

MODULE HANDBOOK

Master of Arts

International Healthcare Management (FS-OI-MAIHM-60)

60 CP

Distance Learning

As of April 23rd, 2024

Classification: Non-Consecutive

Contents

1. Semester

Module DLMIHMGHM: Global Healthcare Markets

Module Description	7
Course DLMIHMGHM01: Global Healthcare Markets	9

Module DLMIHMIHS: International Health Systems

Module Description	12
Course DLMIHMIHS01: International Health Systems	14

Module DLMIHMHF: Healthcare Financing

Module Description	18
Course DLMIHMHF01: Healthcare Financing	20

Module DLMARM-01: Advanced Research Methods

Module Description	24
Course DLMARM01-01: Advanced Research Methods	26

Module DLMIHMHE: Health Economics

Module Description	31
Course DLMIHMHE01: Health Economics	33

Module DLMMGSMPO: Seminar: Managing People and Organizations

Module Description	37
Course DLMMGSMPO01: Seminar: Managing People and Organizations	39

2. Semester

Module DLMIHMQARMH: Quality Assurance and Risk Management in Health

Module Description	43
Course DLMIHMQARMH01: Quality Assurance and Risk Management in Health	45

Module DLMGWDIMP_E: Digital Health

Module Description	48
Course DLMGWDIMP01_E: Digital Transformation in Healthcare	50
Course DLMGWDIMP02_E: Seminar: Digital Transformation in Healthcare	53

Module DLMGWPH_E: Public Health

Module Description	56
--------------------------	----

Course DLMGWPH01_E: Public Health	59
Course DLMGWPH02_E: Seminar: Public Health	63
Module DLMIHMEIPMT: Innovation in Pharma and Medical Technology	
Module Description	66
Course DLMIHMEIPMT01: Innovation in Pharma and Medical Technology	69
Course DLMIHMEIPMT02: Seminar: Innovation in Pharma and Medical Technology	73
Module DLMBACCE: Accounting	
Module Description	76
Course DLMBACCE01: Advanced Management Accounting & Control	79
Course DLMBACCE02: Current Issues in Accounting	84
Module DLMBCBR: Consumer Behavior and Research	
Module Description	89
Course DLMBCBR01: International Consumer Behavior	92
Course DLMBCBR02: Applied Marketing Research	95
Module DLMBCFIE: Corporate Finance and Investment	
Module Description	99
Course DLMBCFIE01: Advanced Corporate Finance	102
Course DLMBCFIE02: Investment Analysis & Portfolio Management	106
Module DLMWKPR_E: Communication and Public Relations	
Module Description	111
Course DLMWKB01_E: Communication and Public Relations I	114
Course DLMWKB02_E: Communication and Public Relations II	118
Module DLMBDSA-01: Data Science and Analytics	
Module Description	121
Course DLMBDSA01-01: Data Science	124
Course DLMBDSA02: Analytical Software and Frameworks	129
Module DLMADTWM_E: Digital Marketing	
Module Description	134
Course DLMWOM01_E: Online and Social Media Marketing	137
Course DLMADAS01_E: Digital Analytics and Strategies	140
Module DLMITEIIM: International and Intercultural Management	
Module Description	143
Course DLMINTMAB01_E: Managing Across Borders	146
Course DLMINTIM01_E: Intercultural Management	150
Module DLMIHMEIHR: Negotiation and International HR	
Module Description	154

Course DLMNEGE01-01: Negotiation	157
Course DLMSIHRM01_E: Seminar: International Human Resource Management	161

Module DLMBPDDT: Product Development and Design Thinking

Module Description	165
Course DLMBPDDT01: Product Development	167
Course DLMBPDDT02: Project: Design Thinking	171

Module DLMWSAM_E: Sales Management

Module Description	175
Course DLMWSA01_E: Sales Management I	177
Course DLMWSA02_E: Sales Management II	182

Module DLMEAIMAIP: AI and Mastering AI Prompting

Module Description	187
Course DLMAIAI01: Artificial Intelligence	189
Course DLMPAIECPT01: Project: AI Excellence with Creative Prompting Techniques	193

Module DLMMTHES: Master Thesis

Module Description	196
Course DLMMTHES01: Master Thesis	198
Course DLMMTHES02: Colloquium	202

1. Semester

Global Healthcare Markets

Module Code: DLMIHMGHM

Module Type see curriculum	Admission Requirements none	Study Level MA	CP 5	Student Workload 150 h
--------------------------------------	---------------------------------------	--------------------------	----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Prof. Alan Gillies (Global Healthcare Markets)

Contributing Courses to Module

- Global Healthcare Markets (DLMIHMGHM01)

Module Exam Type

Module Exam

Study Format: Distance Learning
Exam, 90 Minutes

Split Exam

Weight of Module

see curriculum

Module Contents

- Health – the Global Marketplace
- Stakeholders in the Global Health Sector
- Managing Healthcare Services and Products in Global Markets
- Industries in Global Health Markets
- Innovation in Global Health Markets

Learning Outcomes**Global Healthcare Markets**

On successful completion, students will be able to

- understand global healthcare markets and the main stakeholders involved.
- analyze the global regulatory environment for healthcare products and services.
- appreciate the role of global health diplomacy in shaping global healthcare markets.
- apply management tools to different sectors of the global healthcare industry, including pharmaceuticals, hospitals, and insurance.
- explain innovation in global healthcare markets and its impact on patients, providers, and payers.

Links to other Modules within the Study Program

This module is similar to other modules in the field of Healthcare Management

Links to other Study Programs of the University

All Master Programs in the Health Affairs field

Global Healthcare Markets

Course Code: DLMIHMGHM01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

This course is designed to comprehensively introduce global healthcare markets and the complex set of determinants that shape these markets. Students will learn about the key healthcare industries and get confronted with an outlook in the different areas of innovation. Ultimately, the students will have an opportunity to engage with a set of up-to-date case studies. This course will provide students with a set of tools to manage healthcare services and products globally. Students will learn about the different stakeholders in the global health sector and the role of health diplomacy and governance from an industry perspective. The course will also cover topics such as the different types of global healthcare markets, market entry strategies, and how to effectively manage a global healthcare business.

Course Outcomes

On successful completion, students will be able to

- understand global healthcare markets and the main stakeholders involved.
- analyze the global regulatory environment for healthcare products and services.
- appreciate the role of global health diplomacy in shaping global healthcare markets.
- apply management tools to different sectors of the global healthcare industry, including pharmaceuticals, hospitals, and insurance.
- explain innovation in global healthcare markets and its impact on patients, providers, and payers.

Contents

1. Health – the Global Marketplace
 - 1.1 Influential Factors and Driving Forces
 - 1.2 Health Systems and Health Financing
 - 1.3 Private Insurance
 - 1.4 Regions and Markets
 - 1.5 Trade in Healthcare
2. Stakeholders in the Global Health Sector
 - 2.1 Global Health Governance and Regulation
 - 2.2 World Health Organization
 - 2.3 Global Health and Instruments in the UN System beyond WHO

- 2.4 TRIPS and Health
- 2.5 GATS and Health
3. Managing Healthcare Services and Products in Global Markets
 - 3.1 Business Models and Healthcare Ecosystems
 - 3.2 Risk Management and Product Safety
 - 3.3 Health Product Procurement
 - 3.4 Competition Parameters (Quality, Delivery, Cost, Flexibility)
 - 3.5 Health Services Management
4. Industries in Global Health Markets
 - 4.1 Pharmaceutical Industry
 - 4.2 Medical Products and Devices
 - 4.3 Hospitals and Hospital Groups
 - 4.4 Global Health Insurance Market
 - 4.5 Public-Private Partnerships
5. Innovation in Global Healthcare Markets
 - 5.1 Innovation Types and Concepts
 - 5.2 Personalized Medicine
 - 5.3 Digital Transformation in Healthcare
 - 5.4 Artificial Intelligence in Healthcare
 - 5.5 Innovations in Healthcare Delivery
6. Case Studies on Global Healthcare Markets
 - 6.1 Employee Health & Wellness in a Multinational Company
 - 6.2 The Global Fund: Shaping Global Markets for Critical Healthcare Products
 - 6.3 India and its Global Role as a Provider of Generic Medicines
 - 6.4 The Growth of International Telemedicine

Literature

Compulsory Reading

Further Reading

- McPake, B., Normand, C., Smith, S., & Nolan, A. (2020). Health economics: An international perspective (4th ed.). Routledge.
- Rogers, E. M. (2003). Diffusion of innovations (5th ed.). Free Press.
- United Nations. (n.d.). Take action for the Sustainable Development Goals.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods	
Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

International Health Systems

Module Code: DLMIHMIHS

Module Type see curriculum	Admission Requirements None	Study Level MA	CP 5	Student Workload 150 h
--------------------------------------	---------------------------------------	--------------------------	----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Prof. Dr. Sophie Xenia Constanze Brenner (International Health Systems)

Contributing Courses to Module

- International Health Systems (DLMIHMIHS01)

Module Exam Type

Module Exam

Study Format: Distance Learning
Exam, 90 Minutes

Study Format: myStudies
Exam, 90 Minutes

Split Exam

Weight of Module

see curriculum

Module Contents

- Aims and Principles of Health Care Systems
- Structural Features of Health Care Systems
- Health System Building Blocks
- Health System Efficiency
- Health Equity
- Country Case Studies

Learning Outcomes**International Health Systems**

On successful completion, students will be able to

- understand various healthcare system delivery models.
- develop analytical skills in healthcare market drivers.
- identify and make a synthesis of national and international healthcare policies.
- interpret decision making processes in health care from an international perspective.

Links to other Modules within the Study Program

This module is similar to other modules in the field of Healthcare Management

Links to other Study Programs of the University

All Master Programs in the field of Health Affairs

International Health Systems

Course Code: DLMIHMIHS01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	None

Course Description

This course addresses the health system perspective of international healthcare management. It emphasizes the system view and introduces the principles of good governance, equity, efficiency and sustainability as well as building blocks for health care systems design and management. The course conveys concepts, skills and core competencies in key areas as required by different stakeholder groups. By means of a structured comparative approach, the course analyzes different health systems that have long served as “prototypes” in the discussion, such as the UK’s National Health Service and the German Statutory Health Insurance. The course builds on concepts from health policy, health economics, insurance economics and broader health systems research.

Course Outcomes

On successful completion, students will be able to

- understand various healthcare system delivery models.
- develop analytical skills in healthcare market drivers.
- identify and make a synthesis of national and international healthcare policies.
- interpret decision making processes in health care from an international perspective.

Contents

1. Health Care Systems Internationally: Politics, Economics, and Policy
 - 1.1 Aims and Principles of Health Care Systems
 - 1.2 Structural Features of Health Care Systems
 - 1.3 Health System Building Blocks
 - 1.4 Contextual Factors
 - 1.5 Health System Governance
2. Organizing the Provision of Services
 - 2.1 Primary Care
 - 2.2 Specialist Care
 - 2.3 Hospital Care
 - 2.4 Pharmaceutical Care
3. Managing the Health Workforce

- 3.1 Medical Education
- 3.2 Supply and Distribution of Health Workers
- 3.3 Health Workforce Governance
- 3.4 Health Worker Migration
4. Health System Efficiency
 - 4.1 Measuring and Comparing Health System Outputs
 - 4.2 Cross-National Efficiency Comparisons of Health Systems
5. Health Equity
 - 5.1 Equity in Health Care Delivery
 - 5.2 Equity in Health Financing
6. Health Systems by Country – An Analytical Approach
 - 6.1 Germany
 - 6.2 United Kingdom
 - 6.3 United States
 - 6.4 Health Systems in Other Parts of the World

Literature

Compulsory Reading

Further Reading

- Johnson, J., Stoskopf, C. & Shi, L. (2018). Comparative health systems: A global perspective (2nd ed.). Jones & Bartlett.
- Rice, T. (2021). Health insurance systems: An international comparison. Elsevier Science & Technology.
- Walshe, K., & Smith, J. (2016). Healthcare management. McGraw-Hill Education.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Study Format myStudies

Study Format myStudies	Course Type Theory Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	Learning Material <input checked="" type="checkbox"/> Course Book	Exam Preparation <input checked="" type="checkbox"/> Online Tests

Healthcare Financing

Module Code: DLMIHMHF

Module Type see curriculum	Admission Requirements None	Study Level MA	CP 5	Student Workload 150 h
--------------------------------------	---------------------------------------	--------------------------	----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Prof. Dr. Michael Thiede (Healthcare Financing)

Contributing Courses to Module

- Healthcare Financing (DLMIHMHF01)

Module Exam Type

Module Exam

Study Format: Distance Learning
Oral Assignment
Study Format: myStudies
Oral Assignment

Split Exam

Weight of Module

see curriculum

Module Contents

- Health Expenditure as a Key Input for Health Financing
- Revenue Collection
- Risk Pooling Mechanisms
- Provider Payment Mechanisms
- Trends in Healthcare Financing

Learning Outcomes**Healthcare Financing**

On successful completion, students will be able to

- interpret health care financing in the light of health expenditure trends.
- explain the health financing functions and illustrate them with real world examples.
- analyze the quality incentives associated with provider payment mechanisms.
- showcase the strengths and weaknesses of pay for performance models.
- dissect DRG based payments for hospital services and evaluate alternative approaches.

Links to other Modules within the Study Program

This module is similar to other modules in the field of Healthcare Management

Links to other Study Programs of the University

All Master Programs in the field of Health Affairs

Healthcare Financing

Course Code: DLMIHMHF01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	None

Course Description

This course breaks down challenges in health financing from a systems perspective. The course investigates how health financing supports the achievement of national and international health goals. Health expenditure analysis is linked to different approaches of health financing. The course agenda follows different stakeholders' perspectives. It also showcases trends in health financing and analyzes dominant provider payment mechanisms.

Course Outcomes

On successful completion, students will be able to

- interpret health care financing in the light of health expenditure trends.
- explain the health financing functions and illustrate them with real world examples.
- analyze the quality incentives associated with provider payment mechanisms.
- showcase the strengths and weaknesses of pay for performance models.
- dissect DRG based payments for hospital services and evaluate alternative approaches.

Contents

1. Health Expenditure Analysis
 - 1.1 Global Trends in Health Spending
 - 1.2 Burden of Disease and Domestic Health Spending
 - 1.3 Government Health Spending
2. Financing Healthcare
 - 2.1 Revenue Raising
 - 2.2 Risk Pooling
 - 2.3 Resource Allocation
 - 2.4 Service Provision
3. Provider Payment Systems and Associated Quality Incentives
 - 3.1 Fee-for-Service
 - 3.2 Capitation
 - 3.3 Global Budget
 - 3.4 Diagnosis-Related Groups (DRGs)

- 3.5 Deductibles, Coinsurance and Co-Payments
- 4. Health Financing Globally
 - 4.1 Health Spending Scenarios
 - 4.2 Global Financing Mechanisms
 - 4.3 Alignment
- 5. Pay-for-Performance
 - 5.1 Pay-for-Performance and Quality of Care
 - 5.2 Pay-for-Performance at the Primary Care Level
 - 5.3 Pay-for-Performance at the Hospital Level
- 6. The Evolution of DRGs
 - 6.1 Principles of DRG Payment
 - 6.2 DRG-Based Payment for Hospital Services: Country Case Studies

Literature

Compulsory Reading

Further Reading

- Cashin, C., Chi, Y.-L., Smith, P., Borowitz, M., & Thompson, S. (Eds.). (2014). *Paying for performance in health care: Implications for health system performance and accountability*. Open University Press.
- Chang, A. Y., Cowling, K., Micah, A. E., Chapin, A., Chen, C. S., Ikilezi, G., Sadat, N., Tsakalos, G., Wu, J., Younker, T., Zhao, Y., Zlavog, B. S., Abbafati, C., Ahmed, A. E., Alam, K., Alipour, V., Aljunid, S. M., Almalki, M. J., Alvis-Guzman, N., . . . Dieleman, J. L. (2019). Past, present, and future of global health financing: A review of development assistance, government, out-of-pocket, and other private spending on health for 195 countries, 1995–2050. *The Lancet*, 393 (10187), 2233–2260.
- Feldhaus, I., & Mathauer, I. (2018). Effects of mixed provider payment systems and aligned cost sharing practices on expenditure growth management, efficiency, and equity: A structured review of the literature. *BMC Health Services Research*, 18(996), 1–14.
- Gottret, P., & Schieber, G. (2006). *Health financing revisited: A practitioner's guide*. The World Bank.
- Kutzin, J., Witter, S., Jowett, M., & Bayarsaikhan, D. (2017). *Developing a national health financing strategy: A reference guide*. World Health Organization.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Oral Assignment

Student Workload					
Self Study 110 h	Contact Hours 0 h	Tutorial/Tutorial Support 20 h	Self Test 20 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Online Tests <input checked="" type="checkbox"/> Guideline

Study Format myStudies

Study Format myStudies	Course Type Theory Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Oral Assignment

Student Workload					
Self Study 110 h	Contact Hours 0 h	Tutorial/Tutorial Support 20 h	Self Test 20 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	Learning Material <input checked="" type="checkbox"/> Course Book	Exam Preparation <input checked="" type="checkbox"/> Online Tests

Advanced Research Methods

Module Code: DLMARM-01

Module Type see curriculum	Admission Requirements none	Study Level MA	CP 5	Student Workload 150 h
--------------------------------------	---------------------------------------	--------------------------	----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Prof. Dr. Tamara Wehrstein (Advanced Research Methods)

Contributing Courses to Module

- Advanced Research Methods (DLMARM01-01)

Module Exam Type

Module Exam

Study Format: myStudies

Written Assessment: Written Assignment

Study Format: Distance Learning

Written Assessment: Written Assignment

Split Exam

Weight of Module

see curriculum

Module Contents

- Principles of Research
- Research Approaches
- The Research Project
- Selected Formal Techniques
- Selected Interpretative Topics
- Scientific Reporting

Learning Outcomes**Advanced Research Methods**

On successful completion, students will be able to

- demonstrate an understanding of principles of scientific inquiry and logical reasoning.
- apply formal techniques to modeling and theory generation.
- apply interpretative techniques to intercultural case studies.
- propose, plan, and conduct research projects under ethical constraints.
- evaluate study results to arrive at valuable and ethical conclusions.
- report study results responsibly in an objective and comprehensible form.

Links to other Modules within the Study Program

This module is similar to other modules in the field of Methods

Links to other Study Programs of the University

All Master Programmes in the Business field

Advanced Research Methods

Course Code: DLMARM01-01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

Advanced research methods, specifically business research, is scientific inquiry that attempts to uncover new information which helps a business improve performance, maximizing shareholder value while adhering to ethical and moral compliance standards. Managers seeking to conduct empirical research must maintain validity, reliability, and trustworthiness when utilizing scientific methodologies in order to produce meaningful and actionable results. Research proposals are typically written prior to conducting research, which have a certain structure, enabling the researcher to properly plan, conduct, and analyze case studies and surveys. Different data collection strategies are used to collect both qualitative and quantitative data, depending on the research proposal goals. Managers utilize their understanding of research methodologies to accurately assess the quality of research.

Course Outcomes

On successful completion, students will be able to

- demonstrate an understanding of principles of scientific inquiry and logical reasoning.
- apply formal techniques to modeling and theory generation.
- apply interpretative techniques to intercultural case studies.
- propose, plan, and conduct research projects under ethical constraints.
- evaluate study results to arrive at valuable and ethical conclusions.
- report study results responsibly in an objective and comprehensible form.

Contents

1. Principles of Research
 - 1.1 Scientific Inquiry
 - 1.2 Principles of Reasoning
 - 1.3 From Data to Knowledge
 - 1.4 Models & Theories
 - 1.5 The Research Cycle
2. Research Approaches
 - 2.1 Experimental Design
 - 2.2 Engineering & Development
 - 2.3 Empirical Research & Case Studies

- 2.4 Interpretative Studies
- 3. The Research Project
 - 3.1 Topic Generation
 - 3.2 Types of Literature Reviews
 - 3.3 Developing a Research Design
 - 3.4 The Research Proposal
- 4. Selected Formal Techniques
 - 4.1 Foundations of Probability Theory & Inferential Statistics
 - 4.2 Data Acquisition
 - 4.3 Pattern Recognition & Classification
 - 4.4 Modelling & Theory Generation
 - 4.5 Artificial Intelligence in Research
- 5. Selected Interpretative Topics
 - 5.1 Phenomenology
 - 5.2 Hermeneutics & Discourse Analysis
 - 5.3 Ethnography & Ethnomethodology
 - 5.4 Critical Management Theory
- 6. Scientific Reporting
 - 6.1 Results Presentation & Visualization
 - 6.2 Interpretation
 - 6.3 Argumentation & Discussion
 - 6.4 Conclusions
 - 6.5 Ethical Considerations

Literature**Compulsory Reading****Further Reading**

- Babbie, E. R. (2021). *The practice of social research* (15th ed.). Cengage Learning.
- Babbie, E. R. (2016). *The practice of social research* (14th ed.). Cengage Learning.
- Crossman, A. (2019). How to conduct an index for research. <https://www.thoughtco.com/index-for-research-3026543>
- Eurostat. (n.d.). Beginners: Statistical concept - Index and base year. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Beginners:Statistical_concept_-_Index_and_base_year
- Giles, D. (2004). *Advanced research methods in psychology* (Reprint). Psychology Press.
- Rea, L.M., & Parker, R.A. (2014). *Designing and conducting survey research: A comprehensive guide*, (4th ed). Jossey-Bass.
- Saunders, M., Thornhill, A., & Lewis, P. (2019). *Research methods for business students* (8th ed). Pearson.
- Takahashi, A. R. W., & Araujo, L. (2019). Case study research: Opening up research opportunities. *RAUSP Management Journal*, 55(1), 100–111.
- Widner, J., Woolcock, M., & Ortega Nieto, D. (Eds.). (2022). *The case for case studies: Methods and applications in international development (strategies for social inquiry)*. Cambridge University Press.

Study Format myStudies

Study Format myStudies	Course Type Theory Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Written Assessment: Written Assignment

Student Workload					
Self Study 110 h	Contact Hours 0 h	Tutorial/Tutorial Support 20 h	Self Test 20 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Online Tests <input checked="" type="checkbox"/> Guideline

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Written Assessment: Written Assignment

Student Workload					
Self Study 110 h	Contact Hours 0 h	Tutorial/Tutorial Support 20 h	Self Test 20 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Online Tests <input checked="" type="checkbox"/> Guideline

Health Economics

Module Code: DLMIHMHE

Module Type see curriculum	Admission Requirements None	Study Level MA	CP 5	Student Workload 150 h
--------------------------------------	---------------------------------------	--------------------------	----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Martin Rudasingwa (Health Economics)

Contributing Courses to Module

- Health Economics (DLMIHMHE01)

Module Exam Type

Module Exam

Study Format: Distance Learning
Exam, 90 Minutes

Study Format: myStudies
Exam, 90 Minutes

Split Exam

Weight of Module

see curriculum

Module Contents

- Economic Peculiarities of the Healthcare Market
- Equality and Fairness
- Delivering Healthcare
- Economic Evaluation and Priority Setting

Learning Outcomes**Health Economics**

On successful completion, students will be able to

- analyze demand and supply on health markets from an economic perspective and to derive consequences.
- substantiate the necessity to focus on distributive goals with the help of theories of distributive justice.
- explore economic scope for action from the perspective of service providers in the health sector.
- reflect on the principles of health economic evaluation and to use and appraise them against the background of allocation decisions.

Links to other Modules within the Study Program

This module is similar to other modules in the field of Healthcare Management

Links to other Study Programs of the University

All Master Programs in the field of Health Affairs

Health Economics

Course Code: DLMIHME01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	None

Course Description

This course addresses the economic peculiarities of the healthcare market, with a particular focus on the requirements for decision-makers in the healthcare sector. Students are sensitized to economic thinking and are confronted in particular with the tension between efficiency and equity in healthcare. While the module content draws on economic theory, the policy implications are evident in each section of the module.

Course Outcomes

On successful completion, students will be able to

- analyze demand and supply on health markets from an economic perspective and to derive consequences.
- substantiate the necessity to focus on distributive goals with the help of theories of distributive justice.
- explore economic scope for action from the perspective of service providers in the health sector.
- reflect on the principles of health economic evaluation and to use and appraise them against the background of allocation decisions.

Contents

1. The Peculiar Market for Healthcare
 - 1.1 Demand and Need
 - 1.2 Supply: Resources, Production and Costs
 - 1.3 Asymmetric Information and the Agency Relationship
 - 1.4 Externalities
 - 1.5 Market Failure and its Consequences
2. Government Intervention in Healthcare Markets
 - 2.1 Economic Rationale for Government Intervention
 - 2.2 Forms of Government Intervention
 - 2.3 Government Involvement in Healthcare
 - 2.4 Government Failure
 - 2.5 Competitive Strategies

3. Equality and Fairness
 - 3.1 Distributive Preferences
 - 3.2 Concepts of Health Equity
 - 3.3 Theories of Distributive Justice
 - 3.4 Exogenous Determinants of Health
 - 3.5 Policy Lessons
4. Delivering Healthcare
 - 4.1 The Physician as a Supplier of Medical Services
 - 4.2 Supplier-Induced Demand
 - 4.3 Economics of Hospital Care
5. Economic Evaluation and Priority Setting
 - 5.1 Benefits and the Measurement of Health Benefits
 - 5.2 Costing Healthcare
 - 5.3 Types of Economic Evaluation
 - 5.4 QALYs and the Cost-Effectiveness Threshold
 - 5.5 Policy Implications
6. Health Econometrics
 - 6.1 Introduction to Applied Health Econometrics
 - 6.2 Methods for Causal Analysis

Literature

Compulsory Reading

Further Reading

- Drummond, M. et al. (2015): *Methods for the Economic Evaluation of Health Care Programmes*. 4th edition, Oxford, Oxford University Press.
- McPake, B. et al. (2020): *Health Economics – An International Perspective*. 4th edition, Abingdon, Routledge.
- Olsen, J. (2017): *Principles in Health Economics and Policy*. 2nd edition. Oxford, Oxford University Press.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support	Learning Material	Exam Preparation
<input checked="" type="checkbox"/> Course Feed	<input checked="" type="checkbox"/> Course Book	<input checked="" type="checkbox"/> Practice Exam
<input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	<input checked="" type="checkbox"/> Video	<input checked="" type="checkbox"/> Online Tests
<input checked="" type="checkbox"/> Recorded Live Sessions	<input checked="" type="checkbox"/> Slides	

Study Format myStudies

Study Format myStudies	Course Type Theory Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	Learning Material <input checked="" type="checkbox"/> Course Book	Exam Preparation <input checked="" type="checkbox"/> Online Tests

Seminar: Managing People and Organizations

Module Code: DLMMGSMPO

Module Type see curriculum	Admission Requirements none	Study Level MA	CP 5	Student Workload 150 h
--------------------------------------	---------------------------------------	--------------------------	----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Prof. Dr. Muhammad Ashfaq (Seminar: Managing People and Organizations)

Contributing Courses to Module

- Seminar: Managing People and Organizations (DLMMGSMPO01)

Module Exam Type

Module Exam

Study Format: Distance Learning
Written Assessment: Research Essay

Study Format: myStudies
Written Assessment: Research Essay

Split Exam

Weight of Module

see curriculum

Module Contents

This seminar deals with issues in managing people and organizations.

Learning Outcomes**Seminar: Managing People and Organizations**

On successful completion, students will be able to

- familiarize themselves autonomously with a given topic from the field of "Managing People and Organizations".
- independently research subject-specific literature and evaluate it in a targeted manner.
- elaborate important characteristics, interrelationships and findings in a written assignment.

Links to other Modules within the Study Program

This module is similar to other modules in the fields of Business Administration & Management

Links to other Study Programs of the University

Master Programmes in the Business & Management fields

Seminar: Managing People and Organizations

Course Code: DLMMGSMPO01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

In the seminar "Managing People and Organizations" students write a research essay on a specific topic. The students demonstrate that they are able to autonomously familiarize themselves with a topic of the seminar and to document and present the knowledge gained in an organized manner.

Course Outcomes

On successful completion, students will be able to

- familiarize themselves autonomously with a given topic from the field of "Managing People and Organizations".
- independently research subject-specific literature and evaluate it in a targeted manner.
- elaborate important characteristics, interrelationships and findings in a written assignment.

Contents

- The seminar deals with "Managing People and Organizations". Each participant is expected to write a research paper on a topic assigned to them.

Literature

Compulsory Reading

Further Reading

- Bailey, S. (2020). Academic writing for international students of business. New York, NY: Routledge. 3rd Edition.
- Busse, C. and August, E. (2021). How to Write and Publish a Research Paper for a Peer-Reviewed Journal. Journal of Cancer Education 36, 909-913.
- Silvia, P. J. (2019). How to Write a Lot: A Practical Guide to Productive Academic Writing. (2nd Ed). Washington: American Psychological Association.

Study Format Distance Learning

Study Format Distance Learning	Course Type Seminar
--	-------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: no
Type of Exam	Written Assessment: Research Essay

Student Workload					
Self Study 120 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 0 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	Learning Material <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Guideline

Study Format myStudies

Study Format myStudies	Course Type Seminar
----------------------------------	-------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: no
Type of Exam	Written Assessment: Research Essay

Student Workload					
Self Study 120 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 0 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods	
Learning Material <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Guideline

2. Semester

Quality Assurance and Risk Management in Health

Module Code: DLMIHMQARMH

Module Type see curriculum	Admission Requirements none	Study Level MA	CP 5	Student Workload 150 h
--------------------------------------	---------------------------------------	--------------------------	----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Prof. Dr. Alan Gillies (Quality Assurance and Risk Management in Health)

Contributing Courses to Module

- Quality Assurance and Risk Management in Health (DLMIHMQARMH01)

Module Exam Type

Module Exam

Study Format: Distance Learning
Written Assessment: Case Study

Split Exam

Weight of Module

see curriculum

Module Contents

- Quality assurance and Risk management in Healthcare
- Quality Assurance Systems
- Risk Identification and Management
- Audits in healthcare providing institutions
- Process management
- Project Management

Learning Outcomes**Quality Assurance and Risk Management in Health**

On successful completion, students will be able to

- build a quality and risk management system.
- analyze processes according to stakeholder needs.
- manage internal and external audits.
- apply quality management methods on practical work scenarios.
- build project plans and support the execution.

Links to other Modules within the Study Program

This module is similar to other modules in the field of Healthcare Management

Links to other Study Programs of the University

All Master Programs in the Health Affairs field

Quality Assurance and Risk Management in Health

Course Code: DLMIHMQARMH01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

The healthcare market is still a growing market, with many populations in Europe and abroad facing rising age and chronification of illnesses paired with civilization diseases such as cardiovascular diseases, cancer and the challenges of a growing obesity epidemic. On the one hand the demand in the healthcare sector is rising in such countries and on the other hand the awareness in terms of personal health of the civilization has grown immensely in the last two decades. As the resources in most healthcare systems are scarce and service providers face the need to be efficient and under constant development, Quality Assurance and Risk Management have gotten a broader attention. This is due to the focused management approach and the practical implementation tools that comes with it. Supporting the leaders in coming up with the management goals aligned to the market situation, the often restricted legislative context and the stakeholder interests, the quality assurance systems also pave the way for the most direct path to achieving these goals. By introducing the healthcare institutions to a purposeful management of risks, with an emphasis on patient safety, reputational and economical harm is minimized. The last key methods for a considerate use of the given resources are the process and project management tools. Both tools are a powerful engine for strategic goals and future developments.

Course Outcomes

On successful completion, students will be able to

- build a quality and risk management system.
- analyze processes according to stakeholder needs.
- manage internal and external audits.
- apply quality management methods on practical work scenarios.
- build project plans and support the execution.

Contents

1. Quality Assurance and Risk Management in Healthcare
 - 1.1 Definitions and Practical Application
 - 1.2 Measuring Quality and Identifying Risks
 - 1.3 Pay for Performance
2. Quality Assurance Systems
 - 2.1 Quality Management Models

- 2.2 European Norm on Quality Assurance
- 2.3 Methods
- 3. Risk Identification and Management
 - 3.1 Patient Safety Culture
 - 3.2 CIRS-Systems
 - 3.3 Risk Management
- 4. Audits in Healthcare Providing Institutions
 - 4.1 Internal Audits
 - 4.2 External Audits
 - 4.3 Certificates
- 5. Process Management
 - 5.1 Visualization
 - 5.2 Stakeholder-Analysis and Goals
 - 5.3 Management of Deviations
- 6. Project Management
 - 6.1 Project Management Basics
 - 6.2 Scrum Framework
 - 6.3 Project Communication

Literature

Compulsory Reading

Further Reading

- Bove, L.A. & Houston, S.M. (2020): Project Management Skills for Healthcare: Methods and Techniques for Diverse Skillsets. Productivity Press, New York.
- Minvielle, E. & Kimberly, J.R. (2005): Measuring and Managing Quality in Hospitals: Lessons from a French Experiment. Emerald Group Publishing Limited, Bingley.
- Pruitt, Z./ Smith, C. S./ Perez-Ruberte, E. (2020): Healthcare Quality Management: A Case Study Approach. Springer Publishing Company, New York.
- Simsekler, M.C.E. (2019): The link between healthcare risk identification and patient safety culture. International Journal of Health Care Quality Assurance, 32(3), 574–587.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Written Assessment: Case Study

Student Workload					
Self Study 110 h	Contact Hours 0 h	Tutorial/Tutorial Support 20 h	Self Test 20 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support	Learning Material	Exam Preparation
<input checked="" type="checkbox"/> Course Feed	<input checked="" type="checkbox"/> Course Book	<input checked="" type="checkbox"/> Online Tests
<input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	<input checked="" type="checkbox"/> Video	<input checked="" type="checkbox"/> Guideline
<input checked="" type="checkbox"/> Recorded Live Sessions	<input checked="" type="checkbox"/> Slides	

Digital Health

Module Code: DLMGWDIMP_E

Module Type see curriculum	Admission Requirements None	Study Level MA	CP 10	Student Workload 300 h
--------------------------------------	---------------------------------------	--------------------------	-----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Prof. Dr. Elena Phillips (Digital Transformation in Healthcare) / Prof. Dr. Elena Phillips (Seminar: Digital Transformation in Healthcare)

Contributing Courses to Module

- Digital Transformation in Healthcare (DLMGWDIMP01_E)
- Seminar: Digital Transformation in Healthcare (DLMGWDIMP02_E)

Module Exam Type

Module Exam

Split Exam

Digital Transformation in Healthcare

- Study Format "Distance Learning": Exam, 90 Minutes

Seminar: Digital Transformation in Healthcare

- Study Format "Distance Learning": Written Assessment: Research Essay

Weight of Module

see curriculum

Module Contents

Digital Transformation in Healthcare

- Terms, concepts and examples of digitalization in the health and social care sector
- Design approaches for digitalization projects
- Ethical consideration of digitalization processes
- Challenges and risks of digital transformations

Seminar: Digital Transformation in Healthcare

This course will take a critical look at current topics and trends related to the digitalization of processes in medicine and nursing.

Learning Outcomes

Digital Transformation in Healthcare

On successful completion, students will be able to

- explain the basic terms and concepts of digitalization.
- understand the principles and modes of action of digital transformations.
- describe current technologies and digitalization processes in medicine and nursing.
- develop their own ideas and design approaches for digitalization projects.
- determine the ethical problems of digital transformations.
- assess the challenges and risks of digitalization processes.

Seminar: Digital Transformation in Healthcare

On successful completion, students will be able to

- evaluate a digitization issue from different points of view or perspectives.
- implement a systematic literature search according to scientific principles.
- write a scientific paper according to formal and methodological criteria.
- identify various, current issues of digital transformation in medicine and nursing.
- contrast the different effects and changes caused by digitization processes in medicine and nursing.

Links to other Modules within the Study Program

This module is similar to other modules in the field of Healthcare Management

Links to other Study Programs of the University

All Master Programs in the field of Health Affairs

Digital Transformation in Healthcare

Course Code: DLMGWDIMP01_E

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	None

Course Description

In the current context of demographic change, rising healthcare costs, and the limited availability of healthcare resources, digital transformation in healthcare presents new opportunities and challenges. This course provides an overview of crucial digital technologies and their application in the healthcare sector, simultaneously considering leading legal and societal initiatives shaping the transformation of healthcare systems. The introduction provides the theoretical foundations and the overview of terms and concepts of digital transformation, shedding light on current difficulties in healthcare systems that are driving digital innovation. This is followed by an examination of the "digital health" phenomenon and its disruptive impact on patients, physicians, and their relationships. Digital transformation is linked with certain technologies such as artificial intelligence (AI), blockchain, and quantum technologies (QT). To assess the value and implications of these technologies for healthcare, this course provides an essential understanding of their key concepts and mechanisms of work. Digital technologies have a transformative effect on healthcare, with both positive and negative implications. Thus, a set of ethics applicable to digital health is urgently needed to shape the digital transformation process, minimizing its risks and enhancing its benefits. This course provides theoretical ethical foundations and introduces a practical ethical framework for evaluating digital health interventions. Finally, the course examines the main risks and challenges related to digital transformation in healthcare, such as unreliable AI, threats to data security, and data privacy, providing an overview of legal and societal strategies to govern digital technologies.

Course Outcomes

On successful completion, students will be able to

- explain the basic terms and concepts of digitalization.
- understand the principles and modes of action of digital transformations.
- describe current technologies and digitalization processes in medicine and nursing.
- develop their own ideas and design approaches for digitalization projects.
- determine the ethical problems of digital transformations.
- assess the challenges and risks of digitalization processes.

Contents

1. Foundations of Digital Transformation in Healthcare
 - 1.1 Current Challenges of Healthcare Systems
 - 1.2 Digitization, Digitalization, and Digital Transformation

- 1.3 Potential of Digital Technologies in Healthcare
2. Digital Health
 - 2.1 A Brief History of Digital Health
 - 2.2 Digital Health as a Paradigm Shift in Traditional Healthcare
 - 2.3 Empowerment Through Digital Health: Patients
 - 2.4 Empowerment Through Digital Health: Physicians
 - 2.5 The Patient–Physician Relationship in the Digital Health Era: It’s Complicated
3. Technologies in Digital Health
 - 3.1 Artificial Intelligence
 - 3.2 Blockchain
 - 3.3 Quantum Technologies
4. Ethics in Digital Health
 - 4.1 Ethics: Terms and Concepts
 - 4.2 Theoretical Approaches to Normative Ethics
 - 4.3 Methods for the Ethical Evaluation of Digital Health
 - 4.4 Ethics and Soft Law: European Ethics Guidelines for Trustworthy Artificial Intelligence
5. Risks and Challenges of Digital Health
 - 5.1 Risks of Digital Health
 - 5.2 Are Soft Laws Enough?
 - 5.3 From Ethics to Legislation

Literature

Compulsory Reading

Further Reading

- Menvielle, L./Audrain-Pontevia, A.-F./Menvielle, W. (eds., 2017): The Digitization of
- Saari, E./Toivonen, M. (2019): Human-Centered Digitalization and Services. Springer, Singapore.
- Shashi Gogia, S. (2019): Fundamentals of Telemedicine and Telehealth. Elsevier Science, Amsterdam.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Seminar: Digital Transformation in Healthcare

Course Code: DLMGWDIMP02_E

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	None

Course Description

This course focuses on digital transformations and trends in medicine and nursing. Technological advances in information and communication technology as well as robotics are leading to the transformation of established structures and processes in health and social care in a very short time. This also means that the familiar roles and areas of responsibility of all involved stakeholders (e.g. doctors, nursing and care staff, patients, citizens, etc.) are changing. In health and care management, the ability to critically examine innovations or new technologies in order to be able to assess their actual social, cultural and economic added value is needed. For this reason, each student prepares a written research essay in which the critical examination of digital transformation processes takes place, whereby advantages and disadvantages as well as opportunities and limitations of digital technologies and processes are recognized. In addition, this also opens up perspectives for the active design and management of digitization processes in hospitals, nursing homes and other health and social care facilities

Course Outcomes

On successful completion, students will be able to

- evaluate a digitization issue from different points of view or perspectives.
- implement a systematic literature search according to scientific principles.
- write a scientific paper according to formal and methodological criteria.
- identify various, current issues of digital transformation in medicine and nursing.
- contrast the different effects and changes caused by digitization processes in medicine and nursing.

Contents

- The digital transformation in health and social care is progressing continuously: innovative care processes are arriving in practice, new technologies and markets are arising, but new risks and problems are also emerging. This seminar addresses such current topics of digitalization in medicine and care. The seminar topics include various technologies and innovations of digitalization in health and social care (mHealth, internet of things, AI, etc.), which will be analyzed from different perspectives e.g. from an ethical, legal, social, cultural and economic point of view. Each student has to prepare a research essay on an assigned topic.

Literature**Compulsory Reading****Further Reading**

- Menvielle, L./Audrain-Pontevia, A.-F./Menvielle, W. (eds., 2017): The Digitization of
- Saari, E./Toivonen, M. (2019): Human-Centered Digitalization and Services. Springer, Singapore.
- Shashi Gogia, S. (2019): Fundamentals of Telemedicine and Telehealth. Elsevier Science, Amsterdam.

Study Format Distance Learning

Study Format Distance Learning	Course Type Seminar
--	-------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: no
Type of Exam	Written Assessment: Research Essay

Student Workload					
Self Study 120 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 0 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods	
Learning Material <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Guideline

Public Health

Module Code: DLMGWPH_E

Module Type see curriculum	Admission Requirements None	Study Level MA	CP 10	Student Workload 300 h
--------------------------------------	---------------------------------------	--------------------------	-----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Prof. Dr. Andreas Heinz (Public Health) / Prof. Dr. Andreas Heinz (Seminar: Public Health)

Contributing Courses to Module

- Public Health (DLMGWPH01_E)
- Seminar: Public Health (DLMGWPH02_E)

Module Exam Type

Module Exam

Split Exam

Public Health

- Study Format "Distance Learning": Exam, 90 Minutes

Seminar: Public Health

- Study Format "Distance Learning": Written Assessment: Research Essay

Weight of Module

see curriculum

Module Contents**Public Health**

- Statistical and epidemiological basis for public health
- Social science basics of disease and health
- Political and economic basics of the German health care system
- Medical basis for public health
- Ethical sensitization to public health issues
- Scientific competence in health promotion and prevention

Seminar: Public Health

- The seminar teaches the potential of digitalization in the context of public health (ePublic Health). Each student must prepare a seminar paper on an assigned topic and present the contents of the written paper.
 - Relevance of digital health applications to population health
 - Potentials and risks of digital media for health promotion compared to other media
 - Digital communication and education to promote health literacy and patient empowerment
 - Digital intervention and health behavior
 - Digitization in the context of the shortage of healthcare professionals (including doctors and nurses)
 - Artificial intelligence in the context of early disease detection (e.g., app Ada)
 - ePublic Health in selected settings (companies, schools, municipalities)
 - Specifics of the evaluation of digital intervention in health promotion

Learning Outcomes

Public Health

On successful completion, students will be able to

- work on practical and application-related questions in a scientific manner based on theoretical principles of public health-related disciplines, e.g. medicine, epidemiology, economics, psychology, and sociology.
- analyze and assess the health situation of the population as a whole and of subgroups at the municipal, regional, and national levels, as well as in international comparison.
- interpret the influence of physical, psychological, social conditions and environmental influences on health and disease and their interactions.
- take up practical and theoretical issues from application areas of the multidisciplinary field of Public Health scientifically in such a way that specific and interprofessional concepts can be developed and evaluated.
- analyze and evaluate the structure, cost development and dynamics in health care systems.
- plan, implement and evaluate prevention and health promotion as well as rehabilitative and palliative care concepts in a scientifically way.

Seminar: Public Health

On successful completion, students will be able to

- describe typical examples of digital media/applications in health promotion in the context of the ePublic-Health approach.
- describe the challenges and barriers for the implementation of ePublic-Health approaches in practice using an example to illustrate.
- critically assess concrete examples of ePublic-Health approaches in relation to basic health science models and describe approaches for evaluating technology-based interventions.

Links to other Modules within the Study Program

This module is similar to other modules in the field of Health Science

Links to other Study Programs of the University

All Master Programs in the field of Health Affairs

Public Health

Course Code: DLMGWPH01_E

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	None

Course Description

The aim of the course "Public Health" is to qualify students, by teaching the theoretical foundations of Public Health, for tasks in research as well as in the planning and management area of the national and international health care system. As an independent, multi-, and interdisciplinary science, Public Health deals with the conditions for health and the management and prevention of diseases, as far as they are rooted in the natural, technical and social environment of human beings. The course examines, among other things, the influence of the health care system, health care structures, health literacy, the financing of health care services, the political and social framework and the technological development of eHealth applications on the health situation of a population and shows possible solutions for improving the health situation of society as a whole. It thus reveals the field of tension between health research, social medicine, health services research and economics. The research field of Public Health is taught in a practice-oriented manner.

Course Outcomes

On successful completion, students will be able to

- work on practical and application-related questions in a scientific manner based on theoretical principles of public health-related disciplines, e.g. medicine, epidemiology, economics, psychology, and sociology.
- analyze and assess the health situation of the population as a whole and of subgroups at the municipal, regional, and national levels, as well as in international comparison.
- interpret the influence of physical, psychological, social conditions and environmental influences on health and disease and their interactions.
- take up practical and theoretical issues from application areas of the multidisciplinary field of Public Health scientifically in such a way that specific and interprofessional concepts can be developed and evaluated.
- analyze and evaluate the structure, cost development and dynamics in health care systems.
- plan, implement and evaluate prevention and health promotion as well as rehabilitative and palliative care concepts in a scientifically way.

Contents

1. Basics of Public Health
 - 1.1 What is Public Health?
 - 1.2 Historical Development

- 1.3 National and International Actors in Health Promotion
- 1.4 Disciplines of Public Health
- 1.5 Public Health Ethics
- 1.6 Necessity of Health Services Research
2. Public Health - Disciplines and Methods
 - 2.1 Epidemiology
 - 2.2 Demographics
 - 2.3 Biostatistics
 - 2.4 Social Science Data Collection
 - 2.5 Evaluation of Complex Interventions
 - 2.6 Decision-Oriented Management (Decision Theory)
3. Population Medicine and Biomedical Principles
 - 3.1 Biomedical Model of Disease
 - 3.2 Social Determinants and Biopsychosocial Models of Health and Disease
 - 3.3 Social Structure
 - 3.4 Social and Health Inequalities
 - 3.5 Public Health Strategies to Mitigate Social Inequalities in Health
4. Environmental Medicine
 - 4.1 Climate
 - 4.2 Air
 - 4.3 Noise
 - 4.4 Water
 - 4.5 Radiation
5. Prevention and Health Promotion
 - 5.1 Prevention
 - 5.2 Health Promotion
 - 5.3 Health Behaviors and Lifestyles, Health Literacy
 - 5.4 Screening
 - 5.5 Occupational Safety and Corporate Health Management
6. Chronic Diseases
 - 6.1 Obesity
 - 6.2 Cardiovascular Diseases
 - 6.3 Malignant Neoplasms

- 6.4 Respiratory Diseases
- 6.5 Diseases of the Musculoskeletal System
- 6.6 Costs of Selected Clinical Pictures
- 7. Mental Illness and Addiction
 - 7.1 Mental Illness
 - 7.2 Mental Health in Childhood and Adolescence
 - 7.3 Affective Disorders
 - 7.4 Addiction Disorders
- 8. Infectious Diseases
 - 8.1 Infectious Diseases and Modes of Transmission
 - 8.2 Reporting Systems and Legal Basis for the Surveillance of Infectious Diseases
 - 8.3 HIV/Aids
 - 8.4 Nosocomial Infections
 - 8.5 Vaccinations and Preventive Measures

Literature

Compulsory Reading

Further Reading

- Brownson, R.C. et. al. (2017). Evidence-Based Public Health. Oxford University Press, London.
- Fink, G.A. (2012): Evidence-Based Public Health Practice. Sage Pubn, London.
- Gerhardus, A. et al. (Hrsg.) (2010): Evidence-based Public Health. Hans Huber, Bern.
- Guest, C. et al. (2013): Oxford Handbook of Public Health Practice. Oxford University Press, Oxford.
- Jyoti, B./Hamad, A. (2016): BMJ Clinical Review. Infectious diseases and public health. BPP Learning Media, London.
- Magnuson, J.A./Fu, P.C. (2016): Public Health Informatics and Information Systems. Springer Verlag, Berlin/Heidelberg.
- Skolnik, R. (2015): Global Health 101. Jones and Bartlett Publishers .

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Seminar: Public Health

Course Code: DLMGWPH02_E

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	None

Course Description

The aim of the Public Health seminar is to qualify students by teaching them the theoretical principles and practical implementation of eHealth applications in the context of public health (ePublic-Health). The focus of the course is on digitally supported health promotion and prevention. The goal is the prevention of diseases and the maintenance or promotion of health and well-being (health-oriented action approach). Students learn to critically examine theoretical foundations of health promotion and prevention and to recognize and assess their significance for the population. Concepts and methods of quality assurance, evidence base and evaluation in health promotion and prevention are taught in order to be able to apply them strategically in a practical project planning using digital applications. The focus is primarily on the intersectoral and interdisciplinary approach.

Course Outcomes

On successful completion, students will be able to

- describe typical examples of digital media/applications in health promotion in the context of the ePublic-Health approach.
- describe the challenges and barriers for the implementation of ePublic-Health approaches in practice using an example to illustrate.
- critically assess concrete examples of ePublic-Health approaches in relation to basic health science models and describe approaches for evaluating technology-based interventions.

Contents

- The seminar teaches the potential of digitalization in the context of public health (ePublic Health). Each student must prepare a seminar paper on an assigned topic and present the contents of the written paper.
 - Relevance of digital health applications to population health
 - Potentials and risks of digital media for health promotion compared to other media
 - Digital communication and education to promote health literacy and patient empowerment
 - Digital intervention and health behavior
 - Digitization in the context of the shortage of healthcare professionals (including doctors and nurses)
 - Artificial intelligence in the context of early disease detection (e.g., app Ada)
 - ePublic Health in selected settings (companies, schools, municipalities)

- Specifics of the evaluation of digital intervention in health promotion

Literature**Compulsory Reading****Further Reading**

- Bensley, R. J./Brookins-Fisher, J. (2018): Community and Public Health Education Methods. A Practical Guide. Jones & Bartlett Learning.
- Magnuson, J. A./Fu, P.C.: Public Health Informatics and Information Systems. Springer Verlag, London.
- McKenzie, J. F./Neiger B. L./Thackeray R. (2016): Planning, Implementing & Evaluating Health Promotion Programs. A Primer. 7. Auflage, Pearson.
- Weaver, C. A. et al. (2015): Healthcare Information Management System. Cases, Strategies, Solutions. Springer Verlag, Berlin/Heidelberg.

Study Format Distance Learning

Study Format Distance Learning	Course Type Seminar
--	-------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: no
Type of Exam	Written Assessment: Research Essay

Student Workload					
Self Study 120 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 0 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed	Learning Material <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Guideline

Innovation in Pharma and Medical Technology

Module Code: DLMIHMEIPMT

Module Type see curriculum	Admission Requirements none	Study Level MA	CP 10	Student Workload 300 h
--------------------------------------	---------------------------------------	--------------------------	-----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Prof. Dr. Jan Rüterbories (Innovation in Pharma and Medical Technology) / Florian Koerber (Seminar: Innovation in Pharma and Medical Technology)

Contributing Courses to Module

- Innovation in Pharma and Medical Technology (DLMIHMEIPMT01)
- Seminar: Innovation in Pharma and Medical Technology (DLMIHMEIPMT02)

Module Exam Type

Module Exam

Split Exam

Innovation in Pharma and Medical Technology

- Study Format "Distance Learning": Exam, 90 Minutes

Seminar: Innovation in Pharma and Medical Technology

- Study Format "Distance Learning": Written Assessment: Research Essay

Weight of Module

see curriculum

Module Contents**Innovation in Pharma and Medical Technology**

- Introduction to Innovation in Pharma and Medical Technology
- Incentives and Disincentives for Innovation in Pharma and Medical Technology
- Effectiveness and Benefits of Innovation in Pharma and Medical Technology
- Disruptive Innovations for Pharma and Medical Technology
- Important Trends in Pharma
- Important Trends in Medical Technology

Seminar: Innovation in Pharma and Medical Technology

Potential and risks of digital transformation for innovations in Pharma and Medical Technology with the following key points: Telehealth, Mobile Health Technologies and wearables and Big data and analytics.

Learning Outcomes**Innovation in Pharma and Medical Technology**

On successful completion, students will be able to

- understand and evaluate the influence and interests of different stakeholders on innovation in Pharma and the broad field of medical technology.
- assess and critically discuss the influence of various incentives and disincentives on innovation in these areas.
- analyze the effectiveness and benefits of innovation in Pharma and medical technology while considering ethical aspects.
- analyze and critically evaluate the impact of innovation in these areas on the patient, the society, health care and economics.
- analyze and have an in-depth understanding why innovation projects fail or succeed.
- discuss the challenges and potentials of new trends in pharma and the area of medical technology.

Seminar: Innovation in Pharma and Medical Technology

On successful completion, students will be able to

- critically evaluate risks and benefits of digital transformation in innovation in Pharma and Medical technology.
- analyze and interpret the impact of digital transformation in innovation in these areas on the patient, the society, health care and economics.
- have an in-depth understanding how digital transformation of innovation in Pharma and the field of medical technology can empower patients.

Links to other Modules within the Study Program This module is similar to other modules in the field of Healthcare Management	Links to other Study Programs of the University All Master Programs in the Health Affairs field
---	---

Innovation in Pharma and Medical Technology

Course Code: DLMIHMEIPMT01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

The aim of the course "Innovation in Pharma and Medical Technology" is to give the students a comprehensive insight into determinants of innovation in Pharma and the broad field of medical technology and to enable the students to analyze the effectiveness and benefits of innovation in these areas. Continuous innovation in pharma and medical technology is a key to medical progress. New technologies and new drugs are used to prevent, treat and cure various illnesses. As a result, innovations in these areas contribute to improving and saving lives. Innovation in pharma and medical technology is a dynamic, complex, and highly competitive multi-stage process. In addition to other topics, the course addresses the impact of incentives and disincentives such as regulatory policy, the patent system, and barriers to new market entrants on innovation, different approaches to evaluate innovations, important trends as well as ethical issues and challenges in this context. The course thus shows the field of tension between patient-relevant, societal, health care-related and economic benefits in innovation in Pharma and medical technology.

Course Outcomes

On successful completion, students will be able to

- understand and evaluate the influence and interests of different stakeholders on innovation in Pharma and the broad field of medical technology.
- assess and critically discuss the influence of various incentives and disincentives on innovation in these areas.
- analyze the effectiveness and benefits of innovation in Pharma and medical technology while considering ethical aspects.
- analyze and critically evaluate the impact of innovation in these areas on the patient, the society, health care and economics.
- analyze and have an in-depth understanding why innovation projects fail or succeed.
- discuss the challenges and potentials of new trends in pharma and the area of medical technology.

Contents

1. Introduction to Innovation in Pharma and Medical Technology
 - 1.1 Incremental, Radical and Disruptive Innovations
 - 1.2 How to Measure Innovation in Pharma and Medical Technology?
 - 1.3 Stakeholders

- 1.4 Determinants of Innovation in Pharma and Medical Technology
 - 1.5 Pharmaceutical R&D and Prices
2. Incentives and Disincentives for Innovation in Pharma and Medical Technology
 - 2.1 Information Asymmetries
 - 2.2 Barriers to New Market Entrants
 - 2.3 The Patent System and Innovations
 - 2.4 Impact of Public Policies and Price Regulation on Innovation
 - 2.5 Digression: Orphan Drug Act and Innovation
3. Effectiveness and Benefits of Innovation in Pharma and Medical Technology
 - 3.1 Evaluation of Innovation
 - 3.2 Returns of Innovation and Cost-Benefit Analysis
 - 3.3 Impact of Innovations on the Health of the Population
 - 3.4 Ethical Issues and Challenges
4. Disruptive Innovations for Pharma and Medical Technology
 - 4.1 Artificial Intelligence in Drug Discovery and Assisted Surgery
 - 4.2 Augmented and Virtual Reality
 - 4.3 Blockchain Technology
 - 4.4 Internet of Things
 - 4.5 3D Printing
5. Important Trends in Pharma
 - 5.1 Precision Medicine
 - 5.2 Omic-based Approaches for Drug Discovery
 - 5.3 In Silico Trials
 - 5.4 Patient Involvement in Drug Design
6. Important Trends in Medical Technology
 - 6.1 Nanomedicine
 - 6.2 Wearables for Medical Technology and Implantable Technologies
 - 6.3 Tissue Engineering
 - 6.4 Needle-free Diabetes Care

Literature**Compulsory Reading****Further Reading**

- Angraal, S./Krumholz H.M./Schulz W.L. (2017) Blockchain Technology. In: *Circulation: Cardiovascular Quality and Outcomes*, 10, 9, p. e003800.
- Gassmann, O./Schuhmacher, A./von Zedtwitz, M./Reepmeyer, G. (2018): *Leading pharmaceutical Innovation. How to Win the Life Science Race*. Third Edition, Springer, Cham.
- Mendoza, R. L. (2019). Incentives and disincentives to drug innovation: evidence from recent literature. In: *Journal of Medical Economics*, 22, 8, p. 713-721.
- Paul, D./Sanap, G./Shenoy, S./Kalyane, D./Kalia, K./Tekade, R. K. (2021). Artificial intelligence in drug discovery and development. In: *Drug Discovery Today*, 26, 1, p. 80-93.
- Schweitzer, S. & Lu, Z.J. (2018). *Pharmaceutical Economics and Policy: Perspectives, Promises, and Problems*. Third Edition, Oxford University Press.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Seminar: Innovation in Pharma and Medical Technology

Course Code: DLMIHMEIPMT02

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

In this course students prepare a seminar paper on a topic in the area of innovation in Pharma and the field of medical technology. Thus, the students demonstrate that they are able to work independently on a specialized topic. The students show that they are competent to analyze and interpret their findings in a structured and evidence-based way.

Course Outcomes

On successful completion, students will be able to

- critically evaluate risks and benefits of digital transformation in innovation in Pharma and Medical technology.
- analyze and interpret the impact of digital transformation in innovation in these areas on the patient, the society, health care and economics.
- have an in-depth understanding how digital transformation of innovation in Pharma and the field of medical technology can empower patients.

Contents

- Potential and risks of digital transformation for innovations in Pharma and Medical Technology with the following key points
 - Healthcare application of Blockchain Technology
 - Virtual Reality devices, e.g. for surgical operations and medical training
 - Telehealth
 - Artificial Intelligence for Diagnosis and Medicine Development
 - Internet of Things
 - Mobile Health Applications
 - Big data and analytics
 - Health Monitoring through healthcare wearables
 - Data security and digital transformation
 - Digital transformation and Public Health Safeguarding
 - Digital transformation and Precision medicine
 - Digital transformation and empowerment of patients

Literature**Compulsory Reading****Further Reading**

- Angraal, S./Krumholz H.M./Schulz W.L. (2017) Blockchain Technology. In: *Circulation: Cardiovascular Quality and Outcomes*, 10, 9, p. e003800.
- Lee, S.M./Lee D. (2020) Healthcare wearable devices: an analysis of key factors for continuous use intention. In: *Service Business*, 14, 4, p. 503-531.
- Monaghesh, E./Hajizadeh A. (2020) The role of telehealth during COVID-19 outbreak: a systematic review based on current evidence. In: *BMC Public Health*, 20, 1, p. 1193.
- Paul, D. et al. (2021). Artificial intelligence in drug discovery and development. In: *Drug Discovery Today*, 26, 1, p. 80-93.
- Ruthenbeck, G.S./Reynolds K.J. (2015) Virtual reality for medical training: the state-of-the-art. In: *Journal of Simulation*, 9, 1, p. 16-26.

Study Format Distance Learning

Study Format Distance Learning	Course Type Seminar
--	-------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: no
Type of Exam	Written Assessment: Research Essay

Student Workload					
Self Study 120 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 0 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods	
Learning Material <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Guideline

Accounting

Module Code: DLMBACCE

Module Type see curriculum	Admission Requirements none	Study Level MA	CP 10	Student Workload 300 h
--------------------------------------	---------------------------------------	--------------------------	-----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Prof. Dr. Stefan Tilch (Advanced Management Accounting & Control) / Prof. Dr. Zeljko Sevic (Current Issues in Accounting)

Contributing Courses to Module

- Advanced Management Accounting & Control (DLMBACCE01)
- Current Issues in Accounting (DLMBACCE02)

Module Exam Type

Module Exam

Split Exam

Advanced Management Accounting & Control

- Study Format "Distance Learning": Exam, 90 Minutes
- Study Format "myStudies": Exam, 90 Minutes

Current Issues in Accounting

- Study Format "myStudies": Exam, 90 Minutes
- Study Format "Distance Learning": Exam, 90 Minutes

Weight of Module

see curriculum

Module Contents**Advanced Management Accounting & Control**

- Controllershship and the CFO: Core Competencies, Organization, and Strategies
- Contingency Theory and Management Accounting and Control
- Levers of Control
- Behavioral Management Accounting and Control
- Transfer Pricing, and Corporate and Shared Service Centers
- Balance Scorecard, Executive Remuneration, and Control
- Product Life Cycle, Business Strategy, and Control

Current Issues in Accounting

- Preparation of Financial Statements
- Optimization of Receivables and Inventory
- Optimization of Liabilities and Equity
- Current Issues in Financial Accounting
- Valuing Businesses
- Capital Budgeting 154
- Financial Modeling and Valuation

Learning Outcomes

Advanced Management Accounting & Control

On successful completion, students will be able to

- Describe how controllership is set up in international companies.
- Explain how management accounting and control have to consider the contingencies under which they are set up.
- Design management accounting and control processes specific to the contingencies characterizing a specific company.
- Utilize management accounting and control processes to address strategic uncertainties and support organizational learning.
- Design, evaluate, and optimize management accounting and control systems and practices to influence the behavior of managers and employees.
- Identify the importance of transfer pricing for multinational groups.
- Discuss the role of the CFO in an international company.

Current Issues in Accounting

On successful completion, students will be able to

- explain selected management and financial accounting issues.
- Analyze relevant issues specific to the level of financial accounting established in a company.
- Identify and explain the specific tasks of a CFO with regards to the different functions of financial accounting and financial management.
- Describe the regulatory changes following the economic crisis, e.g. Basel III, and identify their impact of financial accounting and control.
- Discuss recent developments concerning IFRS.
- Develop processes and strategic plans that recognize the increased importance of working capital optimization and capital restructuring.
- Identify the functions of a chief treasurer or controller in a multinational corporation.

Links to other Modules within the Study Program

This module is similar to other modules in the field(s) of Finance & Tax Accounting

Links to other Study Programs of the University

All Master Programmes in the Business & Management field(s)

Advanced Management Accounting & Control

Course Code: DLMBACCE01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

This course deals with advanced aspects of management accounting and control. Students will understand how controllership is set up in international companies and explore the contingencies of management accounting and control, e.g. strategy, organizational life cycle phase, size, and ownership structure. The course also introduces the concept of the levers of control and highlights not only the traditional feedback and constraining function of control systems, but also the learning and expanding function of these control levers. As management accounting and control ultimately aims to influence the behavior of managers and employees when implementing the organization's goals, behavioral aspects must be considered. Constraints such as limitations concerning the information processing capabilities of managers have to be taken into account when designing management control systems. Furthermore, as companies grow larger and operate in different countries, transfer pricing systems for controlling corporate and shared service centers have to be set up. Upon completion of this course, students will also understand the consequences of different approaches to transfer pricing.

Course Outcomes

On successful completion, students will be able to

- Describe how controllership is set up in international companies.
- Explain how management accounting and control have to consider the contingencies under which they are set up.
- Design management accounting and control processes specific to the contingencies characterizing a specific company.
- Utilize management accounting and control processes to address strategic uncertainties and support organizational learning.
- Design, evaluate, and optimize management accounting and control systems and practices to influence the behavior of managers and employees.
- Identify the importance of transfer pricing for multinational groups.
- Discuss the role of the CFO in an international company.

Contents

1. Controllership and the CFO: Core Competencies, Organization, and Strategies
 - 1.1 Management Accounting and Control
 - 1.2 Core Competencies of CFOs and Controllers
 - 1.3 Controllership Strategies

- 1.4 Organization of the Controller and Finance Unit
2. Contingency Theory and Management Accounting and Control
 - 2.1 Contingency Theory
 - 2.2 Differences in Management Accounting and Control According to Different Contingencies
 - 2.3 Limitations of Contingency Theory
3. Levers of Control
 - 3.1 Levers of Control
 - 3.2 Implications of the Levers of Control for the Management Accounting and Control Function
 - 3.3 Instruments for Different Levers of Control
4. Behavioral Management Accounting and Control
 - 4.1 Cognitive and Behavioral Constraints of Managers
 - 4.2 Implications for the Design of Management Accounting and Control Systems
 - 4.3 Behavioral Aspects of Implementing Management Control Systems
5. Transfer Pricing, and Corporate and Shared Service Centers
 - 5.1 Transfer Pricing Methods
 - 5.2 Transfer Pricing in Multi-National Companies
 - 5.3 Organizing Corporate Centers and Allocation of Their Costs
 - 5.4 Organizing and Pricing of Shared Service Centers
6. Balance Scorecard, Executive Remuneration, and Control
 - 6.1 Balanced Scorecard: An Overview
 - 6.2 Measures in Balanced Scorecard
 - 6.3 Agency Theory and Balanced Scorecard
 - 6.4 Implications of Balanced Scorecard on Control
7. Product Life Cycle, Business Strategy, and Control
 - 7.1 An Overview of Product Life Cycle
 - 7.2 Stages of Product Life Cycle and Business Strategy
 - 7.3 Implications of Product Life Cycle on Control

Literature**Compulsory Reading****Further Reading**

- Atrill, P. & McLaney, E. (2021). Management Accounting for Decision Makers. 10th ed. Pearson.
- Bhimani, A., Datar, S., Horngren, C., Rajan, M., Bhimani, A., Datar, S., Horngren, C., Rajan, M., Bhimani, A., & Datar, S. (2018). Management and cost accounting. Pearson Education, Limited.
- Charifzadeh, M. & Taschner, A. (2017). Management Accounting and Control. Tools and Concepts in a Central European Context. Wiley-VCH.
- Colin Drury, & Mike E Tayles. (2021). Management Accounting for Business: Vol. Eighth edition Colin Drury, Mike Tayles. Cengage Learning.
- Kaplan, R. S., & Norton, D. P. (1996). The balanced scorecard: Translating strategy into action (pp. 43–167). Boston, MA: Harvard Business School Press.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Study Format myStudies

Study Format myStudies	Course Type Theory Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book	Exam Preparation <input checked="" type="checkbox"/> Online Tests

Current Issues in Accounting

Course Code: DLMBACCE02

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

Management accounting and financial accounting are constantly changing and adapting to internal and external circumstances. Financial accounting according to IFRS is continually evolving; developments occur in accounting rules and instruments for financial management are constantly emerging. Following the financial and economic crisis in 2008, accounting changed significantly following the introduction of additional regulatory rules and operating requirements. This course gives students an insight into selected issues and provides practical examples in management accounting and financial accounting. Students are introduced to specific tasks of a CFO with regard to accounting and financial management. The course will also facilitate students to develop an in-depth understanding of working capital optimization and capital restructuring. Finally, students will apply their financial and management accounting knowledge in an integrated financial modeling exercise.

Course Outcomes

On successful completion, students will be able to

- explain selected management and financial accounting issues.
- Analyze relevant issues specific to the level of financial accounting established in a company.
- Identify and explain the specific tasks of a CFO with regards to the different functions of financial accounting and financial management.
- Describe the regulatory changes following the economic crisis, e.g. Basel III, and identify their impact of financial accounting and control.
- Discuss recent developments concerning IFRS.
- Develop processes and strategic plans that recognize the increased importance of working capital optimization and capital restructuring.
- Identify the functions of a chief treasurer or controller in a multinational corporation.

Contents

1. Preparation of Financial Statements
 - 1.1 Accrual and Deferral Concepts for Recording Transactions
 - 1.2 End-of-Period Adjustments and the Use of Accounting Estimates
 - 1.3 Preparation of Financial Statements and the Classified Balance Sheet
 - 1.4 The Accrual Basis of Accounting and the Interpretation of Financial Statements

- 1.5 Financial Analysis and the Company's Liquidity: Working Capital Ratio, Current Ratio, and Quick Ratio
2. Optimization of Receivables and Inventory
 - 2.1 Receivables and Uncollectibles
 - 2.2 Accounting for Receivables and Uncollectibles
 - 2.3 Inventories Classification
 - 2.4 Inventory Cost Flow Assumptions and Their Impact on Financial Statements
 - 2.5 Financial Analysis: Accounts Receivable and Inventory Turnover Ratios
3. Optimization of Liabilities and Equity
 - 3.1 Financing Using Current Liabilities, Notes Payable, and Contingencies
 - 3.2 Long-Term Sources of Finance
 - 3.3 Debt and Equity Financing and Earnings Per Share
 - 3.4 Financial Statement Analysis Using Price-Earnings Ratio
4. Current Issues in Financial Accounting
 - 4.1 International Financial Reporting Standards (IFRS)
 - 4.2 Principle- Versus Rule-Based Standards and IFRS Fair Value Measures
 - 4.3 Specific IFRS Standards
 - 4.4 Financial Statement Presentation under IFRS
 - 4.5 Integrated Revenue Recognition and the Implications of Adopting IFRS
5. Valuing Businesses
 - 5.1 Financial Statements and Valuation
 - 5.2 Accrual Accounting and Valuation: Pricing Book Value
 - 5.3 Accrual Accounting and Valuation: Pricing Earnings
 - 5.4 Business Valuation Methods in Practice
 - 5.5 Corporate Restructuring, Corporate Governance, and Auditor's Role in Firm Valuation
6. Capital Budgeting
 - 6.1 Capital Budgeting Decisions
 - 6.2 Non-Discounting Models: Payback and Accounting Rate of Return
 - 6.3 Discounting Models: The Net Present Value (NPV) Method and Internal Rate of Return (IRR)
 - 6.4 NPV Versus IRR for Selecting Mutually Exclusive Projects
 - 6.5 Basics of Modeling Capital Budgeting
7. Financial Modeling and Valuation

7.1 Using Assumptions and Building a Financial Model

7.2 Analysis, Valuation, and Planning

Literature

Compulsory Reading

Further Reading

- Berk, J., DeMarzo, P., Harford J. (2021). Fundamentals of Corporate Finance, (5th ed.). Pearson.
- Hansen, D. R., & Mowen, M. M. (2015). Cornerstones of cost management (3rd ed.). Boston, MA: Cengage.
- Häcker, J. & Ernst, D. (2017). Financial Modeling: An Introductory Guide to Excel and VBA Applications in Finance (1st ed.). Palgrave Macmillan.
- Needles, B. E., & Powers, M. (2013). International financial reporting standards: An introduction (3rd ed.). Boston, MA: Cengage.
- Penman, S. H. (2013). Financial statement analysis and security valuation (5th ed.). New York, NY: McGraw Hill Education.
- Warren, C. S. (2017). Survey of accounting (8th ed.). Boston, MA: Cengage.

Study Format myStudies

Study Format myStudies	Course Type Theory Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	Learning Material <input checked="" type="checkbox"/> Course Book	Exam Preparation <input checked="" type="checkbox"/> Online Tests

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support	Learning Material	Exam Preparation
<input checked="" type="checkbox"/> Course Feed	<input checked="" type="checkbox"/> Course Book	<input checked="" type="checkbox"/> Practice Exam
<input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	<input checked="" type="checkbox"/> Video	<input checked="" type="checkbox"/> Online Tests
<input checked="" type="checkbox"/> Recorded Live Sessions	<input checked="" type="checkbox"/> Slides	

Consumer Behavior and Research

Module Code: DLMBCBR

Module Type see curriculum	Admission Requirements none	Study Level MA	CP 10	Student Workload 300 h
--------------------------------------	---------------------------------------	--------------------------	-----------------	----------------------------------

Semester / Term see curriculum	Duration Minimaldauer: 1 Semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Caterina Fox (International Consumer Behavior) / Caterina Fox (Applied Marketing Research)

Contributing Courses to Module

- International Consumer Behavior (DLMBCBR01)
- Applied Marketing Research (DLMBCBR02)

Module Exam Type

Module Exam

Split Exam

International Consumer Behavior

- Study Format "Distance Learning": Exam, 90 Minutes

Applied Marketing Research

- Study Format "Distance Learning": Exam, 90 Minutes

Weight of Module

see curriculum

Module Contents**International Consumer Behavior**

- Consumer Behavior
- The Consumer Decision-Making Process
- Internal Influences on Consumer Behavior
- External Influences on Consumer Behavior
- International Consumer Behavior
- International Marketing Strategy and Consumer Behavior

Applied Marketing Research

- The Role of Marketing Research in Managerial Decision-Making
- Problem Definition and the Marketing Research Process
- Secondary Data and Qualitative Research
- Survey Research and the Concept of Measurement
- Observational Research
- Sampling Issues, Data Processing, and Fundamental Data Analysis
- Communicating the Research Results

Learning Outcomes

International Consumer Behavior

On successful completion, students will be able to

- outline the purchase decision-making process undertaken by the consumer.
- describe the internal and external influences on the consumer decision-making processes.
- identify the different research methods available to companies to collect relevant data regarding their consumers and their behavior
- develop a plan to generate required market research data regarding consumer behavior and decision-making.
- be able to generate, analyze, interpret and report relevant data regarding consumers.
- present the key concepts characterizing international consumer behavior and discuss their impact on global marketing strategies.

Applied Marketing Research

On successful completion, students will be able to

- recognize and promote the importance of marketing research methodologies in supporting key marketing management decisions.
- identify some of the challenges of marketing research in an international environment.
- identify appropriate analysis tools for a given marketing related problem on a strategic and operational level.
- identify errors made in the research process.
- outline the stages of the marketing research process.
- identify ethical problems in a marketing research situation and propose an ethically sound approach.
- propose a research design to study a particular research question.
- compare and contrast different research methods.
- recommend good practice for a variety of research techniques.
- design questionnaires with sound measurement properties.
- interpret results of advanced marketing research efforts.
- transfer the gained insights into their future international work environment.

Links to other Modules within the Study Program

This module is similar to other modules in the field(s) Marketing & Sales

Links to other Study Programs of the University

All Master Programmes in the Marketing field(s)

International Consumer Behavior

Course Code: DLMBCBR01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

In a global economy characterized by greater competition, companies operating internationally need comprehensive market-driven strategies to survive in the market place. The course provides students with the relevant concepts for understanding the international environment of the company with focus on the demand side/the consumer. Students learn how differences in culture, economic systems, and political environments impact consumers' behavior in terms of decision-making in the fields of acquisition, consumption, and disposal of products, services, experiences, and ideas.

Course Outcomes

On successful completion, students will be able to

- outline the purchase decision-making process undertaken by the consumer.
- describe the internal and external influences on the consumer decision-making processes.
- identify the different research methods available to companies to collect relevant data regarding their consumers and their behavior
- develop a plan to generate required market research data regarding consumer behavior and decision-making.
- be able to generate, analyze, interpret and report relevant data regarding consumers.
- present the key concepts characterizing international consumer behavior and discuss their impact on global marketing strategies.

Contents

1. Consumer Behavior
 - 1.1 Consumer Behavior and International Marketing
 - 1.2 Consumer Decision-Making in the Marketplace
2. The Consumer Decision-Making Process
 - 2.1 The Pre-Purchase Stage
 - 2.2 The Purchase Stage
 - 2.3 The Post-Purchase Stage
3. Internal Influences on Consumer Behavior
 - 3.1 Motives and Motivation

- 3.2 Perception
- 3.3 Attitude
4. External Influences on Consumer Behavior
 - 4.1 Culture
 - 4.2 Subculture
 - 4.3 Groups and Families
5. International Consumer Behavior
 - 5.1 Cultural Dimensions
 - 5.2 The Influence of Social Media on Consumer Decision-Making
6. International Marketing Strategy and Consumer Behavior
 - 6.1 International Market Segmentation and Product Positioning
 - 6.2 Consumer Behavior and Product Strategy
 - 6.3 Consumer Behavior and Communication Strategy
 - 6.4 Consumer Behavior and Pricing Strategy
 - 6.5 Consumer Behavior and Distribution Strategy

Literature**Compulsory Reading****Further Reading**

- Schiffman, L. G., & Kanuk, L. L. (2014). Consumer behavior. Frenchs Forest.: Pearson Education Australia.
- Solomon, M. (2016). Consumer behavior: Buying, having, and being (12th ed.). New York City, NY: Pearson.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Applied Marketing Research

Course Code: DLMBCBR02

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

In a global economy characterized by greater competition, companies operating internationally need comprehensive market-driven strategies in order to survive in the market place. The course allows students to explore marketing research, the information-gathering arm of marketing practice. The topic is viewed primarily from the perspective of a consumer of marketing research, i.e. a busy manager who needs information to guide decision making. Given their role in decision-making regarding marketing and sourcing marketing research, it is helpful for managers to understand how producers of research approach the process. This background will help you as a manager to become a better-informed consumer of research who is able to participate in research design, evaluate the quality of marketing information that crosses your desk, and conduct marketing research projects yourself when appropriate.

Course Outcomes

On successful completion, students will be able to

- recognize and promote the importance of marketing research methodologies in supporting key marketing management decisions.
- identify some of the challenges of marketing research in an international environment.
- identify appropriate analysis tools for a given marketing related problem on a strategic and operational level.
- identify errors made in the research process.
- outline the stages of the marketing research process.
- identify ethical problems in a marketing research situation and propose an ethically sound approach.
- propose a research design to study a particular research question.
- compare and contrast different research methods.
- recommend good practice for a variety of research techniques.
- design questionnaires with sound measurement properties.
- interpret results of advanced marketing research efforts.
- transfer the gained insights into their future international work environment.

Contents

1. The Role of Marketing Research in Managerial Decision-Making
 - 1.1 The Importance of Marketing Research in Decision-Making
 - 1.2 The Institutions Involved in Marketing Research

- 1.3 Common Challenges in Conducting Marketing Research
2. Problem Definition and the Marketing Research Process
 - 2.1 From Problem Recognition to Research Objectives: Step One
 - 2.2 From Research Design to Follow-Up: Steps Two to Six
 - 2.3 Forward and Backward Linkages in the Marketing Research Process
3. Secondary Data and Qualitative Research
 - 3.1 Advantages and Limitations of Secondary Data
 - 3.2 Definition and Types of Qualitative Research
 - 3.3 Limitations of Qualitative Research
4. Survey Research and the Concept of Measurement
 - 4.1 Survey Errors and Their Impact on Research Outcomes
 - 4.2 Measurement Scales
 - 4.3 Questionnaire Design
5. Observational Research
 - 5.1 Observational Research Defined
 - 5.2 Approaches to Observational Research
 - 5.3 Advantages and Limitations of Observational Research
6. Sampling Issues, Data Processing, and Fundamental Data Analysis
 - 6.1 Sampling Methods and Types of Samples
 - 6.2 Data Processing Issues
 - 6.3 Fundamental Data Analysis
7. Communicating the Research Results
 - 7.1 The Major Steps in Communicating the Results
 - 7.2 Organization of the Research Report
 - 7.3 The Marketing Research Presentation

Literature**Compulsory Reading****Further Reading**

- Hair, J.F.; Ortinau, D.J., & Harisson, D.E. (2023). *Essentials of Marketing Research*. New York: McGraw-Hill Education.
- Len Tiu Wright, Luiz Moutinho, Merlin Stone, & Richard P. Bagozzi. (2021). *The Routledge Companion to Marketing Research*. Routledge.
- Malhotra, N. K. (2019). *Marketing Research: An Applied Orientation (7th Ed.)*. Pearson.
- Rajagopal, R. (2019). *Qualitative marketing research: Understanding how behavioral complexities drive marketing strategies*. Business Expert Press.
- Robin Nunkoo, Viraiyan Teeroovengadum, & Christian M. Ringle. (2021). *Handbook of Research Methods for Marketing Management*. Edward Elgar Publishing.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Corporate Finance and Investment

Module Code: DLMBCFIE

Module Type see curriculum	Admission Requirements none	Study Level MA	CP 10	Student Workload 300 h
--------------------------------------	---------------------------------------	--------------------------	-----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Prof. Dr. Andreas Simon (Advanced Corporate Finance) / Prof. Dr. Andreas Simon (Investment Analysis & Portfolio Management)

Contributing Courses to Module

- Advanced Corporate Finance (DLMBCFIE01)
- Investment Analysis & Portfolio Management (DLMBCFIE02)

Module Exam Type

Module Exam

Split Exam

Advanced Corporate Finance

- Study Format "Distance Learning": Exam, 90 Minutes
- Study Format "myStudies": Exam, 90 Minutes

Investment Analysis & Portfolio Management

- Study Format "myStudies": Exam, 90 Minutes
- Study Format "Distance Learning": Exam, 90 Minutes

Weight of Module

see curriculum

Module Contents**Advanced Corporate Finance**

- Financing decisions and issuing securities
- Debt financing and leasing
- Options and futures
- Takeovers, corporate control, and governance
- Unsolved issues and the future of finance

Investment Analysis & Portfolio Management

- Introduction to investment analysis and portfolio management
- Portfolio selection and the optimum portfolio
- The equilibrium in capital markets and asset pricing models
- Analysis and management of securities
- Evaluation of the investment performance

Learning Outcomes**Advanced Corporate Finance**

On successful completion, students will be able to

- identify methods of issuing corporate debt and equity securities, and understand the role of financial intermediaries.
- discuss dividend policy and corporate capital structure in perfect markets vis-à-vis imperfect markets.
- utilize a range of tools for valuing different kinds of debt.
- describe various financing options and their different forms of application in the context of corporate finance.
- discuss mergers and takeovers and the role of different parties involved in the transaction process.

Investment Analysis & Portfolio Management

On successful completion, students will be able to

- describe the theoretical constructs of investments and portfolio analysis.
- apply the modern portfolio theory and the theory of capital markets to practical questions of investment decisions.
- discuss the conflicting priorities between the normative theoretical approach of portfolio selection and equilibrium asset pricing on the one hand, and the practical application of investment decisions such as stock picking and technical analysis on the other hand.
- utilize various tools for researching and analyzing investment vehicles used in the context of asset pricing and asset allocation decisions.
- identify main features and practices of the global investment advisory industry.
- describe warrants and convertibles, options and futures and discuss the application of these vehicles in a portfolio investment context.

Links to other Modules within the Study Program

This module is similar to other modules in the field of Finance & Tax Accounting

Links to other Study Programs of the University

All Master Programmes in the Business & Management field

Advanced Corporate Finance

Course Code: DLMBCFIE01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

The last decade has seen fundamental changes in financial markets and financial instruments. Both the theory and practice of corporate finance have been moving ahead with uncommon speed. Participants will be guided through the main areas of modern financial theory, including the pricing of assets and derivatives, corporate financial policy, and corporate control. The course emphasizes the modern fundamentals of the theory of finance and brings the theory to life with contemporary examples.

Course Outcomes

On successful completion, students will be able to

- identify methods of issuing corporate debt and equity securities, and understand the role of financial intermediaries.
- discuss dividend policy and corporate capital structure in perfect markets vis-à-vis imperfect markets.
- utilize a range of tools for valuing different kinds of debt.
- describe various financing options and their different forms of application in the context of corporate finance.
- discuss mergers and takeovers and the role of different parties involved in the transaction process.

Contents

1. Financing Decisions and Issuing Securities
 - 1.1 Types of Corporate Financing
 - 1.2 Corporations and Issuing Shares
 - 1.3 Corporations and Issuing Debt Securities
2. Dividend Policy and Capital Structure
 - 2.1 What's Your Dividend Policy?
 - 2.2 What's Your Debt Policy?
 - 2.3 Weighted Average Cost of Capital (WACC)
 - 2.4 Corporate and Personal Taxes
 - 2.5 Capital Structure and Related Theories

3. Debt Financing and Leasing
 - 3.1 Debt Valuation
 - 3.2 Rating Debt
 - 3.3 Different Kinds of Debt and Hybrid Securities
 - 3.4 Leasing as a Form of Corporate Finance
4. Options and Futures
 - 4.1 Derivative Financial Instruments, Options and Futures
 - 4.2 Valuing Options, the Binomial Model, the Black-Scholes Formula
 - 4.3 Real Options
5. Takeovers, Corporate Control, and Governance
 - 5.1 Mergers and Acquisitions
 - 5.2 LBOs, Management Buyouts, and Going Private
 - 5.3 Private Equity and the Venture Capitalist
 - 5.4 Empirical Testing of Takeover Success
 - 5.5 Corporate Governance and Corporate Control
6. Unsolved Issues and the Future of Finance
 - 6.1 What Do We Know and What Do We Not Know About Finance?
 - 6.2 The Future of Finance

Literature

Compulsory Reading

Further Reading

- Brealey, R., Myers, S. C., & Allen, F. (2016). Principles of corporate finance (12th ed.). New York, NY: McGraw-Hill Education.
- Vernimmen, P., Quiry, P., Dallochio, M., Le Fur, Y., & Salvi, A. (2014). Corporate finance: Theory and practice (4th ed.). Hoboken, NJ: John Wiley & Sons. (Database: EBSCO).

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Study Format myStudies

Study Format myStudies	Course Type Theory Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	Learning Material <input checked="" type="checkbox"/> Course Book	Exam Preparation <input checked="" type="checkbox"/> Online Tests

Investment Analysis & Portfolio Management

Course Code: DLMBCFIE02

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

Security analysis, asset allocation strategies, and the optimal composition of portfolios of financial assets are some of the most important fields of advanced financial management. This course is designed to bring together investment analysis and portfolio theory and their implementation with regard to portfolio management. Topics to be covered are the theory of portfolio selection and the theory's application, the hypotheses of efficient capital markets and the capital market equilibrium, analysis of investments and the evaluation of portfolios (or mutual funds) of common stocks, bonds, international assets, and other asset classes. Students will be directed through a broad and critical evaluation of the various investment strategies for maximizing returns and minimizing risk on portfolios. Investment analysis and portfolio management is a truly global topic. As a consequence, the course will take an international perspective, provide an insight into the global investment advisory industry, and discuss best-practice approaches around the globe.

Course Outcomes

On successful completion, students will be able to

- describe the theoretical constructs of investments and portfolio analysis.
- apply the modern portfolio theory and the theory of capital markets to practical questions of investment decisions.
- discuss the conflicting priorities between the normative theoretical approach of portfolio selection and equilibrium asset pricing on the one hand, and the practical application of investment decisions such as stock picking and technical analysis on the other hand.
- utilize various tools for researching and analyzing investment vehicles used in the context of asset pricing and asset allocation decisions.
- identify main features and practices of the global investment advisory industry.
- describe warrants and convertibles, options and futures and discuss the application of these vehicles in a portfolio investment context.

Contents

1. Introduction to Investment Analysis and Portfolio Management
 - 1.1 The Asset Management and Investment Advisory Industry
 - 1.2 Financial Instruments, Derivatives, and Organization of Securities Markets
 - 1.3 The History of Investment Analysis
2. Portfolio Selection and the Optimum Portfolio

- 2.1 Mean Variance Portfolio Theory
- 2.2 The Calculation of Risk and Return
- 2.3 Efficient Portfolios and Techniques for Calculating the Efficient Frontier
- 2.4 Single-Index Models and Multi-Index Models
- 2.5 International Diversification
3. Equilibrium in Capital Markets and Asset Pricing Models
 - 3.1 Equilibrium in Capital Markets and the Standard Capital Asset Pricing Model
 - 3.2 Empirical Tests of Equilibrium Models
 - 3.3 Extensions to the Single-Factor Capital Asset Pricing Model
 - 3.4 Multifactor Asset Pricing Models: Arbitrage Pricing Theory and the Fama-French Model
4. Analysis of Securities
 - 4.1 Macro- and Microanalyses of Industries and Companies
 - 4.2 Stock Valuation, Intrinsic Value and Market Value Determinants, and Valuation Techniques
 - 4.3 The Analysis and Valuation of Bonds
 - 4.4 Technical Analysis and Behavioral Finance
5. Management of Securities
 - 5.1 The Efficient Market Hypothesis
 - 5.2 Stock and Bond Portfolio Management Strategies Using Active vs Passive Strategies
 - 5.3 Asset Allocation Strategies
6. Investment Vehicles
 - 6.1 Mutual Funds: Types, Industry, and Participants
 - 6.2 Hedge Funds
 - 6.3 Private Equity Funds
7. Evaluation of Investment Performance
 - 7.1 Globalization and International Investing
 - 7.2 Investment Process
 - 7.3 Evaluation of Portfolio Performance Using the Sharpe Ratio, Jensen Measure, Treynor Measure, and Other Measures
 - 7.4 Evaluation of Security Analysis

Literature

Compulsory Reading

Further Reading

- Smart, S., Gitman, L. J., & Joehnk, M. D. (2017). Fundamentals of investing (13th ed.). Upper SaddleRiver, NJ: Pearson.

Study Format myStudies

Study Format myStudies	Course Type Theory Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	Learning Material <input checked="" type="checkbox"/> Course Book	Exam Preparation <input checked="" type="checkbox"/> Online Tests

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Communication and Public Relations

Module Code: DLMWKPR_E

Module Type see curriculum	Admission Requirements none	Study Level MA	CP 10	Student Workload 300 h
--------------------------------------	---------------------------------------	--------------------------	-----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Dr. Tim Raupach (Communication and Public Relations I) / Dr. Tim Raupach (Communication and Public Relations II)

Contributing Courses to Module

- Communication and Public Relations I (DLMWKB01_E)
- Communication and Public Relations II (DLMWKB02_E)

Module Exam Type

Module Exam

Split Exam

Communication and Public Relations I

- Study Format "Distance Learning": Written Assessment: Case Study

Communication and Public Relations II

- Study Format "Distance Learning": Written Assessment: Case Study

Weight of Module

see curriculum

Module Contents**Communication and Public Relations I**

- General conditions and strategic objectives of communication and public relations
- The instruments of the communication mix, their critical appraisal and fields of application
- Strategic and tactical planning of communication and public relations measures, including agency management and budget planning

Communication and Public Relations II

- Introduction to the basic processes of perception and identification of target audiences
- Requirements for effective communication and the design of appropriate communication tools
- Basic approaches and instruments for measuring communication results

Learning Outcomes**Communication and Public Relations I**

On successful completion, students will be able to

- understand the general conditions of communication and assess the consequences for the implementation of communication procedures.
- understand the theory of communication.
- identify and evaluate possible communication strategies and develop them based on their own objectives.
- know basic communication instruments and assess the advantages and disadvantages of the respective measures.
- implement communication strategies by designing measures and instruments, in particular in the form of integrated communication.
- know essential aspects of strategic and tactical communication planning and know approaches and possibilities for budgeting and media planning as well as agency management.
- familiarize themselves with the latest trends in communication and brand policy.

Communication and Public Relations II

On successful completion, students will be able to

- understand basic perception and assessment processes of communication.
- draw conclusions for the development of communication messages and develop instruments that increase the effect of communication.
- evaluate and optimize communication measures with regard to their effectiveness.
- know instruments for measuring the effect of communication, assess their advantages and disadvantages and use these instruments in daily business.

Links to other Modules within the Study Program

This module is similar to other modules in the field of Public Relations Management

Links to other Study Programs of the University

All Master Programs in the Marketing & Communication fields

Communication and Public Relations I

Course Code: DLMWKB01_E

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

Students become familiar with the general conditions of communication as well as the past, current and future development of the media landscape. Based on the theory of communication, communication strategy with its different aspects is introduced. This scientific foundation provides the basis for discussing appropriate communication instruments, as well as critically assessing their suitability for achieving different communication objectives. The theoretical discussion is supported by practical examples. Furthermore, the basics of communication and media planning, communication budget determination and agency selection and control are taught.

Course Outcomes

On successful completion, students will be able to

- understand the general conditions of communication and assess the consequences for the implementation of communication procedures.
- understand the theory of communication.
- identify and evaluate possible communication strategies and develop them based on their own objectives.
- know basic communication instruments and assess the advantages and disadvantages of the respective measures.
- implement communication strategies by designing measures and instruments, in particular in the form of integrated communication.
- know essential aspects of strategic and tactical communication planning and know approaches and possibilities for budgeting and media planning as well as agency management.
- familiarize themselves with the latest trends in communication and brand policy.

Contents

1. Introduction to Communication and PR
 - 1.1 Communication
 - 1.2 Levels of Communication
 - 1.3 Public Relations
2. General conditions of Communication
 - 2.1 Development Stages of Corporate Communication

- 2.2 The Media Landscape
- 2.3 Information Overload
- 2.4 Paradigm Shift
- 3. Communication Policy
 - 3.1 Corporate Communication and PR
 - 3.2 Objectives and Stakeholders
 - 3.3 Integrated Communication
- 4. Communication Strategies
 - 4.1 Market and Positioning
 - 4.2 Target Audience Planning
 - 4.3 Communication Strategies
- 5. Communication Tools
 - 5.1 Categories of Communication Instruments
 - 5.2 Advertising
 - 5.3 Social Media and Web 2.0
 - 5.4 Public Relations
- 6. Organization of Communication I
 - 6.1 Communication in Practice
 - 6.2 The Planning Process
- 7. Organization of Communication II
 - 7.1 Agencies: Selection and Briefing
 - 7.2 Budgeting
- 8. Developments and Trends
 - 8.1 Corporate Communication Today and Tomorrow
 - 8.2 Neuro Marketing
 - 8.3 Storytelling
 - 8.4 Mobile Marketing
 - 8.5 Further Developments

Literature**Compulsory Reading****Further Reading**

- Argenti, P. A. (2015). Corporate communication (7th ed.). McGraw-Hill Education.
- Cornelissen, J. P. (2020). Corporate communication: A guide to theory and practice (6th ed.). SAGE.
- Theaker, A. (2020). The public relations handbook (6th ed.). Routledge.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Written Assessment: Case Study

Student Workload					
Self Study 110 h	Contact Hours 0 h	Tutorial/Tutorial Support 20 h	Self Test 20 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support	Learning Material	Exam Preparation
<input checked="" type="checkbox"/> Course Feed	<input checked="" type="checkbox"/> Course Book	<input checked="" type="checkbox"/> Online Tests
<input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	<input checked="" type="checkbox"/> Video	<input checked="" type="checkbox"/> Guideline
<input checked="" type="checkbox"/> Recorded Live Sessions	<input checked="" type="checkbox"/> Slides	

Communication and Public Relations II

Course Code: DLMWKB02_E

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

This course expands upon the understanding of communication and public relations with important findings on consumer perception. Students learn to assess basic perception insights from a target audience perspective and apply them to develop communication tools. Furthermore, techniques for creating attention, conveying information, designing experiences and increasing learning are discussed and supported by practical examples. In addition, students learn about the different approaches and instruments for measuring success and the effect of communication and understand which instrument is suitable for which problem and under which conditions.

Course Outcomes

On successful completion, students will be able to

- understand basic perception and assessment processes of communication.
- draw conclusions for the development of communication messages and develop instruments that increase the effect of communication.
- evaluate and optimize communication measures with regard to their effectiveness.
- know instruments for measuring the effect of communication, assess their advantages and disadvantages and use these instruments in daily business.

Contents

1. Communication and Perception
 - 1.1 The Effect of Communication
 - 1.2 Psychological and Neuroscientific Findings
 - 1.3 Image, Text and Sound in Communication
2. Optimizing Implementation: Organization and Positioning
 - 2.1 Integrated Communication
 - 2.2 Positioning
3. Optimizing Implementation: Situation Analysis, Objectives and Target Audiences
 - 3.1 Situation Analysis
 - 3.2 Objectives and Planning
 - 3.3 Target Audiences

4. Planning, Concepts and Staging
 - 4.1 Strategy and Planning
 - 4.2 Conceptual Work
 - 4.3 Dramaturgy and Staging
5. The Media Mix - Practical Examples
 - 5.1 Television Advertising
 - 5.2 Live Communication
 - 5.3 Public Relations
6. Social Media in the Communication Mix
 - 6.1 Owned, Paid and Earned Media
 - 6.2 Social Media and Corporate Communication
7. Communication Controlling
 - 7.1 Added Value Through Communication
 - 7.2 Strategic and Operational Communication Controlling
 - 7.3 Instruments
8. Responsible Communication
 - 8.1 Socially Oriented Communication
 - 8.2 Corporate Social Responsibility (CSR)
 - 8.3 Legal Considerations

Literature

Compulsory Reading

Further Reading

- Juska, J. (2017). Integrated marketing communication: Advertising and promotion in a digital world. Routledge.
- Kelleher, T. (2020). Public relations (2nd ed.). Oxford University Press.
- Seitel, F. (2016). The practice of public relations (13th ed.). Pearson.
- Stacks, D. (2016). Primer of public relations research (3rd ed.). Guilford Press.
- Wilcox, D., Cameron, G., & Reber, B. (2014). Public relations: Strategies and tactics (11th ed.). Pearson.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Written Assessment: Case Study

Student Workload					
Self Study 110 h	Contact Hours 0 h	Tutorial/Tutorial Support 20 h	Self Test 20 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Online Tests <input checked="" type="checkbox"/> Guideline

Data Science and Analytics

Module Code: DLMBDSA-01

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	none	MA	10	300 h

Semester / Term	Duration	Regularly offered in	Language of Instruction and Examination
see curriculum	Minimum 1 semester	WiSe/SoSe	English

Module Coordinator

Prof. Dr. Simon Steinberg (Data Science) / Prof. Dr. Andrew Adjah Sai (Analytical Software and Frameworks)

Contributing Courses to Module

- Data Science (DLMBDSA01-01)
- Analytical Software and Frameworks (DLMBDSA02)

Module Exam Type

Module Exam

Split Exam

Data Science

- Study Format "Distance Learning": Exam, 90 Minutes
- Study Format "myStudies": Exam, 90 Minutes

Analytical Software and Frameworks

- Study Format "Distance Learning": Written Assessment: Written Assignment
- Study Format "myStudies": Written Assessment: Written Assignment

Weight of Module

see curriculum

Module Contents**Data Science**

- Introduction to Data Science
- Use Cases and Performance Evaluation
- Pre-processing of Data
- Processing of Data
- Selected Mathematical Techniques
- Selected Artificial Intelligence Techniques

Analytical Software and Frameworks

- Introduction to Analytical Software and Frameworks
- Data Storage
- Statistical Modeling
- Machine Learning
- Cloud Computing Platforms
- Distributed Computing
- Database Technologies

Learning Outcomes**Data Science**

On successful completion, students will be able to

- identify use cases and evaluate the performance of data-driven approaches.
- understand how domain specific knowledge for a particular application context is required to identify objectives and value propositions for data science use cases.
- appreciate the role and necessity for business-centric model evaluation apposite to the respective area of application.
- comprehend how data are pre-processed in preparation for analysis.
- develop typologies for data and ontologies for knowledge representation.
- decide for appropriate mathematical algorithms to utilize data analysis for a given task.
- understand the value, applicability, and limitations of artificial intelligence for data analysis.

Analytical Software and Frameworks

On successful completion, students will be able to

- comprehend how cloud computing and distributed computing support the field of data analytics.
- understand in-memory database technologies for real-time analytics.
- apply advanced statistics and machine learning solutions to solve data analysis problems.
- compare the capabilities and limitations of the presented software solutions.
- understand how to identify the right technological solution for a specific application domain.

Links to other Modules within the Study Program

This module is similar to other modules in the field of Data Science & Artificial Intelligence

Links to other Study Programs of the University

All Master Programmes in the IT & Technology field

Data Science

Course Code: DLMBDSA01-01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

The course provides the framework to create value from data. After an introduction the course covers how to identify suitable use cases and evaluate the performance of data-driven methods. In an interdisciplinary approach, the requirements from a specific application domain need to be understood and transferred to the technological understanding to identify the objectives and value proposition of a Data Science project. The course covers techniques for the technical processing of data and then introduces advanced mathematical techniques and selected methods from artificial intelligence that are used to analyze data and make predictions.

Course Outcomes

On successful completion, students will be able to

- identify use cases and evaluate the performance of data-driven approaches.
- understand how domain specific knowledge for a particular application context is required to identify objectives and value propositions for data science use cases.
- appreciate the role and necessity for business-centric model evaluation apposite to the respective area of application.
- comprehend how data are pre-processed in preparation for analysis.
- develop typologies for data and ontologies for knowledge representation.
- decide for appropriate mathematical algorithms to utilize data analysis for a given task.
- understand the value, applicability, and limitations of artificial intelligence for data analysis.

Contents

1. Introduction to Data Science
 - 1.1 Overview of Data Science
 - 1.2 Data Science Activities
 - 1.3 Sources and Types of Data
 - 1.4 Stages of Data Processing
 - 1.5 Mathematical Basics for Data Scientists
2. Use Cases and Performance Evaluation
 - 2.1 Data Science Use Cases (DSUCs)
 - 2.2 Model-Centric Evaluation: Performance Metrics
 - 2.3 Business-Centric Evaluation: the Role of KPIs

- 2.4 Cognitive Biases and Decision-Making Fallacies
- 3. Pre-Processing of Data
 - 3.1 Transmission of Data
 - 3.2 Data Quality and Cleansing of Data
 - 3.3 Transformation of Data
 - 3.4 Reduction of Data Dimensionality
- 4. Data Processing
 - 4.1 From Raw Data to Insights
 - 4.2 Data Collection
 - 4.3 Data Analysis and Model Building
 - 4.4 Insight Implementation
 - 4.5 Output Formats of Processed Data
 - 4.6 Data Storage
- 5. Selected Mathematical Techniques
 - 5.1 Principal component Analysis
 - 5.2 Cluster Analysis
 - 5.3 Linear Regression
 - 5.4 Time Series Forecasting
 - 5.5 Transformation Approaches
- 6. Selected Artificial Intelligence Techniques
 - 6.1 Support Vector Machines
 - 6.2 Artificial Neural Networks
 - 6.3 Further Approaches

Literature**Compulsory Reading****Further Reading**

- Akerar, R., & Sajja, P.S. (2016). Intelligent techniques for data science. Cham: Springer.
- Bruce, A., & Bruce, P. (2017). Practical statistics for data scientists: 50 essential concepts. Newton, MA: O'Reilly Publishers.
- Fawcett, T. & Provost, F. (2013). Data science for business: What you need to know about data mining and data-analytic thinking. Newton, MA: O'Reilly Media.
- Hodeghatta, U. R., & Nayak, U. (2017). Business analytics using R – A practical approach. Berkeley, CA: Apress Publishing. (Database: ProQuest).
- Liebowitz, J. (2014). Business analytics: An introduction. Boca Raton, FL: Auerbach Publications. (Available online).
- Runkler, T. A. (2012). Data analytics: Models and algorithms for intelligent data analysis. Wiesbaden: Springer Vieweg.
- Skiena, S. S. (2017). The data science design manual. Cham: Springer.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Study Format myStudies

Study Format myStudies	Course Type Theory Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Analytical Software and Frameworks

Course Code: DLMBDSA02

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

Analytical Software and Frameworks provides insight into contemporary software and platforms solutions for data analytics in business. The course introduces relevant frameworks and software used in modern data science projects. Commercial and open-source for cloud computing, distributed computing and machine learning, as well as a commercial development platform for in-memory database analytics, are covered. Additional software solutions may be covered by the lecturer as convenient. In particular in the written assignment, students are required to apply their technological knowledge to a specific scenario which requires interdisciplinary thinking of how to merge the particularities of a given application domain with the technological options.

Course Outcomes

On successful completion, students will be able to

- comprehend how cloud computing and distributed computing support the field of data analytics.
- understand in-memory database technologies for real-time analytics.
- apply advanced statistics and machine learning solutions to solve data analysis problems.
- compare the capabilities and limitations of the presented software solutions.
- understand how to identify the right technological solution for a specific application domain.

Contents

1. Introduction
 - 1.1 Software Systems
 - 1.2 Frameworks
 - 1.3 Distributed Computing
 - 1.4 Databases and Data Warehousing
2. Data Storage
 - 2.1 Data Clustering
 - 2.2 Data Replication
 - 2.3 Data Indexing
 - 2.4 Data Warehousing
3. Statistical Modeling Frameworks

- 3.1 The R Project for Statistical Computing
 - 3.2 The Python Ecosystem
4. Machine Learning & Artificial Intelligence
 - 4.1 Overview of Modern Machine Learning Frameworks
 - 4.2 Introduction to TensorFlow & Keras
5. Cloud Computing Platforms & On-Premise Solutions
 - 5.1 Advantages and Disadvantages of Cloud, On-premise, and Edge Solutions
 - 5.2 Overview of Cloud Computing Solutions
6. Distributed Computing
 - 6.1 Overview of Distributed Computing Approaches
 - 6.2 Overview of Streaming Approaches
 - 6.3 Other Solutions
7. Database Technologies
 - 7.1 Overview of Database Approaches
 - 7.1.1 Row-based versus Column-based
 - 7.1.2 In Memory DB
 - 7.1.3 Relational DB versus noSQL
 - 7.1.4 Timeseries DB
 - 7.2 Overview of Database Implementations

Literature

Compulsory Reading

Further Reading

- Konstantinos Domdouzis, Peter Lake, & Paul Crowther. (2021). Concise Guide to Databases: A Practical Introduction: Vol. Second edition Konstantinos Domdouzis, Peter Lake, Paul Crowther. Springer.
- Perkins, L., Redmond, E., & Wilson, J. R. (2018). Seven Databases in Seven Weeks: A Guide to Modern Databases and the NoSQL Movement: Vol. Second edition. Pragmatic Bookshelf.
- Keith Gordon. (2022). Principles of Data Management: Facilitating Information Sharing: Vol. Third edition. BCS, The Chartered Institute for IT.
- Mahanti, R. (2019). Data quality: dimensions, measurement, strategy, management, and governance /. ASQ Quality Press.
- Avinash Navlani, Armando Fandango, & Ivan Idris. (2021). Python Data Analysis: Perform Data Collection, Data Processing, Wrangling, Visualization, and Model Building Using Python: Vol. Third edition. Packt Publishing.
- Gayathri Rajagopalan. (2021). A Python Data Analyst's Toolkit: Learn Python and Python-based Libraries with Applications in Data Analysis and Statistics. Apress.
- Latifian, A. (2022). How does cloud computing help businesses to manage big data issues. *Kybernetes*, 51(6), 1917–1948.
- Wolfram Wingerath, Norbert Ritter, & Felix Gessert. (2019). Real-Time & Stream Data Management: Push-Based Data in Research & Practice. Springer.
- Alka Jarvis, Jose Johnson, & Prakash Ananad. (2022). Successful Management of Cloud Computing and DevOps. ASQ Quality Press.
- Golightly, L., Chang, V., Xu, Q. A., Gao, X., & Liu, B. S. (2022). Adoption of cloud computing as innovation in the organization. *International Journal of Engineering Business Management*, 14, 1–17.
- J. Dinesh Peter, Amir H. Alavi, & Bahman Javadi. (2018). Advances in Big Data and Cloud Computing: Proceedings of ICBDC18 (Vol. 1st ed. 2019). Springer.
- Sharma, S., Chang, V., Tim, U. S., Wong, J., & Gadia, S. (2019). Cloud and IoT-based emerging services systems. *Cluster Computing*, 22(1), 71–91.
- Alejandro Vaisman, & Esteban Zimányi. (2022). Data Warehouse Systems: Design and Implementation: Vol. Second edition. Springer.
- Harsh Chawla, & Pankaj Khattar. (2020). Data Lake Analytics on Microsoft Azure: A Practitioner's Guide to Big Data Engineering: Vol. 1st ed. Apress.
- Andreas Meier, & Michael Kaufmann. (2019). SQL & NoSQL Databases: Models, Languages, Consistency Options and Architectures for Big Data Management. Springer Vieweg.
- Lindsay, D., Gill, S. S., Smirnova, D., & Garraghan, P. (2021). The evolution of distributed computing systems: from fundamental to new frontiers. *Computing*, 103(8), 1859–1878.
- Rashmi Ranjan Rout, Soumya Kanti Ghosh, Prasanta K. Jana, Asis Kumar Tripathy, Jyoti Prakash Sahoo, & Kuan-Ching Li. (2022). Advances in Distributed Computing and Machine Learning: Proceedings of ICADCML 2022. Springer.
- Rehman, T. B. (2018). Cloud computing basics. Sterling, VA: Stylus Publishing, LLC.
- M. Tamer Özsu, & Patrick Valduriez. (2019). Principles of Distributed Database Systems. Springer.
- Cloud networking and storage. (2020). *CompTIA Cloud Essentials+ Study Guide*; Page 35-76.
- Robert Johansson. (2018). Numerical Python: Scientific Computing and Data Science Applications with Numpy, SciPy and Matplotlib. Apress.
- Ashwin Pajankar, & Aditya Joshi. (2022). Hands-on Machine Learning with Python: Implement

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Written Assessment: Written Assignment

Student Workload					
Self Study 110 h	Contact Hours 0 h	Tutorial/Tutorial Support 20 h	Self Test 20 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Online Tests <input checked="" type="checkbox"/> Guideline

Study Format myStudies

Study Format myStudies	Course Type Theory Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Written Assessment: Written Assignment

Student Workload					
Self Study 110 h	Contact Hours 0 h	Tutorial/Tutorial Support 20 h	Self Test 20 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	Learning Material <input checked="" type="checkbox"/> Course Book	Exam Preparation <input checked="" type="checkbox"/> Online Tests

Digital Marketing

Module Code: DLMADTWDM_E

Module Type see curriculum	Admission Requirements none	Study Level MA	CP 10	Student Workload 300 h
--------------------------------------	---------------------------------------	--------------------------	-----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Prof. Dr. Josephine Zhou-Brock (Online and Social Media Marketing) / Rainer Lukas (Digital Analytics and Strategies)

Contributing Courses to Module

- Online and Social Media Marketing (DLMWOM01_E)
- Digital Analytics and Strategies (DLMMADAS01_E)

Module Exam Type

Module Exam

Split Exam

Online and Social Media Marketing

- Study Format "Distance Learning": Written Assessment: Case Study

Digital Analytics and Strategies

- Study Format "Distance Learning": Written Assessment: Case Study

Weight of Module

see curriculum

Module Contents**Online and Social Media Marketing**

- Basics of Strategic Online Marketing
- Introduction to Basic Web Technologies
- The Online Marketing Mix
- Planning, Management and Control of Online Marketing
- Outlook and Discussion: The Future of Online Marketing

Digital Analytics and Strategies

- Basics of Digital Analytics
- Metrics of Digital Analytics
- Digital key performance indicators (KPIs) and their analysis
- Digital strategy development
- Further developments and perspectives of Digital Analytics

Learning Outcomes

Online and Social Media Marketing

On successful completion, students will be able to

- familiarize themselves with the general conditions of online and social media marketing.
- know the specifics of strategic online marketing and its importance for the success of online marketing campaigns.
- have a complete overview of the instruments of online and social media marketing, critically evaluate them and use them optimally in a goal-oriented manner.
- analyze user perception processes and critically assess, control and optimize the design of online marketing instruments.
- develop a strong awareness of the need to protect privacy when using new Internet technologies.
- familiarize themselves with the legal framework of online marketing and anticipate future developments.

Digital Analytics and Strategies

On successful completion, students will be able to

- understand the scope of digital analytics and define the field of web analytics including typical goals and application areas.
- understand, select and evaluate central data sources and metrics to analyze and interpret digital marketing data.
- independently plan and conduct web analyses, interpret the results, draw conclusions and discuss these.
- define key performance indicators (KPIs) of digital analytics and derive specific KPIs to answer potential questions.
- conceptually develop, evaluate and optimize a system to measure online performance indicators.
- analyze current or newly developed online strategies by looking at the customer journey and designing targeted measures to optimize the process especially at the contact points.
- evaluate, reflect and select new digital analysis approaches.

Links to other Modules within the Study Program

This module is similar to other modules in the fields of Marketing & Sales and Business Administration & Management

Links to other Study Programs of the University

All Master Programs in the Marketing & Communication and Business & Management fields

Online and Social Media Marketing

Course Code: DLMWOM01_E

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

This course introduces both the conceptual foundations of strategic online and social media marketing and the structure, content and design options for the operational design of the respective online marketing instruments. In addition, the essential technical basics of the most common web technologies are deepened and approaches and instruments for managing, implementing and controlling the advertising impact of online media are presented. The legal framework for online and social media marketing will be considered, as well as an outlook and the discussion and initial assessment of future online developments and marketing trends.

Course Outcomes

On successful completion, students will be able to

- familiarize themselves with the general conditions of online and social media marketing.
- know the specifics of strategic online marketing and its importance for the success of online marketing campaigns.
- have a complete overview of the instruments of online and social media marketing, critically evaluate them and use them optimally in a goal-oriented manner.
- analyze user perception processes and critically assess, control and optimize the design of online marketing instruments.
- develop a strong awareness of the need to protect privacy when using new Internet technologies.
- familiarize themselves with the legal framework of online marketing and anticipate future developments.

Contents

1. Basics of Strategic Online Marketing
 - 1.1 Integrated Communication as the Basis for Success
 - 1.2 Internal and External Conditions of Online Marketing
 - 1.3 Situation and Environment Analysis
 - 1.4 Definition of Objectives of Online and Social Media Marketing in B2C and B2B Contexts
2. Introduction to Basic Web Technologies
 - 2.1 Web Basics

- 2.2 Current Technologies and Trends
3. The Online Marketing Mix
 - 3.1 Fundamentals of Online Marketing Effects
 - 3.2 Overview of Classic Instruments of Online Marketing
 - 3.3 Mobile Marketing
 - 3.4 Social Media Marketing
 - 3.5 Assessment of Alternative Online Marketing Instruments Including Possible Applications and Limitations
 - 3.6 Integrated Online Marketing and Viral Campaigns
4. Planning, Management and Control of Online Marketing
 - 4.1 Planning of Online Marketing Instruments
 - 4.2 Essential Success Factors of Online Marketing
 - 4.3 Approaches and Instruments for Measuring the Success of Online and Social Media Activities
 - 4.4 Legal Framework for Online and Social Media Marketing
5. Outlook and Discussion: The Future of Online Marketing
 - 5.1 Current and Future Developments in Online Marketing

Literature

Compulsory Reading

Further Reading

- Godin, S. (2000). Unleashing the ideavirus. Hyperion.
- Kingsnorth, S. (2019). Digital marketing strategy: An integrated approach to online marketing (2nd ed.). Kogan Page.
- Scott, D. (2017). The new rules of marketing and PR (6th ed.). Wiley.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Written Assessment: Case Study

Student Workload					
Self Study 110 h	Contact Hours 0 h	Tutorial/Tutorial Support 20 h	Self Test 20 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support	Learning Material	Exam Preparation
<input checked="" type="checkbox"/> Course Feed	<input checked="" type="checkbox"/> Course Book	<input checked="" type="checkbox"/> Online Tests
<input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	<input checked="" type="checkbox"/> Video	<input checked="" type="checkbox"/> Guideline
<input checked="" type="checkbox"/> Recorded Live Sessions	<input checked="" type="checkbox"/> Slides	

Digital Analytics and Strategies

Course Code: DLMMADAS01_E

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

Marketing has a wide range of online instruments and data at its disposal. However, due to the large number of information sources, it is a challenge to extract data, information and key figures based on their valuable contribution to online marketing strategies. Building on the theoretical foundations of suitable metrics to describe and analyze user behavior, key performance indicators (KPIs) are developed, discussed and reflected with regard to their relevance in online marketing. Subsequently, the acquired knowledge is transferred into online strategies, content marketing measures and online campaigns. The course concludes with the identification and discussion of further development possibilities and digital analytic trends in marketing.

Course Outcomes

On successful completion, students will be able to

- understand the scope of digital analytics and define the field of web analytics including typical goals and application areas.
- understand, select and evaluate central data sources and metrics to analyze and interpret digital marketing data.
- independently plan and conduct web analyses, interpret the results, draw conclusions and discuss these.
- define key performance indicators (KPIs) of digital analytics and derive specific KPIs to answer potential questions.
- conceptually develop, evaluate and optimize a system to measure online performance indicators.
- analyze current or newly developed online strategies by looking at the customer journey and designing targeted measures to optimize the process especially at the contact points.
- evaluate, reflect and select new digital analysis approaches.

Contents

1. Basics of Digital Analytics
 - 1.1 Introduction and Definition of Digital Analytics
 - 1.2 Goals of Digital Analytics
 - 1.3 Data and Information Sources
 - 1.4 Legal Framework

2. Metrics of Digital Analytics
 - 2.1 Fundamentals of Metrics
 - 2.2 Hits, Page Views, Visits and Visitors
 - 2.3 Other Metrics
 - 2.4 Limits of Metrics: Inaccuracies and Ambiguities
3. Digital Key Performance Indicators (KPIs) and Their Analysis
 - 3.1 Search Engine Marketing: Key Figures and Analytical Approaches
 - 3.2 Social Media: Monitoring and Analytical Approaches
 - 3.3 Website: Key Figures and Analytical Approaches
 - 3.4 Email: Key Figures and Analytical Approaches
4. Digital Strategy Development
 - 4.1 Fundamentals of the Customer Journey
 - 4.2 Derivation of Digital Marketing Goals Along the Customer Journey
 - 4.3 Application and Design Possibilities for Digital and Mobile Campaigns
 - 4.4 Application and Design Possibilities for Content Marketing
 - 4.5 Monitoring The Implementation of Strategies and Measures
5. Further Developments and Perspectives of Digital Analytics

Literature**Compulsory Reading****Further Reading**

- Angel, G. (2016). Measuring the digital world: Using digital analytics to drive better experiences. Pearson.
- Phillips, J. (2016). Ecommerce analytics: Analyze and improve the impact of your digital strategy. Pearson.
- Sponder, M., & Gohar, K. (2018). Digital analytics for marketing. Routledge.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Written Assessment: Case Study

Student Workload					
Self Study 110 h	Contact Hours 0 h	Tutorial/Tutorial Support 20 h	Self Test 20 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Online Tests <input checked="" type="checkbox"/> Guideline

International and Intercultural Management

Module Code: DLMITEIIM

Module Type see curriculum	Admission Requirements none	Study Level MA	CP 10	Student Workload 300 h
--------------------------------------	---------------------------------------	--------------------------	-----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Prof. Dr. Andreas Herrmann (Managing Across Borders) / Prof. Dr. Jonathan Black-Branch (Intercultural Management)

Contributing Courses to Module

- Managing Across Borders (DLMINTMAB01_E)
- Intercultural Management (DLMINTIM01_E)

Module Exam Type

Module Exam

Split Exam

Managing Across Borders

- Study Format "myStudies": Exam, 90 Minutes
- Study Format "Distance Learning": Exam, 90 Minutes

Intercultural Management

- Study Format "Distance Learning": Exam, 90 Minutes
- Study Format "myStudies": Exam, 90 Minutes

Weight of Module

see curriculum

Module Contents**Managing Across Borders**

- International economic and business environment
- Globalization and international competitiveness
- International Trade
- International financial and capital markets
- International organizations and economic integration
- Current hot spots in the international economic and business environment

Intercultural Management

- Fundamentals and classification of intercultural management
- Role and importance of intercultural management for companies
- Diversity management in intercultural management
- Entrepreneurial aspects in decision-making for intercultural management
- Focal points of intercultural management
- Intercultural management in selected countries

Learning Outcomes

Managing Across Borders

On successful completion, students will be able to

- identify the main developments and trends in the global economic environment and use them as a basis for business decisions.
- demonstrate the development of globalization and world trade in the last decades.
- explain the causes and effects of protectionism on a country's economic development.
- understand the interrelationships of international financial and capital markets and assess them with regard to the handling of exchange rate risks.
- explain the importance of international organizations such as the World Trade Organization (WTO) or the International Monetary Fund (IMF) for global cooperation.
- form their own opinion on current issues of international economic policy.

Intercultural Management

On successful completion, students will be able to

- recognize and classify intercultural management as an independent discipline in business administration.
- use important cultural theories and cultural dimensions as a basis for business decisions in an international context.
- analyze relevant core competencies of a company for successful intercultural management and apply them in concrete situations.
- identify and manage culture-specific influences on the strategy, marketing and human resources of internationally active companies.
- apply important aspects of intercultural management in leadership, communication and cooperation in international teams.
- demonstrate cultural sensitivity and deeper understanding of international cooperation with selected cultural regions (Germany, USA, China).

Links to other Modules within the Study Program

This module is similar to other modules in the fields of Business Administration & Management

Links to other Study Programs of the University

All Master Programs in the Business & Management fields

Managing Across Borders

Course Code: DLMINTMAB01_E

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

The interdependence of economies, markets and technologies has increased continuously over the past decades. In addition to the former three dominant economic areas of the USA, Europe and Japan, emerging markets have joined the group, which play an increasingly important role in world trade. Global networking creates both opportunities and risks for internationally active companies. In this course, students acquire a deeper understanding of global economic, political and technological interrelationships as a basis for strategic decisions of internationally operating companies. In addition to knowledge of international trade, international financial and capital markets, and international organizations, students will be able to form their own well-founded opinion on current developments and trends in the international economic and business environment by the end of this course.

Course Outcomes

On successful completion, students will be able to

- identify the main developments and trends in the global economic environment and use them as a basis for business decisions.
- demonstrate the development of globalization and world trade in the last decades.
- explain the causes and effects of protectionism on a country's economic development.
- understand the interrelationships of international financial and capital markets and assess them with regard to the handling of exchange rate risks.
- explain the importance of international organizations such as the World Trade Organization (WTO) or the International Monetary Fund (IMF) for global cooperation.
- form their own opinion on current issues of international economic policy.

Contents

1. International economic and business environment
 - 1.1 Economic environment
 - 1.2 Political environment
 - 1.3 Technological environment
2. Globalization and international competitiveness
 - 2.1 Definition and development of globalization
 - 2.2 Opportunities and threats of globalization

- 2.3 International competitiveness
3. International Trade
 - 3.1 Theories and models of international trade
 - 3.2 Importance of international trade for an economy
 - 3.3 Protectionism as a threat to international business
4. International financial and capital markets
 - 4.1 Importance of international financial and capital markets for globally active companies
 - 4.2 International exchange rate regimes
 - 4.3 Hedging of exchange rate risks
5. International organizations and economic integration
 - 5.1 International organizations as the basis of the world economy (WTO, World Bank, IMF)
 - 5.2 Regional economic integration as driver for international business (EU, USMCA)
6. Current hot spots in the international economic and business environment
 - 6.1 USA-China: Struggle for political and economic supremacy
 - 6.2 Emerging Markets: new players in the global economy
 - 6.3 Agenda 2030: Sustainable Development Goals (SDG)

Literature

Compulsory Reading

Further Reading

- Cavusgil, S. T., Knight, G. A., & Riesenberger, J. R. (2020). International business: The new realities (5th ed.). Pearson.
- Daniels, J. D., Radebaugh, L. H., & Sullivan, D. P. (2018). International business: Environments and operations (16th ed.). Pearson.

Study Format myStudies

Study Format myStudies	Course Type Theory Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support	Learning Material	Exam Preparation
<input checked="" type="checkbox"/> Course Feed	<input checked="" type="checkbox"/> Course Book	<input checked="" type="checkbox"/> Practice Exam
<input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	<input checked="" type="checkbox"/> Video	<input checked="" type="checkbox"/> Online Tests
<input checked="" type="checkbox"/> Recorded Live Sessions	<input checked="" type="checkbox"/> Slides	

Intercultural Management

Course Code: DLMINTIM01_E

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

With the ever growing globalization of the economy, the demands on managers and employees to operate successfully in an international environment have increased. An important core competence of internationally active companies is the skill to competently deal with the idiosyncrasies of other cultures. In business administration, an independent discipline of intercultural management has therefore been developed to examine the behavior and cooperation of people from countries and organizations around the world and to derive recommendations for successful interactions on a corporate and personal level. This course provides students with a conceptual framework for a systematic understanding of the concept of culture, cultural synergies and differences, and the convergence and divergence of cultural norms and values. Students acquire the knowledge and intercultural skills necessary to manage and work across borders and cultures in a changing global business environment.

Course Outcomes

On successful completion, students will be able to

- recognize and classify intercultural management as an independent discipline in business administration.
- use important cultural theories and cultural dimensions as a basis for business decisions in an international context.
- analyze relevant core competencies of a company for successful intercultural management and apply them in concrete situations.
- identify and manage culture-specific influences on the strategy, marketing and human resources of internationally active companies.
- apply important aspects of intercultural management in leadership, communication and cooperation in international teams.
- demonstrate cultural sensitivity and deeper understanding of international cooperation with selected cultural regions (Germany, USA, China).

Contents

1. Fundamentals and Classification of Intercultural Management
 - 1.1 Intercultural Management as an Independent Discipline in Business Administration
 - 1.2 Important Cultural Concepts as Basis for Intercultural Management
 - 1.3 Important Cultural Dimensions as Basis for Intercultural Understanding

2. Role and Importance of Intercultural Management for Companies
 - 2.1 International Developments and Contexts for Enterprises
 - 2.2 Connection Between National Culture and Corporate Culture
 - 2.3 Entrepreneurial Core Competencies for Successful Intercultural Management
3. Diversity Management in Intercultural Management
 - 3.1 Working with Diversity in Companies
 - 3.2 Management Styles in Individualistic and Collectivist Cultures
 - 3.3 Reconciliation of Cultural Dilemmas
4. Entrepreneurial Decision-making Dimensions of Intercultural Management
 - 4.1 Strategy
 - 4.2 Marketing
 - 4.3 Human Resources Management (HRM)
5. Focal Points of Intercultural Management
 - 5.1 Intercultural Management and Corporate Governance
 - 5.2 Intercultural Communication
 - 5.3 Intercultural Zeamwork
6. Intercultural Management in Selected Countries
 - 6.1 Germany
 - 6.2 USA
 - 6.3 China

Literature

Compulsory Reading

Further Reading

- Browaeys, M-J. / Price, R. (2015): Understanding Cross-Cultural Management. 3rd Edition, Pearson, Upper Saddle River.
- Deresky, H. (2017): International Management: Managing Across Borders and Cultures. 9th Edition, Pearson Education Limited, Harlow.
- Steers, R. M. / Nardon, L. / Sanchez-Runde, C. J. (2016): Management across Cultures. Developing Global Competencies. Cambridge University Press, Cambridge.
- Thomas, D.C. / Inkson, K. (2017): Cultural Intelligence: Surviving and Thriving in the Global Village. 3rd Edition, Berrett-Koehler Publishers, Oakland.
- Trompenaars, F. (2012): Riding the Waves of Culture. Understanding Cultural Diversity in Global Business. 3rd Edition, N. Brealey Publishing, London/Boston.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Study Format myStudies

Study Format myStudies	Course Type Theory Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Negotiation and International HR

Module Code: DLMIHMEIHR

Module Type see curriculum	Admission Requirements none	Study Level MA	CP 10	Student Workload 300 h
--------------------------------------	---------------------------------------	--------------------------	-----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Prof. Dr. Andreas Herrmann (Negotiation) / Prof. Dr. Katharina-Maria Rehfeld (Seminar: International Human Resource Management)

Contributing Courses to Module

- Negotiation (DLMNEGE01-01)
- Seminar: International Human Resource Management (DLMSIHRM01_E)

Module Exam Type

Module Exam

Split Exam

Negotiation

- Study Format "myStudies": Oral Assignment
- Study Format "Distance Learning": Oral Assignment

Seminar: International Human Resource Management

- Study Format "myStudies": Written Assessment: Research Essay
- Study Format "Distance Learning": Written Assessment: Research Essay

Weight of Module

see curriculum

Module Contents**Negotiation**

- The significance and nature of negotiation
- The distribution of value
- Distributive negotiation tactics
- The creation of value
- Value creation negotiation tactics
- The negotiator's dilemma
- Learning to negotiate

Seminar: International Human Resource Management

The aim of this module is to discuss and work on current and practice-relevant issues of International Human Resource Management (IHRM). The module deepens the fundamentals of IHRM by taking into account the context, theories, methods, instruments and practice of international IHRM. Emphasis is placed on debates associated with cultural differences and ethical issues. In addition, it helps to prepare the students for the final master thesis, since a seminar paper is required as the final examination.

Learning Outcomes**Negotiation**

On successful completion, students will be able to

- Describe the process of negotiation and the interconnected but opposing processes of value distribution and value creation.
- Recognize common myths and misconceptions regarding negotiation and negotiators and take measures to avoid common pitfalls.
- Apply empirical insights about the process of negotiation to negotiation scenarios.
- Negotiate with various other parties using value distribution and value creation tactics.
- Engage in a process of self-reflection and utilize a variety of tools to improve performance as a novice negotiator.

Seminar: International Human Resource Management

On successful completion, students will be able to

- name the most important issues in international HR management.
- work independently on a current topic in international HR management using current and relevant literature (monographs, professional and academic journals) and develop innovative methods of solution.
- apply the fundamentals of scientific work to write a seminar paper and prepare methodically for writing the final master thesis.

Links to other Modules within the Study Program

This module is similar to other modules in the fields of Business Administration & Management

Links to other Study Programs of the University

All Master Programs in the Business & Management fields

Negotiation

Course Code: DLMNEGE01-01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

The course enables students to learn about both the negotiation process and actually how to negotiate. In order to understand the rules that govern the interpersonal decision-making process that is negotiation, it is essential to have an in-depth understanding of the two sides of negotiation: the distribution of value and the creation of value. This course begins by introducing students to the pervasive nature of negotiation and some of the common myths and misconceptions that limit the potential benefits that can be gained through effective negotiation. It then delves into the concept of distribution value and the specific tactics that can be employed in order to arrive at the most favorable outcome. Students will then explore value creation and how to implement tactics to move from a win-lose scenario to a win-win. The course will then offer insights drawn from game theory (including the prisoner's dilemma, the "stag hunt game," the "tit-for-tat" strategy) before concluding with a focused exploration of how to manage the process of implementing negotiation theory in practice, avoiding pitfalls and allowing for effective negotiation learning.

Course Outcomes

On successful completion, students will be able to

- Describe the process of negotiation and the interconnected but opposing processes of value distribution and value creation.
- Recognize common myths and misconceptions regarding negotiation and negotiators and take measures to avoid common pitfalls.
- Apply empirical insights about the process of negotiation to negotiation scenarios.
- Negotiate with various other parties using value distribution and value creation tactics.
- Engage in a process of self-reflection and utilize a variety of tools to improve performance as a novice negotiator.

Contents

1. The Significance and Nature of Negotiation
 - 1.1 The Nature and Types of Negotiation
 - 1.2 Misconceptions About Negotiation and Myths About Negotiators
2. The Distribution of Value
 - 2.1 The Pie: Zone of Possible Agreement

- 2.2 Slicing the Pie: Maximizing Distributive Outcomes
- 3. Distributive Negotiation Tactics
 - 3.1 Distributive Negotiation To-Dos
 - 3.2 Learning Transfer
- 4. The Creation of Value
 - 4.1 Value Creation: From Win-Lose to Win-Win
 - 4.2 The Four Steps and the Three Types of Value Creation
- 5. Value Creation Negotiation Tactics
 - 5.1 Framing
 - 5.2 Value Creation Negotiation To-Dos
- 6. The Negotiator's Dilemma
 - 6.1 The Dilemma Between Creating and Distributing Value
 - 6.2 The Prisoner's Dilemma as a Metaphor for the Negotiator's Dilemma
 - 6.3 Coping Strategies: Tit-for-Tat Strategy and Changing Payoffs
- 7. Learning to Negotiate
 - 7.1 From Theory to Practice
 - 7.2 Three Challenges to Learning to Negotiate
 - 7.3 A Model for Negotiation Learning

Literature

Compulsory Reading

Further Reading

- Brett, J. M. (2014). *Negotiating globally: How to negotiate deals, resolve disputes, and make decisions across cultural boundaries* (3rd ed.). Jossey-Bass.
- Fisher, R., Ury, W. L., & Patton, B. (2011). *Getting to yes: Negotiating agreements without giving in* (3rd ed.). Penguin Books.

Study Format myStudies

Study Format myStudies	Course Type Theory Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Oral Assignment

Student Workload					
Self Study 110 h	Contact Hours 0 h	Tutorial/Tutorial Support 20 h	Self Test 20 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support	Learning Material	Exam Preparation
<input checked="" type="checkbox"/> Course Feed	<input checked="" type="checkbox"/> Course Book	<input checked="" type="checkbox"/> Online Tests
<input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	<input checked="" type="checkbox"/> Video	<input checked="" type="checkbox"/> Guideline
<input checked="" type="checkbox"/> Recorded Live Sessions	<input checked="" type="checkbox"/> Slides	

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Oral Assignment

Student Workload					
Self Study 110 h	Contact Hours 0 h	Tutorial/Tutorial Support 20 h	Self Test 20 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Online Tests <input checked="" type="checkbox"/> Guideline

Seminar: International Human Resource Management

Course Code: DLMSIHRM01_E

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

HR Management differs from other business disciplines insofar that it is concerned with the management of a human resource, which brings with it special requirements and challenges. Not only the external framework conditions of HR management are changing, such as political, legal, economic, and socio-demographic conditions but also the internal framework conditions are subject to continuous change, such as the changing needs and expectations of employees, new forms of work and working time arrangements, contemporary forms of personnel management, etc. Against the background of globalization, HR management is increasingly confronted with international aspects and needs to position itself accordingly. In international corporations as well as in medium-sized companies that are in the process of internationalization, HR management needs to be in line with these changing conditions. The seminar deals with the application of the fundamentals of IHRM to current international topics, which have a high application and practical relevance.

Course Outcomes

On successful completion, students will be able to

- name the most important issues in international HR management.
- work independently on a current topic in international HR management using current and relevant literature (monographs, professional and academic journals) and develop innovative methods of solution.
- apply the fundamentals of scientific work to write a seminar paper and prepare methodically for writing the final master thesis.

Contents

- Current topics in international HR management. The following list of topics offers possible topics of the course:
 - International human resources development
 - International Recruiting
 - Opportunities and risks of foreign assignments of executives
 - Problems of reintegrating expatriates after their assignment abroad
 - Global Talent Management
 - International standardization of HR processes: between global standardization and local adaptation
 - Intercultural competence and personnel development

- International remuneration policy
- Ethical aspects of international HR management

Literature

Compulsory Reading

Further Reading

- Books:
 - Armstrong, M./Taylor, S. (2014): Armstrong's Handbook of Human Resource Management Practice. 13th edition, Kogan Page, London.
 - Briscoe, D. R./Schuler, R. S./Claus, L. M. (2009): International Human Resource Management. Policies and Practices for Multinational Enterprises. 3. Auflage, Routledge, London.
 - Dessler, G. (2013): Human Resource Management. 13th edition, Prentice Hall, Boston.
 - DGFP (Ed.) (2012): Shaping International Human Resources Management. Perspectives, structures, success factors, practical examples. Bertelsmann, Bielefeld.
 - Festing, M. et al. (2011): International Human Resources Management. 3rd edition, Gabler, Wiesbaden.
 - Schmeisser, W./Krimphove, D. (2010): International Human Resources Management and International Labor Law. Oldenbourg, Munich.
 - Scullion, H./Collings, D. G. (Hrsg.) (2011): Global Talent Management. Routledge, New York.
 - Sparrow, P./Brewster, C./Harris, H. (2004): Globalizing Human Resource Management. Routledge, London et al.

Study Format myStudies

Study Format myStudies	Course Type Seminar
----------------------------------	-------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: no
Type of Exam	Written Assessment: Research Essay

Student Workload					
Self Study 120 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 0 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Guideline

Study Format Distance Learning

Study Format Distance Learning	Course Type Seminar
--	-------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: no
Type of Exam	Written Assessment: Research Essay

Student Workload					
Self Study 120 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 0 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Guideline

Product Development and Design Thinking

Module Code: DLMBPDDT

Module Type see curriculum	Admission Requirements none	Study Level MA	CP 10	Student Workload 300 h
--------------------------------------	---------------------------------------	--------------------------	-----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Prof. Dr. Dorian Mora (Product Development) / Prof. Dr. Dorian Mora (Project: Design Thinking)

Contributing Courses to Module

- Product Development (DLMBPDDT01)
- Project: Design Thinking (DLMBPDDT02)

Module Exam Type

Module Exam

Split Exam

Product Development

- Study Format "myStudies": Exam, 90 Minutes
- Study Format "Distance Learning": Exam, 90 Minutes

Project: Design Thinking

- Study Format "myStudies": Written Assessment: Project Report
- Study Format "Distance Learning": Written Assessment: Project Report

Weight of Module

see curriculum

Module Contents

Product Development

- Production planning techniques
- Design tasks
- Product development approaches
- Digital product development and organizational aspects

Project: Design Thinking

This course will put students in the mindset of Design Thinking. Students will be introduced to phases and distinct methods for inspiration, as well as the ideation and implementation of products. A current list of topics is located in the Learning Management System.

Learning Outcomes

Product Development

On successful completion, students will be able to

- know the basic definitions and principles of (new) product development.
- understand the key skills in product development.
- discuss, differentiate, and select appropriate product development approaches with respect to a given scenario.
- work with digital product development tools and techniques like CAD, PDM and PLM at a basic level.
- develop own solutions and approaches to academic and practical questions.
- discuss, evaluate, and adapt different digital product development techniques and tools.

Project: Design Thinking

On successful completion, students will be able to

- comprehend, critically reflect on, and adopt the Design Thinking mindset.
- understand the inspiration, ideation, and implementation phases.
- evaluate and identify appropriate methods from the toolbox of human-centered design for given design tasks and challenges.

Links to other Modules within the Study Program

This module is similar to other modules in the field of Design

Links to other Study Programs of the University

All Master Programs in the Design, Architecture & Construction fields

Product Development

Course Code: DLMBPDDT01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

This course aims to provide basic work and problem-solving methods for the successful development of products. It introduces the definition of key design tasks and various alternative product development approaches such as flow-based, lean product development, and design thinking. Finally, the students will become familiar with the use of computer-aided design (CAD) tools and how they integrate into modern product development approaches.

Course Outcomes

On successful completion, students will be able to

- know the basic definitions and principles of (new) product development.
- understand the key skills in product development.
- discuss, differentiate, and select appropriate product development approaches with respect to a given scenario.
- work with digital product development tools and techniques like CAD, PDM and PLM at a basic level.
- develop own solutions and approaches to academic and practical questions.
- discuss, evaluate, and adapt different digital product development techniques and tools.

Contents

1. Introduction
 - 1.1 Basic Definitions
 - 1.2 The Product Development Process
 - 1.3 Indicators and Metrics
 - 1.4 Product Development Models
 - 1.5 Current Trends in Product Development
2. The Product Development Process
 - 2.1 Planning
 - 2.2 Concept Development
 - 2.3 Design
 - 2.4 Testing and Refinement
 - 2.5 Production and Ramp-up

3. Product Development Approaches
 - 3.1 Lean Product Development
 - 3.2 Design Thinking
 - 3.3 Human-Centered Design
 - 3.4 User Experience Strategy
 - 3.5 Open Innovation
4. Digital Tools
 - 4.1 Computer-Aided Design
 - 4.2 Computer-Aided Quality
 - 4.3 Product Data Management
 - 4.4 Product Lifecycle Management
5. Organizational Perspective
 - 5.1 Incremental, Platform, and Breakthrough Development
 - 5.2 Building Teams
 - 5.3 Political Issues in Organizations
 - 5.4 Distributed New Product Development

Literature

Compulsory Reading

Further Reading

- Kahn, K. B., Kay, S. E., Slotegraaf, R. J., & Uban, S. (Eds.). (2012). *The PDMA handbook of new product development* (3rd ed.). Hoboken, NJ: John Wiley & Sons. (Database: ProQuest).
- Ottosson, S. (2018). *Developing and managing innovation in a fast changing and complex world: Benefiting from dynamic principles*. Cham: Springer. (Database: ProQuest).
- Ulrich, K. T., & Eppinger, S. D. (2016). *Product design and development* (6th ed.). New York, NY: McGraw Hill.

Study Format myStudies

Study Format myStudies	Course Type Theory Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Project: Design Thinking

Course Code: DLMBPDDT02

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

In this course, students will receive a hands-on introduction to human-centered design via the Design Thinking method. Beyond conveying the individual basic principles, the procedures in Design Thinking are examined in detail. In order to fully understand Design Thinking in terms of important aspects in practice, selected methods for the individual process steps are presented in theory and application. Students will learn to improve their design process by reflecting on and adapting their activities.

Course Outcomes

On successful completion, students will be able to

- comprehend, critically reflect on, and adopt the Design Thinking mindset.
- understand the inspiration, ideation, and implementation phases.
- evaluate and identify appropriate methods from the toolbox of human-centered design for given design tasks and challenges.

Contents

- The course covers current topics and trends in Design Thinking, illustrating some methods and techniques as well as case studies. Each participant must create a project report on a chosen project, where he/she describes the application of the Design Thinking approach to a real product development scenario.

Literature**Compulsory Reading****Further Reading**

- IDEO.org. (2015). The Field Guide to Human-Centered Design. A step-by-step guide that will get you solving problems like a designer. Retrieved from <http://www.designkit.org/resources/1>
- Pressman, Andy (2019): Design Thinking. A Guide to Creative Problem Solving for Everyone, New York : Routledge.
- Lockwood, T., & Papke, E. (n.d.). Innovation by design : how any organization can leverage design thinking to produce change, drive new ideas, and deliver meaningful solutions.
- Lewrick, M., Link, P., Leifer, L. J., & Langensand, N. (2018). The design thinking playbook : mindful digital transformation of teams, products, services, businesses and ecosystems. John Wiley & Sons.

Study Format myStudies

Study Format myStudies	Course Type Project
----------------------------------	-------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: no
Type of Exam	Written Assessment: Project Report

Student Workload					
Self Study 120 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 0 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions

Study Format Distance Learning

Study Format Distance Learning	Course Type Project
--	-------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: no
Type of Exam	Written Assessment: Project Report

Student Workload					
Self Study 120 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 0 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Guideline

Sales Management

Module Code: DLMWSAM_E

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	none	MA	10	300 h

Semester / Term	Duration	Regularly offered in	Language of Instruction and Examination
see curriculum	Minimum 1 semester	WiSe/SoSe	English

Module Coordinator

Prof. Dr. Adrienne Steffen (Sales Management I) / Prof. Dr. Adrienne Steffen (Sales Management II)

Contributing Courses to Module

- Sales Management I (DLMWSA01_E)
- Sales Management II (DLMWSA02_E)

Module Exam Type

Module Exam

Split Exam

Sales Management I

- Study Format "Distance Learning": Written Assessment: Case Study
- Study Format "myStudies": Written Assessment: Case Study

Sales Management II

- Study Format "myStudies": Written Assessment: Case Study
- Study Format "Distance Learning": Written Assessment: Case Study

Weight of Module

see curriculum

Module Contents

Sales Management I

- Strategic framework and concepts of sales management
- Organizational and process options for sales and distribution in the company
- General conditions and design options for successful sales force management

Sales Management II

- Goals and instruments of operative sales management
- Basics of database marketing and goals, processes and contents of successful complaint management
- Framework conditions, instruments, success factors and design options of direct marketing and sales as well as online sales management

Learning Outcomes

Sales Management I

On successful completion, students will be able to

- know of the strategic basics of sales management and understand the basic approaches to designing alternative sales models.
- understand core ideas of customer driven organizations and recognize the consequences and design options for structure and process in the sales division of the company.
- familiarize themselves with the functions and challenges of project organization in sales.
- organize and manage a sales team/sales force independently.
- actively meet future challenges in sales management.

Sales Management II

On successful completion, students will be able to

- recognize tasks and goals of the instruments of sales management and familiarize themselves with the basics of database marketing.
- know the framework conditions, goals and design options of complaint management.
- know direct marketing and sales and are able design direct sales campaigns independently.
- familiarize themselves with the process, instruments and central aspects of online sales management.

Links to other Modules within the Study Program

This module is similar to other modules in the fields of Marketing & Sales

Links to other Study Programs of the University

All Master Programs in the Marketing & Communication fields

Sales Management I

Course Code: DLMWSA01_E

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

Students learn the strategic essentials and design options of sales management. In addition to basic strategic directions of sales management, they learn how to categorize alternative sales strategies and critically deal with the challenges of multi-channel sales. In addition, the concept of customer driven organization is explained and deepened, and based on this, consequences for the design of the sales organization and strategic or operative sales force management are derived. The course ends with a discussion on future challenges in sales.

Course Outcomes

On successful completion, students will be able to

- know of the strategic basics of sales management and understand the basic approaches to designing alternative sales models.
- understand core ideas of customer driven organizations and recognize the consequences and design options for structure and process in the sales division of the company.
- familiarize themselves with the functions and challenges of project organization in sales.
- organize and manage a sales team/sales force independently.
- actively meet future challenges in sales management.

Contents

1. Introduction to Sales
 - 1.1 Theory of Sales
 - 1.2 Strategic Distribution
 - 1.3 Sales in Practice
 - 1.4 The Elements of the Sales Policy at a Glance
2. Basics of the Sales Organization
 - 2.1 Single-Level (Direct Sales) Versus Multi-Level Sales
 - 2.2 Distribution to Business Customers or Industrial Goods Distribution
 - 2.3 Cooperative Sales Forms
 - 2.4 Sales Partners: Distributors and Sales Agents
3. Sales Concept

- 3.1 Push Versus Pull
- 3.2 Distribution Intensity - Ubiquitous, Intensive, Selective, Exclusive
- 3.3 Key Account Management
- 3.4 Small Customers Care
4. Multi-Channel Management
 - 4.1 Basics
 - 4.2 Definition and Integration of the Channel Stages and Processes
 - 4.3 Control and Evaluation of the Sales Channels
 - 4.4 Success Factors and Conflict Potential in Multi-Channel Systems
5. Sales and Contact Forms
 - 5.1 Personal Sale
 - 5.2 Media-Supported Sale
 - 5.3 Media-Led Sales
6. Principles of the Sales Organization
 - 6.1 Customer-Oriented Sales Organization
 - 6.2 Sales Organization by Products or Regions
 - 6.3 Sales Organization by Sales Channels or Customers
 - 6.4 Central or Decentralized Sales Organization
7. Sales Force Management I
 - 7.1 Recruitment of Employees for Sales
 - 7.2 Qualification of Employees in Sales
 - 7.3 Shift Planning of Employees in Sales
8. Sales Force Management II
 - 8.1 Sales Management and Sales Culture
 - 8.2 Remuneration and Incentive Systems
 - 8.3 Performance Evaluation and Monitoring
9. Sales Controlling
 - 9.1 Content and Tasks of Sales Controlling
 - 9.2 Strategic Sales Controlling
 - 9.3 Operational Sales Controlling
 - 9.4 Sales Information Systems
10. Future Developments

- 10.1 Digitization and Social Media
- 10.2 Globalization and Internationalization
- 10.3 Big Data and System Integration

Literature

Compulsory Reading

Further Reading

- Guenzi, P., & Geiger, S. (2011). Sales management: A multinational perspective. Palgrave Macmillan.
- Ingram, T. N., Schwepker, C. H., Avila, R. A., & LaForge, R. W. (2008). Professional selling: A trust-based approach (4th ed). Thomson South-Western.
- Johnston, M. W., & Marshall, G. W. (2016). Sales force management: Leadership, innovation, technology. Routledge.
- Manning, G. L., Ahearne, M., & Reece, B. L. (2014). Selling today: Partnering to create value. Pearson.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Written Assessment: Case Study

Student Workload					
Self Study 110 h	Contact Hours 0 h	Tutorial/Tutorial Support 20 h	Self Test 20 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Online Tests <input checked="" type="checkbox"/> Guideline

Study Format myStudies

Study Format myStudies	Course Type Theory Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Written Assessment: Case Study

Student Workload					
Self Study 110 h	Contact Hours 0 h	Tutorial/Tutorial Support 20 h	Self Test 20 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book	Exam Preparation <input checked="" type="checkbox"/> Online Tests

Sales Management II

Course Code: DLMWSA02_E

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

This course expands and deepens the understanding of sales management by presenting and specifying the operational implementation of requirements and design options of strategic sales management. Starting with the development of the overriding target system of sales management, fundamentals of database marketing as well as basic processes and instruments of complaint management are discussed. An in-depth look at the key aspects of direct marketing and sales, including a presentation of central instruments, perception processes and success factors as well as campaign planning and control, complements the presentation of operational sales management. Finally, the central findings on the framework conditions, the conception as well as the implementation and control of online sales measures are presented and development options for sales in the context of the future Web 3.0 are discussed.

Course Outcomes

On successful completion, students will be able to

- recognize tasks and goals of the instruments of sales management and familiarize themselves with the basics of database marketing.
- know the framework conditions, goals and design options of complaint management.
- know direct marketing and sales and are able design direct sales campaigns independently.
- familiarize themselves with the process, instruments and central aspects of online sales management.

Contents

1. Sales Management
 - 1.1 Goals and Tasks of the Sales Department
 - 1.2 The Development of Sales: From The Closing Hunt to Selling with Method
 - 1.3 Developing CRM Sales: Selling with a System
2. Database Marketing
 - 2.1 2.1 Concept and Content of Database Marketing
 - 2.2 2.2 Requirements and Procedures in Database Marketing
 - 2.3 2.3 Legal Framework
3. Complaint Management I

- 3.1 Principles and Objectives of Complaint Management
- 3.2 Definition and Relevance of Customer Satisfaction
- 3.3 Tasks and Processes of Complaint Management
4. Complaints Management li
 - 4.1 Complaint Management Strategies
 - 4.2 Implementation of Complaint Management
 - 4.3 Complaint Management in Social Media
 - 4.4 Monitoring The Success of Complaint Management
5. Direct Marketing and Sales
 - 5.1 Definition and Classification of Direct Marketing
 - 5.2 The Development of Direct Marketing
 - 5.3 Dialogue Marketing and Sales: From Sales Representative Appointment to Written Sales Exchange - The Siegfried Vögele Dialogue Method®
6. The Media of Dialogue Marketing: Use and Design
 - 6.1 Media and Their Use in Dialogue Marketing
 - 6.2 The Design of Dialogue Marketing
 - 6.3 Case Studies
7. Basics and Forms of Online Marketing and Sales Management
 - 7.1 Concept and Forms of Online Marketing
 - 7.2 The Corporate Website
 - 7.3 Affiliate and Search Engine Marketing
8. Email, Mobile and Social Media Marketing and Campaign Management
 - 8.1 Email Marketing
 - 8.2 Mobile Marketing
 - 8.3 Social Media Marketing
 - 8.4 Campaign Management
9. Organization, Management and Control Of Online Marketing And Sales Management
 - 9.1 Organizational Integration of Dialogue/Online Marketing
 - 9.2 The Consolidation of the Database, Complaint Management, Dialogue and Online Marketing in CRM
 - 9.3 Key Figures of Dialog Marketing
10. Legal Aspects and Future Developments in Online Sales Management

- | |
|---|
| 10.1 10.1 Legal Aspects of Dialogue and Online Marketing I |
| 10.2 10.2 Legal Aspects of Dialogue and Online Marketing li |
| 10.3 10.3 Distribution 3.0 |

Literature
Compulsory Reading
Further Reading
<ul style="list-style-type: none">▪ Homburg, C., Schäfer, H., & Schneider, J. (2012). Sales excellence: Systematic sales management. Springer.▪ Ingram, T. N., LaForge, R. W., Avila, R. A., Schwepker, C. H., & Williams, M. R. (2020). Salesmanagement: Analysis and decision making (10th edition). Routledge.

Study Format myStudies

Study Format myStudies	Course Type Theory Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Written Assessment: Case Study

Student Workload					
Self Study 110 h	Contact Hours 0 h	Tutorial/Tutorial Support 20 h	Self Test 20 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book	Exam Preparation <input checked="" type="checkbox"/> Online Tests

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Written Assessment: Case Study

Student Workload					
Self Study 110 h	Contact Hours 0 h	Tutorial/Tutorial Support 20 h	Self Test 20 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support	Learning Material	Exam Preparation
<input checked="" type="checkbox"/> Course Feed	<input checked="" type="checkbox"/> Course Book	<input checked="" type="checkbox"/> Online Tests
<input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint	<input checked="" type="checkbox"/> Video	<input checked="" type="checkbox"/> Guideline
<input checked="" type="checkbox"/> Recorded Live Sessions	<input checked="" type="checkbox"/> Slides	

AI and Mastering AI Prompting

Module Code: DLMEAIMAIP

Module Type	Admission Requirements	Study Level	CP	Student Workload
see curriculum	none	MA	10	300 h

Semester / Term	Duration	Regularly offered in	Language of Instruction and Examination
see curriculum	Minimum 1 semester	WiSe/SoSe	English

Module Coordinator

Prof. Dr. Claudia Heß (Artificial Intelligence) / Prof. Dr. Gissel Velarde Perez (Project: AI Excellence with Creative Prompting Techniques)

Contributing Courses to Module

- Artificial Intelligence (DLMAIAI01)
- Project: AI Excellence with Creative Prompting Techniques (DLMPAIECPT01)

Module Exam Type

Module Exam

Split Exam

Artificial Intelligence

- Study Format "Distance Learning": Exam, 90 Minutes
- Study Format "myStudies": Exam, 90 Minutes

Project: AI Excellence with Creative Prompting Techniques

- Study Format "Distance Learning": Written Assessment: Project Report

Weight of Module

see curriculum

Module Contents**Artificial Intelligence**

- History of AI
- Expert Systems
- Neuroscience
- Modern AI Systems
- AI Application Areas

Project: AI Excellence with Creative Prompting Techniques

In this module, students delve into the world of generative AI applications, creating AI-generated content such as text, images, and videos. They learn to design, analyze, and evaluate different prompting techniques in these systems and apply them within their respective fields of study.

Learning Outcomes**Artificial Intelligence**

On successful completion, students will be able to

- remember the historical developments in the field of artificial intelligence.
- analyze the different application areas of artificial intelligence.
- comprehend expert systems.
- apply Prolog to simple expert systems.
- comprehend the brain and cognitive processes from a neuro-scientific point of view.
- understand modern developments in artificial intelligence.

Project: AI Excellence with Creative Prompting Techniques

On successful completion, students will be able to

- comprehend and implement various prompting techniques in generative AI applications.
- analyze, assess, and combine different prompt techniques for various expected AI outputs.
- implement ethical considerations into the design and execution of various generative AI applications.
- design, implement, and refine effective prompts and their combinations for real-world scenarios through various hands-on exercises.
- showcase creative and innovative thinking and reasoning in the application of advanced prompting techniques to solve multidimensional problems in their specialized area of study.

Links to other Modules within the Study Program

This module is similar to other modules in the field of Data Science & Artificial Intelligence

Links to other Study Programs of the University

All Master Programs in the IT & Technology field

Artificial Intelligence

Course Code: DLMAIAI01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

The quest for artificial intelligence has captured humanity's interest for many decades and has been an active research area since the 1960s. This course will give a detailed overview of the historical developments, successes, and set-backs in AI, as well as the development and use of expert systems in early AI systems. In order to understand cognitive processes, the course will give a brief overview of the biological brain and (human) cognitive processes and then focus on the development of modern AI systems fueled by recent developments in hard- and software. Particular focus will be given to discussion of the development of "narrow AI" systems for specific use cases vs. the creation of general artificial intelligence. The course will give an overview of a wide range of potential application areas in artificial intelligence, including industry sectors such as autonomous driving and mobility, medicine, finance, retail, and manufacturing.

Course Outcomes

On successful completion, students will be able to

- remember the historical developments in the field of artificial intelligence.
- analyze the different application areas of artificial intelligence.
- comprehend expert systems.
- apply Prolog to simple expert systems.
- comprehend the brain and cognitive processes from a neuro-scientific point of view.
- understand modern developments in artificial intelligence.

Contents

1. History of AI
 - 1.1 Historical Developments
 - 1.2 AI Winter
 - 1.3 Notable Advances in AI
2. Expert Systems
 - 2.1 Overview Over Expert Systems
 - 2.2 Introduction to Prolog
3. Neuroscience
 - 3.1 The (Human) Brain

3.2 Cognitive Processes

4. Modern AI Systems

4.1 Recent Developments in Hard- and Software

4.2 Narrow vs General AI

4.3 NLP and Computer Vision

5. AI Application Areas

5.1 Autonomous Vehicles & Mobility

5.2 Personalized Medicine

5.3 FinTech

5.4 Retail & Industry

Literature

Compulsory Reading

Further Reading

- Chowdhary, K. R. (2020). Fundamentals of Artificial Intelligence. Springer India.
- Russell, S. & Norvig, P. (2022). Artificial intelligence. A modern approach (4th ed.). Pearson Education.
- Ward, J. (2020). The student's guide to cognitive neuroscience. (4th ed.). Taylor & Francis Group.

Study Format Distance Learning

Study Format Distance Learning	Course Type Theory Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Study Format myStudies

Study Format myStudies	Course Type Theory Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: yes
Type of Exam	Exam, 90 Minutes

Student Workload					
Self Study 90 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 30 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Course Book <input checked="" type="checkbox"/> Video <input checked="" type="checkbox"/> Audio <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Practice Exam <input checked="" type="checkbox"/> Online Tests

Project: AI Excellence with Creative Prompting Techniques

Course Code: DLMPAIECPT01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		5	none

Course Description

In this course, students explore the exciting world of prompting in various generative AI applications. They involve themselves in hands-on exercises that combine various prompting techniques to create new AI-generated content, including text, images, and videos. Through these exercises, students learn how to effectively use, analyze, combine, and assess these systems within their specialized fields of study.

Course Outcomes

On successful completion, students will be able to

- comprehend and implement various prompting techniques in generative AI applications.
- analyze, assess, and combine different prompt techniques for various expected AI outputs.
- implement ethical considerations into the design and execution of various generative AI applications.
- design, implement, and refine effective prompts and their combinations for real-world scenarios through various hands-on exercises.
- showcase creative and innovative thinking and reasoning in the application of advanced prompting techniques to solve multidimensional problems in their specialized area of study.

Contents

- In this course, students engage in a practical application of a generative AI use case by choosing from the options provided in the extensive supplementary guide. The course presents practical examples as study materials and exercises with both individual and combined prompting techniques for open-source text, image, and video generation use cases. The exercises are crafted to inspire and lead students in executing their distinct generative AI use case work and provide guidance on describing the use case and selecting a mixture of prompting techniques. Additionally, students are led to critically evaluate the design, implementation, and the outcomes from both technical and ethical perspectives.

Literature**Compulsory Reading****Further Reading**

- Dang, H., Mecke, L., Lehmann, F., Goller, S., & Buschek, D. (2022). How to prompt? Opportunities and challenges of zero- and few-shot learning for human-AI interaction in creative applications of generative models. arXiv. <https://arxiv.org/pdf/2209.01390.pdf>
- Epstein, Z., Hertzmann, A., Herman, L., Mahari, R., Frank, M. R., Groh, M., Schroeder, H., Smith, A., Akten, M., Fjeld, J., Farid, H., Leach, N., Pentland, A. S., & Russakovsky, O. (2023). Art and the science of generative AI: A deeper dive. arXiv. <https://arxiv.org/pdf/2306.04141.pdf>
- Gozalo-Brizuela, R., & Garrido-Merchán, E. C. (2023). A survey of generative AI applications. arXiv. <https://arxiv.org/pdf/2306.02781.pdf>
- Wei, J., Wang, X., Schuurmans, D., Bosma, M., Ichter, B., Xia, F., Chi, E. H., Le., Q. V., & Zhou, D. (2023). Chain-of-thought prompting elicit reasoning in large language models. arXiv. <https://arxiv.org/pdf/2201.11903.pdf>

Study Format Distance Learning

Study Format Distance Learning	Course Type Project
--	-------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: no
Type of Exam	Written Assessment: Project Report

Student Workload					
Self Study 120 h	Contact Hours 0 h	Tutorial/Tutorial Support 30 h	Self Test 0 h	Independent Study 0 h	Hours Total 150 h

Instructional Methods	
Tutorial Support <input checked="" type="checkbox"/> Course Feed <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Exam Preparation <input checked="" type="checkbox"/> Guideline

Master Thesis

Module Code: DLMMTHES

Module Type see curriculum	Admission Requirements See current study and exam regulations (SPO)	Study Level MA	CP 15	Student Workload 450 h
--------------------------------------	---	--------------------------	-----------------	----------------------------------

Semester / Term see curriculum	Duration Minimum 1 semester	Regularly offered in WiSe/SoSe	Language of Instruction and Examination English
--	--	--	---

Module Coordinator

Prof. Dr. Tianxiang Lu (Master Thesis) / Prof. Dr. Tianxiang Lu (Colloquium)

Contributing Courses to Module

- Master Thesis (DLMMTHES01)
- Colloquium (DLMMTHES02)

Module Exam Type

Module Exam

Split Exam

Master Thesis

- Study Format "Distance Learning": Master Thesis (90)
- Study Format "myStudies": Master Thesis (90)

Colloquium

- Study Format "myStudies": Colloquium (10)
- Study Format "Distance Learning": Colloquium (10)

Weight of Module

see curriculum

<p>Module Contents</p> <p>Master Thesis</p> <ul style="list-style-type: none"> ▪ Written Master Thesis <p>Colloquium</p> <ul style="list-style-type: none"> ▪ Thesis Defense 	
<p>Learning Outcomes</p> <p>Master Thesis</p> <p>On successful completion, students will be able to</p> <ul style="list-style-type: none"> ▪ work on a problem from their major field of study by applying the specialist and methodological skills they have acquired during their studies. ▪ analyse selected tasks with scientific methods, critically evaluate them and develop appropriate solutions under the guidance of an academic supervisor. ▪ record and analyse existing (research) literature appropriate to the topic of the Master's thesis. ▪ prepare a detailed written elaboration in compliance with scientific methods. <p>Colloquium</p> <p>On successful completion, students will be able to</p> <ul style="list-style-type: none"> ▪ present a problem from their field of study under consideration of academic presentation and communication techniques. ▪ reflect on the scientific and methodological approach chosen in the Master's thesis. ▪ actively answer subject-related questions from subject experts (experts of the Master's thesis). 	
<p>Links to other Modules within the Study Program</p> <p>All modules in the Master Program</p>	<p>Links to other Study Programs of the University</p> <p>All Master Programs</p>

Master Thesis

Course Code: DLMMTHES01

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		13.5	See current study and exam regulations (SPO)

Course Description

The aim and purpose of the Master's thesis is to successfully apply the subject-specific and methodological competencies acquired during the course of study in the form of an academic dissertation with a thematic reference to the major field of study. The content of the Master's thesis can be a practical-empirical or theoretical-scientific problem. Students should prove that they can independently analyse a selected problem with scientific methods, critically evaluate it and work out proposed solutions under the subject-methodological guidance of an academic supervisor. The topic to be chosen by the student from the respective field of study should not only prove the acquired scientific competences, but should also deepen and round off the academic knowledge of the student in order to optimally align his professional abilities and skills with the needs of the future field of activity.

Course Outcomes

On successful completion, students will be able to

- work on a problem from their major field of study by applying the specialist and methodological skills they have acquired during their studies.
- analyse selected tasks with scientific methods, critically evaluate them and develop appropriate solutions under the guidance of an academic supervisor.
- record and analyse existing (research) literature appropriate to the topic of the Master's thesis.
- prepare a detailed written elaboration in compliance with scientific methods.

Contents

- Within the framework of the Master's thesis, the problem as well as the scientific research goal must be clearly emphasized. The work must reflect the current state of knowledge of the topic to be examined by means of an appropriate literature analysis. The student must prove his ability to use the acquired knowledge theoretically and/or empirically in the form of an independent and problem-solution-oriented application.

Literature**Compulsory Reading****Further Reading**

- Bui, Y. N. (2013). *How to Write a Master's Thesis* (2nd ed.). SAGE Publications, Incorporated.
- Turabian, K. L. (2013). *A Manual for Writers of Research Papers, theses, and dissertations* (8th ed.). University of Chicago Press.
- Further subject specific literature

Study Format Distance Learning

Study Format Distance Learning	Course Type Thesis Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: no
Type of Exam	Master Thesis

Student Workload					
Self Study 405 h	Contact Hours 0 h	Tutorial/Tutorial Support 0 h	Self Test 0 h	Independent Study 0 h	Hours Total 405 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Guideline

Study Format myStudies

Study Format myStudies	Course Type Thesis Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: no
Type of Exam	Master Thesis

Student Workload					
Self Study 405 h	Contact Hours 0 h	Tutorial/Tutorial Support 0 h	Self Test 0 h	Independent Study 0 h	Hours Total 405 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Guideline

Colloquium

Course Code: DLMMTHES02

Study Level	Language of Instruction and Examination	Contact Hours	CP	Admission Requirements
MA	English		1.5	See current study and exam regulations (SPO)

Course Description

The colloquium will take place after submission of the Master's thesis. This is done at the invitation of the experts. During the colloquium, the students must prove that they have fully independently produced the content and results of the written work. The content of the colloquium is a presentation of the most important work contents and research results by the student, and the answering of questions by the experts.

Course Outcomes

On successful completion, students will be able to

- present a problem from their field of study under consideration of academic presentation and communication techniques.
- reflect on the scientific and methodological approach chosen in the Master's thesis.
- actively answer subject-related questions from subject experts (experts of the Master's thesis).

Contents

- The colloquium includes a presentation of the most important results of the Master's thesis, followed by the student answering the reviewers' technical questions.

Literature

Compulsory Reading

Further Reading

- Renz, K.-C. (2016): The 1 x 1 of the presentation. For school, study and work. 2nd edition, Springer Gabler, Wiesbaden.

Study Format myStudies

Study Format myStudies	Course Type Thesis Course
----------------------------------	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: no
Type of Exam	Colloquium

Student Workload					
Self Study 45 h	Contact Hours 0 h	Tutorial/Tutorial Support 0 h	Self Test 0 h	Independent Study 0 h	Hours Total 45 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Guideline

Study Format Distance Learning

Study Format Distance Learning	Course Type Thesis Course
--	-------------------------------------

Information about the examination	
Examination Admission Requirements	Online Tests: no
Type of Exam	Colloquium

Student Workload					
Self Study 45 h	Contact Hours 0 h	Tutorial/Tutorial Support 0 h	Self Test 0 h	Independent Study 0 h	Hours Total 45 h

Instructional Methods		
Tutorial Support <input checked="" type="checkbox"/> Intensive Live Sessions/Learning Sprint <input checked="" type="checkbox"/> Recorded Live Sessions	Learning Material <input checked="" type="checkbox"/> Slides	Exam Preparation <input checked="" type="checkbox"/> Guideline