

# **Module Catalogue**

# Austauschstudium WiWi Faculty of Business and Economics

You can see the other use cases of the modules in Digicampus.
Important additional information due to the corona pandemic:
Please note that due to the ongoing development of the coronavirus pandemic, the details relating to the format of examinations for each module within the module catalogue may not be up to date. The examination formats for each module will be clarified and determined during the course of the semester.

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<sup>\* =</sup> At least one course for this module is offered in the current semester

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<sup>\* =</sup> At least one course for this module is offered in the current semester

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<sup>\* =</sup> At least one course for this module is offered in the current semester

# Module WIW-0007: Management Information Systems Wirtschaftsinformatik

5 ECTS/LP

Version 5.0.0 (since WS16/17)

Person responsible for module: Prof. Dr. Daniel Veit

#### **Learning Outcomes / Competences:**

The module communicates the fundamentals of information systems. Upon the successful completion of this module, students can differentiate between types of information systems. They are aware of the tools or processes of IT project and business process management. Students have an understanding of the impacts of information systems on firms and society and are able to discuss their consequences for strategic decision making. They are also able to critically reflect on the associated challenges. As a result, students have the fundamental skills and abilities necessary to make informed strategic and operational IT management decisions and to understand their implications for a variety of stakeholders.

#### Workload:

Total: 150 h

48 h studying of course content through exercises / case studies (self-study)

30 h studying of course content using provided materials (self-study)

30 h studying of course content using literarture (self-study)

42 h lecture and exercise course (attendance)

Conditions:		Credit Requirements:
keine		schriftliche Prüfung
Frequency: each winter semester	Recommended Semester:	Minimal Duration of the Module:
	3.	1 semester[s]
Contact Hours:	Repeat Exams Permitted:	
4	according to the examination	
	regulations of the study program	

#### Parts of the Module

Part of the Module: Management Information Systems (Wirtschaftsinformatik) (Vorlesung)

Mode of Instruction: lecture

Language: English Contact Hours: 2

#### Literature:

Laudon, K. C., and Laudon, J. P. 2020. Management Information Systems: Managing the Digital Firm, 16th Edition.

Piccoli, G., and Pigni, F. 2019. Information Systems for Managers (With Cases), 4th Edition, Prospect Press Inc. Further readings will be given in the lecturing materials.

#### **Assigned Courses:**

Management Information Systems (dt. Wirtschaftsinformatik) (lecture + exercise)

Part of the Module: Management Information Systems (Wirtschaftsinformatik) (Übung)

Mode of Instruction: exercise course

Language: German / English

Contact Hours: 2

**Assigned Courses:** 

Management Information Systems (dt. Wirtschaftsinformatik) (lecture + exercise)

# Wirtschaftsinformatik

written exam / length of examination: 90 minutes

# Description:

jedes Semester

#### Module WIW-0262: Electronic Commerce

Electronic Commerce (5 LP)

5 ECTS/LP

Version 1.0.0 (since WS16/17)

Person responsible for module: Prof. Dr. Daniel Veit

#### **Learning Outcomes / Competences:**

Upon the successful completion of this module, the students are familiar with the forces driving electronic commerce. They understand the impact of technology change on the way businesses operate in electronic channels. They can assess challenges in business development for such companies and are familiar with appropriate models and theories to address these challenges. The awareness of social and ethical issues attached to technology enables them to make sound strategic decisions in the field of electronic commerce.

#### Workload:

Total: 150 h

40 h studying of course content using provided materials (self-study)

30 h studying of course content using literarture (self-study)

18 h studying of course content through exercises / case studies (self-study)

20 h preparation of presentations (self-study)

42 h lecture and exercise course (attendance)

		Credit Requirements: passing the module examination
Frequency: each winter semester	Recommended Semester: from 5.	Minimal Duration of the Module: 1 semester[s]
Contact Hours: 2	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Electronic Commerce (5 LP)

Mode of Instruction: lecture + exercise

Language: English Contact Hours: 2

#### Literature:

Chaffey, D., Hemphill T., and Edmundson-Bird, D. Digital business and e-commerce management. Pearson 2019. Laudon, K. C., and Traver, C.G. 2019. E-commerce 2019: business. technology. society (15th ed.). Pearson Further readings are provided during the lecture.

#### **Assigned Courses:**

#### Electronic Commerce (lecture + exercise)

#### **Examination**

#### **Electronic Commerce**

written exam / length of examination: 60 minutes

### Description:

# **Module WIW-0268: International Accounting** *International Accounting (5 LP)*

5 ECTS/LP

Version 1.0.0 (since SoSe17)

Person responsible for module: Prof. Dr. Wolfgang Schultze

#### **Learning Outcomes / Competences:**

The main objective of this course is to prepare students to work as accounting professionals in international corporations and groups. After passing the course students will be able to:

#### Subject-related competencies

- · understand the differences between international and national accounting principles
- · understand the importance of international trade and international organizations in the global economy
- · solve challenges international corporations and groups face

#### Methodological competencies

- · analyze international trades and process the consequences
- · further develop discussion skills

#### Interdisciplinary competencies

- · apply problem solving techniques
- · communicate within multinational corporations and groups

#### Key competencies

- · critically reflect on experiences, especially regarding international accounting problems
- · analyze problems and extract the underlying information

#### Remarks:

Restriction on participation

#### Workload:

Total: 150 h

21 h lecture (attendance)

44 h studying of course content using literarture (self-study)

40 h studying of course content through exercises / case studies (self-study)

45 h studying of course content using provided materials (self-study)

		Credit Requirements: passing the module examination
Frequency: each summer semester	Recommended Semester: 4 6.	Minimal Duration of the Module: 1 semester[s]
Contact Hours: 2	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: International Accounting (5 LP)

Mode of Instruction: lecture

Language: English Contact Hours: 2

#### Literature:

Will be announced in the course.

# International Accounting

written exam / length of examination: 60 minutes

# Description:

# Module WIW-0269: International Entrepreneurship International Entrepreneurship (5 LP)

5 ECTS/LP

Version 1.2.0 (since SoSe17)

Person responsible for module: Prof. Dr. Marcus Wagner

#### **Learning Outcomes / Competences:**

#### Subject-related competencies

After successful completion of this module students know and understand facts, concepts, methods and tools for realising internationally sustainable ventures and to implement these. Furthermore, students develop competencies which enable the recognition and evaluation of internationally sustainable entrepreneurial opportunities (e.g. based on global trends) as well as on the steps needed for founding and managing an internationally sustainable venture.

#### Methodological competencies

Students learn how to recognize entrepreneurial opportunities competently and how to evaluate them on. Furthermore, students know the different elements of a business plan and are able to develop one on their own.

#### Interdisciplinary competencies

The students can not only apply their knowledge in further courses at the chair (e.g. Bachelor seminar) or the faculty of business and economics, but furthermore apply it to implement their own start-up ideas.

#### Key competencies

Students are able to understand the opportunities and risks of a business idea, to transfer them into practice and to present them competently to a critical audience (investors, customers, other stakeholders).

#### Workload:

Total: 150 h

34 h studying of course content through exercises / case studies (self-study)

15 h preparation of presentations (self-study)

30 h studying of course content using provided materials (self-study)

50 h studying of course content using literarture (self-study)

21 h lecture (attendance)

Conditions: There are no prerequisites.		
Frequency: each summer semester	Recommended Semester: from 4.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: International Entrepreneurship (5 LP)

Mode of Instruction: lecture

Language: English
Contact Hours: 2

### Literature:

Hisrich, R. D. (2016). International Entrepreneurship: Starting, Developing, and Managing a Global Venture. Sage.

Hisrich, R. D., Peters, M.P., & Shepherd, D.A. (2017). Entrepreneurship. McGraw-Hill.

Dean, T. (2014). Sustainable Venturing. Entrepreneurial Opportunity in the Transition to a Sustainable Economy.

Pearson.

# International Entrepreneurship

written exam / length of examination: 60 minutes

# Description:

# Module WIW-0270: International Finance

5 ECTS/LP

International Finance

Version 1.0.0 (since WS21/22)

Person responsible for module: Prof. Dr. Marco Wilkens

Prof. Dr. Yarema Okhrin

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

After successfully completing this module, students understand the challenges of international finance and how to make optimal corporate financial decisions concerning investments, financing, and hedging against risks in the international corporate environment.

#### Methodological competencies:

After successfully completing this module, students are able to use Excel to analyze finance-related data using various quantitative methods. They are able to calculate and interpret statistical measures and to use the multiple linear regression model in different variants for forecasting. They will also be able to use quantitative methods, particularly in the international currency environment, and interpret the results of the methods.

#### Interdisciplinary competencies:

After successfully completing this module, students are able to apply the knowledge they have acquired in any area of their studies that deal with empirical questions in the field of finance and international economics. Students are able to apply quantitative approaches and models for international finance problems to other empirical and theoretical issues.

#### Key competencies:

After successfully completing this module, students are able to interpret relationships in the international financial environment with regard to their statements at different levels. This includes, for example, finding causal relationships in economic systems or assessing the quality of statistics. Students are able to use quantitative tools to manage international financial risks.

#### Workload:

Total: 150 h

20 h studying of course content through exercises / case studies (self-study)

50 h studying of course content using literarture (self-study)

42 h lecture and exercise course (attendance)

38 h studying of course content using provided materials (self-study)

		Credit Requirements: passing the module examination
Frequency: each winter semester	Recommended Semester: 4 6.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: International Finance (Vorlesung)

Mode of Instruction: lecture

#### Literature:

Eun, C. / Resnick, B: International Financial Management, 8th Edition, McGraw Hill.

Selected publications

#### **Assigned Courses:**

# International Finance (Bachelor) (lecture)

#### Part of the Module: International Finance (Übung)

Mode of Instruction: exercise course

Language: English Contact Hours: 2

#### **Assigned Courses:**

#### International Finance (Bachelor) (exercise course)

#### **Examination**

#### **International Finance**

written exam

#### Description:

# **Module WIW-0271: International Taxation**

5 ECTS/LP

International Taxation (5 LP)

Version 1.0.0 (since SoSe17)

Person responsible for module: Prof. Dr. Robert Ullmann

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

After successfully completing this course, students are able to recognize and discuss major principles in international taxation. In the first part of this course, this covers particularly different international tax systems, the effect of taxation on investments and the effect of taxation on international allocation of profits by multinational enterprises. After the second part of this course, students are familiar with the principles and methods of transfer pricing within multinational enterprises as well as their practical implications.

#### Methodological competencies:

Students are able to discuss and critically reflect on current empirical research on international taxation published in academic journals. They are also familiar with how to select the most appropriate transfer pricing method and are able to justify the model selection.

#### Interdisciplinary competencies:

Students are able to apply the knowledge on international taxation they have acquired in this course to several research and business problems beyond this course.

#### Key competencies:

In the course, students learn to approach complex tasks in a goal-oriented manner. Independent study of empirical research articles encourages personal responsibility and self-discipline. Students are able to understand and critically reflect on a wide range of topics in the field of international taxation.

#### Workload:

Total: 150 h

21 h lecture (attendance)

31 h studying of course content through exercises / case studies (self-study)

38 h studying of course content using literarture (self-study)

60 h studying of course content using provided materials (self-study)

Conditions: There are no prerequisites.		Credit Requirements: passing the module examination
Frequency: each summer semester	Recommended Semester: from 4.	Minimal Duration of the Module: 1 semester[s]
Contact Hours: 2	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: International Taxation (5 LP)

Mode of Instruction: lecture

Language: English Contact Hours: 2

#### Literature:

Will be announced in class.

#### International Taxation

written exam / length of examination: 60 minutes

# Description:

#### Module WIW-0289: Service Operations

Service Operations

5 ECTS/LP

Version 1.3.0 (since WS16/17)

Person responsible for module: Prof. Dr. Jens Brunner

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

The students are familiar with the standard problems and models in service operations management. They are able to model service operations management problems and to solve these models with appropriate mathematical methods.

#### Methodological competencies:

Students are able to analyze service operations management problems and to make sound decisions in the field of service operations. Students are familiar with methods of workforce planning, demand forecasting, inventory management, waiting line management, and revenue management.

#### Interdisciplinary competencies:

Students are able to apply what they have learned to other subjects of their course of study. Students are able to apply these skills in everyday life. In particular, students are familiar with sound decision-making and they are able to translate complex problems into efficient decision-making processes.

#### Key competencies:

Students are able to analyze questions from business life and problems from everyday life. In doing so, they understand how to manage tasks, inventory, offerings, and employees.

#### Workload:

Total: 150 h

42 h lecture and exercise course (attendance)

40 h studying of course content using literarture (self-study)

30 h studying of course content through exercises / case studies (self-study)

38 h studying of course content using provided materials (self-study)

Conditions:  Basic knowledge in service management, mathematics, and statistics is required.		Credit Requirements: passing the module examination
Frequency: each summer semester	Recommended Semester: 4 6.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Service Operations (Übung)

Mode of Instruction: exercise course

Language: English
Contact Hours: 2

Part of the Module: Service Operations (Vorlesung)

Mode of Instruction: lecture

#### Literature:

Fitzsimmons JA and Fitzsimmons MJ: Service Management: Operations, Strategy, Information Technology, McGraw-Hill.

The most recent edition is relevant.

Additional literature will be announced in the semester.

#### Examination

#### **Service Operations**

written exam / length of examination: 60 minutes

#### Description:

# Module WIW-0302: International Monetary Economics International Monetary Economics

5 ECTS/LP

Version 1.0.0 (since SoSe17)

Person responsible for module: Prof. Dr. Burkhard Heer

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

After successful participation in this module, students understand the basic theoretical relationships of the goods and financial markets of an open economy, in particular the interaction of international flows of goods and capital as well as the functioning of foreign exchange markets. They can analyse the interdependencies between these markets and their effects on the external balance and the balance of payments. Students understand the impact of the exchange rate system on economic development, either historically or theoretically. Moreover, they can explain both the behaviour of exchange rates and develop the consequences of trade, monetary and fiscal policies within the framework of various open economy models such as the Mundell-Fleming model.

#### Methodological competencies:

Students are able to determine equilibria of different markets within an open economy graphically and analytically. They can independently make changes to individual model elements (e.g., tariffs, exchange rates, trade flows, interest rates, taxes, consumption preferences) and forecast their effects mathematically and based on experience. Furthermore, students are familiar with the method of the comparative-static analysis of the Mundell-Fleming model and various exchange rate theories such as interest parity or the Dornbusch overshooting model.

#### Interdisciplinary competencies:

Students are able to understand basic foreign economic relationships and relate these to practical issues and economic policy interventions of international organisations such as the International Monetary Fund and the European Central Bank and their international effects. The knowledge acquired in the course is not only fundamental for the advanced courses of the Faculty of Economic Sciences, but is also applicable to political and economic issues of the Euro zone and the international monetary system, either historically or currently.

#### Key competencies:

Students are able to analyse current and historical developments on the foreign exchange markets and in the balance of payments and to explain these to interested non-professionals as well as to an informed audience. They can take a well-founded position in discussions on these topics and defend their point of view competently.

#### Workload:

Total: 150 h

42 h lecture and exercise course (attendance)

30 h studying of course content using provided materials (self-study)

20 h studying of course content through exercises / case studies (self-study)

58 h studying of course content using literarture (self-study)

		Credit Requirements: written exam
Frequency: each winter semester	Recommended Semester: 3 5.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: International Monetary Economics (Vorlesung)

Mode of Instruction: lecture

#### Literature:

Blanchard, Olivier, Macroeconomics (4. Edition or higher).

Krugmann, Obstfeld, Melitz, 2011, International Economics: Theory and Policy, 9th ed.

Gärtner, Lutz, 2009, Makroökonomik flexibler and fester Wechselkurse. 4. Aufl. De Grauwe, 2009, Economics of Monetary Union, 8th ed.

#### **Assigned Courses:**

**International Monetary Economics (Vorlesung)** (lecture)

Part of the Module: International Monetary Economics (Übung)

Mode of Instruction: exercise course

Language: English Contact Hours: 2

**Assigned Courses:** 

**International Monetary Economics (Übung)** (exercise course)

#### **Examination**

#### **International Monetary Economics**

written exam / length of examination: 60 minutes

#### **Description:**

#### Module WIW-0303: Cases in Simulation

Cases in Simulation

5 ECTS/LP

Version 3.0.0 (since WS21/22)

Person responsible for module: Prof. Dr. Jens Brunner

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

The students are familiar with the procedures and building blocks of simulation studies. They are familiar with possibilities and restrictions of simulation studies.

#### Methodological competencies:

Students are able to apply simulation methods and to correctly interpret obtained results. The students are capable of implementing the introduced methods using suitable simulation software.

#### Interdisciplinary competencies:

Students are able to apply what they have learned to other subjects of their course of study. Students are able to apply these skills in everyday life. In particular, students develop skills for critical understanding of the capabilities and limitations of the utilized methods, which can be applied to other situations in life.

#### Key competencies:

Students are able to analyze questions from business life and problems from everyday life. In doing so, they develop critical thinking skills.

#### Workload:

Total: 150 h

30 h studying of course content using provided materials (self-study)

30 h preparation of presentations (self-study)

10 h studying of course content using literarture (self-study)

48 h studying of course content through exercises / case studies (self-study)

32 h lecture and exercise course (attendance)

Conditions: Basic knowledge of operations & inform statistics.	nation management, programming, and	
Frequency: each summer semester	Recommended Semester: 4 6.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Cases in Simulation
Mode of Instruction: lecture + exercise

Language: English Contact Hours: 3

#### Literature:

Die Literatur wird in der jeweiligen Veranstaltung bekannt gegeben.

The relevant literature will be announced in the respective course.

**Cases in Simulation** 

portfolio exam

Description:

every year

#### Module WIW-0338: Services Marketing: Principles (5 LP)

Services Marketing: Principles (5 LP)

5 ECTS/LP

Version 1.0.0 (since WS17/18)

Person responsible for module: Prof. Dr. Michael Paul

#### **Learning Outcomes / Competences:**

After the successful participation in this module, students are able to understand essential concepts and theories of services marketing. In particular, they understand how services differ from other products; how service quality and customer satisfaction are conceptualized, measured, and managed; how to manage relationships with service customers; and how to brand services. Students are able to apply the concepts and theories to analyze simple case examples and research findings in services marketing. They can apply their knowledge on service quality and customer satisfaction to several business and research problems beyond this module. Overall, students are able to analyze and critically evaluate services marketing phenomena and to explain their ideas to experts and others.

#### Workload:

Total: 150 h

62 h studying of course content using provided materials (self-study)

46 h studying of course content using literarture (self-study)

42 h lecture and exercise course (attendance)

Conditions: WIW-0005: Marketing (in particular, basic concepts of Marketing and basics of the Marketing Mix).		Credit Requirements: passing the module examination
Frequency: each winter semester	Recommended Semester: from 5.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Services Marketing: Principles (5 LP) (Vorlesung)

Mode of Instruction: lecture

Language: English Contact Hours: 2

#### Literature:

Zeithaml, Valerie A., Mary Jo Bitner, and Dwayne D. Gremler (2017): Services Marketing - Integrating Customer Focus across the Firm, 7th edition, New York: McGraw-Hill.

#### **Assigned Courses:**

Services Marketing: Principles (lecture)

Services Marketing: Tutorial (exercise course)

Part of the Module: Services Marketing: Principles (5 LP) (Übung)

Mode of Instruction: exercise course

Language: English

#### **Assigned Courses:**

Services Marketing: Principles (lecture)

Services Marketing: Tutorial (exercise course)

Services Marketing: Principles (5 LP)

written exam / length of examination: 60 hours

Description: every year

# Module WIW-0343: Industrial Services Management

5 ECTS/LP

Industrial Services Management (5 LP)

Version 1.1.0 (since SoSe18)

Person responsible for module: Prof. Dr. Michael Paul

#### **Learning Outcomes / Competences:**

After the successful participation in this module, students are able to understand essential concepts and theories of services management in an industrial market setting. In particular, they understand the scope and challenges of industrial markets; the industrial purchasing process of services; critical elements of value offerings for industrial services; and behavioral interactions among industrial service buyers and sellers. Students are able to apply the concepts and theories to analyze simple case examples and research findings in industrial services management. They can apply their knowledge on industrial markets and industrial buying behavior to several business and research problems beyond this module. Overall, students are able to analyze and critically evaluate industrial services management phenomena and to explain their ideas to experts and others.

#### Workload:

Total: 150 h

31 h studying of course content through exercises / case studies (self-study)

21 h lecture (attendance)

38 h studying of course content using literarture (self-study)

60 h studying of course content using provided materials (self-study)

Conditions: None		
Frequency: einmalig SoSe	Recommended Semester: 4 6.	Minimal Duration of the Module: 1 semester[s]
Contact Hours: 2	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Industrial Services Management (5 LP)

Mode of Instruction: lecture

#### Literature:

Anderson, J. C. and J.A. Narus (1984). A Model of the Distributor's Perspective of Distributor-Manufacturer Working Relationships. Journal of Marketing, 48 (January), 62-74.

Anderson, J. C. and J.A. Narus (1990). Model of Distributor Firm and Manufacturer Firm Working Partnerships. Journal of Marketing, 54 (January), 42–58.

Bonoma, T.V. (2006). Major Sales: Who Really Does the Buying? Harvard Business Review, 84 (July-August), 172-181.

Dwyer, R.F. and J. Tanner (1999). Business Marketing. McGraw-Hill, USA.

Dwyer, R.F., P.H. Schurr, and S. Oh (1987). Developing Buyer-Seller Relationships. Journal of Marketing, 51 (April), 11–27.

El-Ansary, A. and L.W. Stern (1972). Power Measurement in the Distribution Channel. Journal of Marketing Research 9(1), 47-52.

Ford, D., L. Gadde, H. Håkansson, and I. Snehota (2006). The Business Marketing Course. West Sussex: John Wiley & Sons.

Ford, D., L. Gadde, H. Håkansson, and I. Snehota (2010). Managing Business Relationships. West Sussex: John Wiley & Sons.

Frazier, G.L. (1983). On the Measurement of Interfirm Power in Channels of Distribution. Journal of Marketing Research, 20 (May), 158–166.

Gundlach, G.T. and E.R. Cadotte, (1994). Exchange Interdependence and Interfirm Interaction: Research in a Simulated Channel Setting. Journal of Marketing Research, 31(4), 516-532.

Leonidou, L.C., D. Palihawadana and M. Theodosiou (2006). An Integrated Model of the Behavioural Dimensions of Industrial Buyer-Seller Relationships, European Journal of Marketing, 40 (1/2), 145-173.

Leonidou, L.C., S. Samiee, B. Aykol, and M. Talias (2014), Antecedents and Outcomes of Exporter-Importer Relationship Quality: Synthesis, Meta-Analysis, and Directions. Journal of International Marketing, 22 (2), 21-46.

Lovelock, C. and J. Wirtz (2011). Services Marketing. Upper Saddle River NJ: Pearson.

Rangan, V.K. and B.Isaacson (1994). Scope and Challenge of Business-to-Business Marketing, in Rangan et al. (Eds), Business Marketing Strategy: Concepts and Applications. Irwin, USA, pp. 3-13.

Shapiro, B.P. and R.S. Posner (2006). Making the Major Sale. Harvard Business Review, 84 (Jul-Aug), 140-148.

Webster, F.E. and Y. Wind (1972). A General Model for Understanding Organizational Buying Behavior. Journal of Marketing, 36 (2), 12-19.

#### Examination

#### **Industrial Services Management (5 LP)**

written exam / length of examination: 60 minutes

#### Description:

Unique offer in the respective term

# Module WIW-0344: International Marketing 5 ECTS/LP International Marketing

Version 1.7.0 (since SoSe18)

Person responsible for module: Prof. Dr. Michael Paul

#### **Learning Outcomes / Competences:**

The main objective of this module is to prepare students to successfully apply, analyze, and evaluate international marketing concepts and phenomena as managers in different industries or as business consultants. After the successful participation in this module, students are able to

#### Subject-related competencies

- understand essential concepts and theories of international marketing
- understand the influence of environmental forces (e.g., economic, social, cultural, political, legal) and approaches of market research in an international setting
- · understand international marketing strategies and international marketing mix decisions
- · understand the sources of competitiveness in international marketing

#### Methodological competencies

- · apply the concepts and theories to analyze simple case examples
- · formulate international marketing strategies and marketing mix decisions
- · analyze and critically evaluate international marketing phenomena
- · analyze research findings in international marketing

#### Interdisciplinary competencies

- apply knowledge on international marketing to several business problems beyond this module
- · apply knowledge on international marketing to several research problems beyond this module

#### Key competencies

- · explain their ideas to experts and others
- · work in teams and present results to others
- · critically reflect their own decisions and consequences.

#### Workload:

Total: 150 h

60 h studying of course content using provided materials (self-study)

38 h studying of course content using literarture (self-study)

31 h studying of course content through exercises / case studies (self-study)

21 h lecture (attendance)

Conditions: None		Credit Requirements: passing the module examination
Frequency: each summer semester	Recommended Semester: 4 6.	Minimal Duration of the Module: 1 semester[s]
Contact Hours: 2	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: International Marketing

Mode of Instruction: lecture

#### Literature:

Cateora, P., Graham, J., and Gilly, M. (2020). International Marketing. 18th Edition. McGraw-Hill.

Terpstra, V., Foley, J., and Sarathy, R. (2016). International Marketing. 11th Edition. Naper Press.

Keegan, W.J. and Green, M.C. (2020). Global Marketing. 10th Edition. Pearson.

Hill, C.W.L. and Hult, G.T.M. (2019). International Business: Competing in the Global Marketplace. 12th Edition. McGraw-Hill.

#### **Examination**

#### International Marketing

written exam / length of examination: 60 minutes

#### Description:

# Module WIW-0355: Cases in Business Analytics

Cases in Business Analytics

5 ECTS/LP

Version 1.3.0 (since SoSe19)

Person responsible for module: Prof. Dr. Jens Brunner

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

Students are able to use in-depth methods of data manipulation in Excel. They learn to apply modeling of mathematical optimization and to correctly interpret obtained results. The students are capable of implementing the introduced methods using suitable software.

#### Methodological competencies:

Students are able to implement different data problems and solve mathematical programming problems using Excel. At the end of the module, the students are able to understand the approaches to tackle planning problems in service operations and they understand different data structures in business life. Furthermore, the students are able to assess the modeling approaches in terms of effectiveness and efficiency, and to present their findings in class.

#### Interdisciplinary competencies:

Students are able to apply what they have learned to other subjects of their course of study. Students are able to apply these skills in everyday life. In particular, students develop skills for critical understanding of the capabilities and limitations of the utilized methods, which can be applied to other situations in life.

#### Key competencies:

Students are able to analyze questions from business life and problems from everyday life. In doing so, they develop critical thinking skills. Students develop the skills to present achieved results. Finally, they are able to make sound decisions in complex situations.

#### Workload:

Total: 150 h

30 h preparation of presentations (self-study)

48 h studying of course content through exercises / case studies (self-study)

10 h studying of course content using literarture (self-study)

30 h studying of course content using provided materials (self-study)

32 h lecture and exercise course (attendance)

Conditions:  Basic knowledge in mathematics and statistics is required.		Credit Requirements: passing the module examination
Frequency: each semester	Recommended Semester: 4 6.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Cases in Business Analytics

Mode of Instruction: lecture + exercise

Language: English
Contact Hours: 3

#### Literature:

Literature will be announced in the course

#### **Assigned Courses:**

Cases in Business Analytics (project seminar)

**Cases in Business Analytics** 

portfolio exam

Description:

# Module WIW-0367: Systematic Creativity (Design Thinking/Lean Startup/SCRUM)

5 ECTS/LP

Systematic Creativity (Design Thinking/Lean Startup/SCRUM)

Version 1.0.0 (since SoSe20)

Person responsible for module: Prof. Dr. Daniel Veit

#### **Learning Outcomes / Competences:**

#### Subject-related competencies

After successful participation in this module, students will be able to apply the basics of user-centered development methods. The learning content imparted in the course is closely coupled with examples from practice in order to convey to the students the benefits but also the risks of applying methods and instruments in a clear manner.

#### Methodical competencies

The methods range from identifying customer problems to develop evidence-based, iterative solutions to meet customer needs. Here, students will sense the benefits of state-of-the-art innovation management techniques, namely design thinking, lean startup and SCRUM. Students will learn how to approach and apply the methods in a de-risked environment.

#### Interdisciplinary competencies

Students can apply the learnt concepts and methods not only in advanced courses at the Faculty of Business and Economics, but also beyond - including the students' future professional practice. Thus, students are able to analyze problems, develop solutions using design thinking, lean startup and SCRUM and evaluate possibilities for action.

#### Key competencies

Besides fostering method competencies, this seminar will also facilitate the improvement of English skills, as the entire seminar is held in English. Thus, after the successful completion of this module, students will have improved their writing, presentation and discussion skills in English.

#### Remarks:

This course is limited to a maximum of 20 participants. You can find further information on Digicampus.

#### Workload:

Total: 150 h

32 h seminar (attendance)

40 h preparation of presentations (self-study)

48 h preparation of written term papers (self-study)

30 h studying of course content using provided materials (self-study)

Conditions:  Working knowledge of English is necessary to understand the literature provided in this module and to prepare and present own findings.		Credit Requirements:  Passing the module examination
Frequency: each winter semester	Recommended Semester: 4 6.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Systematic Creativity (Design Thinking/Lean Startup/SCRUM)

Mode of Instruction: seminar

#### Literature:

Individual readings are assigned during the lecture.

# **Assigned Courses:**

Systematic Creativity (Design Thinking/Lean Startup/SCRUM) (seminar)

#### **Examination**

Systematic Creativity (Design Thinking/Lean Startup/SCRUM)

written/oral exam

# **Description:**

every year

# **Module WIW-0370: Metropolitan Development** *Metropolitan Development*

5 ECTS/LP

Version 1.0.0 (since WS20/21)

Person responsible for module: Prof. Dr. Erik Lehmann

#### **Learning Outcomes / Competences:**

In this course, the process of economic development of cities, regions, and countries is studied. The sources of competitiveness and growth are identified. Public policies to promote competitiveness and economic development are analyzed in both historical and contemporary contexts. Some attention is given to the process of economic development and development strategies in an international context. This course is taught in a global classroom context. It is incorporated with a related course at Indiana University in the USA. The insights gained in this process enable students to:

#### Subject-related competencies:

- apply knowledge of the process of economic development of cities, regions, and countries in a historical and contemporary context.
- evaluate the effectiveness of public policy in addressing the unique economic development challenges of a region.

#### Methodological competencies:

- critically analyze the interaction between public policy, government regulation, and strategic management within the contexts of location policy and economic development.
- examine sustainable and ethical considerations in the context of strategic decision making for cities, regions, and federal states.

#### Interdisciplinary competencies:

- work in interdisciplinary and international teams to solve organizational problems using action-oriented policy recommendations.
- look at problems in other subject areas from the perspective of path-dependent developments.

#### Key competencies:

- work in a goal-oriented manner in an international team environment, especially with regard to different disciplines.
- · self-critically discuss work progress and team experiences/dynamics in feedback sessions.

#### Remarks:

Students have to apply with CV and STUDIS report This course will follow the schedule of the Indiana University "spring semester".

#### Workload:

Total: 150 h

20 h studying of course content using literarture (self-study)

44 h studying of course content through exercises / case studies (self-study)

42 h lecture (attendance)

44 h preparation of written term papers (self-study)

Conditions:		Credit Requirements:
none		Unique offer in the respective term
Frequency: each winter semester	Recommended Semester:	Minimal Duration of the Module:
	4 6.	1 semester[s]
Contact Hours:	Repeat Exams Permitted:	
4	according to the examination	
	regulations of the study program	

#### Parts of the Module

Part of the Module: Metropolitan Development

Mode of Instruction: lecture

Language: English

#### Literature:

 $\textbf{Audretsch, David. Everything in Its Place: Entrepreneurship and the Strategic Management of Cities, Regions, and Compared to the Strategic Management of Cities, Regions, and Compared to the Strategic Management of Cities, Regions, and Compared to the Strategic Management of Cities, Regions, and Compared to the Strategic Management of Cities, Regions, and Compared to the Strategic Management of Cities, Regions, and Compared to the Strategic Management of Cities, Regions, and Compared to the Strategic Management of Cities, Regions, and Compared to the Strategic Management of Cities, Regions, and Compared to the Strategic Management of Cities, Regions, and Compared to the Strategic Management of Cities, Regions, and Compared to the Strategic Management of Cities, Regions, Compared to the Strategic Management of Cities, Regions, Compared to the Cities of Cities, Compared to the Cities of Citie$ 

States. New York: Oxford University Press, (2015).

# **Assigned Courses:**

#### Metropolitan Development (Anmeldung)

#### **Examination**

# **Metropolitan Development**

# Description:

every year

Module WIW-0372: Green Finance	5 ECTS/LP
Green Finance	

Version 1.3.0 (since WS20/21)

Person responsible for module: Prof. Dr. Marco Wilkens

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

After successfully completing this module, students understand the challenges of green finance and how to make private and corporate financial decisions considering climate targets and environmental objectives. The students are familiar with the theoretical foundations of green finance and how climate and environmental aspects fit into classic financial frameworks. Students know how climate related decisions can influence firm values. Students know which green financial products exist, critically reflect their climate effectiveness, and know how to evaluate their risks and returns.

#### Methodological competencies:

After successfully completing this module, students are able to use Excel to analyze green finance related problems. They are able to calculate and interpret statistical measures. Students are able to discuss and critically reflect green finance related topics based on specific articles from academic and practitioner journals.

#### Interdisciplinary competencies:

After successfully completing this module, students are able to apply the knowledge they have acquired in any area of their studies that deal with financial economics in general as well as environmental economics, climate economics, sustainable business administration, and corporate social responsibility.

#### Key competencies:

After successfully completing this module, students are able to critically reflect and interpret relationships in the green and climate finance environment. They are able to evaluate how climate related financial decisions affect firm values. Students are able to use quantitative tools to manage financial risks and opportunities resulting from climate change. After successful participation, students are able to independently apply statistical methods to data-driven problems. They will be able to interpret the results, present them in a meaningful way and present them in a comprehensible way to a critical audience.

#### Workload:

Total: 150 h

38 h studying of course content using provided materials (self-study)

20 h studying of course content through exercises / case studies (self-study)

50 h studying of course content using literarture (self-study)

42 h lecture and exercise course (attendance)

Conditions:		Credit Requirements:
Students should have basic knowledge of financial mathematics. In particular, the knowledge of financing and investment calculation taught in the basic course "Investition und Finanzierung" is assumed to be known. Furthermore, basic statistical knowledge is necessary.		Passing the module examination
Frequency: each winter semester	Recommended Semester: 4 6.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Green Finance (Vorlesung)

Mode of Instruction: lecture Language: English / German

Contact Hours: 2

#### Literature:

Amel-Zadeh/Serafeim (2018): Why and how investors use ESG information: Evidence from a Global Survey. Financial Analyst Journal (74), 3, 87-103.

Swiss Sustainable Finance (2017) Handbook on Sustainable Investments. CFA Institute Research Foundation.

Worldbank (2019): State and Trends of Carbon Pricing 2019, https://openknowledge.worldbank.org/handle/10986/31755.

Blitz/Fabozzi (2017): Sin Stocks Revisited: Resolving the Sin Stock Anomaly. Journal of Portfolio Management 44 (1), 105-111.

Friede et al (2015): ESG and financial performance: aggregated evidence from more than 2000 empirical studies. Journal of Sustainable Finance & Investments (5), 4, 210-233

Görgen et al. (2019): Carbon Risk. WP Uni Augsburg.

Khan (2019): Corporate Governance, ESG, and Stock Returns around the World. Financial Analyst Journal (75), 4, 103-123 • EU Action Plan for sustainable finance, https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance\_de.

Matos (2020): ESG and responsible institutional investing around the world. CFA Institute Research Foundation.

Zerbib (2019): The effect of pro-environmental preferences on bond prices: Evidence from green bonds. Journal of Banking and Finance, 98, pp 39-60.

IPCC (2018): Special Report: Global Warming of 1.5°C: Summary for Policymakers. • European Commission (2020): Sustainable Finance - TEG final report on the EU taxonomy.

Fama/French (1993) Common risk factors in the returns on stocks and bonds. Journal of Financial Economics, 33 (1), 3–56.

Further selected publications.

#### **Assigned Courses:**

#### Green Finance (Bachelor) (lecture)

Part of the Module: Green Finance (Übung)

Mode of Instruction: exercise course

Language: English / German

Contact Hours: 2

#### **Assigned Courses:**

Green Finance (Bachelor) (exercise course)

#### **Examination**

### Green Finance

written exam

#### **Description:**

every year

# Module WIW-0377: International Environmental Policy

5 ECTS/LP

International Environmental Policy

Version 1.0.0 (since SoSe22)

Person responsible for module: Prof. Dr. Peter Michaelis

#### **Learning Outcomes / Competences:**

After completing this module successfully - the students learn to know the difference between national and international environmental policy; - they learn to know the reasons that cause international environmental problems like climate change, loss of biodiversity or damage of the ozone layer; - they learn to know instruments that can be used to prevent international environmental problems like climate change, loss of biodiversity or damage of the ozone layer; - they learn to know why it is difficult to convince enough nations to cooperate and implement the instruments to prevent international environmental problems like climate change, loss of biodiversity or damage of the ozone layer.

#### Workload:

Total: 150 h

80 h studying of course content using literarture (self-study)

49 h studying of course content using provided materials (self-study)

21 h lecture (attendance)

Conditions:		Credit Requirements: Passing the module examination
Frequency: each semester	Recommended Semester: 4 6.	Minimal Duration of the Module: 1 semester[s]
Contact Hours: 2	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: International Environmental Policy

Mode of Instruction: lecture

Barrett, Scott, Environment and Statecraft, The Strategy of Environmental Treaty-making, Oxford 2003.

Boehmer-Christiansen, Sonja, International Environmental Policy: Interests and the Failure of the Kyoto Process, Cheltenham et al. 2002.

Finus, Michael, Game Theoretic Research on the Design of International Environmental Agreements: Insights, Critical Remarks and Future Challenges, Discussion paper No. 414, Hagen 2007.

Fotis, P. and M. Polenus, Sustainable development, environmental policy and renewable energy use: A dynamic panel data approach, Sustainable Development, No. 26, 2018, p. 726-740.

Fujimori, S. and Co-authors, Will international emissions trading help achieve the objectives of the Paris Agreement? Environmental Research Letter, 11, 2016.

Gillingham, K. and J.H. Stock, The cost of reducing greenhouse gas emissions, J. Econ. Perspect., 32 2018.

Glanemann, N. et al., Paris Climate Agreement passes the cost-benefit test, Nat. Commun., 11, 2020.

Heister, Johannes, Economic and Legal Aspects of International Envi¬ronmental Agreements: the Case of Enforcing and Stabilising an International CO2 Agreement, Institut für Weltwirtschaft, Working paper Nr. 711, Kiel 1995.

Marsiliani, Laura, et al., Ed., Environmental Policy in an International Perspective, Dordrecht 2003.

Perman, Roger, et al., Natural Resource and Environmental Economics, 3. Edition, Harlow et al. 2003 (Chapter 10: International environmental problems).

Rasmusen, Eric, Games and Information, An Introduction to Game Theory, Cambridge et al. 1989.

Rübbelke, Dirk T.G., International Climate Policy to Combat Global Warming, Cheltenham et al. 2002.

Schulze, Günther G., Ed., International Environmental Economics, Oxford 2001.

Siebert, Horst, Ed., The Economics of International Environmental Problems, Tübingen 2000.

#### **Assigned Courses:**

#### **International Environmental Policy** (lecture)

#### **Examination**

#### International Environmental Policy

written exam

#### Description:

# Module WIW-0378: Cases in Resilient Supply Chains: A business game application

5 ECTS/LP

Cases in Resilient Supply Chains: A business game application

Version 1.0.0 (since SoSe22)

Person responsible for module: Prof. Dr. Manuel Ostermeier

#### **Learning Outcomes / Competences:**

The students will first obtain a practice-oriented overview of basics, decisions and interrelations in supply chain management. They will learn the importance of different stages in the supply chain and the interaction between these stages. The students will achieve the ability to understand influencing factors and consequences of supply chain decisions with the help of the business simulation "The Fresh Connection". In a second step, students will understand the importance of resilience in supply chains. Students will learn about risks that need to be taken into account within the supply chain and the corresponding implications and trade-offs for a company's strategy & operations (using again the business simulation). The students will achieve the competence for autonomous academic self-study and application-oriented presentation of content. A focus of the mediation of competences is on work in cross-functional teams.

#### Workload:

Total: 150 h

38 h studying of course content using provided materials (self-study)

40 h studying of course content through exercises / case studies (self-study)

30 h preparation of presentations (self-study)

42 h lecture and exercise course (attendance)

A basic understanding of logistics and supply chain management can be of advantage.      Willingness to work in a team and the motivation for self-reliant working.		Credit Requirements: Passing the module examination
Frequency: each summer semester	Recommended Semester: from 4.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Cases in Resilient Supply Chains: A business game application

Mode of Instruction: lecture + exercise

Language: English Contact Hours: 4

#### Literature:

To be announced.

#### **Examination**

Cases in Resilient Supply Chains: A business game application

portfolio exam **Description**:

every year

	Module WIW-4706: Intercultural Management Intercultural Management	5 ECTS/LP
ſ	Version 1.0.0 (since SoSe14)	
	Person responsible for module: Prof. Dr. Wolfgang Schultze	

Prof. Dr. Abdellatif A. Filali

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

After successful participation in the course, students will be familiar with diverse theories and constructs in the field of intercultural management. Students will develop an in-depth understanding of various cultural dimensions as well as the conflict potential and enrichment associated with cultural diversity in the context of international business relationships.

#### Methodological competencies:

Students are able to analyze business issues from the perspective of different cultural circumstances and present approaches to solutions in a structured manner, taking into account different cultural dimensions. They are familiar with relevant practices for dealing with intercultural encounters and issues.

#### Interdisciplinary competencies:

Students learn to think multi-perspectively and to solve problems considering different cultural dimensions. Students are sensitized to cultural and religious diversity and are able to apply what they have learned not only in more advanced courses at the Faculty of Business and Economics, but beyond - including the students' everyday lives.

#### Key competencies:

Students are able to systematically analyze issues from international business life as well as problems from everyday professional life in an international context. In doing so, they understand how to reduce international issues to their core and to view them from the perspective of different cultural backgrounds.

#### Remarks:

This course is exclusively held for GBM students and students studying the IBE Track. The number of participants is limited. Further information concerning the application procedure is provided via Digicampus. Attendance is compulsory for all dates.

#### Workload:

Total: 150 h

60 h preparation of written term papers (self-study)

21 h lecture (attendance)

Contact Hours: 2

35 h studying of course content using provided materials (self-study)

34 h studying of course content using literarture (self-study)

Conditions: Participants must be fluent in English, both written and spoken.		Credit Requirements: Hausarbeit
Frequency: each semester	Recommended Semester: 2 6.	Minimal Duration of the Module: 1 semester[s]
Contact Hours: 2	Repeat Exams Permitted: according to the examination regulations of the study program	

# Parts of the Module Part of the Module: Intercultural Management Mode of Instruction: lecture Language: English

Hampden-Turner, C. (2012). Riding the Waves of Culture: Understanding Diversity in Global Business. 3rd Edition. McGraw Hill.

Hofstede, G. (2010). Cultures and Organizations, Software of the Mind: Intercultural Cooperation and its Importance for Survival. 3nd Edition. McGraw Hill USA.

Jacob, N. (2003). Intercultural Management. Kogan Page Ltd.

Luthans, F./Doh, J. (2015). International Management: Culture, Strategy, and Behavior. McGraw Hill. 9th Edition.

#### **Assigned Courses:**

**Intercultural Management** (lecture)

#### **Examination**

#### **Intercultural Management**

term paper

#### Description:

jedes Semester

#### Module WIW-4708: Project Management

Project Management (5 LP)

5 ECTS/LP

Version 2.1.0 (since WS16/17)

Person responsible for module: Prof. Dr. Jens Brunner

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

Students understand the importance of project management and are familiar with the fundamentals and the specific tasks of project management. In particular, they are able to understand how to evaluate, select, plan, and control projects.

#### Methodological competencies:

Students are able to establish a project organization and to plan the project portfolio and schedule. They are able to plan project tasks, milestones and recognize potential bottlenecks. In order to realistically plan and evaluate a project, students are familiar with project cost estimation and project controlling methods. Furthermore, they will understand how to use software systems like Microsoft Project in order to accomplish these tasks.

#### Interdisciplinary competencies:

Students are able to apply what they have learned to other subjects of their course of study. Students are also able to apply these skills in everyday life. In particular, students are able to decide on the importance of various tasks, and they know how to fulfill them efficiently.

#### Key competencies:

Students are able to analyze questions from business life and problems from everyday life. In doing so, they understand how to manage tasks and how to successfully guide colleagues to finish important tasks together on time and on budget.

#### Workload:

Total: 150 h

30 h studying of course content through exercises / case studies (self-study)

38 h studying of course content using provided materials (self-study)

40 h studying of course content using literarture (self-study)

42 h lecture and exercise course (attendance)

Conditions: Basic knowledge in mathematics and statistics is required.		Credit Requirements: Passing the module examination
Frequency: each winter semester  Recommended Semester: 4 6.		Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Project Management (Vorlesung)

Mode of Instruction: lecture

Language: English Contact Hours: 2

#### Literature:

Shtub, Bard and Globerson: Project Management, Pearson Prentice Hall (latest Version)

#### **Assigned Courses:**

Project Management (lecture + exercise)

Part of the Module: Project Management (Übung)

Mode of Instruction: exercise course

**Language:** English **Contact Hours:** 2

**Assigned Courses:** 

Project Management (lecture + exercise)

**Examination** 

#### **Project Management**

written exam / length of examination: 60 minutes

Description: every year

Module WIW-4721: New Media Marketing: Principles	5 ECTS/LP
New Media Marketing: Principles (5 LP)	

Version 3.2.0 (since SoSe17)

Person responsible for module: Prof. Dr. Michael Paul

#### **Learning Outcomes / Competences:**

The main objective of this module is to prepare students to successfully apply, analyze, and evaluate new (i.e., digital) media marketing concepts and phenomena as managers in different industries or as business consultants. After the successful participation in this module, students are able to

#### Subject-related competencies

- understand essential concepts and theories of new media marketing
- understand how new media differ from traditional media and by which concepts and theories new media phenomena can be explained
- · understand which challenges, opportunities, and communication formats exist in the era of new media
- · understand how to manage multichannel companies

#### Methodological competencies

- · apply the concepts and theories to analyze simple case examples
- gather and interpret case-relevant information
- · analyze and critically evaluate new media marketing phenomena
- · analyze research findings in new media marketing

#### Interdisciplinary competencies

- apply knowledge on new media marketing to several business problems beyond this module
- · apply knowledge on new media marketing to several research problems beyond this module

#### Key competencies

- · explain their ideas to experts and others
- · work in teams and present results to others
- · critically reflect their own decisions and consequences.

#### Workload:

Total: 150 h

42 h lecture and exercise course (attendance)

10 h studying of course content through exercises / case studies (self-study)

60 h studying of course content using provided materials (self-study)

38 h studying of course content using literarture (self-study)

Conditions: WIW-0005: Marketing (especially basic marketing terms and basics of the marketing mix)		Credit Requirements:  Passing the module examination
Frequency: each summer semester Recommended Semester: 4 6.		Minimal Duration of the Module: 1 semester[s]
Contact Hours: 2	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: New Media Marketing: Principles (5 LP) (Vorlesung)

Mode of Instruction: lecture

Language: English Contact Hours: 2

Lauden, Kenneth C. and Carol G. Traver (2021), E-Commerce 2020-2021: Business, Technology, Society. Pearson: Harlow.

Kotler, Philip, Hermawan Kartajaya, and Iwan Setiawan (2021), Marketing 5.0: Technology for Humanity. Wiley:

#### **Examination**

#### **New Media Marketing: Principles**

written exam / length of examination: 60 minutes

#### Description:

# Module WIW-4723: Digital Government Management

5 ECTS/LP

Digital Government Management (5 LP)

Person responsible for module: Prof. Dr. Daniel Veit

#### **Learning Outcomes / Competences:**

#### Subject-related competencies

Version 2.1.0 (since SoSe17)

Upon the successful completion of this module, students understand the implications of the internet for government and society. They are able to discuss the purposeful use of information and communication technology to reinvent the relationship between government and society by making governments more responsive, accessible, transparent, responsible, participatory, efficient, and effective than before.

#### Methodical competencies

Students are able to differentiate and address technical, organizational, legal, and societal challenges of moving public services online and can describe possible strategies and countermeasures. They are also able to discuss the concept and opportunities of digital democracy as well as current issues such as digital participation and open data.

#### Interdisciplinary competencies

The students can apply the theories and concepts delivered in class not only in further courses offered by the Faculty of Business and Economics, but also in their everyday political lives as well as in their future professional practice. Thus, students are able to analyze problems concerning the digital transformation of governmental and other political entities, discuss current issues, and evaluate possibilities for action.

#### Key competencies

Students develop communication and argumentation skills by participating in in-class discussions. Furthermore, students deepen group work and presentation skills by addressing a specific problem in Digital Government Management in a group case study.

#### Workload:

Total: 150 h

40 h studying of course content using literarture (self-study)

24 h studying of course content through exercises / case studies (self-study)

20 h studying of course content using provided materials (self-study)

24 h preparation of presentations (self-study)

42 h lecture and exercise course (attendance)

Conditions: Working knowledge of English is necessary.		Credit Requirements: Passing the module examination
Frequency: each summer semester	Recommended Semester: 4 6.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Digital Government Management (Vorlesung)

Mode of Instruction: lecture

Language: English Contact Hours: 2

Primary Literature:

Veit, D., and Huntgeburth, J. 2014. Foundations of Digital Government: Leading and Managing in the Digital Era, Berlin, Heidelberg: Springer Berlin Heidelberg.

Secondary Literature:

Bishop, P., Kane, J., and Patapan, H. 2002. "The Theory and Practice of E-Democracy: Agency, Trusteeship and Participation on The Web," International Review of Public Administration (7:2), pp. 21-31.

Norris, P. 2001. Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide, Cambridge University Press.

West, D. M. 2005. Digital Government: Technology and Public Sector Performance, Princeton University Press.

Further journal and conference papers will be referenced by the course material.

Part of the Module: Digital Government Management (Übung)

Mode of Instruction: exercise course

Language: English Contact Hours: 2

#### Examination

#### **Digital Government Management**

written exam / length of examination: 60 minutes

Description:

## Module WIW-4725: International Trade

5 ECTS/LP

International Trade (5 LP)

Version 2.2.0 (since SoSe17)

Person responsible for module: Prof. Dr. Peter Welzel

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

The module introduces students to the theory and policy of international trade. Against the background of stylized facts from the world economy students get to understand why countries engage in international trade and what economic consequences they can expect. The module also develops a comprehensive understanding of instruments of trade policies, like tariffs and import quotas, and enables students to evaluate their economic effects.

#### Methodological competencies:

Students are able to use microeconomic models to analyze international trade, to explain trade patterns and identify winners and losers of international trade. Besides, students are able to illustrate their findings graphically.

#### Interdisciplinary competencies:

By successfully completing this module, students are able to critically evaluate current decisions concerning international trade as well as trade instruments introduced by political institutions. In addition, they learn to solve problem sets independently and discuss solutions in the classroom. Since the module is taught in English, students improve their language skills.

#### Key competencies:

This module provides students with the ability to analyze international trade and trade policy, including regional integration and supra-national trade policy.

#### Workload:

Total: 150 h

40 h studying of course content using provided materials (self-study)

18 h studying of course content through exercises / case studies (self-study)

50 h studying of course content using literarture (self-study)

42 h lecture and exercise course (attendance)

Conditions:  Basic knowledge in microeconomics (indifference curve, utility function, demand function, market power in monopoly/oligopoly, profit and utility maximization, social welfare)		Credit Requirements: written exam
Frequency: each summer semester	Recommended Semester: 4 6.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: International Trade (5 LP) (Vorlesung)

Mode of Instruction: lecture

Language: English
Contact Hours: 2

#### Literature:

Krugman, P.R., Obstfeld, M., Melitz, M. (2018), International Trade: Theory and Policy, 11th ed., Pearson.

Part of the Module: International Trade (5 LP) (Übung)

Mode of Instruction: exercise course

Language: English Contact Hours: 2

**Examination** 

International Trade

written exam / length of examination: 60 minutes

Description: every term

# Module WIW-4994: Industry Analysis Industry Analysis

5 ECTS/LP

Version 1.0.0 (since SoSe15)

Person responsible for module: Prof. Dr. Michael Paul

#### **Learning Outcomes / Competences:**

The main objective of this module is to prepare students to successfully apply, analyze, and evaluate industry analysis concepts and phenomena as managers in different industries or as business consultants. After the successful participation in this module, students are able to ...

#### Subject-related competencies

- understand essential concepts, methods, and managerial tools to analyze the external environment of companies (e.g., markets, industries, competition) and identify key trends
- · understand concepts, methods, and managerial tools to analyze companies and their strategies
- understand concepts, methods, and managerial tools to identify strategic issues, reveal strategic alternatives, and derive strategic recommendations

#### Methodological competencies

- · apply methods and managerial tools of industry analysis to companies in different industries
- · gather, evaluate, and interpret relevant information to derive statements and arguments
- · identify business problems and write basic reports
- · create relevant managerial insights

#### Interdisciplinary competencies

- · apply knowledge on methods and managerial tools to several business problems beyond this module
- · apply knowledge on methods and managerial tools to several research problems beyond this module

#### Key competencies

- explain and defend their position towards managers, experts, and others
- · work in (inter)national teams and present results to others
- develop a professional self-image that is oriented toward goals and standards of professional action in companies and other organizations
- · critically reflect their own decisions and consequences.

#### Workload:

Total: 150 h

21 h seminar (attendance)

28 h preparation of written term papers (self-study)

46 h studying of course content through exercises / case studies (self-study)

24 h preparation of presentations (self-study)

15 h studying of course content using provided materials (self-study)

16 h studying of course content using literarture (self-study)

Conditions:		Credit Requirements:
none		Hausarbeit, Präsentation und
		Diskussionsbeteiligung
Frequency: each summer semester	Recommended Semester: 4 6.	Minimal Duration of the Module: 1 semester[s]
Contact Hours: 2	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

**Part of the Module: Industry Analysis (Seminar)** 

Mode of Instruction: project seminar

Language: English Contact Hours: 2

#### Contents:

- · Introductory lecture on industry analysis.
- Visits of companies from different industries (e.g., Audi, Siemens, or Kuka).
- US and German students work in international teams on a presentation on their assigned companies.
- US and German students discuss the company presentations.
- German students write seminar papers which include the application of course contents to the analysis of the assigned companies.

#### Literature:

To be announced in the first session.

#### **Examination**

#### **Industry Analysis**

project work

#### Description:

jährlich

Hausarbeit, Präsentation, Diskussionsbeteiligung

Module WIW-9000: International Seminar Business and	5 ECTS/LP
Economics	
International Seminar Business and Economics	

Version 1.0.0

Person responsible for module: Prof. Dr. Jens Brunner

#### Contents

Selected topics in business and economics. Topics include (but are not limited to):

- Business Analytics and Operations
- Decision Making
- Finance
- Marketing
- Behavioral management

#### **Learning Outcomes / Competences:**

At the end of the module, the students are able to understand the approaches to tackle several problems in business and economics. The students are able to understand procedures, assess these approaches in terms of effectiveness and efficiency, present their findings in class.

#### Workload:

Total: 150 h

Conditions: Basic knowledge in mathematics and statistics is required.		Credit Requirements: Passing the examination
Frequency: each semester	Recommended Semester:	Minimal Duration of the Module: semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: International Seminar Business and Economics

Language: English
Assigned Courses:

International Seminar Business and Economics (seminar)

#### **Examination**

#### **International Seminar Business and Economics**

written/oral exam, Seminar paper and presentation

## **Module WIW-9001: International Project**

5 ECTS/LP

International Project

Version 1.0.0

Person responsible for module: Prof. Dr. Erik Lehmann

#### Contents:

For exchange students WeltWeit or Erasmus+:

- AAA accompanies international exchange students in the application process and in finding a suitable school for the project "International Classroom Experience"
- -Project contents are agreed upon verbally in consultation with the teacher supervising the student at the school
- Preparation of a project plan in the form of a target agreement
- Regular attendance/preperation of classes (approx. once or twice a week) of "International Classroom Experience" during the exchange semester
- Preparation of a project report with the following contents: Description of the project, approach during the project, self-reflection and "lessons learned"
- Presentation of the project

#### **Learning Outcomes / Competences:**

After successful participation in this module, students are able to apply subject-related competences by identifying and defining relevant practical problems. They are able to apply the skills and abilities they have acquired in their studies to these problems and understand how to select relevant sub-areas from their knowledge, adapt them to real problems and develop specific solutions. Using basic time and project management techniques, students are able to structure and prioritize projects into task bundles. Furthermore, students possess interdisciplinary skills or a deeper understanding of interdisciplinary problems in nonprofit organizations/schools. They will be able to name intercultural requirements from their own practical experience and differentiate between them. In general, professional field and social competencies will be required. By taking on responsibility and being accountable for their work results in front of project partners from the field, students are able to communicate and deal with conflicts.

#### Total: 150 h **Conditions: Credit Requirements:** Enrolled as exchange student WeltWeit or Erasmus+ at the University of Passing the examination Augsburg: - Native speaker or C1+/C2 proficiency in one of the languages: English, French, Spanish, Italian - Participant in the AAA project "International Classroom Experience" Frequency: each semester **Recommended Semester:** Minimal Duration of the Module: semester[s] Contact Hours: Repeat Exams Permitted: 3 according to the examination regulations of the study program

#### Parts of the Module

Workload:

Part of the Module: International Project

Language: English

**Assigned Courses:** 

International Projects (lecture)

#### **Examination**

#### **International Project**

project work, project report and presentation

#### Module WIW-9842: IT Innovation Research

IT Innovation Research (5 LP)

5 ECTS/LP

Version 1.0.0 (since WS15/16)

Person responsible for module: Prof. Dr. Daniel Veit

#### **Learning Outcomes / Competences:**

Upon the successful completion of this module, students should be able to critically discuss selected research articles pertaining to topics of IT innovation research. By analyzing research that investigates the adoption and spread of IT-based processes, products and services, students familiarize themselves with theoretical models and concepts in the area of IT adoption behavior of individuals and organizations. Students learn how to critically discuss the assigned papers in contrast to previous research and through the identification and analysis of additional academic literature they evaluate how the papers have subsequently affected the work of researchers and practitioners. By writing and presenting an individual seminar paper, in which they systematically report their approach and findings, students learn how to structure and analyze scientific problems. Thus, methodological skills acquired in this seminar are crucial for writing a bachelor thesis at the chair. Besides fostering analytical thinking, this seminar will also facilitate the improvement of English skills, as the entire seminar is held in English. Thus, after the successful completion of this module, students will have improved their writing, presentation and discussion skills in English.

#### Workload:

Total: 150 h

10 h studying of course content using provided materials (self-study)

32 h seminar (attendance)

78 h preparation of written term papers (self-study)

30 h preparation of presentations (self-study)

Conditions:  Working knowledge of English is necessary to understand the literature provided in this module and to prepare and present own findings.		Credit Requirements: Seminararbeit und Vortrag
Frequency: each semester	Recommended Semester: 3 5.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: IT Innovation Research (5 LP)

Mode of Instruction: seminar

Language: English
Contact Hours: 3

#### Literature:

Individual readings are assigned during the seminar.

#### **Assigned Courses:**

IT Innovation Research Seminar (cohort 2022/23 WS) (seminar)

#### **Examination**

IT Innovation Research (5 LP)

seminar

#### **Description:**

jedes Semester

Seminararbeit und Vortrag

#### Module WIW-9854: Online User Behavior Research

Online User Behavior Research

5 ECTS/LP

Version 1.0.0 (since SoSe17)

Person responsible for module: Prof. Dr. Daniel Veit

#### **Learning Outcomes / Competences:**

Upon the successful completion of this module, students should be able to critically discuss selected research articles pertaining to customer and user behavior on the internet. By analyzing research that investigates usage and decisions in online channels, students familiarize themselves with theoretical models and concepts in this subject area. Students learn how to critically discuss the assigned papers in contrast to previous research and through the identification and analysis of additional academic literature they evaluate how the papers have subsequently affected the work of researchers and practitioners. By writing and presenting an individual seminar paper, in which they systematically report their approach and findings, students learn how to structure and analyze scientific problems. Thus, methodological skills acquired in this seminar are crucial for writing a bachelor thesis at the chair. Besides fostering analytical thinking, this seminar will also facilitate the improvement of English skills, as the entire seminar is held in English. Thus, after the successful completion of this module, students will have improved their writing, presentation and discussion skills in English.

#### Remarks

As the number of places is limited, please visit our homepage to learn about the application procedure.

#### Workload:

Total: 150 h

Conditions:  Working knowledge of English is necessary to understand the literature provided in this module and to prepare and present own findings.		Credit Requirements: Bestehen der Modulprüfung
Frequency: each summer semester	Recommended Semester:	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Online User Behavior Research

Mode of Instruction: seminar

Language: German Contact Hours: 3

#### Contents:

- Introduction to academic writing
- Examination of an important piece of research in the area of online user behavior
- Analysis of theoretical implications
- · Analysis of practical implications
- Structuration, presentation and discussion of the topic

Topics deal with the adoption and diffusion of IT-enabled processes, products and services, aspects of change management, individuals' and organizations' behavior, as well as implications of IT innovations for organizational capabilities.

#### Literature:

Individual readings are assigned during the seminar.

#### **Examination**

#### **Online User Behavior Research**

written/oral exam, jährlich

# Module WIW-9865: Digital Transformation Research Digital Transformation Research (5LP)

5 ECTS/LP

Version 1.1.0 (since WS17/18)

Person responsible for module: Prof. Dr. Daniel Veit

#### **Learning Outcomes / Competences:**

Upon the successful completion of this module, students should be able to critically discuss selected research articles pertaining to topics of digital strategy research. By analyzing research that investigates IT-driven and -enabled strategies and business models of both start-ups and mature organizations, students familiarize themselves with theoretical models and concepts in this subject area. Students learn how to critically discuss the assigned papers in contrast to previous research and through the identification and analysis of additional academic literature they evaluate how the papers have subsequently affected the work of researchers and practitioners. By writing and presenting an individual seminar paper, in which they systematically report their approach and findings, students learn how to structure and analyze scientific problems. Thus, methodological skills acquired in this seminar are crucial for writing a bachelor thesis at the chair. Besides fostering analytical thinking, this seminar will also facilitate the improvement of English skills, as the entire seminar is held in English. Thus, after the successful completion of this module, students will have improved their writing, presentation and discussion skills in English.

#### Remarks:

This module was renamed from Digital Strategy Research. Students who have already passed Digital Strategy Research (WIW-0227 bzw. WIW-9843) cannot take this module.

#### Workload:

30 h seminar (attendance)

90 h preparation of written term papers (self-study)

30 h preparation of presentations (self-study)

Conditions:  Working knowledge of English is necessary to understand the literature provided in this module and to prepare and present own findings.		Credit Requirements: Seminararbeit und Vortrag
Frequency: each semester	Recommended Semester: 3 5.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Digital Transformation Research (5LP)

Mode of Instruction: seminar

Language: German

#### **Assigned Courses:**

Digital Transformation Research Seminar (cohort 2022/23 WS) (seminar)

#### Examination

#### **Digital Transformation Research (5LP)**

seminar

#### **Description:**

jährlich

Seminararbeit und Vortrag

Module WIW-5016: Advanced Management Information Systems
Seminar Advanced Management Information Systems

6 ECTS/LP

Version 2.0.0 (since WS16/17)

Person responsible for module: Prof. Dr. Daniel Veit

#### **Learning Outcomes / Competences:**

Upon the successful completion of this module, students have extended their knowledge on management information systems and empirical research in the information systems field. Topics of this seminar pertain to strategic questions on innovation, adoption and continued use of management information systems. Students learn how to conduct, write and present a systematic and academic literature review on their individually assigned topic. By doing so, students gain a fundamental understanding of the principles of empirical academic work and obtain the ability to systematically and independently address a research topic. Accordingly, the knowledge and methodological skills acquired in this seminar are a necessary foundation to write a master thesis at the chair. Besides fostering analytical thinking, this seminar will also facilitate the improvement of English skills, as the entire seminar is held in English. Thus, after the successful completion of this module, students will have improved their writing, presentation and discussion skills in English.

#### Workload:

Total: 180 h

30 h preparation of presentations (self-study)

42 h seminar (attendance)

108 h preparation of written term papers (self-study)

		Credit Requirements: Passing the module examination
We furthermore recommend attending introductory courses offered by the university library.		
Frequency: each winter semester	Recommended Semester: 1.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Seminar Advanced Management Information Systems

Mode of Instruction: seminar

Language: English Contact Hours: 4

#### Literature:

Initial readings are provided during the seminar.

#### Examination

**Seminar Advanced Management Information Systems** 

#### Description:

every year

## **Module WIW-5040: Transfer Pricing**

6 ECTS/LP

Transfer Pricing

Version 3.1.0 (since SoSe17)

Person responsible for module: Prof. Dr. Wolfgang Schultze

#### **Learning Outcomes / Competences:**

After passing this course students know the most important institutions of cross border income allocation (e.g. OECD). They are able to apply different transfer pricing methodologies and can analyze related party transactions. Students are able to conduct an arm's length analysis and are familiar with the requirement of transfer pricing documentation. Presenting selected topics by themselves helps students to improve their presentation skills.

#### Workload:

Total: 180 h

28 h studying of course content through exercises / case studies (self-study)

30 h studying of course content using literarture (self-study)

38 h studying of course content using provided materials (self-study)

20 h preparation of written term papers (self-study)

22 h preparation of presentations (self-study)

42 h lecture and exercise course (attendance)

Conditions:		Credit Requirements:
Good command of the English language. Knowlegde of managerial accounting and international taxation from previous lectures.		Passing the module examination
Frequency: each summer semester	Recommended Semester: from 2.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Transfer Pricing (Vorlesung)

Mode of Instruction: lecture

Language: English Contact Hours: 2

#### Literature:

Will be announced in the course.

#### **Examination**

#### **Transfer Pricing**

written exam

#### **Description:**

every year

## Module WIW-5058: Investment Funds

Investment Funds

6 ECTS/LP

Version 2.3.0 (since SoSe17)

Person responsible for module: Prof. Dr. Marco Wilkens

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

After successful participation in this module, students know the advantages and disadvantages of investing in investment funds. They know which different types of investment funds exist and how they differ. Students will be able to evaluate and interpret the performance of these different types of investment funds using the appropriate methods. Students know the most important factors influencing the performance of investment funds.

#### Methodological competencies:

After successful participation in this module, students know the most important performance measures for evaluating investment funds and can apply them and interpret the results. This includes return-based approaches as well as holdings-based and cash flow-based performance measures. The course is essay-based. Therefore, after successful participation, the students are able to work out the most important contents of a subject area on the basis of literature, especially on the basis of scientific articles.

#### Interdisciplinary competencies:

After successful participation in this module, students will be able to transfer the acquired knowledge, especially methodological knowledge, to other topics within finance and banking as well as to numerous other economic research fields.

#### Key competencies:

After successful participation in this module, students will be able to pursue numerous career paths related to investment funds. In addition to a career in fund management, this also includes investing in funds as a professional investor or taking on functions in financial and stock exchange supervision.

#### Workload:

Total: 180 h

20 h studying of course content through exercises / case studies (self-study)

42 h lecture and exercise course (attendance)

80 h studying of course content using literarture (self-study)

38 h studying of course content using provided materials (self-study)

Conditions:  Students should have basic knowledge of financial mathematics. In particular, the knowledge of financing and investment calculation taught in typical Bachelor's foundation courses (e.g. "Investition und Finanzierung") is assumed to be known. In addition, basic statistical knowledge is necessary. Previous or simultaneous attendance of the courses "Kapitalmarktorientierte Unternehmenssteuerung" and "Empirische Kapitalmarktforschung" is also		Credit Requirements: Passing the module examination
recommended.  Frequency: each summer semester	Recommended Semester: from 2.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Investment Funds (Vorlesung)

Mode of Instruction: lecture Language: German / English

Contact Hours: 2

Grinblatt, M. and Titman, S. (1993) Performance Measurement without Benchmarks: An Examination of Mutual Fund Returns. Journal of Business 66, 47-68.

Pollet, J. M. and Wilson, M. (2008) How Does Size Affect Mutual Fund Behavior? Journal of Finance 58, 2941-2969.

Agarwal, V., Naik, N. Y. (2004) Risks and Portfolio Decisions Involving Hedge Funds. Review of Financial Studies 17, 63-98.

Unpublished Working Paper (under review).

Rohleder, M., Scholz, H., and Wilkens, M. (2011) Survivorship Bias and Mutual Fund Performance: Relevance, Significance, and Methodical Differences. Review of Finance 15, 441-474.

#### Part of the Module: Investment Funds (Übung)

Mode of Instruction: exercise course

Language: German
Contact Hours: 2

#### **Examination**

#### **Investment Funds**

written exam / length of examination: 60 minutes

# Description:

every year

#### Module WIW-5089: Health Care Operations Management Health Care Operations Management

6 ECTS/LP

Version 2.1.0 (since SoSe17)

Person responsible for module: Prof. Dr. Jens Brunner

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

The students are familiar with the standard problems and models in health care operations management. They are able to model problems and to solve these models with appropriate mathematical methods.

#### Methodological competencies:

Students are able to analyze health operations management problems and to make sound decisions in the field of health services. Students are familiar with strategic, tactical and operational planning and scheduling steps in a hospital and in patient care in general.

#### Interdisciplinary competencies:

Students are able to apply what they have learned to other subjects of their course of study. Students are able to apply these skills in everyday life. In particular, students are familiar with sound decision-making and they are able to translate complex problems into efficient decision-making processes.

#### Key competencies:

Students are able to analyze questions from business life and problems from everyday life. In doing so, they understand how to manage tasks, inventory, services, and employees.

#### Workload:

Total: 180 h

60 h studying of course content using literarture (self-study)

60 h studying of course content using provided materials (self-study)

18 h studying of course content through exercises / case studies (self-study)

42 h lecture and exercise course (attendance)

Conditions:  (Advanced) knowledge in operations management, mathematics (including Linear Programming), and statistics, knowledge in optimization (e.g. OPL)/ simulation (e.g. Arena) software is an advantage.		Credit Requirements: Passing the module examination
Frequency: each summer semester	Recommended Semester: 1 3.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Health Care Operations Management (Vorlesung)

Mode of Instruction: lecture

Language: English Contact Hours: 2

Busse, R., J. Schreyögg und C. Gericke: Management im Gesundheitswesen. Springer.

Hall R: Handbook of Health Care System Scheduling, in International Series in Operations

Langabeer II JR: Health Care Operations Management: A Quantitative Approach to Business and Logistics, Jones & Bartlett Publishers.

Ozcan YA: Quantitative Methods in Health Care Management: Techniques and Applications, Wiley.

Vissers, J.M.H. und Beech R.: Health Operations Management: Patient Flow Logistics in Health Care, Taylor & Francis.

For all books, the most recent edition is relevant. Additional literature will be announced in the semester.

Part of the Module: Health Care Operations Management (Übung)

Mode of Instruction: exercise course

Language: English Contact Hours: 2

#### **Examination**

#### **Health Care Operations Management**

written exam / length of examination: 60 minutes

#### Description:

# **Module WIW-5090: Seminar Health Care Operations Management** *Seminar Health Care Operations Management*

6 ECTS/LP

Version 2.1.0 (since WS16/17)

Person responsible for module: Prof. Dr. Jens Brunner

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

The students are able to understand the approaches to tackle several planning problems in health care and they are able to understand more complex solution approaches in operations management.

#### Methodological competencies:

The students are able to implement such procedures, assess these approaches in terms of effectiveness and efficiency, and present their findings in class.

#### Interdisciplinary competencies:

The students are able to make sound decisions. They are able to work with scientific literature and understand complex problems.

#### Key competencies:

Students are able to present their finding under consideration of audience and situation. They are able to question scientific literature and achieved results.

#### Workload:

Total: 180 h

28 h studying of course content using provided materials (self-study)

42 h seminar (attendance)

30 h preparation of presentations (self-study)

80 h preparation of written term papers (self-study)

Conditions:  (Advanced) Knowledge in operations management, mathematics (including Linear Programming), and statistics, knowlegde in optimization (e.g. OPL)/ simulation (e.g. Arena) software is an advantage.		Credit Requirements: Passing the module examination
Frequency: each semester	Recommended Semester: 1 3.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Seminar Health Care Operations Management

Mode of Instruction: seminar

Language: English Contact Hours: 4

#### Literature:

Literature will be announced in the semester.

#### **Assigned Courses:**

Seminar Health Care Operations Management (MSc) (seminar)

## Examination

## Seminar Health Care Operations Management

/ length of examination: 60 minutes

## Description:

# **Module WIW-5093: Global E-Business and Electronic Markets** *Global E-Business and Electronic Markets*

6 ECTS/LP

Version 2.2.0 (since SoSe17)

Person responsible for module: Prof. Dr. Daniel Veit

#### **Learning Outcomes / Competences:**

This module covers the fundamentals of E-Business and Electronic Markets. Students will be able to apply this knowledge to critically analyze and evaluate the opportunities and threats of the growing digital channel. Moreover it equips them with the necessary understanding to develop strategies in the area of E-Business and Electronic Markets. The course enables students to understand, evaluate and apply the most important E-Commerce business models, their components and their success factors. Moreover, emergent issues like internet pricing for tangible goods, services and information goods are covered. The course contributes to an understanding of the importance of ethical topics like privacy, fairness and transparency. Within the second part of the course, students are applying the knowledge acquired to real life cases in today's businesses. Therefore, students are provided with an understanding of the role of information for business strategies by reviewing transaction cost theory, principal agent theory and related economic concepts. Network effects on the internet are complementing these theoretical components. Based on these theories, students are empowered to analyze the impact of information technology and the internet on industry structure.

Overall, students will be made aware in what way the online channel differentiates from the offline channel. The aim is to create an understanding of the associated opportunities and threats. During the course, organizational level of analysis and the impact on economic activity stands in the foreground. This view is complemented by individual level theories. Students will also be enabled to discuss, evaluate and apply the fundamentals of E-Business strategy, business models and success factor research and to conceptualize key aspects of electronic markets. Moreover, students will be equipped with the capability to work in a group on a specific problem and to develop solutions for it.

#### Workload:

Total: 180 h

30 h preparation of presentations (self-study)

48 h studying of course content through exercises / case studies (self-study)

30 h studying of course content using literarture (self-study)

30 h studying of course content using provided materials (self-study)

42 h lecture and exercise course (attendance)

Conditions: Working knowledge of English is necess	ssary.	Credit Requirements: Passing the module examination
Frequency: each summer semester	Recommended Semester: 2.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Global E-Business and Electronic Markets (Vorlesung)

Mode of Instruction: lecture

Language: English
Contact Hours: 2

Bakos, Y.: The Emerging Role of Electronic Marketplaces on the Internet, Communications of the ACM, 41(8): 35-42, 1998

Porter, M: Strategy and the Internet, Harvard Business Review, 79(3):63-78, 2001

Shapiro, C.; Varian, H.: Information Rules: A Strategic Guide to the Network Economy, Harvard Business School Press, 1999

Additional literature will be provided in the course.

## Part of the Module: Global E-Business and Electronic Markets (Übung)

Mode of Instruction: exercise course

Language: English Contact Hours: 2

#### Examination

#### **Global E-Business and Electronic Markets**

written exam / length of examination: 60 minutes

#### Description:

# Module WIW-5094: Information Systems Research Information Systems Research

6 ECTS/LP

Version 3.0.0 (since WS18/19)

Person responsible for module: Prof. Dr. Daniel Veit

#### **Learning Outcomes / Competences:**

Upon the successful completion of this module, students have a basic understanding of empirical research in information systems. Topics will be chosen and assigned to students to familiarize them with the information systems research discipline. These topics include IT innovation, IT adoption and continuance, digital strategy, business models, pricing, cloud computing, information privacy, electronic healthcare and others. Students learn how to conduct, write and present a systematic and academic literature review on their individually assigned topic. By doing so, students gain a fundamental understanding of the principles of empirical academic work and obtain the ability to systematically and independently address a research topic. Accordingly, the knowledge and methodological skills acquired in this seminar are a necessary foundation to write a master thesis at the chair. Besides fostering analytical thinking, this seminar will also facilitate the improvement of English skills, as the entire seminar is held in English. Thus, after the successful completion of this module, students will have improved their writing, presentation and discussion skills in English.

#### Workload:

Total: 180 h

42 h seminar (attendance)

108 h preparation of written term papers (self-study)

30 h preparation of presentations (self-study)

Conditions:		Credit Requirements:
Basic knowledge of the topics (e.g., from attending our lectures) is beneficial.Good command of English is useful for understanding the provided literature and preparing presentation and seminar paper.We furthermore recommend attending introductory courses offered by the university library.		Passing the module examination
Frequency: each semester	Recommended Semester: 3.	Minimal Duration of the Module: 1 semester[s]

#### Parts of the Module

Part of the Module: Information Systems Research Seminar

Mode of Instruction: seminar

Language: English Contact Hours: 4

#### Literature:

Initial readings are provided during the seminar.

#### **Assigned Courses:**

Information Systems Research (cohort 2022/23 WS) (seminar)

#### Examination

Information Systems Research Seminar

#### Description:

# **Module WIW-5096: Performance Analysis of Stochastic Systems** *Performance Analysis of Stochastic Systems*

6 ECTS/LP

Version 2.0.0 (since WS16/17)

Person responsible for module: Prof. Dr. Jens Brunner

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

The students are familiar with basic stochastic systems, i.e. discrete-time Markov chains (DTMCs) and continuous-time Markov chains (CTMC), thereupon simulation models and performance analysis. They are able to model problems and to solve these models with appropriate mathematical methods. This enables them to analyze (health care) operations management problems and to make sound decisions in the field of (health care) operations management.

#### Methodological competencies:

Students are able to understand possibilities and difficulties of modelling stochastic systems. They are able to choose the right method for specific problem types and they develop the skills to solve complex problems in demanding problem environments.

#### Interdisciplinary competencies:

Students are able to apply what they have learned to other subjects of their course of study. Students are able to apply these skills in everyday life. In particular, students are familiar with sound decision-making and they are able to translate complex problems into efficient decision-making processes.

#### Key competencies:

Students are able to analyze complex questions from business life and problems from everyday life.

#### Workload:

Total: 180 h

68 h studying of course content using provided materials (self-study)

30 h studying of course content through exercises / case studies (self-study)

40 h studying of course content using literarture (self-study)

42 h lecture and exercise course (attendance)

Conditions: (Advanced) Knowledge in operations management, mathematics (including Linear Programming), and statistics, knowlegde in simulation (e.g. Arena) software is an advantage.		Credit Requirements: Passing the module examination
Frequency: each winter semester	Recommended Semester: 1 3.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Performance Analysis of Stochastic Systems (Vorlesung)

Mode of Instruction: lecture

Language: English
Contact Hours: 2

Stewart, W.J.:Probability, Markov Chains, Queues, and Simulation: The Mathematical Basis of Performance Modeling, Princeton University Press.

Hall, R.W.: Queueing Methods for Services and Manufacturing, Prentice Hall.

Gross, D. and Harris C.M.: Queueing Theory, John Wiley & Sons.

Banks, J. Carson, J.S., Nelson, B.L. und Nicol, D.M.: Discrete-Event System Simulation, Prentice Hall.

Latest versions of the books are relevant. Other literature will be announced in the course.

#### **Assigned Courses:**

Performance Analysis of Stochastic Systems (lecture + exercise)

Part of the Module: Performance Analysis of Stochastic Systems (Übung)

Mode of Instruction: exercise course

Language: English Contact Hours: 2

#### **Assigned Courses:**

Performance Analysis of Stochastic Systems (lecture + exercise)

#### **Examination**

#### **Performance Analysis of Stochastic Systems**

written exam / length of examination: 60 minutes

#### Description:

# **Module WIW-5099: Advanced Topics in Modeling and Optimization**

6 ECTS/LP

Advanced Topics in Modeling and Optimization

Version 2.6.0 (since SoSe17)

Person responsible for module: Prof. Dr. Jens Brunner

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

Students are familiar with optimization problems arising in many practical applications and functional areas. They are able to model these problems mathematically, and to understand the problem complexity.

#### Methodological competencies:

Students are able to implement their models in IBM ILOG in order to solve the problems and interpret the solutions. Additionally, the students will gain insight into scripting tools within ILOG such as pre-/postprocessing data, interaction with databases, and flow control in order to tackle more advanced modeling problems.

#### Interdisciplinary competencies:

Students are able to apply what they have learned to other subjects of their course of study. Students are able to apply these skills in everyday life. In particular, students develop skills for critical understanding of the capabilities and limitations of the utilized methods, which can be applied to other situations in life.

#### Key competencies:

Students are able to analyze questions from business life and problems from everyday life. In doing so, they develop critical thinking skills. Students develop the skills to present achieved results. Finally, they are able to make sound decisions in complex situations.

#### Workload:

Total: 180 h

42 h seminar (attendance)

20 h studying of course content using provided materials (self-study)

78 h studying of course content through exercises / case studies (self-study)

40 h preparation of presentations (self-study)

Conditions:  (Advanced) Knowledge in operations management modeling, mathematics (including Linear Programming); knowledge in optimization software (e.g. IBM ILOG) is assumed; knowledge of a programming language (e.g. Java) is beneficial.		Credit Requirements: Passing the module examination
Frequency: each winter semester	Recommended Semester: 1 3.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Advanced Topics in Modeling and Optimization

Mode of Instruction: seminar

Language: English

Frequency: each semester

Contact Hours: 4 ECTS Credits: 6.0

Domschke, W. und A. Drexl: Einführung in Operations Research. 8. Aufl., Springer Verlag, Berlin.

Domschke, W.; A. Drexl, R. Klein, A. Scholl und S. Voß: Übungen und Fallbeispiele zum Operations Research. 7. Aufl., Springer-Verlag, Berlin.

Latest versions of the books are relevant. Other literature will be announced in the course.

#### **Examination**

#### **Advanced Topics in Modeling and Optimization**

written/oral exam

#### Description:

Every year

homework and presentation

## Module WIW-5101: Integer Programming

6 ECTS/LP

Integer Programming

Version 2.0.0 (since SoSe17)

Person responsible for module: Prof. Dr. Jens Brunner

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

The students are familiar with optimization problems arising in many practical health care applications and functional areas. They are able to model problems, to understand the problem complexity, and to apply appropriately (exact and heuristic) solution approaches to solve their complex research problems at hand.

#### Methodological competencies:

Students are able to review of linear programming and its methods. They understand integer programming model formulations and computational complexity. They are able to describe and use solving methods such as cutting plane methods, branch and bound and its variations or (meta-) heuristic methods.

#### Interdisciplinary competencies:

Students are able to apply what they have learned to other subjects of their course of study. Students are able to apply these skills in everyday life. In particular, students are familiar with sound decision-making and they are able to translate complex problems into efficient decision-making processes.

#### Key competencies:

Students are able to analyze complex questions from business life and problems from everyday life.

#### Workload:

Total: 180 h

42 h lecture and exercise course (attendance)

60 h studying of course content using provided materials (self-study)

60 h studying of course content using literarture (self-study)

18 h studying of course content through exercises / case studies (self-study)

Conditions:  (Advanced) Knowledge in operations management, mathematics (including Linear Programming), and statistics.		Credit Requirements: Passing the module examination
Frequency: each summer semester	Recommended Semester: 1 3.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Integer Programming (Vorlesung)

Mode of Instruction: lecture

Language: English
Contact Hours: 2

#### Literature:

Nemhauser GL and Wolsey LA: Integer and Combinatorial Optimization, Wiley.

Wolsey LA: Integer Programming, Wiley.

Winston WL: Operations Research, 5th ed., Thomson.

Latest versions of the books are relevant. Other literature will be announced in the course.

Part of the Module: Integer Programming (Übung)

Mode of Instruction: exercise course

Language: English Contact Hours: 2

**Examination** 

Integer Programming

written exam

Description:

every year

# Module WIW-5102: Advanced Management Support Advanced Management Support

Version 3.2.0 (since SoSe17)

Person responsible for module: Prof. Dr. Marco Meier

## **Learning Outcomes / Competences:**

The main objective of this module is that students are familiar with current problems as well as selected theories and methods in order to gain the capability to create human-centered information systems for management support. Upon successful completion of this module, students are able to:

#### Subject-related skills:

- understand the challenges as well as the opportunities of management support today and in the future - explain key characteristics of management support systems - give an overview of current research topics in the field of management support

#### Methodical skills:

- · extract and integrate essential facts from scientific as well as other sources
- · foster reflection processes as well as (group) decisions

## Interdisciplinary skills:

- · define clear goals
- · identify problems in complex systems orderly

#### Soft skills:

- · communicate effectively in oral as well as in written form
- reflect self-critically on experiences and learning outcomes, especially from ethical and sustainability perspectives.

## Remarks:

It is recommended to visit this lecture if you intend to write a master's thesis that is advised by the professorship for Business & Information Systems Engineering, in particular Management Support (Prof. Dr. Marco C. Meier).

#### Workload:

Total: 180 h

69 h studying of course content through exercises / case studies (self-study)

30 h studying of course content using literarture (self-study)

39 h studying of course content using provided materials (self-study)

42 h lecture and exercise course (attendance)

Conditions:	Credit Requirements:	
Fundamental knowledge about the purpose of management support systems, current challenges in decision making, data transformation, multidimensional data modeling as well as analytics.		Passing the module examination
Frequency: each summer semester Recommended Semester: from 2.		Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

6 ECTS/LP

Part of the Module: Advanced Management Support (Vorlesung)

Mode of Instruction: lecture

Language: English Contact Hours: 2

## Literature:

Relevant readings will be published at the beginning of the module in the learning platform Digicampus.

Part of the Module: Advanced Management Support (Übung)

Mode of Instruction: exercise course

Language: English Contact Hours: 2

#### **Examination**

## **Advanced Management Support**

written exam / length of examination: 60 minutes

## Description:

every semester

## Module WIW-5123: Services Marketing: Case Studies

Services Marketing: Case Studies

6 ECTS/LP

Version 2.0.0 (since WS16/17)

Person responsible for module: Prof. Dr. Michael Paul

#### **Learning Outcomes / Competences:**

After the successful participation in this module, students are able to understand current theories, methods, and managerial tools of services marketing. In particular, they are able to apply research methods and managerial tools to solve case studies and are able to create novel managerial insights in a services marketing context. Students are able to integrate information and to deal with complexity and limited information. They are able to acquire knowledge, information, and skills independently and to write sound case reports. Students can apply their knowledge on methods and managerial tools to several business problems beyond this module. Overall, students are able to conduct case study projects in a largely autonomous way and to clearly defend their position towards managers, experts, and others on an academic level.

#### Workload:

Total: 180 h

20 h studying of course content using literarture (self-study)

46 h studying of course content through exercises / case studies (self-study)

40 h preparation of presentations (self-study)

28 h preparation of written term papers (self-study)

4 h studying of course content using provided materials (self-study)

42 h seminar (attendance)

Conditions: Basic methodological skills and basic descriptive and inductive statistics, reservices marketing).		
Frequency: each winter semester  Recommended Semester: 1 3.		Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Services Marketing: Case Studies

Mode of Instruction: seminar

**Language:** English **Contact Hours:** 4

#### Literature:

To be announced in the first session.

#### **Assigned Courses:**

Services Marketing: Case Studies (seminar)

#### **Examination**

**Services Marketing: Case Studies** 

# Description: jährlich

## Module WIW-5124: New Media Marketing: Research (Master)

New Media Marketing: Research (Master)

6 ECTS/LP

Version 2.1.0 (since WS16/17)

Person responsible for module: Prof. Dr. Michael Paul

#### **Learning Outcomes / Competences:**

After the successful participation in this module, students are able to understand current theories and methods of new media marketing research. In particular, they are able to apply scientific methods to create novel insights in new media marketing research. Students are able to integrate knowledge and to deal with complexity and limited information. They are able to acquire knowledge and skills independently and to write sound conceptual or empirical research papers. Students can apply their knowledge on scientific methods to any research problem beyond this module. Overall, students are able to conduct research projects in a largely autonomous way and to clearly defend their position towards experts and others on an academic level.

#### Workload:

Total: 180 h

15 h preparation of presentations (self-study)

70 h preparation of written term papers (self-study)

42 h seminar (attendance)

8 h studying of course content using provided materials (self-study)

40 h studying of course content using literarture (self-study)

5 h studying of course content through exercises / case studies (self-study)

Conditions: Basic knowledge of marketing.		Credit Requirements: Passing the module examination
Frequency: each winter semester	Recommended Semester: 1 3.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: New Media Marketing: Research

Mode of Instruction: seminar

Language: English Contact Hours: 4

#### Literature:

To be announced in the first session.

## **Assigned Courses:**

New Media Marketing: Research (Master) (seminar)

## **Examination**

New Media Marketing: Research

Description: every year

## Module WIW-5134: New Media Marketing: Case Studies

New Media Marketing: Case Studies

6 ECTS/LP

Version 2.1.0 (since SoSe17)

Person responsible for module: Prof. Dr. Michael Paul

#### **Learning Outcomes / Competences:**

After the successful participation in this module, students are able to understand current theories, methods, and managerial tools of new media marketing. In particular, they are able to apply research methods and managerial tools to solve case studies and are able to create novel managerial insights in a new media marketing context. Students are able to integrate information and to deal with complexity and limited information. They are able to acquire knowledge, information, and skills independently and to write sound case reports. Students can apply their knowledge on methods and managerial tools to several business problems beyond this module. Overall, students are able to conduct case study projects in a largely autonomous way and to clearly defend their position towards managers, experts, and others on an academic level.

#### Workload:

Total: 180 h

42 h seminar (attendance)

- 4 h studying of course content using provided materials (self-study)
- 40 h preparation of presentations (self-study)
- 28 h preparation of written term papers (self-study)
- 20 h studying of course content using literarture (self-study)
- 46 h studying of course content through exercises / case studies (self-study)

#### **Conditions:**

Basic knowledge of methods and fundamentals of marketing from bachelor's degree (especially descriptive and inductive statistics, regression analysis, marketing research, new media marketing if applicable)

marketing research, new media marketing in applicable)		
Frequency: each summer semester	Recommended Semester:	Minimal Duration of the Module:
	2 4.	1 semester[s]
Contact Hours:	Repeat Exams Permitted:	
4	according to the examination	
	regulations of the study program	

#### Parts of the Module

Part of the Module: New Media Marketing: Case Studies

Mode of Instruction: seminar

Language: English
Contact Hours: 4

#### Literature:

To be announced in the first session.

## Examination

**New Media Marketing: Case Studies** 

portfolio exam

Description:

every year

## Module WIW-5135: Advanced Value Based Marketing

6 ECTS/LP

Advanced Value Based Marketing

Version 4.0.0 (since SoSe17)

Person responsible for module: Prof. Dr. Michael Paul

#### **Learning Outcomes / Competences:**

After the successful participation in this module, students are able to understand important concepts, theories, and methods of advanced value based marketing with a focus on the brand asset. In particular, they understand brand concepts and theories, brand strategies, and methods for measuring brand performance. Students apply the concepts, theories, and methods to reflect and discuss case studies and research findings, generate ideas for research, and to develop research designs. They can apply their knowledge on performance measurement and research designs to any topic where they are applicable. Overall, students are able to critically analyze and evaluate phenomena related to the management of brands and to create solutions for business and research problems in a largely autonomous way. They are able to exchange their ideas with experts and others on an academic level.

#### Workload:

Total: 180 h

42 h lecture and exercise course (attendance)

8 h preparation of presentations (self-study)

30 h studying of course content using literarture (self-study)

12 h studying of course content through exercises / case studies (self-study)

88 h studying of course content using provided materials (self-study)

#### **Conditions:**

Basic knowledge of methods and fundamentals of marketing from bachelor studies (especially descriptive and inductive statistics, ANOVA, regression analysis, marketing research).

Frequency: each summer semester	Recommended Semester: from 2.	Minimal Duration of the Module: 1 semester[s]
Contact Hours: 4	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Advanced Value Based Marketing (Vorlesung)

Mode of Instruction: lecture

Language: English Contact Hours: 2

#### Literature:

Keller, Kevin Lane (2013), Strategic Brand Management. Building, Measuring, and Managing Brand Equity, 4th ed., Upper Saddle River, NJ: Pearson.

Sattler, Henrik and Franziska Völckner (2013), Markenpolitik, 3. Aufl., Stuttgart: Kohlhammer.

Part of the Module: Advanced Value Based Marketing (Übung)

Mode of Instruction: exercise course

Language: English
Contact Hours: 2

## **Examination**

## **Advanced Value Based Marketing**

portfolio exam / length of examination: 60 minutes

## Description:

## Module WIW-5136: Services Marketing: Research (Master)

Services Marketing: Research (Master)

6 ECTS/LP

Version 2.0.0 (since SoSe17)

Person responsible for module: Prof. Dr. Michael Paul

#### **Learning Outcomes / Competences:**

After the successful participation in this module, students are able to understand current theories and methods of services marketing research. In particular, they are able to apply scientific methods to create novel insights in services marketing research. Students are able to integrate knowledge and to deal with complexity and limited information. They are able to acquire knowledge and skills independently and to write sound conceptual or empirical research papers. Students can apply their knowledge on scientific methods to any research problem beyond this module. Overall, students are able to conduct research projects in a largely autonomous way and to clearly defend their position towards experts and others on an academic level.

#### Workload:

Total: 180 h

8 h studying of course content using provided materials (self-study)

40 h studying of course content using literarture (self-study)

70 h preparation of written term papers (self-study)

5 h studying of course content through exercises / case studies (self-study)

15 h preparation of presentations (self-study)

42 h seminar (attendance)

Conditions:  Basic knowledge of methods and fundamentals of marketing from Bachelor's degree (especially descriptive and inductive statistics, regression analysis, marketing research, if applicable services marketing)		Credit Requirements: Passing the module examination
Frequency: each summer semester Recommended Semester: 2 4.		Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

## Parts of the Module

Part of the Module: Services Marketing: Research

Mode of Instruction: seminar

Language: English
Contact Hours: 4

#### Literature:

To be announced in the first session.

#### **Examination**

Services Marketing: Research

portfolio exam **Description**:

every year

term paper, presentation and discussion participation

## Module WIW-5137: Corporate Governance: Concepts

Corporate Governance: Konzepte

6 ECTS/LP

Version 4.2.0 (since SoSe20)

Person responsible for module: Prof. Dr. Erik Lehmann

#### **Learning Outcomes / Competences:**

The aim of the course is to enable students to know, analyze and apply different concepts of corporate governance in the context of (corporate) entrepreneurship. Theoretical aspects as well as thoughts behind will be highlighted and students will learn to understand and evaluate their impact on performance. Of particular focus will be key governance theories, the role and influence of market and institutional mechanisms and future developments within the field. Overall, students should learn to use and interpret governance concepts as well as to apply them to concrete situations.

#### Remarks:

Open to German students as well as Erasmus/Incoming/Freemovers

#### Workload:

Total: 180 h

48 h studying of course content using provided materials (self-study)

42 h lecture (attendance)

90 h preparation of written term papers (self-study)

Conditions:		
-		
Frequency: each summer semester	Recommended Semester:	Minimal Duration of the Module:
	from 2.	1 semester[s]
Contact Hours:	Repeat Exams Permitted:	
4	according to the examination	
	regulations of the study program	

#### Parts of the Module

Part of the Module: Corporate Governance: Konzepte

Mode of Instruction: lecture

Language: English Contact Hours: 4

## Literature:

Adams, R, Hermalin BE and MS Weisbach (2010): The Role of Boards of Directors in Corporate Governance: A Conceptual Framework and Survey, Journal of Economic Literature 48, 55-107.

Audretsch DB and EE Lehmann (2011), "Introduction", in: Audretsch/Lehmann (eds): Corporate Governance in Small and Medium-Sized Firms, Edward Elgar.

Audretsch DB and EE Lehmann (2013), "Corporate Governance in Newly Listed Firms", in: Levis/Vismara (eds): Handbook of Research on IPO, Edward Elgar (forthcoming).

Gabrielsson, J. (2017). Handbook of research on corporate governance and entrepreneurship.

Edward Elgar Publishing. Hart, O (2011): Thinking about the Firm: A Review of Daniel Spulbers "The Theory of the Firm", Journal of Economic Literature, p. 101-113. (in particular pp 101-108).

Jensen, MC and WH Meckling (1976): Theory of the Firm: Managerial behavior, Agency Costs, and Ownership Structure, Journal of Financial economics 3, 305-360.

Morris, M. H., Kuratko, D. F., & Covin, J. G. (2010). Corporate entrepreneurship & innovation. Cengage Learning. Shleifer A and R Vishney (1997): A Survey of Corporate Governance, Journal of Finance 52, 737-780.

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Corporate Governance: Konzepte

term paper

Description:

every year

## Module WIW-5138: Advanced Services Marketing

6 ECTS/LP

Advanced Services Marketing

Version 4.1.0 (since WS16/17)

Person responsible for module: Prof. Dr. Michael Paul

#### **Learning Outcomes / Competences:**

After the successful participation in this module, students are able to understand important concepts, theories, and methods of services marketing. In particular, they understand the management of people involved in service delivery (i.e., frontline employees and customers) and experimentation in services marketing. Students apply the concepts and theories to reflect and discuss case studies and research findings, generate ideas for research, and develop experimental research designs. They can apply their knowledge on research designs to any topic where experimentation is applicable. Overall, students are able to critically analyze and evaluate phenomena at the service employee-customer interface and to create solutions for business and research problems in a largely autonomous way. They are able to exchange their ideas with experts and others on an academic level.

#### Workload:

Total: 180 h

26 h studying of course content using literarture (self-study)

84 h studying of course content using provided materials (self-study)

42 h lecture and exercise course (attendance)

16 h preparation of presentations (self-study)

12 h studying of course content through exercises / case studies (self-study)

Conditions:  Basic methodological skills and basic knowledge of marketing (e.g., descriptive and inductive statistics, ANOVA, regression analysis, marketing research, services marketing).		Credit Requirements: Passing the module examination
Frequency: each winter semester  Recommended Semester:  1 3.		Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Advanced Services Marketing (Vorlesung)

Mode of Instruction: lecture

Language: English Contact Hours: 2

#### Literature:

Bordoloi, Sanjeev, James A. Fitzsimmons, and Mona J. Fitzsimmons (2019), Service Management: Operations, Strategy, and Information Technology, 9th ed., NY: McGraw-Hill.

Shadish, William R., Thomas D. Cook, and Donald T. Campbell (2002), Experimental and Quasi-Experimental Designs for Generalized Causal Inference, 1st ed., Boston: Houghton Mifflin.

Zeithaml, Valerie M., Mary Jo Bitner, and Dwayne D. Gremler (2020), Services Marketing - Integrating Customer Focus across the Firm, 4th ed., London: McGraw-Hill.

#### **Assigned Courses:**

Advanced Services Marketing (lecture + exercise)

Part of the Module: Advanced Services Marketing (Übung)

Mode of Instruction: exercise course

**Language:** English **Contact Hours:** 2

**Assigned Courses:** 

Advanced Services Marketing (lecture + exercise)

**Examination** 

**Advanced Services Marketing** 

written exam

Description:

every semester

Module WIW-5147: Summer School on Global Perspectives of Public and Private Sector Interaction II	6 ECTS/LP
Summer School on Global Perspectives of Public and Private Sector Interaction II	

Version 2.0.0 (since SoSe17)

Person responsible for module: Prof. Dr. Erik Lehmann

#### **Learning Outcomes / Competences:**

In this seminar course taught in English, students learn the content-related and methodological basics that are required for potential specialists and managers to evaluate "controversial" economic issues that need to be clarified with regard to their ethical relevance and moral consequences. Using various economic regions as examples, students learn to apply the knowledge they have gained about the economic development of regions and to plan and justify strategies and activities that can be implemented. The insights gained in this process enable students to:

## Subject-related competencies:

- explain regional economic development in the context of strategic management.
- identify social, economic, and sustainability factors that influence the economic development of a region and to develop context-based solution strategies based on these factors.

#### Methodological competencies:

- systematically analyze a region using theoretical frameworks in the fields of "Factors of Production", "Spatial & Organizational Dimension" and "Human Dimension".
- · develop and present strategies for promoting the economic region based on theoretical knowledge.

## Interdisciplinary competencies:

- work in interdisciplinary and international teams to solve regional problems using action-oriented policy recommendations.
- look at problems in other subject areas from the perspective of path-dependent developments.

#### Key competencies:

- work in a goal-oriented manner in an international team environment, especially with regard to different disciplines.
- independently design long-term strategies.
- self-critically discuss work progress and team experiences/dynamics in feedback sessions.

#### Remarks:

Restriction on participation

#### Workload:

Total: 180 h

28 h studying of course content using literarture (self-study)

20 h preparation of presentations (self-study)

90 h preparation of written term papers (self-study)

42 h seminar (attendance)

		Credit Requirements: Passing the module examination
Frequency: each summer semester Recommended Semester: 2 4.		Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

Part of the Module: Summer School on Global Perspectives of Public and Private Sector Interaction

Mode of Instruction: seminar

Language: English Contact Hours: 4

## Literature:

Audretsch, David. Everything in Its Place: Entrepreneurship and the Strategic Management of Cities, Regions, and States. New York: Oxford University Press, (2015).

Audretsch, David; Lehmann, Erik. The seven secrets of Germany. Economic Resilience in an Era of Global Turbulence. New York: Oxford University Press, (2016).

#### **Examination**

Summer School on Global Perspectives of Public and Private Sector Interaction

## Description:

#### Module WIW-5160: Health Economics

Gesundheitsökonomik - Health Economics

6 ECTS/LP

Version 2.4.0 (since SoSe17 to SoSe22)

Person responsible for module: Prof. Dr. Robert Nuscheler

#### **Learning Outcomes / Competences:**

#### Professional competences:

Students are able to analyze insurance markets and to determine the equilibrium of the insurance market under alternate information constraints and equilibrium concepts. They will be able to distinguish between important market failures in health insurance markets, namely, the free-riding problem, adverse selection, ex ante moral hazard, and ex post moral hazard. Students will be able to pin down the respective market failures and to develop public policy responses that are suited to mitigate the associated welfare losses. Moreover, students need to understand the problem of risk selection in regulated competitive health insurance markets and be aware of the prime policy responses that aim at reducing the health insurers' incentives to engage in risk selection, namely, risk adjustment and risk sharing. Students will be able to explain that imperfect risk adjustment requires a tradeoff between the inefficiencies arising from direct and indirect risk selection. Finally, students understand the principles of the political economy of health care financing and are familiar with the most important financing aspects of the German health care system.

#### Methodological competences:

After completing this course, students will be able to apply the concepts of welfare economics, information economics and incentives to health insurance markets and to health care financing more generally. This includes the identification of market failures and the development of suited public policy responses. The presentation of empirical research papers enables students to apply their econometric competences to assess the validity of hypotheses derived from economic theory.

#### Interdisciplinary skills:

A solid understanding of welfare economics and information economics is crucial for understanding the pitfalls and challenges in the field of health economics and beyond. After all, many markets of public concern are plagued by information constraints, e.g., the labor market and, rather generally, markets for goods with imperfect competition. The methods acquired in this course can easily be applied to these markets.

#### Key competences:

Students are able to analyze relevant markets, assess their efficiency properties, and suggest - if necessary - optimal public policy responses or regulations. As part of this, students are able to reduce research questions to their core, analyze them using modern microeconomic theory, and competently present and defend their results.

#### Workload:

Total: 180 h

60 h studying of course content using provided materials (self-study)

50 h studying of course content using literarture (self-study)

28 h studying of course content through exercises / case studies (self-study)

42 h lecture and exercise course (attendance)

## Conditions:

A solid understanding of the concepts of microeconomics and constrained optimization is an advantage. Ideally, participants should have attended the course "Mikroökonomik (Master)" (Advanced Microeconomics). While the content of the lecture is largely applied micro economic theory, the assigned research papers for presentations will have an empirical focus. Basic knowledge of econometrics is an advantage. Participation in the course "Mikroökonometrie" (Microeconometrics) is recommended.

#### **Credit Requirements:**

Passing the module examination

Frequency: each summer semester	Recommended Semester: 2.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted:	
4	according to the examination regulations of the study program	

Part of the Module: Gesundheitsökonomik - Health Economics (Vorlesung)

Mode of Instruction: lecture

Language: English Contact Hours: 2

## Literature:

Zweifel, Breyer und Kifmann (2009): Health Economics, 2nd edition. Springer-Verlag, Heidelberg.

Supplementary material will be announced in class.

Part of the Module: Gesundheitsökonomik - Health Economics (Übung)

Mode of Instruction: exercise course

Language: English Contact Hours: 2

#### **Examination**

#### Gesundheitsökonomik

portfolio exam **Description**:

every semester

Presentation, mid and end examination

# Module WIW-5200: Management: Innovation and International Business

6 ECTS/LP

Management: Innovation and International Business

Version 2.2.0 (since SoSe17)

Person responsible for module: Prof. Dr. Marcus Wagner

## **Learning Outcomes / Competences:**

On successful completion of this module students should be able to understand selected topics of strategic management related to sustainably supporting innovation and international business. Furthermore, students should be able to apply theoretical concepts to novel and complex situations provided in case studies to develop and evaluate feasible solutions to identified problems. Students should be able to apply presentation techniques to present their own work and to understand and evaluate the work of their fellows.

#### Remarks:

Note: We recommend visiting "Management: Innovation and international Business" BEFORE visiting "Management: Globale Nachhaltigkeit". The password for the registration and further information will be provided in the first lecture.

#### Workload:

Total: 180 h

40 h studying of course content through exercises / case studies (self-study)

54 h studying of course content using literarture (self-study)

16 h preparation of presentations (self-study)42 h lecture and exercise course (attendance)

28 h studying of course content using provided materials (self-study)

Conditions: There are no prerequisites.		Credit Requirements: Passing the module examination
Frequency: each summer semester	Recommended Semester: 2 3.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Management: Innovation and International Business (Vorlesung)

Mode of Instruction: lecture

Language: English Contact Hours: 2

#### Literature:

Helfat, C. E., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D., & Winter, S. G. (2007). Dynamic capabilities: Understanding strategic change in organizations. John Wiley & Sons.

Case studies will be announced as approriate.

Part of the Module: Management: Innovation and International Business (Übung)

Mode of Instruction: exercise course

Language: English Contact Hours: 2

## **Examination**

Management: Innovation and International Business

written exam

Description:

every year

## Module WIW-5202: Management: Research (English)

Management: Research (english)

6 ECTS/LP

Version 2.5.0 (since SoSe17)

Person responsible for module: Prof. Dr. Marcus Wagner

#### **Learning Outcomes / Competences:**

On successful completion of this module students should be able to understand existing literature on selected topics. Furthermore, students should be able to apply theoretical concepts to research fields and to analyze them with their own explanatory model or through empirical evaluation. Students should be able to apply theories to abstract from secondary influence factors, think in a causal manner and to operationalize and use theoretical constructs in empirical analyses. Students should be able to apply presentation techniques to present their own work and to understand the work of their fellows.

#### Remarks:

Ausschlusskriterium: Studierende, welche die Veranstaltung "Master Seminar Innovation & International Management (english)" bereits abgelegt haben können die Veranstaltung "Management: Research (english)" nicht ablegen. Exclusion criterion: Students who have already passed the module "Master seminar "innovation & international management" (english)" can not take the module "Management: Research (english)".

#### Workload:

Total: 180 h

35 h studying of course content using literarture (self-study)

35 h preparation of presentations (self-study)

68 h preparation of written term papers (self-study)

42 h seminar (attendance)

Conditions:		Credit Requirements:
Prerequisites for attending the seminar	Prerequisites for attending the seminar are a library introduction course and	
the attendance at the modules "Manage	the attendance at the modules "Management: Globale Nachhaltigkeit" and	
"Management: Innovation and International Business"		
Frequency: each semester	Recommended Semester:	Minimal Duration of the Module:
	from 3.	1 semester[s]
Contact Hours:	Repeat Exams Permitted:	
4	according to the examination	
	regulations of the study program	

#### Parts of the Module

Part of the Module: Management: Research (english)

Mode of Instruction: seminar

Language: English Contact Hours: 4

## Literature:

Will be announced on a case-by-case basis as approriate.

#### **Examination**

Management: Research (english)

Description:

every semester

# Module WIW-5243: Machine Learning in Health Care Machine Learning in Health Care

6 ECTS/LP

Version 1.2.0 (since SoSe19)

Person responsible for module: Prof. Dr. Jens Brunner

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

Students understand the concepts of supervised and unsupervised learning as well as regression and classification problems. Moreover, they are familiar with the most effective machine learning techniques, underlying mathematical concepts and crucial performance indicators.

#### Methodological competencies:

Students are able to program in Python and they understand the theoretical background of supervised machine learning methodologies such as linear regression, logistic regression or neural networks, as well as the basics in unsupervised learning.

## Interdisciplinary competencies:

Students are able to apply what they have learned to other subjects of their course of study. Students are able to apply these skills in everyday life. In particular, students develop skills for critical understanding of the capabilities and limitations of the utilized methods, which can be applied to other situations in life and they are able to work with scientific literature and present complex research.

#### Key competencies:

Students are able to analyze questions from business life and problems from everyday life. In doing so, they develop critical thinking skills. Students develop the skills to present achieved results. They are able to make sound decisions in complex situations and they are familiar with an often used programming language.

#### Workload:

Total: 180 h

42 h seminar (attendance)

78 h studying of course content through exercises / case studies (self-study)

40 h preparation of presentations (self-study)

20 h studying of course content using provided materials (self-study)

Conditions: (Advanced) Knowledge in mathematics, particularly linear algebra and stochastics; knowledge of a programming language (e.g. Python) is beneficial; interest in health care applications and team.		Credit Requirements: Passing the module examination
Frequency: each summer semester	Recommended Semester: 1 3.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

#### Parts of the Module

Part of the Module: Machine Learning in Health Care

Mode of Instruction: seminar

Language: English
Contact Hours: 4

#### Literature:

Christopher M. Bishop: Pattern Recognition and Machine Learning. Springer Verlag, 2006.

Andrew Ng: Machine Learning. Stanford University. Online on Coursera: https://www.coursera.org/learn/machine-learning

Google Developers: Machine Learning Crash Course. Online: https://developers.google.com/machine-learning/crash-course

Prashant Natarajan, John C. Frenzel, Detlev H. Smaltz: Demystifying Big Data and Machine Learning for Healthcare. CRC Press, 2017.

Stephen Boyd: Introduction to Applied Linear Algebra -

Vectors, Matrices, and Least Squares. Cambridge University Press, 2017. Online: http://vmls-book.stanford.edu/vmls.pdf

Barry M. Wise, Neal B. Gallagher: An Introduction to Linear Algebra. Online: http://www.eigenvector.com/Docs/LinAlg.pdf

Eric Matthes: Python Crash Course. No Starch Press, 2016.

Official Python tutorial. Online: https://docs.python.org/3/tutorial

Interactive Python tutorial. Online: https://www.learnpython.org/

Other literature will be announced in the course.

#### **Examination**

#### Machine Learning in Health Care

#### Description:

## Module WIW-5252: Health Economics - Financing

Health Economics - Financing

6 ECTS/LP

Version 1.0.0 (since WS15/16)

Person responsible for module: Prof. Dr. Robert Nuscheler

#### **Learning Outcomes / Competences:**

## Professional competences:

Students are able to analyze insurance markets and to determine the equilibrium of the insurance market under alternate information constraints and equilibrium concepts. They will be able to distinguish between important market failures in health insurance markets, namely, the free-riding problem, adverse selection, ex ante moral hazard, and ex post moral hazard. Students will be able to pin down the respective market failures and to develop public policy responses that are suited to mitigate the associated welfare losses. Moreover, students need to understand the problem of risk selection in regulated competitive health insurance markets and be aware of the prime policy responses that aim at reducing the health insurers' incentives to engage in risk selection, namely, risk adjustment and risk sharing. Students will be able to explain that imperfect risk adjustment requires a tradeoff between the inefficiencies arising from direct and indirect risk selection. Finally, students understand the principles of the political economy of health care financing and are familiar with the most important financing aspects of the German health care system.

#### Methodological competences:

After completing this course, students will be able to apply the concepts of welfare economics, information economics and incentives to health insurance markets and to health care financing more generally. This includes the identification of market failures and the development of suited public policy responses. The presentation of empirical research papers enables students to apply their econometric competences to assess the validity of hypotheses derived from economic theory.

#### Interdisciplinary skills:

A solid understanding of welfare economics and information economics is crucial for understanding the pitfalls and challenges in the field of health economics and beyond. After all, many markets of public concern are plagued by information constraints, e.g., the labor market and, rather generally, markets for goods with imperfect competition. The methods acquired in this course can easily be applied to these markets.

#### Key competences:

Students are able to analyze relevant markets, assess their efficiency properties, and suggest - if necessary - optimal public policy responses or regulations. As part of this, students are able to reduce research questions to their core, analyze them using modern microeconomic theory, and competently present and defend their results.

#### Workload:

Total: 180 h

42 h lecture and exercise course (attendance)

50 h studying of course content using literarture (self-study)

28 h studying of course content through exercises / case studies (self-study)

60 h studying of course content using provided materials (self-study)

## Conditions:

A solid understanding of the concepts of microeconomics and constrained optimization is an advantage. Ideally, participants should have attended the course "Mikroökonomik (Master)" (Advanced Microeconomics). While the content of the lecture is largely applied micro economic theory, the assigned research papers for presentations will have an empirical focus. Basic knowledge of econometrics is an advantage. Participation in the course "Mikroökonometrie" (Microeconometrics) is recommended.

## **Credit Requirements:**

Bestehen der Modulprüfung

Frequency: each summer semester	Recommended Semester: from 2.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

Part of the Module: Health Economics - Financing

Mode of Instruction: lecture + exercise

Language: English

## Literature:

Zweifel, Breyer und Kifmann (2009): Health Economics, 2nd edition. Springer-Verlag, Heidelberg.

Supplementary material will be announced in class.

## **Examination**

## **Health Economics – Financing**

portfolio exam

## Description:

Students are evaluated on the basis of an assignment, a paper presentation, and an oral exam. The paper presentation is in English. For the assignment and the oral presentation, students can choose between English and German.

jedes Semester

## Module WIW-5253: Health Economics - Topics

Health Economics - Topics

6 ECTS/LP

Version 1.0.0 (since WS15/16)

Person responsible for module: Prof. Dr. Robert Nuscheler

#### **Learning Outcomes / Competences:**

#### Professional competences:

Students understand what factors and individual traits shape health behaviors and how this relates to the inefficiencies that arise in the presence of health externalities. This includes smoking and the over-use of antibiotics as examples for negative health externalities and vaccinations as an example for positive health externalities. In the context of the latter, students understand the economic epidemiology of infectious diseases and how preventive measures affect the spread of diseases taking Sars-Cov-2 as an example. Students are able to assess the incentive effects of alternative payment schemes for healthcare providers and competently discuss their pros and cons. Students are aware of the most important concepts of the economic evaluation of healthcare services, namely, cost-effectiveness analysis, cost-utility analysis, and cost-benefit analysis. Students can competently discuss the pros and cons of deceases versus living organ donation. The students can identify the differences between different regulations on organ donation (e.g. consent and opt-out) and assess the incentives resulting from these regulations for willingness to donate. Finally, students are aware of the peculiarities of the market for long-term care.

#### Methodological competences:

After completing this course, students will be able to apply the concepts of welfare economics, information economics and incentives to various areas in the field of health economics, including individual health production, health externalities, economic epidemiology, provider payment, economic evaluation, organ donation, and long-term care. This includes the identification of market failures and the development of suited public policy responses. The presentation of empirical research papers enables students to apply their econometric competences to assess the validity of hypotheses derived from economic theory.

#### Interdisciplinary skills:

A solid understanding of welfare economics and information economics is crucial for understanding the pitfalls and challenges in the field of health economics and beyond. After all, many markets of public concern are plagued by information constraints, e.g., the labor market and, rather generally, markets for goods with imperfect competition. The methods acquired in this course can easily be applied to these markets.

#### Key competences:

Students are able to analyze relevant markets, assess their efficiency properties, and suggest - if necessary - optimal public policy responses or regulations. As part of this, students are able to reduce research questions to their core, analyze them using modern microeconomic theory, and competently present and defend their results.

#### Workload:

Total: 180 h

50 h studying of course content using literarture (self-study)

60 h studying of course content using provided materials (self-study)

28 h studying of course content through exercises / case studies (self-study)

42 h lecture and exercise course (attendance)

#### Conditions:

A solid understanding of the concepts of microeconomics and constrained optimization is an advantage. Ideally, participants should have attended the course "Mikroökonomik (Master)" (Advanced Microeconomics). While the content of the lecture is largely applied micro economic theory, the assigned research papers for presentations will have an empirical focus. Basic knowledge of econometrics is an advantage. Participation in the course "Mikroökonometrie" (Microeconometrics) is recommended.

## **Credit Requirements:**

Passing the module examination

Frequency: each winter semester	Recommended Semester: 1 3.	Minimal Duration of the Module: semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination	
	regulations of the study program	

Part of the Module: Health Economics – Topics

Mode of Instruction: lecture + exercise

Language: English
Contact Hours: 4

#### Literature:

will be announced in class

## **Assigned Courses:**

**Health Economics - Topics** (lecture + exercise)

#### **Examination**

## **Health Economics – Topics**

portfolio exam

## **Description:**

every semester

Students are evaluated on the basis of an assignment, a paper presentation, and an oral exam. The paper presentation is in English. For the assignment and the oral presentation, students can choose between English and German.

# Module WIW-5257: Summer School on Strategic Management in the International Context: Public, Private and Nonprofit Organizations II

6 ECTS/LP

Summer School on Strategic Management in the International Context: Public, Private and Nonprofit Organizations II

Version 1.0.0 (since SoSe20)

Person responsible for module: Prof. Dr. Erik Lehmann

#### **Learning Outcomes / Competences:**

This course focuses on the strategic management of organizations in the public, private, and nonprofit sector, with an emphasis on the international context. As internationalization and globalization bring people, nations, and economies of the world ever closer together, there are significant implications for organizations in all three sectors. These effects manifest both inside and outside the organization and are best managed through focused strategic management and planning at all levels of the organization. Examples include digitization and disruption, demographic change, political upheaval, and economic ups and downs, to name just a few. While many principles of strategic management are common knowledge, their application in the international context and in the workplace is less clear. This course offers students the opportunity to build basic knowledge in strategic management and learn what it means for organizations in our global age operating within and across the three sectors of the economy. The insights gained in this process enable students to:

#### Subject-related competencies:

- gain understanding of strategic management theory at the organizational level across all three sectors public, private, and nonprofit.
- gain insight into the complexities of multinational organizations in all three sectors, with a focus on managing diversity, inclusion, and cultural competence in the workplace.

#### Methodological competencies:

- critically analyze the interaction between public policy, government regulation, and strategic management of organizations.
- · examine sustainable and ethical considerations in the context of strategic decision making.

#### Interdisciplinary competencies:

- work in interdisciplinary and international teams to solve organizational problems using action-oriented policy recommendations.
- · look at problems in other subject areas from the perspective of path-dependent developments.

#### Key competencies:

- work in a goal-oriented manner in an international team environment, especially with regard to different disciplines.
- self-critically discuss work progress and team experiences/dynamics in feedback sessions.

#### Remarks:

The number of participants is limited.

#### Workload:

Total: 180 h

42 h seminar (attendance)

90 h preparation of written term papers (self-study)

28 h studying of course content using literarture (self-study)

20 h preparation of presentations (self-study)

		Credit Requirements: Passing the module examination
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Minimal Duration of the Module:
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		semester[s]

Contact Hours:	Repeat Exams Permitted:
4	according to the examination
	regulations of the study program

Part of the Module: Summer School on Strategic Management in the International Context: Public, Private and Nonprofit Organizations II

Mode of Instruction: seminar

Language: English Contact Hours: 4

## Literature:

Audretsch, David; Lehmann, Erik. The Seven Secrets of Germany: Economic Resilience in an Era of Global Turbulence. New York: Oxford University Press, (2015).

Deresky, Helen. International Management: Managing Across Borders and Cultures. 9th edition. New Jersey: Pearson, (2016).

## **Examination**

on Strategic Management in the International Context: Public, Private and Nonprofit Organizations II written/oral exam

## Description:

# **Module WIW-5262: Advanced Topics in Service Operations Management**

6 ECTS/LP

Advanced Topics in Service Operations Management

Version 1.0.0 (since SoSe20)

Person responsible for module: Prof. Dr. Jens Brunner

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

Students are familiar with optimization problems arising in many practical applications and functional areas. They are able to model these problems mathematically, to understand the problem complexity, and to implement their models in order to solve the problems and interpret the solutions.

#### Methodological competencies:

The students are able to assess different modeling approaches and solution approaches in terms of effectiveness and efficiency, and they are able to apply them to a practical setting. This enables them to analyze service operations management problems and to make sound decisions in term of effectiveness and efficiency.

#### Interdisciplinary competencies:

Students are able to apply what they have learned to other subjects of their course of study. Students are able to apply these skills in everyday life. In particular, students develop skills for critical understanding of the capabilities and limitations of the utilized methods, which can be applied to other situations in life and they learn to plan and implement a project on their own.

#### Key competencies:

Students are able to analyze questions from business life and problems from everyday life. In doing so, they develop critical thinking skills. Students develop the skills to present achieved results. Finally, they are able to make sound decisions in complex situations.

#### Workload:

Total: 180 h

28 h studying of course content using provided materials (self-study)

80 h preparation of written term papers (self-study)

30 h preparation of presentations (self-study)

42 h seminar (attendance)

Conditions:		Credit Requirements:
(Advanced) Knowledge in service operations management, operations research, modeling, and mathematics (including Linear Programming); knowledge in optimization (e.g. IBM ILOG) software is assumed; knowledge of a programming language (e.g. Java) is beneficial.		Passing the module examination
Frequency: each semester	Recommended Semester: from 3.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

## Parts of the Module

Part of the Module: Advanced Topics in Service Operations Management

Mode of Instruction: seminar

Language: English Contact Hours: 4

## Literature:

The literature depends on the specific topic of the course.

## **Assigned Courses:**

**Advanced Topics in Service Operations Management** (seminar)

## **Examination**

## **Advanced Topics in Service Operations Management**

written/oral exam

## **Description:**

every semester

## Module WIW-5263: Machine Learning

Machine Learning

6 ECTS/LP

Version 1.0.0 (since WS20/21)

Person responsible for module: Prof. Dr. Yarema Okhrin

#### **Learning Outcomes / Competences:**

#### Subject-related competencies:

After the successful participation in this module, students have a good understanding of the objectives, tools and potential applications of supervised and unsupervised Machine Learning. The students understand the mathematical and statistical background of the models, can apply the discussed techniques in R and interpret the results correctly. Furthermore, the students understand the key steps of a modelling/learning process, its reasoning and requirements.

#### Methodological competencies:

The students learn the key approaches to performance measurement of supervised learning techniques with a focus on the separation between explanatory and predictive modelling. The feature engineering for large data sets is discussed on the example of lasso and elasticnet regressions. The students understand and can apply tree-based models such as regression trees, bagging and random forests as well as models stemming from neural networks, such as MLP, recurrent NN and basics of deep learning. The students can solve classification problems using support vector machines and Bayes' classifiers. Furthermore, ensample models and super learners will be discussed based on the previously learned techniques. Finally, the students become familiar with the most popular ideas and tools of interpretable machine learning, (LIME and Shapley measures). Relying on the methods discussed in the second part of the course the students will be able to apply methods of unsupervised learning for pattern recognition using advanced clustering techniques. The participants can apply and interpret correctly the PCA for the purpose of dimension reduction. From the last part of the module, the students will be familiar with such advanced areas of machine learning for unstructured data as text mining and image processing.

#### Interdisciplinary competencies:

For practical applications, we use the statistical software R. The students can apply the ML methods to solve practical questions of modelling, forecasting or classification for large data with a focus on applications in business and economics. The students can draw economic conclusions from complex ML models and learn the potential of these methods in practice.

#### Key competencies:

The students are able to correctly assess data structures, select appropriate modelling methods and apply them using the software R. Furthermore, they are able to present and interpret the results in a conclusive manner.

#### Workload:

Total: 180 h

42 h lecture and exercise course (attendance)

70 h studying of course content using provided materials (self-study)

34 h studying of course content using literarture (self-study)

34 h studying of course content through exercises / case studies (self-study)		
Conditions:		Credit Requirements:
The key prerequisite for a successful particle background in mathematical and statist with software R. This is covered by the Statistics I/II. A successfully passed Da Econometrics (Master) are of advantag regularly, as well as independent preparecessary.	ical methods and a basic experience modules Mathematics I/II and ta Mining course (Bachelor) and e. The willingness to attend the lecture	Passing the module examination
Frequency: each winter semester Recommended Semester:		Minimal Duration of the Module:
	1 3.	1 semester[s]

[	Contact Hours:	Repeat Exams Permitted:
4	4	according to the examination
		regulations of the study program

Part of the Module: Machine Learning (Übung)

Mode of Instruction: exercise course

Language: English / German

Contact Hours: 2

**Assigned Courses:** 

Machine Learning (Übung) (exercise course)

Part of the Module: Machine Learning (Vorlesung)

**Mode of Instruction:** lecture **Language:** English / German

Contact Hours: 2

#### Literature:

James, Witten, Hastie, Tibshirani (2013): An Introduction to Statistical Learning - with Applications in R, Springer.

 $Hastie, Tibshirani, Friedman \ (2009): The \ Elements \ of \ Statistical \ Learning - Data \ Mining, Inference \ and \ Prediction,$ 

Springer.

Hothorn, Everitt (2014) A Handbook of Statistical Analyses using R, Chapman and Hall/CRC; 3 edition-

Efron and Hastie (2016), Computer Age Statistical Inference: Algorithms, Evidence and Data Science.

Bishop (2007) Pattern Recognition and Machine Learning.

Goodfellow, Bengio, Courville (2017) Deep Learning.

Molnar (2020) Interpretable Machine Learning: A Guide for Making Black Box Models Explainable.

#### **Assigned Courses:**

Machine Learning (lecture)

#### **Examination**

#### **Machine Learning**

written exam

## **Description:**

## Module WIW-5264: Artificial Intelligence in Business

Artificial Intelligence in Business

6 ECTS/LP

Version 1.0.0 (since WS20/21)

Person responsible for module: Prof. Dr. Daniel Veit

#### **Learning Outcomes / Competences:**

Artificial intelligence (AI) is rapidly emerging as the most important and transformative digital technology of our time. Recent advances have led to a rapid proliferation of new approaches that are changing the competitive landscape for companies in almost all industries. Therefore an understanding of this technology is indispensable for future managers

Upon completion of this module students therefore possess basic knowledge of the conceptual and technological foundations of AI and its strategic implications for companies. They can distinguish different types of machine learning as core enablers of AI (e.g., deep learning, neural networks). They are able to formulate strategies for using AI to create value in companies and to apply the appropriate tools and techniques. Students are familiar with the limitations, pitfalls and possible countermeasures when using AI. They are capable of discussing the societal, ethical and legal implications of the use of AI in business.

During the course, the students are divided into heterogeneous teams of 3-6 students. Within these teams they will learn to develop their own strategy to use AI to solve a real business problem. Finally, the teams will compete with their solution against the solutions of the other teams in a pitch towards the company's stakeholders.

#### Remarks:

This course is limited to a maximum of 20 participants. You can find further information on Digicampus.

#### Workload:

Total: 180 h

30 h preparation of presentations (self-study)

108 h preparation of written term papers (self-study)

42 h seminar (attendance)

Conditions:		Credit Requirements:
A basic understanding of organizational processes and information systems in		Passing the module examination
firms. Fundamental knowledge of statistics.		
Frequency: each summer semester	Recommended Semester:	Minimal Duration of the Module:
	1 3.	1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination	
	regulations of the study program	

## Parts of the Module

Part of the Module: Artificial Intelligence in Business

Mode of Instruction: seminar

Language: English Contact Hours: 4

## Literature:

Initial readings are provided during the course.

#### **Examination**

#### Artificial Intelligence in Business

#### Description:

## Module WIW-5268: Topics in Behavioural Controlling

Topics in Behavioural Controlling

6 ECTS/LP

Version 1.0.0 (since WS21/22)

Person responsible for module: Prof. Dr. Jennifer Kunz

#### **Learning Outcomes / Competences:**

#### Subject-related competencies

After successfully completing this module, students will be able to critically evaluate scientific texts and understand the use of different methodological approaches in research on management accounting and management control systems.

#### Methodological competencies

Students can practice the critical use of scientific knowledge and develop their discursive skills. After successful participation in this course, students also understand the use of different methodological approaches.

## Interdisciplinary competencies

After successfully completing this module, students acquire analytical skills that are of great relevance both for scientific work and for responsible work in a business context.

#### Key competencies

Students deeply understand behavioral approaches in the context of the design of management control systems.

#### Remarks:

There is an introduction date and a presentation date. The number of participants is limited.

#### Workload:

Total: 180 h

90 h preparation of written term papers (self-study)

30 h studying of course content using literarture (self-study)

18 h preparation of presentations (self-study)

42 h seminar (attendance)

		Credit Requirements: Passing the module examination
Frequency: each winter semester	Recommended Semester: from 2.	Minimal Duration of the Module: 1 semester[s]
Contact Hours:	Repeat Exams Permitted: according to the examination regulations of the study program	

## Parts of the Module

Part of the Module: Topics in Behavioural Controlling

Mode of Instruction: seminar

Language: English Contact Hours: 4

#### Literature:

Articles will be announced depending on the topic.

## **Assigned Courses:**

Topics in Behavioural Controlling (Masterseminar) (seminar)

Examination

**Topics in Behavioural Controlling** 

Description: