand at the end of the course, but will be the content and programme of the afternoon session from the second day of the course onwards. On their own computers, in a cooperative exchange with others and supervised by the lecturer, the students will develop models of simple social dynamics. Thus, for the fifth component we will invest about half of the time of the course.

<table>
<tr><td>Intended Learning Outcomes</td><td>Knowledge:
The participants know the basic ideas, basic approaches and typical problems of agent-based modelling. They have in-depth knowledge of some classic models in which the individual actions of a micro-level produce surprising and often unintended macro effects. Students will know basic strategies for programming, visualising, and analysing agent-based models. From a philosophy of science point of view, they will be familiar with some of the meta-theoretical problems of computer-based modelling of social and economic dynamics.

Skills:
The participants possess the methodological tools to critically examine arguments in the context of model-based understanding, explanation, or prediction of actions and the macro-effects resulting from them. They are able to reflect models and results from a meta-theoretical perspective. From a practical point of view, the participants are able to understand agent-based models and to develop simple models of social dynamics independently. The participants can work out their own thoughts and arguments coherently, present them clearly and represent them in discussions with others.

Competences:
Participants will be able to critically analyse and reflect on the approaches, perspectives and problems of agent-based modelling, including a philosophy of science perspective. They can apply this knowledge constructively in professional, public and private spheres for the development and evaluation of proposed solutions.</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>The course is partly held in the form of introductory lectures, partly in the form of seminar sessions, partly in the form of a joint practical project to develop simple models of social dynamics.</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td><table>
<tr><td>Type of examination</td><td>Duration or length</td><td>Performance Points</td><td>Due date or date of exam</td></tr>
<tr><td>Written exam</td><td>120 Minutes</td><td>120</td><td>Exam Week</td></tr>
</table></td></tr>
<tr><td>Recommended Literature</td><td>The obligatory literature and other useful material for the module will be indicated by the lecturer at the beginning of the module.</td></tr>
<tr><td>Module Structure</td><td>The module has five components:

1. Classical agent-based models
2. Agent-based models and the program of an explanatory social science
3. Agent-based models of opinion dynamics
4. Meta-theory: from a philosophy of science point of view
5. Joint development of simple agent-based models in NetLogo</td></tr>
</table>

Usability in other Modules/Programmes	Bachelor Thesis
Last Approval Date	2021/11/24

Consumer Behaviour [MGT60185]

Module Coordinator		Atalay, Selin			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Marketing			
Content		**1. Scientific Approach to Consumer Behavior** **2. How Consumers Acquire, Remember and Use Knowledge** **3. How Consumers Make Decisions** **4. Influence and Persuasion**			

<table>
<tr><td>Intended Learning Outcomes</td><td>Marketing begins and ends with consumers – from determining consumers' needs to providing consumer satisfaction. As such, a clear understanding of consumers' buying behavior is critical in successfully managing the marketing function. The purpose of this course is to introduce you to the study of consumer behavior. The role of research and the tools of scientific inquiry will be emphasized in order to illuminate the underlying behavioral and psychological constructs. Depth of understanding of these underlying constructs is a key to success in today' s complex marketplace. Product lifecycles are shorter, market segments are smaller and more dispersed, and the competition is more intense than ever before.

Upon completion of this course, students:

• Will have learned the key behavioral and psychological concepts and will have developed the intellectual ability to apply them in analyzing marketing situations.
• Will be able to understand consumers' consumption–related behaviors
• Will be able to develop and evaluate marketing strategies intended to influence consumption–related behaviors.</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>Lectures, in-class exercises, cases, active discussions and group work</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td><table>
<tr><td>Type of examination</td><td>Duration or length</td><td>Performance Points</td><td>Due date or date of exam</td></tr>
<tr><td>Group Project</td><td></td><td>60 points</td><td>Last day of class</td></tr>
<tr><td>Individual Assignments & In Class Work</td><td></td><td>60 points</td><td>Throughout the semester</td></tr>
</table></td></tr>
<tr><td>Recommended Literature</td><td>Will be provided in class.</td></tr>
<tr><td>Module Structure</td><td>The contents of the course are broken down into the following modules:

1. Scientific Approach to Consumer Behavior

2. How Consumers Acquire, Remember and Use Knowledge
a. Attention, Comprehension, and Memory b. Attitudes and Attitude Formation

3. How Consumers Make Decisions
a. Judgment and Decision Making
b. Individual Differences

4. Influence and Persuasion
a. Social Influence Principles and Persuasion
b. Cultural Influences on Consumers</td></tr>
</table>

Usability in other Modules/Programmes	B.Sc.-Thesis
Last Approval Date	2021/11/01

Advanced Business Modeling Using Spreadsheets [INF60104]

Module Coordinator		Roßbach, Peter			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Completion of module "Introduction to Programming/Einführung in die Programmierung" or comparable skills in Excel and VBA are required. Participation in this module requires an English Windows version of Excel from the Office 365 program. Excel on macOS does not have the necessary components and functions!			

Content	In today's business many managerial decisions are based on decision models applying highly sophisticated algorithms. For the implementation of such models software tools are needed. One class of those tools is spreadsheet programmes, like Microsoft Excel, which provide the necessary functions and flexibility for the developer and user in one person. The purpose of this module is to develop professional skills for the design and implementation of ambitious business and finance models using spreadsheets and programming techniques. The objective is to understand the models from conceptual and computational perspectives and to translate them into Microsoft Excel/VBA applications. For this, both the models and the manifold techniques for developing spreadsheet applications are subject of the lectures. The topics of this module will mainly cover the following areas: • Valuation; for example value-at-risk and valuation of securities and derivatives • Optimization; for example cash-flow optimization, portfolio optimization, and heuristic optimization • Simulation; e.g. Monte Carlo and what-if analysis • Forecasting and Prediction; e.g. GARCH modelling and turnover forecasting Accompanying the content-related modelling, specific spreadsheet techniques, like the usage of matrix functions, pivot functions, the solver, and building graphical user interfaces, are also subject of the lectures.
Intended Learning Outcomes	**Knowledge**: On completion of this module, the students are familiarized with the relevant methods and instruments utilized in managerial and in special financial decision processes, i.e. they can: • describe how to apply statistical methods, optimization and simulation and OLAP technology, • explain how the functionality Excel and VBA provides to effectively model the above mentioned methods and instruments. **Skills**: On successful completion of this module, students will have the proven ability to practically implement the methods and instruments in Excel and VBA with the focus on quality, efficiency and reusability, i.e. they can: • apply an implementation process different to trial-and-error and • find the adequate relationship between Excel and VBA. **Competencies**: On successful completion of this module, the students are able to: • formulate practical challenges and problems in a formal and conceptual language used in business, • transform the formal model in a technical model in the language of Excel and VBA and • implement it in a quality-oriented manner.
Forms of teaching, methods and support	Interactive lectures, business cases, in-class exercises, and home exercises.

<table>
<tr><td>Type of Assessment(s) and performance</td><td>
<table>
<tr><th>Type of examination</th><th>Duration or length</th><th>Performance points</th><th>Due date or date of exam</th></tr>
<tr><td>Assignments in form of spreadsheet applications in course and at home</td><td></td><td>120</td><td>During semester</td></tr>
</table>

<u>Examination requirements:</u>
Computer with MS Excel and VBA installed (at least version 2010).

<u>Attendance requirements:</u>
Compulsory student attendance of 7 out of the 11 lectures. An attendance below that number will lead to a fail of the module.
</td></tr>
<tr><td>Recommended Literature</td><td>Will be announced in the lectures.</td></tr>
<tr><td>Module Structure</td><td>The module consists of two parts. In the first part, advanced techniques in Excel and Visual Basic for Applications (VBA) will be taught. In the second part, the modelling of managerial and business applications using Excel and VBA will be the subject of the lectures.</td></tr>
<tr><td>Usability in other Modules/Programmes</td><td>Bachelor Thesis</td></tr>
<tr><td>Last Approval Date</td><td>2021/11/23</td></tr>
</table>

Principles of Innovation Management
[MGT60231]

Module Coordinator		Amigoni, Gaja			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		This Innovation Management module is offered at an advanced stage of the Bachelor program. Consequently, students are expected to have a good understanding of the business environment and core elements (strategy, marketing, finance, etc.) as well as understanding of firm´s structures, organization and operations. There are, however, no formal preliminary entry requirements for this module.			

Content	The module aims to provide students with basic concepts and awareness in innovation management and an understanding of the challenges and opportunities, which small and large firms face in relation to it. In today's rapidly changing business environment, firms can only survive if they regularly innovate - developing new products and successfully introducing them into the market. In this module, we will focus on the practices and processes that managers use to do so in order to manage innovation effectively. We will approach innovation issues from the entrepreneur and manager's perspectives. As building an organization that can continuously generate and commercialize innovations is one of the core concerns of both entrepreneurs and top management, any leader should be conversant with the leading thinking on innovation and should not leave this challenge to the R&D function within its organization alone. The module will deliberately move between strategic issues (what should you do?) and organizational and managerial issues (how should you get it done?). The course is designed in this manner as it is grounded in the belief that it is particularly dangerous to separate strategy from implementation (the "why" from the "how") when innovation is the issue, because having a great idea is worth little or nothing if a firm cannot figure out how to commercialize or monetize that idea. More specifically, we will cover topics which can be classified into 3 categories: 1. **Exploring** innovations - the processes used to explore innovations along the technology, market and strategy dimensions as the innovation moves from idea to market 2. **Executing** innovations — the structures and incentives organizations must put into place to effectively allow talented individuals to execute innovation processes 3. **Exploiting** innovations — the strategies that a firm must consider to most effectively exploit the value of their innovation

Intended Learning Outcomes	**Knowledge**: On successful completion of this module, students will be familiar with the core concepts of innovation management, i.e. they can: • Understand different techniques of innovation management • Analyze companies' innovation related activities and processes • Critically discuss a firm's need to have a strategic and integrated approach to be able to successfully manage innovation **Skills**: On successful completion of this module, students can: • Apply the core concepts of innovation management directly to real world situations • Understand the strategies most effective for exploiting innovations, and, as a result, analyze and compare innovation strategies of successful firms • Identify, evaluate, and resolve a variety of issues relating to poor innovative performance in large firms as well as entrepreneurial firms **Competencies**: On successful completion of this module, students are able to: • Implement innovation management concepts independently in their professional activities • Critically examine the potential of the innovation management concepts and techniques with which they may deal in the future • Analyze complex innovation processes in firms both internally and externally
Forms of teaching, methods and support	In-class teaching will be based on interactive lectures and discussions, case studies, and reading materials which may be assigned prior to the specific class. The main objective of the class is to analyze how firms cope with the need to innovate, what strategies and processes they apply in order to do so, and whether these strategies and processes are effective. This objective would be met through team work on both a group project and group presentations in which students will apply the concepts, tools and frameworks covered in class.

<table>
<tr><td>Type of Assessment(s) and performance</td><td>
<table>
<tr><td>Type of examination</td><td>Duration or length</td><td>Performance points</td><td>Due date or date of exam</td></tr>
<tr><td>Group Project Unveiling firm’s innovation strategy</td><td></td><td>75 points</td><td>Last day of the course</td></tr>
<tr><td>Course exam and/or quizzes</td><td>45 Minutes</td><td>45 points</td><td>Exam week</td></tr>
</table>

<u>Group Project – Unveiling firm’s innovation strategy</u>
The scope of this project is to target an established, significantly-sized firm, examine how it relates to innovation and what measurements it takes, if at all, to implement an innovation strategy.

<u>Individual Contribution – Course exam and/or quizzes</u>
Innovation Management written exam.
</td></tr>
<tr><td>Recommended Literature</td><td>The following is a suggested background reading:
Schilling, M.A. (2013), Strategic Management of Technological Innovation, McGraw-Hill International Edition, Fourth Edition
Tidd, J. and Bessant, J. (2009), Managing Innovation – Integrating Technological, Market and Organizational Change, Wiley, Fourth Edition
Smith, D. (2010), Exploring Innovation, McGraw Hill, Second Edition
I may assign other readings, which I will upload on the class website</td></tr>
<tr><td>Module Structure</td><td>Over the course of the semester we will cover the main elements of innovation management through the combination of lectures, class exercizes, independent reading of case studies and articles followed by class analysis and discussion, as well as other forms of supervised learning.</td></tr>
<tr><td>Usability in other Modules/Programmes</td><td>This module provides a good fit with the Entrepreneurship module, as there are some commonalities in the nature of these two disciplines. However, these are two distinct modules and there is no requirement to take both modules.</td></tr>
<tr><td>Last Approval Date</td><td>2021/11/03</td></tr>
</table>

Grundlagen des Unternehmensrechts
[LAW60113]

Module Coordinator		Redenius-Hövermann, Julia			
Programme(s)		Bachelor of Science			
Term		6. Semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		German			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Keine.			
Content		Im SoSe 2021 werden während der Vorlesung die folgenden Rechtsgebiete, auch anhand von Übungsfällen, behandelt: 1. Grundlagen des Handelsrechts: Kaufmann, Firma, Vertretung des Kaufmanns, Handelsregisterpublizität, Handelskauf 2. Grundlagen des Gesellschaftsrechts: Personen- und Kapitalgesellschaften 3. Corporate Governance: Rechte und Pflichten, Haftung der Gesellschafter/Organe, Organe der verschiedenen Gesellschaftsformen 4. Grundlagen der Unternehmensfinanzierung (Stammkapital, Kapitalaufbringung, -herabsetzung, -erhöhung) 5. Grundlagen des Umwandlungsrechts 6. Grundlagen des Insolvenzrechts Auch wird im Rahmen der Vorlesung eine wirtschaftsrechtliche Großkanzlei virtuell besucht: nach einem Vortrag gibt es die Möglichkeit Einblicke in den Kanzleialltag zu erhalten.			

<table>
<tr><td>Intended Learning Outcomes</td><td>Kenntnisse:
Nach erfolgreichem Abschluss des Moduls, kennen die Studierenden die Grundlagen des Unternehmensrechts. Sie sind in der Lage:
• Handelsrechtliche Grundlagen zu erläutern;
• Unternehmensformen (in ihrer Organisation und Finanzierung) zu unterscheiden und zu entscheiden, welche Unternehmensform sich am besten für einen Sachverhalt eignet. Auch können sie die verschiedenen Haftungsformen der Gesellschafter und Geschäftsleiter erläutern;
• Umwandlungsarten darzustellen und zu entscheiden, welche Art am besten für einen Sachverhalt geeignet ist.
• Handelsrechtliche Sachverhalte (Kaufmann, Firma, Registerpublizität) zu unterscheiden;
• insolvenzrechtliche Fragen zu verstehen, und insb. die verschieden Insolvenzarten und Insolvenzverfahren zu unterscheiden;
• auch werden die verfahrensrechtlichen Grundlagen dargestellt.
Fertigkeiten:
Nach erfolgreichem Abschluss des Moduls, können die Studierenden die Grundlagen des Unternehmensrechts anwenden, sie sind in der Lage:
• kleinere unternehmensrechtliche Sachverhalte zu bearbeiten
• unternehmensrechtliche Gesetzestexte auszulegen
Kompetenzen:
Nach erfolgreichem Abschluss des Moduls, sind die Studenten in der Lage:
• unternehmensrechtliche Sachverhalte zu analysieren und zu verstehen.
• unternehmensrechtliche Sachverhalte mit Rechtsanwälten und Unternehmensjuristen zu diskutieren.</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>Die Vorlesung besteht aus einer Einführung in die verschiedenen Themengebiete, kleinere Übungsfälle werden besprochen, Einblicke aus der Praxis werden gewährt. Die Ausarbeitung soll das Wissen festigen und das Verfassen der Bachelorarbeit vorbereiten.</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td>
<table>
<tr><th>Type of examination</th><th>Duration or length</th><th>Performance Points</th><th>Due date or date of exam</th></tr>
<tr><td>Zwischenprüfung</td><td></td><td>45</td><td>Während des Semesters</td></tr>
<tr><td>Schriftliche Prüfung</td><td></td><td>65</td><td>Prüfungswoche</td></tr>
<tr><td>Kanzleibesuch</td><td></td><td>10</td><td></td></tr>
</table>
</td></tr>
<tr><td>Recommended Literature</td><td>•Foerste, Insolvenzrecht, 2014
•Grunewald, Gesellschaftsrecht, 2019
•Kindl, Gesellschaftsrecht, 2011
•Kraft/Redenius, Umwandlungsrecht, 2015
•Langenbucher, Aktien- und Kapitalmarktrecht, 2018
•Mock, Gesellschaftsrecht, 2015</td></tr>
<tr><td>Module Structure</td><td></td></tr>
</table>

Usability in other Modules/Programmes	BA-Thesis; M&A/Banken/Beratung
Last Approval Date	2021/11/23

Econometrics [FIN60113]

Module Coordinator		Vecer, Jan			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Mathematics, Statistics and Probability			

Content	This module will cover intermediary and advanced econometrics including: Review of probability and statistics: • Probability distributions (both discrete and continuous) • Expectation, variance and covariance • Law of large numbers • Central limit theorem • Statistical estimation, confidence intervals • Frequentist versus Bayesian approach to statistics Classical linear regression models (both simple and multiple regression): • Properties of the ordinary least squares estimator • T-test • F-test Diagnostic tests for linear regression: • Non-linearity tests • Ramsey's RESET • Heteroscedasticity tests • Stability of parameters • Normality of residual • Durbin-Watson: autocorrelation of residuals • Multicolinearity • Principal components Time series modeling and forecasting: • Moving average processes • Autoregressive processes • Forecasting • Vector autoregressive models Volatility and correlation: • GARCH models Limited dependent variable models: • Logit • Probit All concepts are illustrated on real data sets using programming language Python.

<table>
<tr><td>Intended Learning Outcomes</td><td>Knowledge: On successful completion of the module, students will have a thorough comprehension of econometric theory, methods and concepts, meaning they
• comprehend the underlying principles of probability and statistics
• explain the functioning and scope of application for classical linear regression and time series and panel data analysis
• identify and understand appropriate diagnostic tests for linear regression
• can study data and implement their own models in major programming languages such as Python
Skills: On successful completion of the module, students will have the proven ability to apply general econometric principles with a special focus on economic and financial models, i.e. they can
• apply econometric techniques to examples and cases from practice.
• execute diagnostic tests for linear regression
• interpret the econometric results based on real data sets
• implement econometric models in Python (major programming language)
Competencies: The combination of theoretical knowledge and application to economic and financial cases enables students to critically evaluate the predictive powers of different explanatory variables.
They also gain computer competence to study large data sets.</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>Lecture with integrated worked examples and economic and financial applications. Examples are illustrated in programming language Python.</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td>
<table>
<tr><td>Type of examination</td><td>Duration or length</td><td>Performance points</td><td>Due date or date of exam</td></tr>
<tr><td>One group project</td><td></td><td>120</td><td>During semester</td></tr>
</table>

<u>Examination requirements:</u>
One take home project.</td></tr>
<tr><td>Recommended Literature</td><td>Wooldridge, Jeffrey (2019): Introductory Econometrics: A Modern Approach (Upper Level Economics Titles), 7th Edition

Heiss, Florian and Brunner, Daniel (2020): Using Python for Introductory Econometrics</td></tr>
</table>

Module Structure	This course covers widely used econometric techniques such as the classical linear regression model, time series analysis and panel data analysis. Students learn the theory of these topics, they are provided with real data to apply these techniques, and they are confronted with real data to interpret the econometric results.
Usability in other Modules/Programmes	Bachelor Thesis
Last Approval Date	2021/11/24

Supply Chain Management [MGT60232]

Module Coordinator		Reuter, Carsten			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Operations Management, Statistics and Probability, Mathematics			
Content		Supply chains are networks of organizations (suppliers, manufacturers, distributors, retailers) that jointly supply and transform materials, and distribute products and services to consumers. If designed and managed properly, these networks are a crucial source of competitive advantage for both manufacturing and service enterprises. Each day, world-class companies such as Amazon, Apple, Dell, and Zara try to leverage their supply chain management (SCM) capabilities to achieve profitable growth far ahead of their competition. This module develops a framework of Supply Chain drivers that helps students understand and predict the financial performance of a firm's supply chain strategy.			

Intended Learning Outcomes	**Knowledge**: On successful completion of this module, students will have a thorough comprehension of the basic definitions, theories and concepts of supply chain management, i.e. they can: • understand how Supply Chain Management contributes to the financial performance of companies across a wide range of industries. • define and distinguish different concepts of and approaches to SCM **Skills:** On successful completion of this module, students will have the proven ability to apply supply chain management concepts, i.e. they can: • develop and advance quantitative spreadsheet modeling skills that allow them to support qualitative arguments with solid quantitative analysis. **Competencies:** On successful completion of this module, students can take responsibility for designing and implementing supply chain management concepts in organisations, i.e. they can: • develop the requisite know-how to provide responsible contributions in establishing concepts and processes in supply chain management. • independently take responsibility for SCM in practice • present supply chain management challenges to a broad audience, and argue competently about problem solution strategies.
Forms of teaching, methods and support	Lecture, Case Studies, Online-Simulation, Mentoring

<table>
<tr>
<td>Type of Assessment(s) and performance</td>
<td>
<table>
<tr><th>Type of examination</th><th>Duration or length</th><th>Performance Points</th><th>Due date or date of exam</th></tr>
<tr><td>Supply Chain Simulation - Performance Score (Group - in teams of three to four)</td><td></td><td>60</td><td>During the course</td></tr>
<tr><td>Supply Chain Simulation - Written Performance Analysis (Individual)</td><td></td><td>42</td><td>During the course</td></tr>
<tr><td>Case Study Report (Individual)</td><td></td><td>18</td><td>During the course</td></tr>
</table>

<u>Examination requirements:</u>
Participation in the Supply Chain Simulation is required from the very beginning. Teams of four will be formed on the very first day. The performance score takes into account both the status in the last round and the development path. Because of that neither a late-enrollment nor a cancelation are usually possible once the simulation has started.
The written performance analysis is meant to reflect on the individual decisions made during the simulation, their impact on the performance of the respective corporate function, and the company as a whole. The analysis should take up and apply principles, frameworks, and models of supply chain management.
The case study report will address a current topic from the field of supply chain management.
</td>
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<tr>
<td>Recommended Literature</td>
<td>
The lecture is mostly based on the following textbook:
Chopra and Meindl: Supply Chain Management: Strategy, Planning, and Operation, 6th edition, McGrawHill, 2014

Cachon and Terwiesch: Matching Supply with Demand: An Introduction to Operations Management, 3rd edition, McGraw Hill, 2012

The textbook can be found in the FS library in reasonable numbers (Signatures: DDC/Chopra).
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</table>

Module Structure	The contents of the 11 sessions in total are built up as follows: **Session 1** • Introduction SC Performance: Achieving Strategic Fit **Session 2** • Introduction Supply Chain Simulation: The Fresh Connection (Round 1) **Session 3** • Debrief/Discussion The Fresh Connection (Round 1) • Dealing with Uncertain Demand & Demand Forecasting **Session 4** • Supply Chain Principles • Procurement and Global Sourcing **Session 5** • Debrief/Discussion The Fresh Connection (Round 2) • Inventory Management, Cycle Inventory, Safety Inventory Minimum Order Quantities **Session 6** • Inventory Management, Cycle Inventory, Safety Inventory Minimum Order Quantities Cont'd **Session 7** • Debrief/Discussion The Fresh Connection (Round 3) • Triggers and Mitigation of the Bullwhip Effect **Session 8** • Triggers and Mitigation of the Bullwhip Effect (Cont'd) **Session 9** • Debrief/Discussion The Fresh Connection (Round 4) • Coordination along the Supply Chain and Pooling Concepts **Session 10** • Late Differentiation and Postponement **Session 11** • Debrief/Discussion The Fresh Connection (Round 5) • Sustainability along the Supply Chain
Usability in other Modules/Programmes	Bachelor Thesis
Last Approval Date	2021/11/24

Leadership [SOC60213]

Module Coordinator		Aktay, Basak			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		None			

Content	Strong leadership is essential to individual and organisational growth and success. The goal of this course is to lay a strong foundation for building and leading high?performing teams effectively. The students will receive a set of strategies and techniques to identify their personal leadership styles and will be able to apply the theoretical knowledge gathered in different contexts. • In the first module of the course major leadership theories, concepts, and research findings will be examined in depth and elaborated in a multitude of case studies. • As the next stage, emotional intelligence, personality traits, perception, and decision-making will be studied from an individual perspective. Students will be able to conduct assessments to identify their personality traits and reflect on their personality characteristics paving the way for authentic leadership. • The third module will focus on group-level concepts and models that are critical to building high-performing teams, such as group formation, motivation, power, and conflict management. • Finally, the course will apply current theories and frameworks to explore leadership in today's dynamic and uncertain business environment, considering digital transformation, globalization, diverse teams, and the ever-changing challenges brought on by rapid innovation. Many case studies involving extensive group work, and a group assignment on the analysis of a selected leaders' experiences and challenges will be incorporated into the course. In this highly interactive course, the students will be expected to contribute actively on the several topics studied.
Intended Learning Outcomes	After completing the Leadership module, students will be able to: • comprehend key leadership concepts • distinguish between leadership styles • get a stronger insight of their own personality characteristics that are important in leadership • recognize and implement effective leadership principles at the individual level comprehend key concepts in group dynamics • understand the factors that influence motivation, power, and conflict management. • analyse and evaluate current leadership paradigms. • present their opinions and ideas with confidence in front of an audience
Forms of teaching, methods and support	• In-class participation • Self-assessment • Team assignments and presentations Active involvement in class as well as openness to bring in and reflect own experiences are key for the student’s individual development.

<table>
<tr><td>Type of Assessment(s) and performance</td><td>
<table>
<tr><td>Type of examination</td><td>Duration or length</td><td>Performance Points</td><td>Due date</td></tr>
<tr><td>Final exam</td><td>60 min</td><td>60</td><td>Exam Week</td></tr>
<tr><td>Team assignments and presentations</td><td></td><td>60</td><td>End of semester</td></tr>
</table>
</td></tr>
<tr><td>Recommended Literature</td><td>

Robbins, Stephen P. / Judge, Timothy A. (2019): Organizational behavior, 18th edition, Pearson. (or 17th edition 2018)
Northouse, Peter G. (2018): Leadership – Theory & Practice, 8th edition, Sage. (or 7th edition)

All other reading or case material will be provided.
</td></tr>
<tr><td>Module Structure</td><td><u>Topics covered</u>
Theory of Leadership (3 sessions)
Leadership – Individual Level (2 sessions)
Leadership – Group Level (2 sessions)
Leadership in Modern Global Business Environment (1 session)
Group Assignment (2 sessions)
Course Review (1 session)</td></tr>
<tr><td>Usability in other Modules/Programmes</td><td>Useful for any further modules with the focus on management and organisational behaviour</td></tr>
<tr><td>Last Approval Date</td><td>2021/11/24</td></tr>
</table>

Marketing Strategy [MGT73723]

Module Coordinator		Schulze, Christian			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Marketing and Statistics.			

Content	The purpose of business is to create and keep a customer (Peter Drucker, 1954) The financial success of a company depends on its ability to acquire and retain profitable customers - to develop a successful marketing strategy, however, is not a simple task. This module serves three goals: 1. Students will learn about new tools to help them understand and analyze the marketing strategies of successful (and unsuccessful) companies. 2. Students will apply the underlying analytical concepts and learn, for example, how to identify the needs of potential customers. 3. Students will discover how marketing drives companies' financial success and ultimately shareholder value. **Please note:** *** Regular class attendance is required. Without regular attendance, students will not be permitted to participate in the consulting project presentation.** *** Case studies require time for preparation throughout the quarter.** *** The key deliverable of the course is the presentation of a consulting project, where student teams (of up to 6 students per team) tackle real-world marketing strategy problems and their presence (in person or on Zoom) is mandatory** *** Grading largely depends on group performance**

<table>
<tr><td>Intended Learning Outcomes</td><td>Knowledge: On successful completion of this module, the students will have a thorough comprehension of Marketing Strategy and the corresponding analytical tools, i. e., can
• explain the 5 C’s of market analysis
• describe segmentation approaches
• discuss analytical concepts of the Marketing Mix
• discover how marketing drives companies’ financial success and ultimately shareholder value

Skills: On successful completion of this module, the students will have the proven ability to deploy the underlying analytical concepts of Marketing Strategy in real-world situations, i. e., they can
• apply qualitative and quantitative tools of marketing
• identify the needs of potential customers
• analyse and compare the marketing strategies of successful (and unsuccessful) companies

Competence: Through its cross-disciplinary approach, this course will equip students with a coherent framework to integrate their knowledge from various disciplines, including Marketing, Finance, and Accounting. Students’ skills in applying the tools covered in this course will allow them to
• successfully analyse strengths and weaknesses of existing marketing strategies
• integrate insights into customer needs and firm capabilities to draw up new and promising marketing strategies
• propose marketing actions that will positively impact firms’ financial outcomes</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>Class sessions will include traditional lectures and exercises, as well as case studies and a group consulting project to give students a practical, hands-on experience.

Students need to be prepared to be an active and well-prepared participant of the course and contribute regularly to in-class discussions.

Good contributions require intensive preparation of the weekly case studies, so the workload during the entire semester for this course is very high!</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td>
<table>
<tr><td>Type of examination</td><td>Duration or length</td><td>Performance Points</td><td>Due date or date of exam</td></tr>
<tr><td>Group consultin g project</td><td>35 minutes per Team</td><td>120</td><td>End of semester, most likely last day of the course</td></tr>
</table>
</td></tr>
</table>

Recommended Literature	There is no required textbook for this module. However, students might find the following textbooks helpful: • Strategic Marketing Management by Alexander Chernev • Managing Customers for Profit: Strategies to Increase Profits and Build Loyalty by V. Kumar
Module Structure	Classroom sessions and online tutorials are scheduled throughout the semester. The consulting project will kick off with a briefing when the course starts and concludes with the final presentation towards the end of the course.
Usability in other Modules/Programmes	Other marketing modules; Entrepreneurship; Management Concentration; Marketing Concentration.
Last Approval Date	2021/11/24

International Healthcare Business
[SOC60137]

Module Coordinator		Gandjour, Afschin; Sibbel, Rainer			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		General knowledge based on completed secondary education.			
Content		The first part of the module focuses on healthcare system management and economics and will provide participants with an overview of the different areas of health economics, current trends and developments and analyse and compare various health systems from around the world. The second part the module addresses the flow of services within the healthcare industry and the potentials and challenges of health care value chains. Students will analyse trends in the international trade of healthcare services. More specifically, topics include: • Overview to health economics • Basic operation of health systems worldwide • Types and institutions of health systems • Health system regulation • Economic evaluation of pharmaceuticals and medical devices • Healthcare - growing global market • International dimensions of healthcare • Global trends and challenges in Healthcare • Healthcare service and value chain management Lectures will be scheduled throughout the course of the semester. As a complement to lectures, students will hear from experts on healthcare who come from industry and academia and will discuss with them on current healthcare business and industry topics.			

<table>
<tr><td>Intended Learning Outcomes</td><td>Knowledge:
On successful completion of this module, students will have a thorough comprehension of the fundamentals of the structure, segments and strategies of healthcare business, i.e. they can:
• Understand the role of healthcare as growing business worldwide and major driver of economic development,
• Identify the fundamentals of the structure, functions and the basic types of healthcare systems,
• Understand the role in the different national environments,
Skills:
On successful completion of this module, students will have the skills to judge specific situations in healthcare business, such as:
• Describe and analyse current healthcare systems and business areas,
• Identify the interests and policies of the different stakeholders,
• Identify the degree of globalisation and internationalisation in healthcare,
• Analyse the complexity and constraints of service operations and value chain management in healthcare.
Competencies:
After finishing this module students will be able to conduct independent research and analyze healthcare systems from an economic and business point of view, i.e. they can:
• Undertake research and process information on the healthcare industry and its business opportunities.</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>Lecture, student presentations, guest speakers, discussions with experts and academics on current healthcare business and industry topics.</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td>
<table>
<tr><td>Type of examination</td><td>Duration or length</td><td>Performance points</td><td>Due date or date of exam</td></tr>
<tr><td>Written exam</td><td>60 minutes</td><td>60</td><td>Exam week</td></tr>
<tr><td>Team presentations</td><td>30 minutes</td><td>60</td><td>End of course</td></tr>
</table>
Additional requirements / information:
Team presentations – Students will be grouped and should work out a comprehensive presentation focussing on a specific international healthcare business model respectively industry segment.
</td></tr>
</table>

Recommended Literature	• R. E. Santerre, S. P. Neun (2012): Health Economics, 6th ed., Thomson • J. Figueras, R. Robinson, E. Jacobowski (2004): Purchasing to improve health system performance. Ch 2. Buckingham UK: Open University Press • C. Scott (2001): Public and private roles in health care systems. Buckingham UK: Open University Press • R. Robinson, A. Steiner (1998): Managed Health Care. Ch 1. Buckingham UK: Open University Press • M. Drummond, B. O'Brien, G. Stoddart, G. Torrance (1997): Methods for the Economic Evaluation of Health Care Programmes Oxford UK: Oxford university Press • C. Blouin (2005): International Trade in Health Services and the GATS: Current Issues and Debates. World Bank Publications • L. R. Burns (2002): The Health Care Value Chain. John Wiley & Sons • M. E. Porter (2010): What is value in healthcare?, NEJM. • L. E. Swayne, W. J. Duncan, P. M. Ginter: Strategic Management of Health Care Organizations, 9. ed., 2018.
Module Structure	Topics include: • Overview to health economics • Basic operation of health systems worldwide • Types and institutions of health systems • Health system regulation • Economic evaluation of pharmaceuticals and medical devices • Healthcare - growing global market • International dimensions of healthcare • Global trends and challenges in Healthcare • Healthcare service and value chain management
Usability in other Modules/Programmes	Bachelor Thesis
Last Approval Date	2021/11/23

Corporate Finance [FIN50044]

Module Coordinator		Schäfer, Larissa			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Finance 1			
Content		This course focuses on the practical and conceptual problems associated with financial management of the non-financial corporation. The treatment of all areas involves theoretical concepts and the application of these concepts to contemporary business situations for the purpose of corporate decision-making. All topics reflect the impact on the overall value and risk of the company. Topics covered include, but are not limited to: Financial statements and cash flow, time value of money, valuation of equity, capital budgeting and project evaluation techniques. The main textbook for this class will be Berk and DeMarzo (BDM), Corporate Finance). • Introduction and Basics of Financial Statements Analysis (BDM Chapter 1, 2) • Corporate Governance (BDM Chapter 29, and other material) • Project Appraisal (BDM Chapters 3,4, and other material) • Stock Valuation (BDM Chapter 9, 10) • Capital Structure (BDM Chapters 14, 15) • Financial Distress, Managerial Incentives and Information (BDM Chapter 16) • Valuation with Leverage (BDM Chapter 18) • Payout Policy (BDM Chapter 17) • Long-term Financing; raising Equity and Debt (BDM Chapters 23, 24) This content is subject to (minor) changes due to actual circumstances, cases, guest speakers or others			

<table>
<tr><td>Intended Learning Outcomes</td><td>Knowledge: On successful completion of this module, students will have a thorough comprehension of the basic definitions, theories and concepts of corporate finance, i.e. they can:
describe the basic definitions, theories and concepts,
explain how to undertake and evaluate investment, financing, payout, and valuation decisions
Skills: On successful completion of this module, students will have the proven ability to apply corporate finance concepts, i.e. they can:
evaluate the costs and benefits of different corporate governance mechanisms,
allocate capital across projects,
apply modern valuation techniques,
determine capital structure and payout policies,
select suitable project evaluation techniques
Competencies: On successful completion of this module, students can take responsibility for designing and implementing corporate finance concepts in organizations, i.e. they can:
critically analysze the suitability of different corporate financial approaches for the specific context of their organization
take into account interdependencies of financial choices when implementing concepts</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>Teaching discussion, group work, student presentations, advanced studies</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td><table>
<tr><td>Prüfungsleistung</td><td>Dauer oder Länge</td><td>Akku-Punkte</td><td>Abgabe-oder Erstellungszeitraum</td></tr>
<tr><td>Case Study</td><td></td><td>40</td><td>group work during the course</td></tr>
<tr><td>Presentation Academic Article</td><td></td><td>40</td><td>group work during the course</td></tr>
<tr><td>Written Exam</td><td></td><td>40</td><td>individual work, closed-book at the end of the course</td></tr>
</table></td></tr>
</table>

Recommended Literature	Course material: Slides will be provided to accompany the lecture, and are posted on the course web site prior to the class. Recommended literature: **Berk, Jonathan and DeMarzo, Peter:** • Corporate Finance, 2013, 3rd edition, Pearson Education Limited
Module Structure	
Usability in other Modules/Programmes	Finance Concentration, Accounting Classes
Last Approval Date	2021/11/23

Entrepreneurship [MGT70927]

Module Coordinator		Amigoni, Gaja			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		No particular prerequisites.			

Content	This course provides an environment in which students can experience many of the aspects of being an entrepreneur. It aims to provide students with an understanding of the entrepreneurial process and the various concepts, practices, and tools used in the entrepreneurial arena. The course has a strong focus on gaining experiences in entrepreneurial practice. I hope you will develop an entrepreneurial mindset, which should serve you well in whatever career you chose. One of the main reasons why entrepreneurs fail, is because they did not test their ideas early enough; they did not force themselves to expose their ideas to reality. Thus this course is about learning how to avoid this trap. We will gain experience not in planning how to start a firm but in practicing the things needed to be a successful entrepreneur. The resulting skills will benefit you not only if you want to start new ventures but also with new project in existing organizations. Beyond entrepreneurship, the skills you pick up in the course are core competencies for doing business in consulting, investment banking and for industry jobs. A primary focus of this class will be gaining experience in the practices needed to develop a venture business model. This will require a lot of field work such as conducting experiments to test aspects of the model, talking to potential customers to better understand their needs and talking to potential partners to set up your business. What the class is not about: This course is about learning the practice of being an entrepreneur. It is not about planning, it is about acting: It will not teach you how to write a business plan, it is not about how to get venture capital funding or how to analyze start-ups. The course cannot be successfully completed by only doing research in the library.
Intended Learning Outcomes	Knowledge: On successful completion of this module, students will have a thorough comprehension that entrepreneurship requires being active; they will have an understanding of the practice of entrepreneurship. Skills: On successful completion of this module, students will have practiced many of the necessary skills needed to start entrepreneurial projects and companies. Skills such as: - Refining ideas - Testing assumptions that underlie an idea - Talking to potential customers, getting feedback about entrepreneurial ideas - Creating experiments to test aspects of a business model - Drawing conclusions from experimental data - Testing ideas in the real world - Prioritizing and synthesizing work Competence: On successful completion of this module, students can apply the skills described above.

<table>
<tr><td>Forms of teaching, methods and support</td><td>The main task of the class is to develop and test a business idea, thus gaining key skills that are relevant for entrepreneurs but which can also be applied to the wider business context. The class is heavily activity based, with in class exercises, flipped classrooms and team work. The main objective of the class is a group project to develop a business model for an entrepreneurial idea.</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td>
<table>
<tr><td>Type of examination</td><td>Duration or length</td><td>Performance points</td><td>Due date or date of exam</td></tr>
<tr><td>Group Project & Presentation</td><td></td><td>75 points</td><td>Last day of the course</td></tr>
<tr><td>Course Final Exam</td><td>45 Minutes</td><td>45 points</td><td>Exam week</td></tr>
</table>
</td></tr>
<tr><td>Recommended Literature</td><td>No obligatory text book readings are required. Further readings of case studies or articles to be discusses in class will be assigned prior to each relevant classs in which they will be discussed.</td></tr>
<tr><td>Module Structure</td><td>Over the course of the semester we will cover the main elements of entrepreneurship through the combination of lectures, in-class exercises, independent reading of case studies and articles followed by class analysis and discussion, as well as other forms of supervised learning.</td></tr>
<tr><td>Usability in other Modules/Programmes</td><td>Relevant for a module that requires entrepreneurial skills.</td></tr>
<tr><td>Last Approval Date</td><td>2021/11/03</td></tr>
</table>

Financial Markets (General Elective)
[FIN40045]

Module Coordinator		Hervás Zurita, Maria de la O; Santoni, Alessandro			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Finance 1			

Content	The students learn the importance and functions of financial products. The module discusses bonds and shares but also derivatives (from intrest rate swap to options). The necessary matmatical tools are taught but also market conventions and market set up are analyzed. All products are calculated and discussed in detail. The students learn: • to evaluate the importance of financial markets, • to understand the elements of money and capital markets, • to understand and use the most important products of financial markets, • an introduction to the theory of financial markets. **Topics:** **1. Financial Markets** 1.1 Money Market 1.2 Capital Markets (Bond and Equity) 1.3 Stock Valuation 1.3 M&A valuation & M&A synergies analysis and calculation **2. Derivates** 2.1 Symmetric Instrument (Interest Rate Swap, Forward Rate Agreement, Future) 2.2 Asymmetric Instruments (Equity Options) **3. Case Studies** **4. Behavioral Finance applied to Equity markets**
Intended Learning Outcomes	**Knowledge**: Based on the theory of financial markets the students will acquire a broad knowledge of the most important products of international financial markets, i.e. they can: • explain the usage of financial products, • describe theoretical concepts of evaluation, • outline the impact of these products in real markets. **Skills**: The students learn the conception and organisational implementation of financial products and train to transfer theses skills to other tasks, i.e. they can: • implement financial products, • evaluate the importance of these products for the market. **Competences**: The Module gives the students a broad knowledge base of the modern financial world. After successful completion of this Module, students can: • analyse complex financial products, • judge financial aspects considering business and regulatory questions.
Forms of teaching, methods and support	The method is structured teaching, focussing on disscussions with the students. To broaden the knowledge base and the undertanding many assignments are used which are discussed in detail in class.

<table>
<tr><td>Type of Assessment(s) and performance</td><td>
<table>
<tr><td>Prüfungsleistung</td><td>Dauer oder Länge</td><td>Akku-Punkte</td><td>Abgabe- oder Erstellungszeitpunkt</td></tr>
<tr><td>Test</td><td>120 Min.</td><td>120</td><td>End of semester</td></tr>
</table>
</td></tr>
<tr><td>Recommended Literature</td><td>

Brealey, R.A. / Myers, S.C. / Allen, F.: Principles of Corporate Finance, 2011
Heidorn, T. / Schäffler Christian: Finanzmathematik in der Bankenpraxis, 2016
Steiner, M. / Bruns, C.: Wertpapiermanagement, Stuttgart 2007

</td></tr>
<tr><td>Module Structure</td><td></td></tr>
<tr><td>Usability in other Modules/Programmes</td><td>Base for other Finance-Modules</td></tr>
<tr><td>Last Approval Date</td><td>2021/11/23</td></tr>
</table>

Negotiation [SOC60138]

Module Coordinator		Catón, Matthias			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		none			
Content		We negotiate constantly in our lives – with friends and family, our partners but obviously also in a business context. In this module, students will learn the basic concepts and frameworks of negotiation. Special situations, such as negotiating in an intercultural context and in circumstances of conflict, will also play a role.			
Intended Learning Outcomes		Knowledge: On successful completion of this module, students • know different frameworks for negotiation • are aware of important cognitive and emotional factors that influence negotiations Skills: On successful completion of this module, students can • analyze a negotiation situation and identify different positions and interests • clarify their interests and define options • conduct negotiations in a productive way Competencies: On successful completion of this module, students can • lead negotiations to mutually successful outcomes			

<table>
<tr><td>Forms of teaching, methods and support</td><td>Through lectures, exercises and simulations students will grasp how biases influence our perception and how we can apply different strategies to negotiate successfully.</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td>
<table>
<tr><th>Type of examination</th><th>Duration or length</th><th>Performance Points</th><th>Due date or date of exam</th></tr>
<tr><td>Exam</td><td>60 minutes</td><td>60</td><td>Exam Week</td></tr>
<tr><td>Case study and presentation</td><td></td><td>30</td><td>In class</td></tr>
<tr><td>Participation simulation/exercises</td><td></td><td>30</td><td>In class</td></tr>
</table>
</td></tr>
<tr><td>Recommended Literature</td><td>Course material and readings will be provided online.</td></tr>
<tr><td>Module Structure</td><td>Different sessions will combine theoretical aspects and applied negotiation.</td></tr>
<tr><td>Usability in other Modules/Programmes</td><td>none</td></tr>
<tr><td>Last Approval Date</td><td>2021/11/25</td></tr>
</table>

Financial Instruments [FIN70962]

Module Coordinator		Löw, Edgar			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		None. Some background in Financial Accounting or some working experience in Accounting would be helpful but not necessary.			
Content		This module aspires to making students familiar with the financial reporting implications of financial instruments, especially of issued financial instruments (equity/liability) derivatives/financial guarantees, structured products, and hedging activities by asking the following questions • What is the central theme within the standard for financial instruments, what is the implication of recognizing derivatives and other financial instruments and measure them at amortised cost or at fair value? • How do companies try to reduce volatility in P/L arriving from derivative accounting rules by the means of IFRS 9? Understanding these issues is important to anyone who will be involved in financial investments, lending activities, structured finance, or hedging financial risks such as interest rate risk or currency risk – or who will be analysing or advising companies that are. The financial reporting effects of these kinds of transactions frequently are ill-understood by the parties involved, although they can have a profound effect on firms' effectiveness and performance.			

<table>
<tr><td>Intended Learning Outcomes</td><td>Knowledge:
This module is based on consolidated financial statements prepared under International Financial Reporting Standards (IFRS), which publicly traded investor companies domiciled in the EU are required to apply. On successful completion of this module, students should be able to
• differentiate between derivatives, irrevocable loan commitments and financial guarantees
• discuss different categories of financial assets and reclassification rules that have been implemented during the financial crises and measurement consequences
• explain stage transfers in the process of building loan loss provisions
• explain similarities and differences between hedge activities and hedge accounting

Skills:
Afterwards students should be familiar with IFRS 9. Students should enhance their ability to
• show the basics of preparing and analysing consolidated IFRS financial statements
• report the main rules and the current standard on financial instruments
• contrast the main structures of equities versus liabilities with consequences on ratios and structure basic products
• estimate impairment rules and recapture the need for conceptional changes from incurred to expected loss products

Competence:
This approach is intended to provide insights into issues relevant to practice, while at the same time developing the skills necessary to evaluate and discuss these issues from an academic standpoint.
Students should be able to
• differentiate and apply different accounting rules regarding Financial Instruments Accounting
• analyze financial statements, including notes, regarding accounting for and management of derivatives and other financial instruments
• structure basic instruments according to accounting rules</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>Teaching, practical cases in class, interaction, discussion, guest lectures</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td><table>
<tr><td>Type of examination</td><td>Duration or length</td><td>Performance Points</td><td>Due date or date of exam</td></tr>
<tr><td>Group presentation</td><td>90 min</td><td>120</td><td>Last session</td></tr>
</table></td></tr>
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Recommended Literature	• *Deloitte*, iGAAP Volume B – Financial Instruments, IFRS 9 and related Standards or Manual of Accounting: IFRS 20xx, Vol.1-2, every edition since 2019 • *Ernst & Young*, International GAAP, every edition since 2019 • *KPMG*, Insights into IFRS, every edition since 2019 • *PwC*, Manual of Accounting, every edition since 2019
Module Structure	1. IFRS 9 as a compromise – Structure and scope of application 2. Derivatives and related contracts, structured products/embedded derivatives 3. Issuing equity instruments versus financial liabilities 4. Categorisation, measurement, and reclassification of financial instruments 5. Impairment 6. Derecognition 7. Hedging versus Hedge Accounting under the accounting choice of IAS 39 or IFRS 9
Usability in other Modules/Programmes	Other Electives, Bachelor Thesis
Last Approval Date	2021/11/24

Monetary Theory and Policy [ECO60173]

Module Coordinator		Donado, Alejandro			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Microeconomics, macroeconomics			
Content		The module presents some of the most important theoretical foundations regarding the money demand, the money supply, and the monetary transmission processes. It describes the institutional framework, the major targets, strategies, and instruments of modern central banking and critically discusses the monetary policies of major central banks over the past few decades.			

<table>
<tr><td>Intended Learning Outcomes</td><td>Knowledge:

On successful completion of this module, students will have a thorough comprehension about institutional conditions, targets, strategies, and instruments of monetary policies. They have knowledge regarding
• the major determinants of money demand and money supply,
• the role of financial institutions and the development of financial markets
• and the major monetary policy instruments and institutions.
Skills:
On successful completion of this module, the students will have the proven ability to apply theoretical concepts and analytical tools in assessing
• central bank policy decisions, and
• their impact on banking institutions and financial markets,
• as well as on the real sector of the economy.

Competencies:
After finishing this module students will be able to analyze and evaluate monetary policy decisions and their likely impact on the economy in the real world.</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>The course combines elements of a lecture with active participation from the students</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td><table><tr><td>Type of examination</td><td>Duration or length</td><td>Performance points</td><td>Due date or date of exam</td></tr><tr><td>Written exam</td><td>120 min.</td><td>120</td><td>Exam week</td></tr></table></td></tr>
<tr><td>Recommended Literature</td><td>Ball, Laurence M. (2012), Money, Banking, and Financial Markets. Second edition, New York (Worth Publishers).

Cecchetti, Stephen G. / Schoenholtz, Kermit L. (2015), Money, Banking, and Financial Markets. Fourth Edition (Global Edition), Croydon (McGraw-Hill Education).

Mishkin, Frederic S. (2016), The Economics of Money, Banking, and Financial Markets. Eleventh edition (Global Edition), Boston (Pearson).</td></tr>
</table>

Module Structure	1. Introduction 2. What is money? 3. Central banks 4. The money supply process 5. Tools of monetary policy 6. Short-run economic fluctuations 7. Economic fluctuations and the financial system 8. Inflation and deflation 9. The conduct of monetary policy
Usability in other Modules/Programmes	Finance; Banking; FX Markets and Exchange Rate Determination; Challenges of the European Union and the Euro Area.
Last Approval Date	2021/11/01

Ethics [PHI71412]

Module Coordinator		Moshtagh Khorasani, Manouchehr			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Principles of Management			
Content		**1. The Basics of Ethics** • Basic issues, examples and arguments of business ethics (i.e. shareholder vs. stakeholder approaches) • The ethics of the market • Social responsibility, ethics and morals **2. Ethical Reasoning and Frameworks** • Principle-based ethics, consequentialist, virtue-based and care ethics as a framework for business ethics • The importance of ethical behavior in business **3. Application and case studies** • Debate • Integration of students' opinions via active participationCase studies in business ethics			

<table>
<tr><td>Intended Learning Outcomes</td><td>

Knowledge:
On successful completion of this module, students will have a thorough comprehension of general ethical positions as well as characteristics of ethical problems. They will have an understanding of fundamental approaches and diverse methods of ethical codes, purpose of ethics and objectivity of ethics in decision-making processes in business. They can:

Describe corporate social responsibility, ethics and morals
Identify basic methods of ethical codes such as deontological, utilitarian, value-based and feminist ethics, reflective equilibrium, etc. in business context
Outline the different aspects and dimensions of ethics and apply them to case-studies in business

Skills:
On successful completion of this module, students will have the proven ability to search for a wide range of ethical approaches incorporating a specific ethical problem at hand, i.e. they can:

Discuss the difference between questions of fact and questions of normative ethics
Analyze practices with respect to their impact on individual dimensions of rational choice
Deal with conflicts of norms that as a matter of fact are socially prevailing – whether shared by themselves or not
Assess evidence about the mechanics of ethical dispute and reputation and make rational choices

Competencies:
On successful completion of this module, students can take responsibility for working out a defensible solution that incorporates their knowledge of general ethical considerations, their understanding of what would be sustainable, specifics of a case and the culture in which they operate, i.e. they can:

Tackle problems in a clear-sighted and logical fashion
Defend their opinions by using reasoned arguments
Work strategically - planning and reflecting upon wider societal issues when making managerial decisions

</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>Lecture, debate, presentations and case-studies</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td>

<table>
<tr><th>Type of examination</th><th>Duration or length</th><th>Performance Points</th><th>Due date or date of exam</th></tr>
<tr><td>Written Exam</td><td>80 minutes</td><td>80</td><td>Exam week</td></tr>
<tr><td>In-class presentation & short text (commented slides)</td><td></td><td>40</td><td>During the module</td></tr>
</table>

</td></tr>
</table>

Recommended Literature	Part 1 and 2 Part 3 • Alexander, Larry; Moore, Michael (2016): Deontological Ethics. With assistance of Edward N. Zalta. Edited by Metaphysics Research Lab, Stanford University (The Stanford Encyclopedia of Philosophy). Available online at https://plato.stanford. edu/archives/win2016/entries/ethics-deontological/, updated on Winter 2016. • Awad, E., Dsouza, S., Kim, R., Schulz, J., Henrich, J., Shariff, A., et al. (2018). The Moral Machine experiment. *Nature, 563*(7729), 59–64. • Bazerman, Max H.; Gino, Francesca; Shu, Lisa L.; Tsay, Chia-Jung (2011b): Joint Evaluation as a Real-World Tool for Managing Emotional Assessments of Morality. In *Emotion Review* 3 (3), p. 290. Available online at http://search.ebscohost.com/login.aspx?direct=true&db=edb&AN=62030422&site=eds-live&scope=site. • Bocchiaro, Piero; Zamperini, Adriano (2012): Conformity, obedience, disobedience: The power of the situation. In : Psychology-Selected Papers: IntechOpen. • Bowden, Peter (2005). Virtue ethics, Aristotle and organisational behaviour. *Australian Association for Professional and Applied Ethics 12th Annual Conference* 28–30 September 2005, Adelaide. • Brenda Green, Brenda (2012). Applying Feminist Ethics of Care to Nursing Practice, *J Nurs Care* 2012, 1:3 • Bucciarelli, Monica, Sangeet Khemlani and P. N. Johnson-Laird (2008). The psychology of moral reasoning, *Judgment and Decision Making*, Vol. 3, No. 2, February 2008, pp. 121–139 • Chaudhary, Priyanka and Vijeta Soni (2013). A Utilitarian Perspective on Business Ethics. *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)* Volume 14, Issue 5 (Sep. - Oct. 2013), PP 75-80 • Crossan, M., Mazutis, D., & Seijts, G. (2013). In Search of Virtue: The Role of Virtues, Values and Character Strengths in Ethical Decision Making. *Journal of Business Ethics, 113*(4), 567–581. • Driver, Julia (2014): The History of Utilitarianism. With assistance of Edward N. Zalta (The Stanford Encyclopedia of Philosophy). Available online at https://plato.stanford. edu/archives/win2014/entries/utilitarianism-history/. • Green, Brenda (2012). Applying Feminist Ethics of Care to Nursing Practice , J Nurs Care 1:111. doi:10.4172/2167-1168.1000111. • Hursthouse, Rosalind (1999). Virtue Ethics and Human Nature, Hume Studies Volume XXV, Number 1 and 2 (April/November, 1999) 67-82 • Marques, Joan (2015). Universalism and Utilitarianism: An Evaluation of Two Popular Moral Theories in Business Decision Making, *The Journal of Values-Based Leadership*, Volume 8, Issue 2 *Summer/Fall 2015* Article 3

	• Quinn, Warren S. (1989). Actions, Intentions, and Consequences: The Doctrine of Double Effect, *Philosophy and Public Affairs*, Vol. 18, No. 4. (Autumn, 1989), pp. 334-351 • Raz, Joseph (2014).The Obligation to Obey: Revision and Tradition, Notre Dame Journal of Law, Ethics & Public Policy, Article 10, Februray 2014, Vol. 1, Issue 1 Symposium on Law and Morality, pp. 138-155 • Robert, Frank (2007). The Status of Moral Emotions in Consequentialist Moral Reasoning, Paul J. Zak (ed.), Moral Markets: The Critical Role of Values in the Economy, New Jersey: Princeton University Press • Schwartz, M. (2001): The Nature of the Relationship between Corporate Codes of Ethics and Behaviour. In *Journal of Business Ethics* 32 (3), pp. 247–262. Available online at http://www.jstor.org/stable/25074572. • Case studies will be provided in the seminar
Module Structure	The module Ethics delivers knowledge about basic ethical issues and their relation to prudential considerations of business. It discusses the role of individuals in making ethical decisions, differentiating between different ethical approaches and methods. Obedience and conformity, the ethical standing of markets, and the importance of ethical behavior are addressed. It will introduce different methods of ethical frameworks and how they are reflected in business.
Usability in other Modules/Programmes	Concentration modules, Master's Thesis
Last Approval Date	2021/11/22

Data Analytics using Machine Learning
[INF60192]

Module Coordinator		Roßbach, Peter			
Programme(s)		Bachelor of Science			
Term		6th semester			
Module Duration		1 Semester			
Compulsory/Elective Module		Elective Module			
Credits:		6			
Frequency		Annually			
Language		English			
Total Workload	150 h	Academic Teaching Hours:	44	Remaining Workload:	Self-study
		One acadmic teaching hour corresponds to 40 minutes.			
		Self-study includes lesson preparation and follow-up activities, reading assignments, assessment preparation, take-home assignments, etc.			
Prerequisites		Knowledge in Statistics; Knowledge in Python			
Content		Data Analytics (or Data Science) is an emerging field in industry and academics. It covers methodologies, algorithms, and processes to tackle the challenges in times of big data, where we are confronted with large amounts of high-dimensional data of different types. While the classical statistical approach has some weaknesses in this context, new ways and methods of data analysis (many coming from Artificial Intelligence) have been established under the term machine learning. Today, they are widely used in science and practice benefitting from calculation power of modern computer technologies. They are the success factor of modern Artificial Intelligence. This course provides an introduction into the field of Data Analytics, covering computational techniques and algorithms for finding and analyzing patterns even in large-scale datasets. Topics to be covered include data preparation, integration, analysis, visualization, segmentation, classification, prediction and decision making. Students will implement and apply the methods using the programming language Python and the related libraries.			

<table>
<tr><td>Intended Learning Outcomes</td><td>

Knowledge:
Students will acquire a comprehensive understanding of the challenges of data analysis in times of big data and learn how to apply modern methods of data analytics to different application areas, i.e. they can:
- Explain the specifics of data analysis in the case of big data
- Explain the differences between statistics and machine learning
- Apply modern methods of data analytics to different application areas

Skills:
Students learn to analyze data, choose the appropriate modeling techniques and to construct models for decision support. They also learn how to implement the data analytics processes using Python as a modern analytical language. They are able to:
- Choose the appropriate methods according to the problem to solve
- Develop the analytics processes via different data analytics tools
- Train and tune the models to achieve the optimal results
- Analyze the resulting models to find the best solution

Competence:
Students are qualified to find and analyze patterns in data and to transform the gained knowledge into managerial decisions. They acquire a fundamental background to fulfill the demands of a modern data scientist. They are able to:
- Understand the underlying business problems
- Identify the problem relevant data
- Build quantitative models to solve the problem choosing from a variety of methods
- Transform the models results into managerial decisions

</td></tr>
<tr><td>Forms of teaching, methods and support</td><td>Lecture with in-class and home exercises using Python and Scikit-learn</td></tr>
<tr><td>Type of Assessment(s) and performance</td><td>

<table>
<tr><td>Type
of Assessment</td><td>Duration/ length</td><td>Performance Points</td><td>Date</td></tr>
<tr><td>Exam</td><td>60 minutes</td><td>60</td><td>Exam week</td></tr>
<tr><td>Group Project</td><td>Written Paper (40 pages)</td><td>60</td><td>end of module</td></tr>
</table>

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</table>

Recommended Literature	General Introduction: • Alpaydin, E. (2016): Machine Learning: The New AI, MIT Press • Schutt, R.; O'Neil, C. (2013): Doing Data Science, O'Reilly Media Methods, Algorithms and Implementation: • Alpaydin, E. (2016): Introduction to Machine Learning, Third Edition, MIT Press • Aurélien Géron (2017): Hands-On Machine Learning with Scikit-Learn and TensorFlow: Concepts, Tools, and Techniques to Build Intelligent Systems, O'Reilly • Raschka, Sebastian (2015): Python Machine Learning, Packt Publishing
Module Structure	**1. Data Analytics** 1.1 What is Data Science? 1.2 Statistics and Machine Learning 1.3 Data Preparation 1.4 Exploratory Data Analysis **2. Methods, Algorithms, and Applications** 2.1 Classification 2.2 Regression 2.3 Segmentation 2.4 Association Analysis **3. Interpretable Machine Learning**
Usability in other Modules/Programmes	-
Last Approval Date	2021/11/03


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