



**HSBA HAMBURG SCHOOL OF  
BUSINESS ADMINISTRATION**

# **Logistics Management Module Descriptions 1st Year of Study**

Year of Study 2019/2020

## Core Modules BA

Financial Accounting  
Human Resource Management  
Managerial Accounting  
Macroeconomics  
Methodology and Basics of Business Studies  
Microeconomics

## Sector-customized BA Modules

./:

## Logistics Modules

Introduction to Logistics

## Electives

Digital Toolbox

## Support Modules

Business English  
Mathematics  
Statistics  
Wirtschaftsrecht or International Business Law

# Business English

## Module description

### General

Code:	B15-BUSENGL-WI
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every first semester
Applicability of the module:	Business Administration Business Informatics Logistics Management Media Management Maritime Management
Prerequisites:	For the preparation of the module see recommended literature.
Name of lecturer:	Louise Kennedy and others
Language of teaching:	English
ECTS credits:	5
Workload and its composition:	48 hours contact, 36 hours independent study 41 hours dual workload
Contact hours:	48 hours in academic year
Methods of examination:	Presentation and Written Synopsis
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of the module

The goals of the course are to

1. consolidate and develop core spoken English-language competences for international business transactions,
2. train effective oral communication skills, including listening comprehension and the discussion of business-oriented topics, and
3. enhance students' sensitivity to cross-cultural differences in the business world.
4. Listening and speaking:  
Students learn to
  - 4.1 understand Business Administration or Economics oriented discussions, interviews and dialogues in authentic English (both native and non-native speakers), summarise them and comment on their content
  - 4.2 present and discuss their own views/arguments/ideas, including practice of the following skills: answering questions, dealing with objections, using relevant vocabulary effectively, justifying and defending opinions
  - 4.3 use business appropriate small talk in company related situations
5. Reading and writing:  
Students learn to
  - 5.1 read, understand and summarise up-to-date Business Administration or Economics oriented texts or articles from various international sources and publications.

## Contents of the module

A good command of English is absolutely essential for anyone working in the international business world and, therefore, an important element of students' training at the HSBA. It is a goal of this course to professionalize the existing skills the students have in English with specific attention to business and economics vocabulary, work-related idioms, register expectations, fluency and lexical range.

The discussions, simulations, exercises, texts and articles deal with basic economic/business questions that are also of relevance for the students in other subjects of their studies at the HSBA. Topics of focus for the year include the basics of economics/market economy, legal structures of companies, corporate finance, the stock exchange, human resources and CSR.

The achievement of the students will be graded on the basis of their lexical range, business professional vocabulary, presentation specific vocabulary, keywords for their chosen topic, word flow, speaking freely, grammar, syntax, business content, organization and audience contact in the presentation.

The presentation examination includes a one-page, synopsis of the presentation written in the student's own words.

Synopsis Requirements:

No. of words: 500-550 words

Layout: according to HSBA „Leitfaden für Wissenschaftliches Arbeiten“

## Teaching and learning methods

Class discussion; group work; role plays; simulations; mini-presentations; case studies; audio-and video; formal language; some business grammar and syntax exercises.

## Recommended literature

- » L., Bovee, John v. Thill (2017), Business Communication Today 14<sup>th</sup> edition
- » MacKenzie, Ian (2018) English for Business Studies: A course for Business Studies and Economics Students, Cambridge University Press (EBS)
- » Business Vocabulary in Use - Advanced, Bill Mascull, Cambridge University Press, Second Edition 2010
- » Professional English in Use - Finance, Ian MacKenzie, Cambridge University Press 2011
- » Academic Vocabulary in Use, Michael McCarthy and Felicity O'Dell, Cambridge University Press 2012
- » HBR Guide to Persuasive Presentations, Nancy Duarte 2012
  
- » **WEB:**
- » Harvard Business Review, Case Studies, Articles
- » HBR Podcasts and Videos
- » The Economist, The Financial Times, The New York Times, esp. Times Topics and Business News
- » BBC Business, Videos
- » RSA.org, PBS.org

# Digital Toolbox

## Beschreibung

### Allgemeines

Code:	B-DTB
Studienjahr:	2019/2020
Art der Lehrveranstaltung:	Pflicht
Häufigkeit des Angebots der Lehrveranstaltung:	In jedem Studienjahr
Verwendbarkeit des Moduls:	Business Administration Business Informatics Logistics Management Maritime Management Media Management & Communication
Zugangsvoraussetzung:	Das Modul baut inhaltlich nicht auf andere Module auf.
Name des Hochschullehrers:	Prof. Dr. Gregor Hopf, Prof. Dr. Kamyar Sarshar et.al.
Unterrichts-/Lehrsprache	Englisch
Zahl der zugeteilten ECTS-Credits:	5
Workload und dessen Zusammensetzung:	64 Stunden Kontaktzeit 61 Stunden Selbststudium
SWS:	64 Stunden verteilt auf drei Studienjahre
Art der Prüfung / Voraussetzung für die Vergabe von Leistungspunkten:	<b>Projektarbeit</b>
Sprache der Prüfung:	Englisch
Gewichtung der Note in der Gesamtnote:	Siehe Studiengangsspezifische Bestimmungen

Es stehen folgende Profile zur Auswahl.

- Business Process Innovation
- Data Business
- Digital Communication and Marketing Technologies
- Digital Strategy
- Intrapreneur
- Programming (not electable for Business Informatics students)

# Business Process Innovation

## Module description

### Aim of the module

The internet, cloud and mobile technologies as well as social media are fundamentally changing the ways we work and share information. They open opportunities for new business processes, new forms of organization, and new ways for employee engagement. Managers with the capability to understand new digital developments, and manage the transformation of business processes within organizations, are highly sought after in the job market. The profile “Business Process Transformation” prepares students for key roles in the shaping of process innovation and in the management of the business and social transformation of their organizations

### Students will be able to

- » discuss the importance of process management in context of digitalization
- » name trends and developments in business process transformation
- » analyze and design a business process by applying modeling techniques and tools
- » describe basic concepts of business process and change management
- » demonstrate the ability to define process measurements
- » create an end-to-end business process and implement it by using SAP software

### The module consists of four courses:

- » Process transformation: analysis and design (8 hours)
- » Process transformation and management (8 hours)
- » Business process implementation and measurement (16 hours)
- » Business process analysis, design and implementation with SAP (32 hours)

The module is taught in English.

The exam will be a final project assignment

## Process transformation: analysis and design (8 hours)

### Aim of the course

Students will be able to

- » assess company value chain and identify relevant end-to-end processes
- » analyze business processes and discover process improvements
- » demonstrate the ability to design a process by applying modeling techniques and tools

### Overview of the course

1. Process Identification
  - 1.1 Company value chain
  - 1.2 Process characteristics
  - 1.3 Process improvement discovery
  - 1.4 End-to-end business processes
2. Process Analysis
  - 2.1 Ingredients of business processes
  - 2.2 Critical issues of process analysis (scope, granularity, representation etc)
  - 2.3 Business process simulation
3. Process Design
  - 3.1 Business process modeling techniques
  - 3.2 Overview of “BPMN”
  - 3.3 Business process modeling tools

### Teaching and learning methods

Interactive lecture, group discussions and exercises, case examples

## Process transformation and management (8 hours)

### Aim of the course

Students will be able to

- » describe basic concepts of business process management
- » evaluate organizational aspects of BPM
- » demonstrate how the process management maturity can be assessed

### Overview of the course

1. Basic concepts of BPM
  - 1.1 BPM lifecycle
  - 1.2 Role and stakeholders
  - 1.3 BPM Governance
2. Process organization
  - 2.1 Cross-company process organization
  - 2.2 Supply Chain Management
  - 2.3 Human and cultural aspects of process organization
3. Business process maturity models (BPMM)
  - 3.1 Models of BPMM
  - 3.2 BPM assessment
  - 3.3 BPM blueprint

### Teaching and learning methods

Interactive lecture, group discussions and exercises, case examples

# Business process implementation and measurement (16 hours)

## Aim of the course

Students will be able to

- » discuss business strategy in context of process organizations
- » explain the relation between quality and process management
- » compare technological approaches to process implementation
- » describe basic aspect of change management
- » demonstrate the ability to define process measurements

## Overview of the course

1. Process organization and strategy
  - 1.1 Strategic alignment
  - 1.2 Functional vs. process organization
  - 1.3 Business process excellence
2. Business process and quality management
  - 2.1 Principles and concepts of quality management
  - 2.2 Quality lifecycle and BPM
  - 2.3 Measuring process quality
3. Technological implementation
  - 3.1 Workflow Management Systems (WfMS)
  - 3.2 Enterprise resource planning systems (ERP)
  - 3.2 Web Services
4. Change Management
  - 3.1 Objectives and basic concepts of change management
  - 3.2 Models and methodologies of change management
  - 3.3 BPM audit
5. Process measurement
  - 4.1 Importance of KPI definition
  - 4.2 Evidence-based process improvements
  - 4.3 Process benchmarking

## Teaching and learning methods

Interactive lecture, group discussions and exercises, case examples

# Workshop - Business process analysis, design and implementation with SAP (32 hours)

## Aim of the implementation workshop

Students will be able to

- » discuss the value chain of a company
- » demonstrate the ability to define and analyze relevant processes
- » design a major end-to-end business process by using BPMN
- » define KPI's for the designed process
- » use basic SAP features to implement the business process
- » define a blueprint on how to manage organizational change

## Overview of the implementation workshop

The implementation workshop of this profile aims to put the prior modules into practice. Throughout the workshop the participants will perform in groups the following interactive tasks:

1. Analyze the value chain of a given company
2. Identify critical business process of that company and define their scope
3. Design a major business process by using BPM tools and techniques
4. Develop appropriate KPI's for the process and ways to measure them
5. Use SAP to implement that process
6. Define a change management project to implement the process

## Teaching and learning methods

Group discussions, exercises, student presentations and case studies



# Data Business

## Module description

### Aim of the module

An organization's data is recognized as the most vital asset of an enterprise. Therefore, it is essential for managers to understand current aspects of data storage to deal with this important asset. But the large volume of data companies collect from many different sources require a common data management and analysis strategy that need to be designed carefully. Experience shows that it's worth the time spent to make sure the core data assets of the organization are managed effectively.

### Students will be able to

- » Students will be able to discuss how data science gains value from business data
- » explain the use of cloud computing and blockchain for data storage
- » describe basic concepts of data mining
- » demonstrate the ability to write, compile and run simple programs using R or Python

### The module consists of four courses:

- » Business data architecture (8 hours)
- » Principles of data mining and machine learning (8 hours)
- » Foundations of data analysis with R or Python (16 hours)
- » Workshop - Data analysis with R or Python in action (32 hours)

The module is taught in English.

The exam will be a final project assignment

## Business data architecture (8 hours)

### Aim of the course

Students will be able to

- » describe the basic idea of relational databases and their limitations
- » demonstrate the ability to build a database and use SQL
- » explain the role of Hadoop in data architecture
- » explain the use of cloud computing and blockchain for data storage

### Overview of the course

1. Introduction to traditional data storage and architecture
  - 1.1 Brief history and basic concepts of relational database management systems (RDBMS)
  - 1.2 Structured Query Language (SQL)
  - 1.3 Data warehouse and Online Analytical Processing (OLAP)
2. Data architecture for big data
  - 2.1 Limitations of relational databases
  - 2.2 Distributed data storage and parallel data processing
  - 2.3 noSQL and Hadoop
  - 2.4 Examples of big data architecture
3. Cloud computing and big data
  - 3.1 Why cloud computing?
  - 3.2 Advantages and limitations of cloud computing for big data
4. Overview: Blockchain technology for data storage

### Teaching and learning methods

Interactive lecture, group discussions and exercises, case examples

## Principles of data mining and machine learning (8 hours)

### Aim of the course

Students will be able to

- » describe basic concepts of data mining
- » discuss principles of machine learning
- » evaluate the impact of data mining on business decision making

### Overview of the course

1. Foundations of data mining
  - 1.1 Purpose and goals of data mining
  - 1.2 Data mining and statistics
  - 1.3 Basic concepts of data mining
  - 1.4 Overview: data mining tools
2. Understanding machine learning
  - 2.1 Role of data in machine learning
  - 2.2 Types of machine learning (supervised, unsupervised, reinforcement)
  - 2.3 Components of machine learning (representation, evaluation, optimization)
3. Machine learning in action
  - 3.1 Traditional programming and machine learning
  - 3.2 From machine learning theory to algorithms
  - 3.3 Examples of machine learning applications

### Teaching and learning methods

Interactive lecture, group discussions and exercises, case examples

## Foundations of data analysis with R or Python (16 hours)

### Aim of the course

Students will be able to

- » demonstrate the ability to setup a R or Python programming environment
- » demonstrate the ability to write, compile and run simple programs using R or Python

### Overview of the course

1. Setup and run the environment
  - 1.1 Installation and configuration
  - 1.2 Relevant functions
  - 1.3 Getting help
2. Basic programming
  - 2.1 Basic statements
  - 2.2 Vectors
  - 2.2 Data input and output
  - 2.3 Data structures
  - 2.4 Data transformation
  - 2.5 Probability
  - 2.6 General statistics
  - 2.7 Graphics
3. Linear regression
  - 3.1 Simple linear regression
  - 3.2 Multiple linear regression
  - 3.3 Getting regression statistics

### Teaching and learning methods

Interactive lecture, group discussions and exercises, case examples

## Workshop - Data analysis with R or Python in action (32 hours)

### Aim of the implementation workshop

Students will be able to

- » demonstrate the ability to analyze data with R or Python in practice

### Overview of the implementation workshop

The implementation workshop of this profile aims to put the prior modules into practice. Throughout the workshop the participants will perform in groups the following interactive tasks:

1. Analyze a given problem
2. Define the requirements
3. Setup and configure an R or Python programming environment
4. Program simple applications using R or Python

### Teaching and learning methods

Group discussions, exercises, student presentations and case studies

# Digital Communication and Marketing Technologies

## Module description

### Aim of the module

Corporate communication must adapt to an increasingly digital and social media environment with new forms of communication, new user behavior and new third-party intermediaries. The changes are fundamental and multi-faceted – to name just a few: from campaign-driven to continuous communication, from external asset production to in-house content creation, from structured one-way communication to permanent many-to-many relationship management, from a focus on optimizing bought communication channels to creating owned and earned communication supported by bought media presence.

### Students shall

- » understand the new rules of (corporate) communication in an increasingly digital and social media environment
- » learn to integrate bought, owned and earned communication channels
- » learn to turn a corporate communication need into information that is of interest to the target audience
- » learn to speak for the company and represent the company's point of view to the media
- » practice their skill of strategy development

### The module consists of four courses:

- » Social Media Advertising (8 hours)
- » Search Engine Optimization and Advertising (8 hours)
- » Persuasive (Online) Communication, Storytelling & Monitoring (16 hours)
- » Workshop - Integrated Corporate Communication (32 hours)

The module is taught in English.

The exam will be a final project assignment

## Social Media Advertising – Planning, Execution, Measurement, Optimization (8 hours)

### Aim of the course

Students will be able to

- » understand social media advertising
- » navigate the main social-media advertising platforms
- » plan and execute online advertising campaigns in social media channels
- » understand general tagging and tracking techniques
- » optimize advertising through targeting, retargeting and testing techniques
- » evaluate different targeting possibilities
- » monitor ongoing advertising campaigns
- » differentiate between social media advertising and programmatic advertising
- » understand the advantage of data in digital advertising and evaluate different data sources

### Overview of the course

- » Relevance of Social Media Advertising
- » Campaign management via social media advertising platforms
- » Campaign set-up and tracking
- » Custom audiences and retargeting
- » Social advertising for brand vs. performance marketing
- » Programmatic advertising
- » Data in programmatic advertising
- » Current trends

### Teaching and learning methods

Interactive seminar, case studies, script (online)

## Search Engine Optimization and Advertising (8 hours)

### Aim of the course

Students will be able to

- » range in search engine marketing (in online marketing instruments);
- » distinguish search engine optimization from search engine advertising;
- » learn the basics of (successful) search engine advertising;
- » learn the basics of (successful) search engine optimization and ranging signals, respectively.

### Overview of the course

1. Introduction into Search Engine Marketing
2. (Successful) Search Engine Optimization (SEO)
  - 2.1. Off-Site SEO
  - 2.2. Googles' PageRank
  - 2.3. On-Site SEO
3. Search Engine Advertising

### Teaching and learning methods

Interactive seminar, script (online), case studies

# Persuasive (Online) Communication, Storytelling & Monitoring (16 hours)

## Aim of the implementation workshop

Students shall

- » Understand how users make decisions, with a special focus on digital media
- » Learn how corporate communication works successfully in digital and social media.
- » Learn to create convincing arguments and turn information into compelling stories
- » Learn how to monitor online media and optimize online media campaigns

## Overview of the course

1. How online communication can lead our thoughts and decisions
  - a) Two cognitive systems
  - b) Cognitive ease
  - c) Behavioural engineering: social validation loop
  - d) Behavioural micro-targeting along psychological profiles
2. Storytelling: Structuring a persuasive argument
  - a) Common structures for stories: three act model, a hero's journey
  - b) Central story elements: character, conflict, suspense, resolution
3. Online Media Monitoring – with a special focus on social media
  - a) From vanity to value
  - b) Audience & brand awareness
  - c) Engagement
  - d) Sentiment
  - e) Content & content optimization
  - f) Influence
  - g) Competition
  - h) Crisis-Communication
  - i) Campaign-optimization and funnel-monitoring

## Teaching and learning methods

Interactive seminar, case studies, script

## Workshop: Integrated Corporate Communication (32 hours)

### Aim of the course

In an increasingly online, connected and distracting world, no single communication channel can capture enough of a target audience's time and attention to effectively communicate a marketing message. Boundaries between paid, owned and earned media campaigns are increasingly blurred, one communication instrument is almost never engaged with in isolation, and most communication channels now employ a mixture of all three types. Thus, integrated online communication can be regarded as the simultaneous deployment of two or more paid, owned and earned assets, to present a consistent and cohesive brand message across different communication channels.

In this seminar, students will learn about the targets of communication, the characteristics and efficiency of different advertising media (with a focus on online communication channels (banner, search, social, etc.) and mobile), and how to integrate them in advertising campaigns so that their combined employment yields maximum synergy.

Students will be able to...

- » be able to understand the principles and challenges of integrated online communication.
- » be able to distinguish between different types of paid, owned and earned media,
- » be able to apply models of integrated communication planning
- » be able to apply the instruments of integrated online communication

### Overview of the course

- 1) Introduction to communication management
- 2) Principles of online communication
- 3) Paid, owned and earned media
- 4) Models of integrated communication planning
- 5) Instruments of integrated online communication

### Teaching and learning methods

Interactive seminar, case studies, self-learn and research assignments between seminar sessions

# Digital Strategy

## Module description

### Aim of the module

Digitalization in its multi-faceted form offers many new business opportunities based on a variety of drivers of change and some fundamental powers of disruption. It also poses a fundamental threat to existing business models. The profile “Digital Strategy” prepares students to understand, tackle and exploit the resulting business challenges and opportunities.

### Students shall

- » understand digitalization’s underlying drivers of change
- » learn to apply strategy models to the rules and requirements of digital markets
- » learn about strategic concepts for the adoption to digital markets within existing companies
- » practice their skill of strategy development

### The module consists of four courses:

- » The Ambidextrous Enterprise (8 hours)
- » Platform Economy (8 hours)
- » Digital Business (16 hours)
- » Workshop - Strategy Development for Digital Markets (32 hours)

The module is taught in English.

The exam will be a final project assignment.



## The Ambidextrous Enterprise (8 hours)

### Aim of the course

Students will be able to

- » Understand the strategic and managerial implications of the necessity of an organization's ability to be both aligned and efficient in the management of today's business demands, whilst simultaneously being adaptive to changes in the environment.
- » How to initiate innovation activities beyond the core competencies of the organization and possibly even disrupting the existing business model.
- » Understand how ambidexterity affects both the organization at large as well as the individual company managers.

### Overview of the course

- 1) Drivers of Digital Transformation: Why does Digitalization change so much and what follows
- 2) Corporate ambidexterity: exploitation vs. exploration
- 3) Forms and paths to ambidexterity
- 4) Toolbox for ambidexterity
- 5) Obstacles to ambidexterity
- 6) Culture of failure
- 7) Case Studies

### Teaching and learning methods

Interactive seminar, case studies, script (online)

## Platform Economy (8 hours)

### Aim of the course

Students shall

- » learn about the fundamental shift from 'pipeline' to platform-business
- » understand the challenges and opportunities for existing companies

### Overview of the course

- 1) Essential constituents of a digital platform
- 2) The fundamentals of a two-sided business model
- 3) Why do platform businesses fit so well to a digitally driven economy?
- 4) From platform to eco-system
- 5) Lock-In and Network-effects (of data) in platform eco-system
- 6) Bargaining powers of the individual players in a platform eco-system
- 7) Creation of platforms
- 8) Closing remarks

### Teaching and learning methods

Interactive seminar, case studies, summary script (online)

## Digital Business (16 hours)

### Aim of the course

Students shall

- » understand the central questions, opportunities and challenges of the digital transformation
- » understand the basic technological foundations of digitalization
- » learn about digital transformation methods and processes within existing companies

### Overview of the course

- 1) Role of IT as part of Corporate Strategy
- 2) Introduction to Basic Technologies, such as for example:
  - › Cloud Computing
  - › Big Data
  - › Blockchain
  - › Artificial Intelligence
  - › Predictive Analytics
  - › Internet of Things (IoT)
  - › Industry 4.0
  - › Other current developments
- 3) Developing a (Corporate) Data Strategy

### Teaching and learning methods

Interactive seminar, case studies, script

## Workshop: Strategy Development for Digital Markets (32 hours)

### Aim of the implementation workshop

Students shall

- » apply the concepts discussed in the earlier modules to the current and likely future developments in individual industries
- » combine the understanding of the underlying digital drivers of change and technological developments with standard corporate strategy development tools

### Overview of the implementation workshop

- 4) Review:
  - a) Fundamental drivers of digital transformation
  - b) Challenges and opportunities for traditional industries
  - c) The Ambidextrous Enterprise
  - d) Platform Economy
- 5) Applied strategy development for digital markets
  - a) St. Gallen Business Model Navigator
  - b) Resource vs. Market Based View
  - c) Applied Game Theory

### Teaching and learning methods

Interactive seminar, case studies, self-learn and research assignments between seminar sessions

# Intrapreneur

## Module description

### Aim of the module

The digital transformation of products and markets creates many challenges but also opportunities for existing businesses. The Intrapreneur-Profile will focus on methods and skills necessary to support and enable innovative and possibly disruptive processes within existing companies, which cannot solely function as a start-up company but must also keep existing processes running and competitive. The successful intrapreneur will use selected start-up methods to support the transformation processes from within the company.

### Students shall

- » understand the methods and skills employed by start-up companies
- » learn how to apply these methods and skills from within existing companies
- » have an opportunity to test their own or their company's innovative ideas

### The module consists of four courses:

- » Business Model Innovation (8 hours)
- » Lean Start-Up Techniques (8 hours)
- » Design Thinking (16 hours)
- » Proof of Concept Workshop (32 hours)

The module is taught in English.

The exam will be a final project assignment

## Business Model Innovation (8 hours)

### Aim of the course

Students shall

- » Understand the substantial threat of digitalization to existing business models
- » Be able to apply possible solutions to existing business models in order to transfer them to a digital market

### Overview of the course

- 1) Understanding Business Model Challenges due to the Digital Transformation (Review Digital Drivers of Change)
- 2) Solutions to the Paradox of Online Business Models
  - a. Long-Tail
  - b. Proprietary System
  - c. Kelley's Generatives
- 3) Platform Economy, Network & Lock-In Effects
- 4) Components of a business model
- 5) The four C's of Internet business models
- 6) Disruption of value chains: Dis-Intermediation and Re-Intermediation
- 7) St. Gallen Business Model Navigator

### Teaching and learning methods

Interactive lecture, summary script

## Lean Start-Up Techniques (8 Stunden)

### Aim of the course

Students will be able to

- » Learn how modern companies use entrepreneurial management techniques to transform their corporate culture and drive long-term growth – with a particular emphasis on innovation and digital transformation

### Overview of the course

- 1) What is lean management?
- 2) Selected lean management techniques
  - › Minimal Viable Product
  - › Continuous Deployment
  - › Growth Hacking
  - › Design Thinking & Scrum
  - › Business Canvas
  - › Visualization Techniques
- 3) Best Practice Examples
- 4) Obstacles and Prerequisites

### Teaching and learning methods

Interactive lecture, case examples, summary script (online)

## Design Thinking (16 Stunden)

### Aim of the course

Students shall

- » know the basics of Design Thinking and why it is used in digitalization projects
- » be able to apply Design Thinking methods to a given problem
- » have developed a prototype for a problem and have presented it to an audience
- » have reflected the Design Thinking approach and their experience with it

### Overview of the course

- 1) Design Thinking – approach and examples
- 2) Understand and identify customer needs
- 3) Ideation – Conceptualize a product or service
- 4) Prototype and Test the ideas
- 5) Presentation, Feedback and Wrap-Up

### Teaching and learning methods

Interactive seminar, problem-based learning, self-learn and group work, home assignments between seminar sessions

## Proof of Concept Workshop (32 hours)

### Aim of the implementation workshop

Students shall

- » learn how to apply the methods and skills of start-up companies, especially the user-centred innovation process of Design Thinking combined with agile project tools and a lean-start-up approach
- » have an opportunity to test their own or their company's innovative product ideas

### Overview of the implementation workshop

- 1) Review methods and tools:
  - a. Design Thinking
  - b. Minimal Viable Product
  - c. Visualisation
  - d. Others
- 2) Test and improve own or given product idea through weekly iteration cycles
- 3) Pitch final product idea and prototype

### Teaching and learning methods

Interactive workshop, case studies, self-learn and research assignments between seminar sessions

# Programming

## Modul description

### Aim of the module

Algorithms are today at the core of many business applications like manufacturing control systems, marketing automation and campaign management as well as healthcare information systems and financial services. They play an increasingly important role in the daily usage of the internet and internet service like search engines. Programming an algorithm is becoming ever more important skill, quickly turning into the core competency for all kinds of 21st Century workers.

### Students will be able to

- » discuss how algorithms impacts business and private life
- » discuss how companies adopt machine learning and artificial intelligence for their business models
- » demonstrate the ability to program a simple website based on HTML and CSS
- » demonstrate the ability to use JavaScript and jQuery in website programming
- » demonstrate the ability to write, compile and run simple java programs and android apps using java

### The profile consists of four partial modules:

- » Basic website programming with HTML and CSS (8 hours)
- » Website interactions with JavaScript and jQuery (8 hours)
- » Fundamentals of Java-Programming (16 hours)
- » Workshop - App-Programming in action with Android (32 hours)

The profile is taught in English.

The exam will be a final project assignment

## Basic website programming with HTML and CSS (8 hours)

### Aim of the course

Students will be able to

- » describe the basic idea of world wide web
- » explain the role of HTML and CSS in website programming
- » demonstrate the ability to program a simple website based on HTML and CSS

### Overview of the course

1. Introduction to website programming
  - 1.1 Brief history of world wide web (WWW)
  - 1.2 Approaches to website programming
  - 1.3 Role of HTML and CSS
2. Hypertext Markup Language (HTML)
  - 2.1 Basic principles of HTML
  - 2.2 HTML-Elements and their usage
  - 2.3 Limitations of HTML
3. Cascading Style Sheets (CSS)
  - 3.1 Why using CSS?
  - 3.2 CSS basic elements and their usage
  - 3.3 Using CSS in HTML

### Teaching and learning methods

Interactive lecture, group discussions and exercises, case examples

## Website interactions with JavaScript and jQuery (8 hours)

### Aim of the course

Students will be able to

- » describe basic concepts of website interaction
- » demonstrate the ability to use JavaScript in website programming
- » Demonstrate the ability to apply JQuery code library for website programming

### Overview of the course

1. Interaction in website programming
  - 1.1 Interactive technologies for web programming
  - 1.2 Strengths and limitations of each technology
2. JavaScript
  - 2.1 Why using JavaScript?
  - 2.2 JavaScript elements and their usage
  - 2.3 JavaScript coding with HTML
3. JQuery
  - 3.1 The idea of code libraries
  - 3.2 Website interaction with JQuery functions
  - 3.3 Implementing and customizing JQuery functions in HTML websites

### Teaching and learning methods

Interactive lecture, group discussions and exercises, case examples

# Fundamentals of Java-Programming (16 hours)

## Aim of the course

Students will be able to

- » discuss different approaches to computer programming
- » explain the main concepts of object oriented programming
- » demonstrate the ability to setup a java programming environment
- » demonstrate the ability to write, compile and run simple java programs using java statements

## Overview of the course

1. Approaches to computer programming
  - 1.1 History of computer programming
  - 1.2 Functional vs. object oriented programming
2. Object oriented programming
  - 2.1 Principles of object oriented design and programming
  - 2.2 Advantages and disadvantages
  - 2.3 Main concepts of object oriented programming
3. Java programming environment
  - 3.1 Java platform and JDK
  - 3.2 Integrated Development Environments (IDE)
  - 3.3 Eclipse IDE
  - 3.4 Compiling and Running a Simple Program
4. Java Language
  - 3.1 Application structure and elements
  - 3.2 Variables
  - 3.3 Operators
  - 3.4 Program control statements
  - 3.5 Arrays and strings
  - 3.6 Classes, objects and methods
  - 3.7 Inheritance
  - 3.8 Java and XML

## Teaching and learning methods

Interactive lecture, group discussions and exercises, case examples



# Workshop - App-Programming in action with Android (32 hours)

## Aim of the implementation workshop

Students will be able to

- » explain the basics of an app development process
- » demonstrate the ability to analyze a problem and define requirements
- » design a simple layout for your app
- » demonstrate the ability to setup an app programming environment
- » demonstrate the ability to write, compile and run a simple app program

## Overview of the implementation workshop

The implementation workshop of this profile aims to put the prior modules into practice. Throughout the workshop the participants will perform in groups the following interactive tasks:

1. Analyze a given problem that need to be programmed as an app
2. Define the requirements for the app
3. Design an app layout and user interaction
4. Setup and configure an app programming environment
5. Program a simple app using Java and XML
6. Publish the app in the google app store

## Teaching and learning methods

Group discussions, exercises, student presentations and case studies

# Financial Accounting

## Module description

### General

Code:	B12-FINACC
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every first year
Applicability of the module:	Logistics Management Maritime Management Business Administration English
Prerequisites:	Basic module for the entire financial accounting. Contents are used in the modules managerial accounting and also in the module investment and financing references are made to the external accounting. For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	Prof. Dr. Torsten Keller and others
Language of teaching:	English
ECTS credits:	6
Workload and its composition:	48 hours contact 52 hours independent study 50 hours dual workload
Contact hours:	48 hours in academic year
Methods of examination:	Written Exam
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of course

The student shall be familiar with the basic principles of the company's management accounting systems with a strong focus on the financial reporting instruments, which consist of the balance sheet, the profit-and-loss statement and the cash flow statement. The student should get in contact with the major parts of the company's financial accounting systems. This concerns concepts like adjusting accounts, completing the accounting cycle, valuation of assets and liabilities. The students shall be able to apply these instruments in practice and critically judge them in an operational manner.

### Contents of the module

- 1) Accounting in Action
- 2) The Recording Process
- 3) Adjusting the Accounts
- 4) Completion of the Accounting Cycle
- 5) Inventories
- 6) Accounting for Receivables
- 7) Fraud, Internal Control, Cash
- 8) Plant Assets, Natural Resources, and Intangible Assets
- 9) Current Liabilities and Payroll Accounting
- 10) Long-Term Liabilities
- 11) Investments

## 12) Financial Statement Analysis

### Teaching and learning methods

Lecture with accompanying presentation tools, practises and case studies. Group and individual work help to strengthen the knowledge. The student shall be able to work independently by solving exercises and mini cases.

### Special features

#### Demands on company training

To gain basic knowledge in terms of a company's financial and cost accounting systems, the practical training should accompany the theoretical studies. So the student should be able to

- » get to know the parts of the company's financial and cost accounting systems,
- » gain experience in the accounting procedures and the financial reporting instruments,
- » get to know the special features of the shipping related accounting matters,
- » get to know the cost accounting systems, especially the product calculation, activity based costing,
- » get to know other specific cost accounting systems like the contribution margin analysis, budgeting and direct costing.

### Recommended literature

- » **Weygandt, Jerry J., Kieso, Donald E., Kimmel, Paul D., Accounting Principles, 12th edition, (2016), (basic literature)**

# Human Resources Management (HRM)

## Module description

### General

Code:	B14-HRM
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every first year
Applicability of the module:	Logistics Management Maritime Management Business Administration (English Track)
Prerequisites:	The module presupposes the knowledge of the module "Methodology and basics of business studies". A presentation with regard to an assigned task of HRM has to be prepared beforehand. For the preparation, monitoring and follow-up of the module see recommended reading list
Responsible:	Prof. Dr. Daniela Eisele-Wijnbergen
Name of lecturer:	Dr. Cliff Rehr, Michael Henkel
Language of teaching:	English
ECTS credits:	6
Workload and its composition:	48 hours contact 52 hours independent study 50 hours dual workload
Contact hours:	48 hours in academic year
Methods of examination:	Presentation and written examination
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of the module

The students shall

- » know essential theories relating to people management, the objectives, importance and generic structural patterns of HRM function and also, where applicable, know relevant labour legislation framework,
- » know the tasks and special elements of the HRM cycle and use its methods,
- » assess ways of recruiting personnel internally and externally,
- » assess personnel selection procedures,
- » know the necessity for and importance of personnel development and the possibilities of internal and external training,
- » understand the meaning of leading people, and motivation and
- » assess selected approaches and tools in setting HRM policy with special attention being given to sustainability and value orientation

### Contents of the module

1. Introduction to Human Resource Management
  - Definitions, goals and scientific approaches of HRM
  - Legal environment, HRM strategy, principles, organization, controlling

2. Personnel Planning  
Methods of quantitative and qualitative planning
3. Personnel Recruitment and Selection  
Employer Branding, personnel marketing, recruiting, methods of selection and procedures
4. Staff Allocation  
Personnel placement and flexibilization of work
5. Compensation and Incentives  
Pay and wage systems, variable compensation systems and benefits
6. Personnel development  
Assessments and evaluation systems, learning and development
7. Motivation and Leadership  
Theories of motivation and leadership approaches

#### Teaching and learning methods

Lecture, presentations, case studies, group discussions.

#### Demands on company training

In order for the students to develop a comprehensive and solid understanding of the tasks and demands in HR as well as acquire practical competence in this area, the company training should supplement and accompany the theoretical studies by giving students the opportunity to

- » know operationally relevant rules in HRM, company agreements, wages, salaries, as well as work and socio-legal provisions,
- » get to know specific HRM methods and use them in examples,
- » experience working with HRM ratios,
- » explain the whole process of recruitment in the company and work on related tasks,
- » get to know and experience the personnel-development measures used by the company and work on the design of training measures,
- » explain and evaluate appraisal systems applied,
- » distinguish between personnel costs occurring as wages and salaries,
- » describe the company's compensation system and assess its importance in the overall corporate and HR context,
- » describe the basic principles of leadership and leadership styles, motivation theories and
- » discuss current trends in HRM in the company.

#### Recommended literature (English monographs)

- DeNisi A. and Griffin, R (2019), HR 5, 5th Edition Cengage
- Gibson, J.L.; Ivancevich, J.M.; Donnelly, J.H. and Konopaske, R. (2011), Organizations: Behavior, Structure, and Processes, 14th ed. New York, McGraw Hill Irwin
- Bohlander, G.W., Snell, S.: Principles of Human Resource management, (2013) 16<sup>th</sup> ed. Cengage
- **Dessler, G.: Fundamentals of Human Resource Management (2018), 5<sup>th</sup> ed., Pearson**

#### Recommended literature (German monographs)

- Becker F., Berthel J.: Personalmanagement, 11. Aufl. Stuttgart 2017
- Eisele, D.; Doyé, D.: Praxisorientierte Personalwirtschaftslehre: 2010

# Elective: International Business Law

## Module description

### General

Code:	B12-INTBL
Year of study:	2019/2020
Form of course:	Elective obligatory
Frequency of course offer:	In every first year (1 <sup>st</sup> and 2 <sup>nd</sup> semester)
Applicability of the module:	Logistics Management Maritime Management Business Administration (English)
Prerequisites:	The module provides basic knowledge of law which is essential for further studies. For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	Lana Spangenberg JD, Dr Rainer Böhm, Steffen Maelicke
Language of teaching:	English
ECTS credits:	5
Workload and its composition:	48 hours contact, 36 hours independent study 41 hours dual workload
Contact hours:	1 <sup>st</sup> semester: 16 hours 2 <sup>nd</sup> semester: 32 hours
Methods of examination:	At the end of 2 <sup>nd</sup> semester: Written examination (90 min)
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of course

The students shall achieve general overview on international legal issues with a focus on international dispute resolution, contract and competition law as applied inter alia in cross-border transactions and work on case studies.

### Contents of the module

1. Contract Law, incl. Incoterms
2. International Commercial Law
3. Introduction to Patents; Trademarks & Copyright
4. Dispute Resolution (Mediation/Negotiation/Conciliation/Arbitration)

### Teaching and learning methods

Presentation and Group Assignments

### Special features

#### Demands on company training

The students shall attend contract negotiations and be involved in contract documentation, incl. meeting with the lawyers involved. Negotiation shall give an understanding for different clauses and its effects on the business. Furthermore, it is recommended to deploy the students in the legal department and to train them on standard problems.

## Recommended literature

- » Fontaine/de Ly, Drafting International Contracts: An Analysis of Contract Clauses, 2009
- » Riesenhuber, EU-Vertragsrecht, 2013
- » Baughen, Shipping Law, 5. Auflage 2012
- » Tweeddale/Tweeddale, Arbitration of Commercial Disputes: International and English Law and Practise, 2005
- » Schwab/Walter, Schiedsgerichtsbarkeit, 7. Auflage 2005
- » Köhler / Bornkamm, UWG, 35. Auflage 2017
- » Bellamy / Child, European Community Law of Competition, 7. Auflage 2013

# Introduction to Logistics

## Module Description

### General

Code:	B12-INTRLOG
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every first year
Applicability of the module:	Logistics Management Maritime Management
Prerequisites:	The module provides the basic content for the study program and thus forms the base module. For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	Prof. Dr. Jan Ninnemann
Language of teaching:	English
ECTS credits:	4
Workload and its composition:	34 hours contact 48 hours independent study 20 hours dual workload
Contact hours:	32 hours in academic year
Methods of examination:	Practical Report
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of course

The course provides the basic content for the following logistics topics such as transport logistics, supply chain management as well as warehouse & inventory management. The students will learn about the major logistics and supply chain management definitions as well as the logistics evolution. Furthermore, the course gives a first insight into strategies on the logistics market as well as green topics.

### Content

- Introduction
  - Aspects of modern logistics
  - Logistics and SCM
  - Logistics Strategy
- Logistics management
  - Procurement Logistics
  - Production Logistics
  - Distribution Logistics
  - Reverse and sustainable Logistics
- Warehousing & Inventory Management
  - Warehousing
  - Inventory Management
- Logistics Systems
  - Logistics Networks
  - Logistics and IT



- Logistics & sustainability
  - The logistics industry's role in sustainability
  - Trends towards a sustainable logistics industry

#### Teaching and learning methods

Interactive teaching and discussions in a seminar-like style, case studies related to practice and methods

#### Special features

Generally, no special features required, as this course is a basic module.

#### Demands on company training cover

- Basic logistics activities such as distribution, production and procurement logistics
- Knowledge about current logistics market trends and developments
- Companies supply chains, flow of materials and orders
- Insight in basic logistics functions such as transport, handling and warehousing

#### Recommended literature

- Logistiksysteme: betriebswirtschaftliche Grundlagen / Pfohl, Hans-Christian. - 9., neu bearbeitete und aktualisierte Auflage. - Berlin : Springer Vieweg, [2018]
- Warehousing and transportation logistics : systems, planning, application and cost effectiveness / Martin, Heinrich. - London : KoganPage, 2018
- Comprehensive logistics / Gudehus, Timm. - 2., rev. and enl. ed. - Berlin [u.a.] : Springer, 2012

# Macroeconomics

## Module description

### General

Code:	B12-MACR
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	Every first year
Applicability of the module:	Business Administration, Logistics Management, Maritime Management
Prerequisites:	Macroeconomics enables students to understand and to analyze circumstances under which firms operate. As a consequence, economics is interconnected with many fields of business administration. For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturers:	Prof. Dr. A.H. Otto, Prof. Dr. Henning Vöpel
Language of teaching:	English
ECTS credits:	4
Workload and its composition:	32 hours contact, 58 hours independent study 10 hours dual workload
Contact hours:	32 hours in academic year
Methods of examination:	Written examination
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of the module

Economic science tries to explain the behaviour of individual households and firms and how the interaction of households, firms, and public authorities affects the allocation of a society's scarce resources. Both economic behaviour as well as the allocation of resources depend upon incentives and market structures which – among others – are shaped by market participants, political and legal frameworks, and ethical and cultural norms.

The aim of the module is to enable students:

- » to understand the basics and the methodology of micro- and macroeconomics,
- » to understand and assess the economic impact of economic developments, public sector activities and policies on firm behaviour, household behaviour, market outcomes, and economic welfare,
- » to apply economic theory in order to describe and analyse market conditions, market mechanisms, and to develop appropriate and sustainable business strategies.

### Contents

1. Common Lecture: Facts of Growth
2. Introduction

3. The short run
  - 3.1. The goods market
  - 3.2. Financial markets
  - 3.3. The IS-LM model
4. The medium run
  - 4.1. The labour market
  - 4.2. The Phillips curve, the natural rate of unemployment and inflation
  - 4.3. The IS-LM-PC model
5. Open Economy
  - 5.1. Openness in goods and financial markets
  - 5.2. The goods market in an open economy
  - 5.3. Output, the interest rate and the exchange rate

#### Teaching and learning methods

- » Lectures
- » Exercises
- » Discussion and analysis of the current economic situation
- » The participants are requested to prepare the lectures by reading the recommended textbooks and to deepen their understanding of the lectures by studying the exercises being provided in the textbooks.

#### Demands on company training

The goal of the lecture is to provide students with a theoretical background in macroeconomics that enhances their understanding of economic behavior, causes and consequences of economic developments, and the impact of economic policies. The lecture thereby aims to strengthen their ability to make decisions and to develop successful and sustainable business strategies.

Firms can support this aim and help students to apply and to deepen their microeconomic knowledge by providing information and insights about the competitive and institutional environments the firms operate in and by providing information about suppliers, customer groups and pricing strategies. Furthermore, firms may promote student's understanding of macroeconomics by explaining the firm's exposure to and reception of macroeconomic events like unanticipated macroeconomic shocks and the business cycle.

#### Recommended literature

- » O. Blanchard, A. Amighini and F. Giavazzi (2017): Macroeconomics – A European Perspective, 3<sup>rd</sup> Edition, Pearson.

# Managerial Accounting

## Module description

### General

Code:	B12-MANACC
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every first year
Applicability of the module:	Logistics Management Maritime Management Business Administration (English)
Prerequisites:	The subjects of the module financial accounting. For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	Prof. Dr. Torsten Keller and others
Language of teaching:	English
ECTS credits:	6
Workload and its composition:	48 hours contact, 52 hours independent study 50 hours dual workload
Contact hours:	48 hours in academic year
Methods of examination:	written exam
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of the module

In the course of Management Accounting, students can clearly see the relevance of accounting in their everyday lives. By introducing challenging accounting concepts with examples that are already familiar to the student from their course Financial Accounting, the course includes the major instruments of Cost Accounting and shows the relevance of data from Cost Accounting for decision making in business.

### Contents of the module

1. Introduction to terms and objectives
2. Job Order Costing
3. Process Costing
4. Cost Behavior
5. Cost-Volume-Profit-Analysis
6. Budgetary Planning and Control
7. Incremental Analysis for Short Term Decision Making
8. Standard Costing and Variances

### Teaching and learning methods

Lecture with tutorials and self-study. Using the student resources (examples, exercises, quizzes) from the publisher.

### Demands on company training

Company training shall serve as a deepening and an amendment to the theoretical studies. It shall train a well-grounded approach to microeconomic questions in the company by giving the students the opportunity to get a closer look especially to the following aspects:

- » The integration of Financial and Managerial Accounting.
- » The decision making on the basis of numbers.
- » The planning and controlling of costs.

### Recommended literature

- » Atkinson, A.A. et al: Management Accounting, 6<sup>th</sup> edition, 2012, ISBN 10: 0-273-76998-7
- » Bragg, S.: Cost Accounting Fundamentals, 3<sup>rd</sup> edition, 2012, ISBN 13: 0980069998
- » Garrison, R.H.et al: Introduction to Managerial Accounting, Global Edition, 12<sup>th</sup> edition, 2012, ISBN 13: 9781259008184
- » Horngren, C.T. et al: Cost Accounting, 14<sup>th</sup> edition, 2012, ISBN 10: 0-273- 75387-8
- » **Weygandt, J.J.,et al: Accounting Principles, International Student Version, 12th edition; ISBN 978-1-118-95974-9**
- » Weygandt, J.J. et al: Managerial Accounting: Tools for Business Decision Making, Study Guide, 2010, 5th edition, ISBN: 978-0-470-50695-0
- » Whitecotton/Libby/Phillips: Managerial Accounting, 2<sup>cd</sup> edition, 2013, ISBN: 9781259060946

# Mathematics

## Module description

### General

Code:	B14-MATH
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	First Semester
Applicability of the module:	Business Administration
Prerequisites:	The module provides mathematical background and knowledge required in quantitative and formally oriented modules like Economics, Investment and Finance, etc.
Name of lecturers:	Prof. Dr. Alkis Otto, Prof. Dr. Sönke Hartmann
Language of teaching:	English
ECTS credits:	7
Workload and its composition:	48 hours contact 109 hours independent study 18 hours dual workload
Contact hours:	48 hours in academic year
Methods of examination:	Final written examination (100%)
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of the module

Students are expected to

- » learn about (and deepen their understanding of) basic mathematical tools and methods,
- » gather mathematical knowledge required for other lectures,
- » apply their mathematical skills to practical problems in business life and economics (finance, operations research, etc..)

### Contents of the course Mathematics

1. Introduction
2. Preliminaries
3. Linear Algebra
  - 3.1. Vectors
  - 3.2. Matrices and Determinants
  - 3.3. Systems of Linear Equations
    - 3.3.1. Gaussian Elimination
    - 3.3.2. Inverse Matrix Approach
4. Analysis
  - 4.1. Sequences, Series and Limits
  - 4.2. Differential Calculus (Single-Variable Optimization)
  - 4.3. Partial Derivatives (Multiple-Variable Optimization)

- 4.4. Integration
- 5. Numerical Methods: Roots of a Function
  - 5.1. Bisection Method
  - 5.2. Linear Interpolation (Regula falsi)
  - 5.3. Newton's Method
- 6. Financial Mathematics
  - 6.1. Compounding, Discounting, Present and Future Value
  - 6.2. Annuities
    - 6.2.1. Annuities in Arrear (Ordinary Annuity)
    - 6.2.2. Annuities in Advance (Annuity Due)
    - 6.2.3. Perpetuities
  - 6.3. Nonannual Compounding
    - 6.3.1. With Periodic Compound Interest
    - 6.3.2. Without Periodic Compound Interest
  - 6.4. Continuous Compounding

#### Teaching and learning methods

Lecture, group work, exercises

#### Demands on company training

The contents of the module are not directly attributable to operational functional activities within firms. However, students may be given the opportunity to participate in financial calculations.

#### Recommended literature

- » **Sydsaeter, K., Hammond, P., Strom, A., Carvajal, A., Essential Mathematics for Economic Analysis, 5th ed., Pearson, Harlow 2009.**
- » Chiang, A.C., Wainwright, K., Fundamental Methods of Mathematical Economics, 4th ed., McGraw Hill, Boston 2013.
- » Dowling, E.T., Schaum's Outline of Mathematical Methods for Business and Economics, McGraw Hill, Boston 1993.

# Methodology and Basics of Business Studies

## Module Description

### General

Code:	B12-METH
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every first year
Applicability of the module:	Logistics Management Maritime Management Business Administration (engl.)
Prerequisites:	The module offers an overview of business administration and serves as basis for the following modules. For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	Jennifer Duseux, Dr. Katja Starken
Language of teaching:	English
ECTS credits:	4
Workload and its composition:	36 hours contact 54 hours independent study 10 hours dual workload
Contact hours:	36 hours in academic year
Methods of examination:	Practical report
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of the Module

This course serves as an introduction to management. Also, students will be given an overview of and insights into specific fields of Business Administration. It covers the basics of a manager's job, introduces the various functions of management (planning, organizing, leading, and controlling) as well as the fundamental functions within an organization (supply chain, manufacturing, marketing, HR, investment, finance...). The scope is broad and includes among others basics of organization and management theory.

In class, exercises as well as case studies will demonstrate practical applications of management concepts.

### Contents of the module

- Principles of scientific working
- Goals and tasks of enterprises
- Business models and value creation processes
- Company functions
- Introduction to management and organization
- Constituent decisions
- Global management and corporate responsibility



## Teaching and Learning Methods

Seminar Style: lectures, case studies, group work, presentations, discussions, self study

## Demands on company training

The company training shall support the broadening and deepening of the theoretical studies and train a conceptual approach to questions in business, in which the students are offered the following possibilities:

- » Familiarise with different company functions and be able to classify them within the business process.
- » Receive an insight into the interfaces of business administration and other scientific disciplines and understand their meaning for business administration.
- » Familiarise themselves with the company's vision and its corporate philosophy in order to identify the target hierarchy and detect target dependencies.
- » Gain an insight into the company functions' decision processes to recognize to which extent theoretical decision rules are applied in practice and to learn how to make practice-oriented decisions with the help of these rules.
- » Receive first insights into production theory.
- » Be able to discuss and evaluate constitutive decisions.
- » Increase awareness for ethical challenges companies are facing.

## Recommended literature (monographs in English language)

### Text Books

- Robbins, S.; Coulter, M. (2017): Management, Harlow, Pearson Education, 12th edition

### Further readings:

- Daft, R.; Marcic, D. (2018): Understanding Management, Cengage Learning, 10th edition
- Needle, D. (2015): Business in Context. An Introduction into Business and its Environment, Cengage Learning, 6th edition
- Kelly, M.; Williams, C. (2018): MindTap Introduction to Business, BUSN, Cengage Learning, 11th edition

### Specific Text Books:

- Kotler, P.; Armstrong, G. (2017): Principles of Marketing, Pearson, 17th edition
- Daft, R.; Murphy, J.; Willmot, H. (2017): Organization Theory and Design: An international Perspective, Cengage Learning, 3rd edition
- Robbins S.; Judge T. (2018): Organizational Behavior, 18th edition

## Recommended additional reading (monographs in German language)

- Wöhe, G.; Döring, U. (2016): Einführung in die Allgemeine Betriebswirtschaftslehre, 26. Auflage
- Schierenbeck, H.; Wöhle, C.(2016): Grundzüge der Betriebswirtschaftslehre, 19. Auflage
- Jung, H.(2016): Allgemeine Betriebswirtschaftslehre, 13. Auflage
- Vahs, D.; Schäfer-Kunz, J.(2015): Einführung in die Betriebswirtschaftslehre, 7. Auflage
- Bea, F.; /Schweitzer, M. (2011): Allgemeine Betriebswirtschaftslehre, Bd. 1-3, 10. Aufl.

Additional material to be announced by lecturer in class.

# Microeconomics

## Module description

### General

Code:	B12-MICR
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	Every first year
Applicability of the module:	Business Administration, Logistics Management, Maritime Management Media Management
Prerequisites:	Microeconomics enables students to understand and to analyze circumstances under which firms operate. As a consequence, economics is interconnected with many fields of business administration. For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturers:	Prof. Dr. A.H. Otto, Prof. Dr. Henning Vöpel
Language of teaching:	English
ECTS credits:	6
Workload and its composition:	50 hours contact, 85 hours independent study 15 hours dual workload
Contact hours:	50 hours in academic year
Methods of examination:	Written examination (90 min., 100 points)
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of the module

Economic science tries to explain the behaviour of individual households and firms and how the interaction of households, firms, and public authorities affects the allocation of a society's scarce resources. Both economic behaviour as well as the allocation of resources depend upon incentives and market structures which – among others – are shaped by market participants, political and legal frameworks, and ethical and cultural norms.

The aim of the module is to enable students:

- » to understand the basics and the methodology of microeconomics,
- » to understand and assess the economic impact of economic developments, public sector activities and policies on firm behaviour, household behaviour, market outcomes, and economic welfare,
- » to apply economic theory in order to describe and analyse market conditions, market mechanisms, and to develop appropriate and sustainable business strategies.

### Contents of the course Microeconomics

1. A Primer in Scientific Theory (Common Lecture)
2. Introduction to Microeconomics (Common Lecture)
3. Markets and economic efficiency
  - 3.1. The supply and demand framework

- 3.2. General equilibrium and efficiency
- 4. Consumer behaviour and market demand
  - 4.1. Consumer behaviour
  - 4.2. Individual demand and market demand
  - 4.3. Optimal consumption
- 5. Firm behaviour and market supply
  - 5.1. Production and cost
  - 5.2. Profit maximization and market supply
- 6. Competition and market structure
  - 6.1. Monopoly
  - 6.2. Oligopoly
- 7. Optimization: The Lagrange method

#### Teaching and learning methods

- » Lectures
- » Exercises
- » Discussion and analysis of the current economic situation
- » The participants are requested to prepare the lectures by reading the recommended textbooks and to deepen their understanding of the lectures by studying the exercises being provided in the textbooks.

#### Demands on company training

The goal of the lecture is to provide students with a theoretical background in microeconomics that enhances their understanding of economic behaviour, causes and consequences of economic developments, and the impact of economic policies. The lecture thereby aims to strengthen their ability to make decisions and to develop successful and sustainable business strategies.

Firms can support this aim and help students to apply and to deepen their microeconomic knowledge by providing information and insights about the competitive and institutional environments the firms operate in and by providing information about suppliers, customer groups and pricing strategies.

#### Recommended literature

- » Robert S. Pindyck, Daniel L. Rubinfeld (2018): Microeconomics, 9<sup>th</sup> Edition, Pearson.

# Statistics

## Module description

### General

Code:	B12-STAT
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every first year
Applicability of the module:	Logistics Management Maritime Management Business Administration (English track)
Prerequisites:	For the preparation, monitoring and follow-up of the module see recommended literature.
Name of lecturer:	Prof. Dr. Sönke Hartmann and others
Language of teaching:	English
ECTS credits:	7
Workload and its composition:	48 hours contact 109 hours independent study 18 hours dual workload
Contact hours:	48 hours in academic year
Methods of examination:	Written examination
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of course

The students shall learn when and how to apply statistical methods. In particular, they should

- » understand the difference between observational studies and experiments,
- » organize, describe and present data using appropriate statistical measures,
- » understand the basic concepts of probabilities and probability distributions,
- » understand the impact of the sample size on the accuracy of the estimation,
- » understand statistical tests and the concept of significance,
- » be able to distinguish between correlation and causation,
- » be able to apply linear regression and to interpret the results.

In addition to the application of statistical formulas and methods, students should gain an intuitive understanding of statistics, e.g. concerning sample sizes and concepts such as significance and correlation.

### Contents of the module

1. Introduction: Basics, Variables, Observations vs. Experiments, Uses and Misuses
2. Descriptive Statistics
  - 2.1. Measures of Central Tendency
    - 2.1.1. Mean
    - 2.1.2. Median
    - 2.1.3. Mode
  - 2.2. Measures of Variation
    - 2.2.1. Range
    - 2.2.2. Variance and Standard Deviation
    - 2.2.3. Coefficient of Variation

- 2.3. Measures of Position
  - 2.3.1. Standard Score
  - 2.3.2. Percentiles
  - 2.3.3. Quartiles
- 2.4. Handling Outliers
- 3. Probabilities
  - 3.1. Definitions
  - 3.2. Types of Probabilities
    - 3.2.1. Classical Probability
    - 3.2.2. Empirical Probability
    - 3.2.3. Subjective Probability
  - 3.3. Calculating with Probabilities
    - 3.3.1. Addition Rules
    - 3.3.2. Multiplication Rules, Conditional Probability, Bayes' Theorem
  - 3.4. Combinatorics and Probabilities
    - 3.4.1. Fundamental Counting Rule
    - 3.4.2. Permutations
    - 3.4.3. Combinations
- 4. Discrete Probability Distributions
  - 4.1. Basic Definitions
  - 4.2. Expected Value and Variance
  - 4.3. Binomial Distribution
    - 4.3.1. Binomial Experiments
    - 4.3.2. Calculating Probabilities
    - 4.3.3. Expected Value and Variance
    - 4.3.4. Applications
  - 4.4. Further Discrete Probability Distributions
    - 4.4.1. Uniform Distribution
    - 4.4.2. Benford Distribution
- 5. Continuous Probability Distributions
  - 5.1. Basic Definitions
  - 5.2. Normal Distribution
    - 5.2.1. Properties
    - 5.2.2. Standard Normal Distribution
  - 5.3. Distribution of Sample Means: Central Limit Theorem
  - 5.4. Approximation to the Binomial Distribution
- 6. Confidence Intervals and Sample Sizes
  - 6.1. Confidence Interval for a Mean
    - 6.1.1. Using the Normal Distribution
    - 6.1.2. Using the t Distribution
  - 6.2. Confidence Interval for a Proportion
  - 6.3. Sample Size
    - 6.3.1. Estimating a Mean
    - 6.3.2. Estimating a Proportion
- 7. Hypothesis Tests
  - 7.1. Testing a Sample Mean
    - 7.1.1. Using the Normal Distribution: z Test
    - 7.1.2. Using the t Distribution: t Test
    - 7.1.3. Left-Tailed, Right-Tailed and Two-Tailed Tests
  - 7.2. Testing a Sample Proportion
  - 7.3. Testing the Difference between two Sample Means

- 7.4. Chi Square Tests
  - 7.4.1. Chi Square Test for Independence, application: A/B test
  - 7.4.2. Chi Square Goodness of Fit Test
- 7.5. Error Types
- 8. Correlation and Regression
  - 8.1. Correlation
    - 8.1.1. Scatter Plots
    - 8.1.2. Correlation Coefficient
    - 8.1.3. Correlation vs. Causation
  - 8.2. Linear Regression
    - 8.2.1. Line of Best Fit
    - 8.2.2. Multiple Linear Regression
    - 8.2.3. Dummy Variables
  - 8.3. Quality of the Regression Model
    - 8.3.1. Residuals
    - 8.3.2. Coefficient of Determination
    - 8.3.3. Confidence Intervals for the Coefficients
    - 8.3.4. Testing the Coefficients
    - 8.3.5. Multicollinearity
  - 8.4. Linear Regression in Excel

#### Teaching and learning methods

Interactive lecture with discussions and exercises; case studies

#### Special features

##### Demands on company training

To deepen the knowledge in statistics, the students should be given the opportunity to gather practical experience which should build upon and extend their theoretical knowledge. They should be given the opportunity to

- » assess the applicability of statistical methods,
- » analyze data in the company using statistical measures,
- » discuss assumptions such as sample sizes,
- » apply advanced statistics techniques such as regression or hypothesis tests.

#### Recommended literature

- » Bluman, Alan G.: Elementary Statistics – A brief version. Third Edition, McGrawHill 2006.
- » Bohley, P.: Statistik, München, Wien 2000.
- » **Bowerman, B.L., O'Connell, R.T.: Business Statistics in Practice, 4th edition, 2006. (Recommended)**
- » Eckey, Kosfeld, Dreger: Statistik, Wiesbaden 2002.
- » Elpelt, B. und Hartung, J.: Grundkurs Statistik. 3. Auflage. München, Wien 2004.
- » Rumsey, D.: Statistics for Dummies. Wiley and Sons 2003.
- » Schlittgen, Rainer: Einführung in die Statistik , München, Wien 2000.
- » Sharpe, N., De Veaux, R.D., Velleman, P.: Business Statistics. Second Edition, Pearson 2012.
- » Ziegler, B.: Grundlagen der statistischen Methodenlehre, Gernsbach 2001.

# Wirtschaftsrecht

## Modulbeschreibung

### Allgemeines

Code:	B12-WRECHT
Studienjahr:	2019/2020
Art der Lehrveranstaltung:	Wahlpflicht
Häufigkeit des Angebots der Lehrveranstaltung:	In jedem ersten Studienjahr (1. + 2. Semester)
Verwendbarkeit des Moduls:	Business Administration Logistics Management Maritime Management
Zugangsvoraussetzung:	Das Modul vermittelt rechtliche Grundkenntnisse, die im weiteren Studium benötigt werden. Zur Vorbereitung des Moduls siehe empfohlene Literaturliste.
Name des Hochschullehrers:	Dr. Torsten Meyer u.a.
Unterrichts-/Lehrsprache	Deutsch
Zahl der zugeteilten ECTS-Credits:	5
Workload und dessen Zusammensetzung:	48 Stunden Kontaktzeit 36 Stunden Selbststudium 41 Stunden dualer Workload 48 Stunden im Studienjahr
SWS:	48 Stunden im Studienjahr
Art der Prüfung / Voraussetzung für die Vergabe von Leistungspunkten:	Klausur (am Ende des 2. Semesters, 90 min.)
Sprache der Prüfung:	Deutsch
Gewichtung der Note in der Gesamtnote:	siehe Studiengangsspezifische Bestimmungen

### Qualifikations- und Kompetenzziele des Moduls

Die Studenten sollen im Hinblick auf wirtschaftliche Interessen rechtliches Problembewusstsein entwickeln und die allgemeinen Grundlagen des Rechts sowie Teilgebiete des Rechts vor dem Hintergrund wirtschaftlicher Fragestellungen verstehend kennen lernen. Sie sollen in der Lage sein, Verträge und Urteile zu internationalen Vertragsstreitigkeiten zu lesen und die darin aufgeworfenen behandelten Probleme zu verstehen und gleichzeitig begreifen, dass umsichtige problemorientierte Vertragsgestaltung künftige Konflikte verhindern kann.

Sie sollen das Anliegen und die Interessen streitender Parteien rechtlich analysieren und beurteilen können, ob sich Interessen und Rechtslagen decken, in dem sie die aufgeworfenen Rechtsfragen zielstrebig erörtern und begründete Antworten liefern. Die Absolventen sollen schließlich lernen, dass und warum die Durchsetzung von Rechten im gerichtlichen Verfahren – insbesondere im internationalen Rechtsverkehr – auch scheitern kann.

### Inhalte der Lehrveranstaltung

#### I. Grundlagen Recht

##### 1. Einführung

- 1.1. Normenhierarchie, Rechtsquellen
- 1.2. Abgrenzung Privatrecht/öffentliches Recht
- 1.3. Wirtschaftsrecht
- 1.4. Internationales Wirtschaftsrecht

2. Rechtssubjekte
  - 2.1. Rechts-, Geschäfts-, Deliktsfähigkeit

## II. Güter- und Leistungsaustausch

1. Vertragsschluss
  - 1.1. Willenserklärungen und Rechtsgeschäfte
  - 1.2. Angebote und Annahme, §§145 ff. BGB
  - 1.3. Formvorschriften, §§ 125 ff. BGB
  - 1.4. Stellvertretung, §§ 164 ff. BGB und §§ 48 ff. HGB
  - 1.5. Anfechtung, §§ 119 ff. BGB
2. Gestaltungsmöglichkeiten durch Verträge
  - 2.1. Grundsatz der Vertragsfreiheit
  - 2.2. Grenzen der Vertragsfreiheit
  - 2.3. Allgemeine Geschäftsbedingungen
3. Vertragstypen
  - 3.1. Überblick
  - 3.2. Kaufvertrag
    - 3.2.1. Inhalt und Zustandekommen des Kaufvertrages
    - 3.2.2. Sachmangelhaftung/Rechtsmängelhaftung
  - 3.3. Geschäftsbesorgungsvertrag
  - 3.4. Leistungsstörungen (Überblick)

## III. Deliktsrecht

1. Unerlaubte Handlung
2. Gefährdungshaftung

## IV. Forderungsmanagement

1. Kreditsicherheiten
  - 1.1. Einführung Sachenrecht
  - 1.2. Dingliche Sicherheiten
    - 1.2.1. Eigentumsvorbehalt
    - 1.2.2. Sicherungsübereignung
    - 1.2.3. Sicherungszession
  - 1.3. Schuldrechtliche Sicherheiten
    - 1.3.1. Bürgschaft
    - 1.3.2. Garantie, Schuldbeitritt (Überblick)
  - 1.4. Internationale Zahlung- und Sicherungsinstrumente (Überblick)
2. Durchsetzung von Forderungen
  - 2.1. Verjährung
  - 2.2. Überblick über das Zivilprozessrecht

## V. Handelsrecht

1. Einführung in das HGB
2. Kaufmannseigenschaft
3. Firmen- und Registerrecht
4. Handelsrechtliche Vertretungsverhältnisse
5. Handelskauf und ausgewählte Handelsgeschäfte (Überblick)

## VI. Gesellschaftsrecht

1. Grundlagen
2. Gesellschaft bürgerlichen Rechts
3. Offene Handelsgesellschaft
4. Kommanditgesellschaft
5. Sonderformen der Personengesellschaft
  - 5.1. Partnerschaftsgesellschaft



- 5.2. Stille Gesellschaft
- 6. Gesellschaft mit beschränkter Haftung
- 7. Aktiengesellschaft (Überblick)
- 8. Sonderformen der Körperschaften (Überblick)
  - 8.1. Kommanditgesellschaft auf Aktien
  - 8.2. Eingetragene Genossenschaft

#### Lehr- und Lernmethoden

Lehrgespräch, Fallübungen

#### Anforderungen an die betriebliche Ausbildung

##### Anforderungen an die betriebliche Ausbildung

Die Inhalte des Moduls Einführung Recht sind den einzelnen betrieblichen Funktionsbereichen nicht unmittelbar zuzuordnen. Sie werden breit gefächert bei unterschiedlichen Gelegenheiten und werden in den Unternehmen gefördert.

#### Empfohlene Literaturliste (Lehr- und Lernmaterial, Literatur)

- » **Brox/Walkers: Allgemeiner Teil des BGB, 39. Auflage 2015**
- » **Pottschmidt/Rohr: Wirtschaftsprivatrecht für den Unternehmer, 12. Auflage 2003**
- » Hoffmann/Thorn: Internationales Privatrecht, 10. Auflage (in Vorbereitung für Juni 2015)
- » **Peter Bülow: Recht der Kreditsicherheiten, 8. Auflage 2012**
- » Metzler/Müller: Wie löse ich einen Privatrechtsfall? Aufbauschema 7. Auflage 2015
- » **Grunewald, Barbara: Gesellschaftsrecht, 9. Auflage 2014**
- » Klunzinger, Eugen: Grundzüge des Gesellschaftsrechts, 16. Auflage 2012



**HSBA HAMBURG SCHOOL OF  
BUSINESS ADMINISTRATION**

# **Logistics Management Module Descriptions 2nd Year of Study**

**Year of Study 2019/2020**

## **Core Modules BA**

Corporate Finance  
Introduction to Investment and Finance  
Organisation

## **Sector-customized BA Modules**

Business-to-Business Marketing  
International Taxation or Betriebswirtschaftliche Steuerlehre  
Project Management  
Strategic Management in Transportation and Logistics

## **Logistics Modules**

Transport Logistics  
Warehousing and Inventory Management

## **Electives**

Electives (to be announced later)

## **Support Modules**

Operations Research  
Quantitative Methods

# **Betriebswirtschaftliche Steuerlehre or International Taxation and International Accounting**

## **Modulbeschreibung**

### **Allgemeines**

Code:	B12-BWSTL
Studienjahr:	2019/2020
Art der Lehrveranstaltung:	Pflicht
Häufigkeit des Angebots der Lehrveranstaltung:	In jedem zweiten Studienjahr
Verwendbarkeit des Moduls:	Logistics Management Maritime Management
Zugangsvoraussetzung:	Das Modul baut auf die Inhalte vom Modul „Methodik und Grundlagen des betriebswirtschaftlichen Studiums“ auf. Zur Vorbereitung, Begleitung und Nachbereitung des Moduls siehe empfohlene Literaturliste.
Name des Hochschullehrers:	Prof. Dr. Schmallowsky
Unterrichts-/Lehrsprache	Deutsch
Zahl der zugeteilten ECTS-Credits:	3
Workload und dessen Zusammensetzung:	24 Stunden Kontaktzeit 10 Stunden Selbststudium 10 Stunden dualer Workload
SWS:	24 Stunden im Studienjahr
Art der Prüfung / Voraussetzung für die Vergabe von Leistungspunkten:	Klausur 60 Min. (Betriebswirtschaftliche Steuerlehre)
Sprache der Prüfung:	Deutsch
Gewichtung der Note in der Gesamtnote:	see course specific provisions

### **General**

Code:	B12-BWSTL
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every second year
Applicability of the module:	Logistics Management Maritime Management
Prerequisites:	The module is based on the contents of the module "Methodology and Basics of business studies." For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	Prof. Dr. Florian Haase, Johannes Spranger
Language of teaching:	English
ECTS credits:	3
Workload and its composition:	24 hours contact 10 hours independent study 10 dual Workload
Contact hours:	30 hours in academic year
Methods of examination:	Written examination 60 min. (20 min Taxation/40 min Accounting)
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

The students get to know the basic principles of German Taxation or International Taxation and International Accounting. They have the choice between the module parts of “Betriebswirtschaftliche Steuerlehre” or “International Taxation and International Accounting”.

# Betriebswirtschaftliche Steuerlehre

## Modulbeschreibung

### Qualifikationsziele der Lehrveranstaltung

Die Studierenden sollen einen grundlegenden Überblick über die Steuern erhalten, die das Unternehmen im Wesentlichen betreffen. Die Studierenden sollen in die Lage versetzt werden, die Einflüsse der Besteuerung auf das betriebliche Geschehen zu analysieren und zu beschreiben. Kriterien und Entscheidungsregeln für betriebswirtschaftliche Gestaltungsmaßnahmen unter Berücksichtigung der Besteuerung, insbesondere hinsichtlich der Unternehmensform sollen erarbeitet werden. Ferner sollen die Studierenden die Auswirkungen aktueller Entwicklungen im Gebiet der Besteuerung auf die Betriebe erkennen.

### Inhalte der Lehrveranstaltung

1. Einführung
  - 1.1. Aufgaben der Betriebswirtschaftlichen Steuerlehre
  - 1.2. Abgrenzung zu Nachbardisziplinen
  - 1.3. Teilgebiete der Betriebswirtschaftlichen Steuerlehre
  - 1.4. Zweck der Besteuerung
2. Grundlagen der Betriebswirtschaftlichen Steuerlehre
  - 2.1. Abgaben, Gebühren, Beiträge, Steuern
  - 2.2. Steuersystem und Besteuerungsprinzipien
  - 2.3. Grundbegriffe
  - 2.4. Steuertarife
  - 2.5. Besteuerungsverfahren
  - 2.6. Rechtsquellen
3. Einkommensteuer
  - 3.1. Persönliche Steuerpflicht
  - 3.2. Sachliche Steuerpflicht
  - 3.3. Ermittlung des zu versteuernden Einkommens
  - 3.4. Ermittlung Einkommensteuer (Tarif)
  - 3.5. Kritik
  - 3.6. Aufgaben
4. Körperschaftsteuer
  - 4.1. Kurzcharakteristik
  - 4.2. Persönliche und sachliche Steuerpflicht
  - 4.3. Ermittlung des zu versteuernden Einkommens
  - 4.4. Tarif
  - 4.5. Kritik
  - 4.6. Aufgaben
5. Gewerbesteuer
  - 5.1. Kurzcharakteristik
  - 5.2. Persönliche und sachliche Steuerpflicht
  - 5.3. Ermittlung der Gewerbesteuer
  - 5.4. Anrechnung auf Einkommensteuer
  - 5.5. Kritik
  - 5.6. Aufgaben

6. Umsatzsteuer
  - 6.1. Kurzcharakteristik
  - 6.2. Umsatzsteuersysteme
  - 6.3. Grundlagen der Umsatzsteuer
  - 6.4. Steuerbefreiungen
  - 6.5. Besteuerung grenzüberschreitender Lieferungen u. Leistungen
  - 6.6. Kritik
  - 6.7. Aufgaben
  
7. Grundsteuer und Grunderwerbsteuer (Skizze)
  - 7.1. Kurzcharakteristik
  - 7.2. Steuerpflicht
  - 7.3. Ermittlung der Steuer
  - 7.4. Beispiele/Aufgaben
  
8. Steuerbilanz und Besteuerung von Personengesellschaften
  - 8.1. Steuerpflicht
  - 8.2. Verfahren der gesonderten und einheitlichen Gewinnfeststellung
  - 8.3. Steuerbilanz und steuerliche Gewinnermittlung
  - 8.4. Rechtsformwahl
  - 8.5. Kritik
  - 8.6. Aufgaben

#### Lehr- und Lernmethoden

Vorbereitung anhand von Skripten, Lehrgespräch und Diskussion im Seminar, Umsetzung der theoretischen Kenntnisse in praxisbezogenen Aufgaben und Fallstudien

#### Besonderes

##### Anforderungen an die betriebliche Ausbildung

Um ein umfassendes und fundiertes Verständnis für die Aufgaben und Anforderungen in der betriebswirtschaftlichen Steuerlehre sowie Handlungskompetenz in diesem Bereich zu entwickeln, soll die betriebliche Ausbildung das theoretische Studium ergänzen und flankieren, indem den Studierenden die Möglichkeit geschaffen wird:

- » die wesentlichen Steuerarten Einkommensteuer, Körperschaftsteuer und Gewerbesteuer sowie Umsatzsteuer, die das Unternehmen betreffen, kennenzulernen und deren Einfluss auf das Betriebsergebnis nachvollziehen zu
- » einen Einblick in die Steuerplanung des Unternehmens zu erhalten, um nachvollziehen zu können, ob und wie im Unternehmen steuerliche Gestaltungsmöglichkeiten genutzt werden

#### Empfohlene Literaturliste (Lehr- und Lernmaterial, Literatur)

- » Haberstock, Lothar(†)/Breithecker, Volker, Einführung in die Betriebswirtschaftliche Steuerlehre. Mit Fallbeispielen, Übungsaufgaben und Lösungen, Erich Schmidt Verlag
- » Schmallowsky, Thomas, Einführung in die betriebliche Steuerlehre, Nomos Verlag
- » Homburg, Stefan, Allgemeine Steuerlehre, Verlag Vahlen
- » Kußmaul, Heinz, Betriebswirtschaftliche Steuerlehre, R. Oldenbourg Verlag
- » Haase, Florian, Lehrbuch Internationales Steuerrecht, C.F. Müller Verlag
- » Steuergesetze und Steuerrichtlinien (z. B. NWB-Verlag oder Beck'sche Textausgaben)

# International Taxation and International Accounting

## Aim of course

### **International Taxation**

The students get to know the basic principles of international taxation. This includes the differences between the taxation of individuals and taxation of corporations with respect to the unlimited tax liability versus limited tax liability. It also includes the regulations of the OECD Model Convention, the German Foreign Tax Act and principles of EU tax law.

### **International Accounting**

The students get to know the basic principles of international accounting (IFRS). This includes the differences between German Accounting Rules (HGB) and IFRS Rules.

## Contents of the module

### **International Taxation**

1. Introduction
2. Income tax
  - 2.1. Taxation of Individuals
  - 2.2. Taxation of Corporations
  - 2.3. Taxation of Partnerships
3. Unlimited and limited tax liability
4. OECD Model Convention
  - 4.1. General Principles
  - 4.2. Examples
5. German Foreign Tax Act
  - 5.1. Add-back taxation
  - 5.2. Transfer Pricing
  - 5.3. Relocation issues
6. EU /Tax) Law
7. Case Studies

### **International Accounting**

1. Basics of international Accounting, IFRS (IAS)
  - 1.1. Legal Situation in Germany
  - 1.2. Basics of IFRS
  - 1.3. Principles of IFRS
  - 1.4. Important Definitions
  - 1.5. Fundamental Differences to German HGB
    - 1.5.1. Differences in Balance Sheet Items
    - 1.5.2. Differences in Balance Sheet Structure
    - 1.5.3. Differences in Measurement
  - 1.6. Deferred Taxes
2. Exercises

## Teaching and learning methods

Lecture and in class discussion. Groupwork with exercises.

Preparation based on lecture and discussion. Appliance of theoretical knowledge on practice related case studies.

## Special features

### Demands on company training - International Taxation

The company training should support the students with the aim to build a well-founded understanding of the tasks and requirements in international taxation. With regard to the income taxation, practical work in connection with international issues could help to establish a basic understanding. The comprehension of international taxation could be supported by involving the students in the decision-making process (where to run the business, where to form a company etc.).

### Demands on company training - International Accounting

The company training should support the students with the aim to build a well-founded understanding of the tasks and requirements in international accounting. IFRS rules are mandatory for public listed companies in the EU and an option for all other legal entities. Especially for small and medium sized companies the discussion for and against the application of IFRS rules could be helpful.

## Recommended literature

### **International Taxation**

- » Amann, Robert: German Tax Guide. Kluwer Law International
- » Haberstock, Lothar (†) /Breithecker, Volker: Einführung in die Betriebswirtschaftliche Steuerlehre. Mit Fallbeispielen, Übungsaufgaben und Lösungen. Erich Schmidt Verlag
- » Breithecker, Volker/Klapdor, Ralf: Einführung in die Internationale Betriebswirtschaftliche Steuerlehre. Mit Fallbeispielen, Übungsaufgaben und Lösungen. Erich Schmidt Verlag
- » Haase, Florian; Internationales und Europäisches Steuerrecht, 4. AL; C.F. Müller Verlag

### **International Accounting**

- » [www.iasb.org](http://www.iasb.org)
- » [www.iasplus.com](http://www.iasplus.com)
- » [www.ifrs-portal.com](http://www.ifrs-portal.com)
- » <http://www.drsc.de>

# **Business-to-Business-Marketing**

## **Module description**

### General

Code:	B12-B2BMARK
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every second year
Applicability of the module:	Maritime Management Logistics Management
Prerequisites:	All theoretical and conceptual foundations for the entire marketing management process are laid. For the preparation of the module see recommended literature.
Name of lecturer:	Mr. Udo-Volkmar Reschke
Language of teaching:	English
ECTS credits:	4
Workload and its composition:	32 hours contact, 35 hours independent study 33 hours dual workload
Contact hours:	32 hours in academic year
Methods of examination:	Written examination (60 min)
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of the module

Basic idea of the module is to train skills in terms of analyzing real business, especially market situations and find out scientific images and tools to match improvements in order to gain competitive advantage by innovating in process and product (which includes services).

#### **In the course the student should:**

- » be able to understand B2B-marketing process as a closed loop cybernetic system
- » explain marketing specific terms and vocabulary in respect of the entire supply chain
- » become familiar with common used marketing techniques and approaches in B2B field
- » be enabled to judge impacts on customer's processes and products in respect of benefit caused by tightrope acting efficiently and effectively

### Contents of course:

1. Introduction – Marketing in the Area of Derived Demand
  - 1.1 Terms Definitions
  - 1.2 Interfaces
  - 1.3 Understanding Supply Chain Process
  - 1.4 Scenery Maritime – Logistics – Services
  - 1.5 Cybernetic Loop System to understand Control Systems



2. Analysis of the B2B-Field
  - 2.1 Competitive Advantage
    - 2.1.1 Competencies
    - 2.1.2 Dynamic Capabilities
  - 2.2 Process Design to understand B2B Research
  - 2.3 Product Design and Methods (QFD)
  - 2.4 Research for Structure of Segments of Organizational Behaviour
3. New Institutional Economics (Basics)
4. B2B Relationship Management
  - 4.1 Transactions
  - 4.2 Levels of Relationship
  - 4.3 Business Types on Dependencies
  - 4.4 Customer Value
5. Procurement Policy

#### Teaching and learning methods: Introduction & Basics

- Lecture and discussing the concepts and models
- Reviewing the learning objectives with case studies,
- Private study based on mandatory literature
- Experts Reporting
- Excursion (depending on seasonal actions like SMM – leading international maritime trade fair)

#### Demands on company training

The academic education should give the students the chance to:

- » know the training company`s understanding of marketing and marketing management
- » become familiar with the structure of the industry and the strategic behavior of the company, so as to be able to assess competition and growth strategies,
- » experience marketing research activities as a basis for marketing decisions,
- » get insights into basic marketing aims and the elementary product, price, distribution and communication as well as brand management focuses of the training company
- » Get the chance to fit generalizations to specific situations

Additional it is desirable that the students will be encouraged to transfer the learned approaches and methods to actual practical questions during their company training.

#### Mandatory literature

- » Michael Kleinaltenkamp /Wulff Plinke/Ingmar Geiger (Editors); 2015: Business Relationship Management and Marketing - Mastering Business Markets Springer-Verlag Berlin Heidelberg 2015 ISBN 978-3-662-43855-8
- » Michael Kleinaltenkamp/Wulff Plinke/Ingmar Geiger (Editors); 2016: Business Project Management and Marketing - Mastering Business Markets Springer-Verlag Berlin Heidelberg 2016 ISBN 978-3-662-48506-4
- » Michael Kleinaltenkamp/Wulff Plinke/Ian Wilkinson/Ingmar Geiger (Editors); 2015: Fundamentals of Business-to-Business Marketing - Mastering Business Markets Springer International Publishing Switzerland 2015 ISBN 978-3-319-12462-9

# Corporate Finance

## Module description

### General

Code:	B12-INV&F-CORP
Year of study:	2019/2020
Form of course:	obligatory
Frequency of course offer:	In every second year
Applicability of the module:	Business Administration Business Administration – English Logistics Management Maritime Management
Prerequisites:	In the module-part Introduction to investment and finance topics of the module financial accounting are used. Module-part Corporate Finance expands the material from the supply module Introduction to investment and finance. For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	Prof. Dr. Stefan Prigge and others
Language of teaching:	English
ECTS credits:	4
Workload and its composition:	32 hours contact, 35 hours independent study 33 hours dual workload
Contact hours:	32 hours in academic year
Methods of examination:	Written exam. To improve their grade students might be offered a bonus for a defined form of active participation (section 14(4) of the General Course and Exam Regulations for all Bachelor's Study Programmes); details will be provided when course starts.
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of course

The participants should get a thorough understanding about how companies raise money to finance their investments. Further, the role of the financial manager in a business organization and the effects of financing decisions on the market value of a firm have to be realized.

Ethical issues are mainly located in the Introduction where, for example, shareholder vs. stakeholder orientation of the company or financial crises could be discussed. With respect to sustainability, it is one major goal of the course to create an awareness for the fact that properly working financial markets – against the impression of at least part of the public – are not short-sighted, instead prices and rates reflect and thus internalize all expected events during the complete lifetime of the asset valued. Class discussions will every now and then deal with this issue. They should focus on the question how current markets diverge from, and could be developed closer to, the ideal state of efficiency. Efficient, or at least properly working, markets are a powerful tool to promote sustainable business. Regarding the scientific approach of this module, it should be mentioned that the course applies a state of the art U.S. textbook which reflects, inter alia, much research which was awarded with the Noble Prize.

## Contents of the module (Based on Brealey et al.)

### **Part One: Introduction**

1. Goals and Governance of the Firm (Brealey Chapter 1)
2. Financial Markets and Institutions (Brealey Chapter 2)
3. Market Efficiency (Brealey Chapter 7)

### **Part Two: Risk**

4. Introduction to Risk, Return, and the Opportunity Cost of Capital (Brealey Chapter 11)
5. Risk, Return, and Capital Budgeting (Brealey Chapter 12)
6. The Weighted-Average Cost of Capital and Company Valuation (Brealey Chapter 13)

### **Part Three: Financing**

7. Introduction to Corporate Financing (Brealey Chapter 14)
8. How Corporations Raise Venture Capital and Issue Securities (Brealey Chapter 15)

### **Part Four: Debt and Payout Policy**

9. Debt Policy (Brealey Chapter 16)
10. Payout Policy (Brealey Chapter 17)

## Teaching and learning methods

Seminar-style lecture with discussion, examples and case studies. Seminar-style lecture requires that the students have read the relevant chapter in advance so that there is some room in the lesson which can be used to discuss major issues and to apply the concepts learned to exercises, to textbook cases and to real-world examples. To support this approach and to encourage the students to prepare in advance preparatory tasks may be assigned to the students.

## Special features

### Demands on company training

Practical training in the company should provide an

- » overview and knowledge about financial markets, financing instruments used and criteria for their choice,
- » insight into the debt and payout policy,
- » insight into capital budgeting and financing of the company

## Recommended literature

- » **Brealey, Richard. A./Myers, Stewart C./Marcus, Alan J.: Fundamentals of Corporate Finance, Ninth Edition, 2018, McGraw Hill, International Edition.**

# Introduction to investment and finance

## Module description

### General

Code:	B12-INV&F-INV
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every second year
Applicability of the module:	Logistics management Maritime Management Business Administration (engl.)
Prerequisites:	In the module-part Introduction to investment and finance topics of the module financial accounting are used. For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	Prof. Dr. André Küster Simic u.a.
Language of teaching:	English
ECTS credits:	6
Workload and its composition:	48 hours contact, 52 hours independent study 50 hours dual workload
Contact hours:	48 hours in academic year
Methods of examination:	written exam
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

The students should get an understanding of the meaning of Investment and Financing in the context of Business Administration, be able to carry out capital budgeting and to take investment decisions, learn about and appreciate different financing forms.

They also should get a thorough understanding about how companies raise money to finance their investments. Further, the role of the financial manager in a business organization and the effects of financing decisions on the market value of a firm have to be realized.

### Aim of course

#### Professional qualifications:

- » Investment decisions / budgeting: net present value calculation, internal rate of return calculation, as well as calculation of annuity. Inclusion of taxes and uncertainty in investment decisions.
- » Financing: learning about different financial sources and instruments. Valuation of selected financial instrument. Learning of the relation between risk and leverage.
- » First introduction to new trends in finance: e.g. FinTech like Crowd-Investing or Crowd-Financing

#### Methodical expertise:

- » Financial mathematics and financial mathematics problem solving solutions

## Contents of the module

1. Basics in investment and finance
2. Investing
  - 2.1. Dynamic methods of investment calculations
  - 2.2. Application of dynamic methods
3. Financing
  - 3.1. Financial planning
  - 3.2. Methods of financing
  - 3.3. Basics of valuation of debt and equity
  - 3.4. Risk and leverage

## Teaching and learning methods

Lecture, use of Excel if applicable

## Special features

### Demands on company training

In order to get a full understanding of the tasks and the requirements in investment and financing and in order to develop competence in this respective field, company training should complement the theoretical studies. Students should get the opportunity to

- » comprehend how decisions on investment and financing are made in the company,
- » particularly learn about and comprehend the actions and procedures, which are used in the company to make investment decisions,
- » penetrate the processes in order to understand how taxes and uncertainties influence investment processes in the company,
- » learn about different financial sources,
- » value selected financial instruments,
- » get an insight into the whole process and sequence of actions concerning investment and financing decisions, taking the corporate governance structure into consideration

## Recommended literature

- » **Richard E. Brealy, Stewart C. Myers, Alan J. Marcus: Fundamentals of Corporate Finance, latest edition.**

# Operations Research

## Module description

### General

Code:	B12-OR
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every second year
Applicability of the module:	Logistics Management Maritime Management Business Administration (English track)
Prerequisites:	For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	Prof. Dr. Sönke Hartmann
Language of teaching:	English
ECTS credits:	5
Workload and its composition:	32 hours contact 80,5 hours independent study 12,5 hours dual workload
Contact hours:	32 hours in academic year
Methods of examination:	Written examination
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of course

The students will be introduced to the models and methods of operations research. The focus of the lecture is on mathematical modeling and optimization methods. The students will get to know typical optimization problems in business administration such as production planning, warehouse location and vehicle routing. Another goal is to achieve a basic understanding of algorithmic structures as well as the capability to develop simple solution approaches for less complex problem settings. Beyond the methods and their applications, the lecture aims at improving analytical skills and problem-solving competencies.

### Contents of the module

1. Introduction to operations research (OR)
2. Mathematical modeling
  - 2.1. Structure of mathematical models: variables, constraints, objective
  - 2.2. Modeling economic problem settings (production planning, linear assignment problem, knapsack problem and other problem settings)
  - 2.3. Solver
3. Basics of linear optimization
  - 3.1. Graphical solution for two variables
  - 3.2. Special cases: multiple solutions, infeasibility
  - 3.3. Normal form and slack variables
  - 3.4. Simplex method for maximization problems, interpretation of the solution, of the slack variables and of the shadow prices
  - 3.5. Outlook on methods for combinatorial optimization; greedy heuristics

4. Optimization in graphs and networks
  - 4.1. Graphs and networks
  - 4.2. Warehouse Location Problem – mathematical model, add and drop method
  - 4.3. Transportation Problem – mathematical model, northwest corner rule, Vogel's approximation method
  - 4.4. Traveling Salesman Problem – nearest neighbor and insertion methods
  - 4.5. Shortest Path Problem – mathematical model, Dijkstra method
  - 4.6. Project scheduling – buffer times, critical path
5. Optional: Case study on optimization – discussion of a real-world application, development of a mathematical model and/or of a solution method

#### Teaching and learning methods

Interactive lecture with discussions and exercises; case studies

#### Special features

##### Demands on company training

To deepen the knowledge in operations research, students should be given the opportunity to gather practical experience which extends their theoretical knowledge. They should be given the opportunity to

- » discuss and analyze optimization problems, e.g. in logistics or production,
- » participate in the selection of OR software (e.g., tour planning software) and/or to apply it in practice,
- » participate in the planning of a project.

#### Recommended literature

- » Domschke, W., Drexl, A.: Einführung in Operations Research, 5. Aufl., Berlin et al. 2002.
- » Domschke, W., Drexl, A., Klein, R., Scholl, A., Voß, S.: Übungen und Fallbeispiele zum Operations Research, 4. Aufl., Berlin et al. 2002.
- » Domschke, W.; Drexl, A.: Logistik: Standorte, 4. Aufl., München, Wien 1996.
- » Ellinger, Th., Beuermann, G., Leisten, R.: Operations Research, 6. Aufl., Berlin et al. 2003.
- » **Hillier, F.S., Lieberman, G.J.: Introduction to Operations Research, 7th edition, Singapore 2001.**
- » Hillier, F.S., Lieberman, G.J.: Operations Research – Einführung. 5. Auflage, Oldenbourg, München 2002.
- » Taha, H.A.: Operations Research – An introduction. 9th edition, Pearson 2011.

# Organization

## Module description

### General

Code:	B12-ORGA
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every second year
Applicability of the module:	Business Administration Business Informatics Logistics Management Media Management Maritime Management
Prerequisites:	The module presupposes the knowledge of the module "methodology and basics of business studies" and "Human Resource Management". For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	Prof. Dr. Peter Klein
Language of teaching:	English
ECTS credits:	6
Workload and its composition:	48 hours contact, 52 hours independent study 50 hours dual workload
Contact hours:	48 hours in academic year
Methods of examination:	Presentation (30 %) and written exam (90 min., 70 %)
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of course

Organizations are all around us and shape our lives. As regards business the design of organizations has substantial influence on a firm's performance. Organizations, however, are hard to see. We see manifestations, such as a building or a friendly employee at a sales desk – but the whole organization is vague and abstract.

This course is designed to help students build their understanding of organizations. We will explore organization theory and look at dimensions that describe specific organizational design traits and structures.

Furthermore, we will discuss recent management concepts with impact on organization and work design as well as the process of designing and changing organizations.

### Contents of the module

- Introduction to organizational theory and design
  - Images and characteristics of organizations
  - Theories on Organizations
- Organizational Design



- Structural dimensions: specialization, span of control, centralization, formalization, spans of control, Centralization and Decentralization
- Organizational structures
  - Functional, divisional and matrix structures
  - Virtual and network organizations
  - Process structures
  - Holding structures, Corporate Centers and Shared Services
- Coordination of organizations
  - Need for coordination
  - Information Linkages (Horizontal and Vertical)
  - Role of corporate and national cultures
- Impact of strategy on organizations
  - Contingency Approach
  - Strategy shaping organizational design
  - Strategies of growth
- Organizational behavior
  - Work and job design
  - Motivation at work
  - Individuals and groups in organizations
  - Decision making in organizations
  - Power, politics, conflicts
  - Change Management, Individual and organizational change
- Management Concepts (based on student's presentations)

#### Teaching and learning methods

The course combines conceptual and experimental approaches. It involves exercises, case studies, lectures, presentations and group work. Active participation in discussions is expected.

#### Special features

##### Demands on company training

To get a solid understanding of organizational structure und organizational development, corporate training shall complement and flank the academic course of study by giving the students an opportunity to (numbers refer to lecture agenda/contents):

- » Get to know organization charts, job descriptions, and work flow diagrams
- » Learn about different approaches in structuring jobs and departments and their respective advantages and disadvantages
- » Assess reasons for different spans of control and hierarchical structures
- » Know and be able to evaluate coordination mechanisms such as hierarchy and internal market
- » Explain the current organization structure of the company and its historical development (
- » Learn about process-oriented structural design
- » Evaluate the organizational and operational tasks in the company and develop ideas for its optimization
- » Know about current approaches to mobilize employees to change and how to navigate the change journey

#### Recommended literature (monographs)

- **Daft, R L. (2017), Organization Theory and Design, Hampshire UK, 3e, Cengage Learning EMEA**
- **Robbins, S.P. & Judge, T.A. (2016), Organizational Behavior, 15e, Prentice Hall International**

- **Nelson, Debra (2017), ORGB5, Cengage Learning 4-Itr Press, 2e**
- **Vahs, D. (2015), Organisation, 9. Aufl., Schäffer-Poeschel**
- **Cameron, E. & Green, M. (2015), Making Sense of Change Management, 4e, London: Kogan-Page**

Additional Reading:

- Greiner, L. E. (1972), Evolution and Revolution as Organizations Grow, in: Harvard Business Review, Vol. 50(4), July–August 1972
- Burton, Richard M. (2006), Organisational Design: A Step-by-Step Approach
- Stanford, Naomi (2015), Guide to Organisation Design: Creating high-performing and adaptable enterprises (Economist Books), 2e
- Schreyögg, G. (2016), Organisation – Grundlagen moderner Organisationsgestaltung, 6. Aufl., Wiesbaden

# Project Management

## Module description

### General

Code:	B12-PM
Year of study:	2018/2019
Form of course:	Obligatory
Frequency of course offer:	In every second year
Applicability of the module:	Logistics Management Maritime Management Business Administration (Engl. Track)
Prerequisites:	The contents of the module are used in the practical phases of cooperative enterprises. For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	Prof. Dr. Ann Kathrin Harms and others
Language of teaching:	English
ECTS credits:	5
Workload and its composition:	24 hours contact 60 hours independent study 41 hours dual workload
Contact hours:	24 hours in academic year
Methods of examination:	Written examination: written report of the project
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of course

The students should:

- » Recognize the relevance of project management
- » Define project goals
- » Assess and plan organizational framework conditions
- » Understand that efficient teamwork is the key determinant for a successful project
- » Identify the role of the project manager
- » Know basic project management tools and apply them in a goal-oriented manner
- » Evaluate risks of the project
- » Plan and implement process steps within the framework of projects
- » Understand and take into account the importance of project initialization and project start for the entire project execution
- » Understand the relevance of project completion
- » Reflect on own strengths and weaknesses
- » Learn the fundamentals of Agile Project Management and how to choose the best approach for each project
- » Work cooperatively and responsibly in groups and critically reflect and expand cooperation behaviour in groups

Finally, the students should have the basic knowledge to implement projects within the available time and cost frame as well as the required quality. They should have an overview of the most basic instruments and methods of project management and be able to structure, plan, control and manage projects of medium complexity. They should know classical and agile methods and can reflect on which methods are suitable for a specific project. Based on this, agile methods can be deepened in the elective.

#### Contents of the module

1. Fundamental terms, characteristics and phases, success and failure factors
2. Organizational framework
3. Goal definition, situation analysis, stakeholder management
4. Project planning, control, implementation and monitoring
5. Project completion
6. Agile project management methods
7. Team management - people in the project

#### Teaching and learning methods

Lecture containing individual and team tasks, corporate project thesis

#### Special features

##### Demands on company training

In order to get a fundamental understanding for the tasks and requirements concerning project management the students have to work on a project in a company after the lecture. This enables the students to learn and apply new competences concerning methods and soft skills. In which projects the students are participating is decided by the companies. The project teams (2-5 students) are responsible for the planning and the conduction of the project. Moreover they have to present their findings to managers of the company and write a report about the project.

#### Recommended literature

- » Cooke, H. and K. Tate (2011): The McGraw-Hill 36-Hour Project Management Course, McGraw-Hill.
- » Horine, G. (2013): The Absolute Beginner's Guide to Project Management, Que.
- » Kendrick, T. (2014): The Project Management Tool Kit: 100 Tips and Techniques for Getting the Job Done Right, Amacom.
- » Kerzner, H. (2013): Project Management: A Systems Approach to Planning, Scheduling, and Controlling, Wiley.
- » Additional literature will be announced in class.

# Quantitative Methods:

## Module description

### General

Code:	B12-QMETH
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every second year
Applicability of the module:	Logistics Management Maritime Management Business Administration (English Track)
Prerequisites:	This module represents a method-driven support for the entire study program in Business Administration. Building on the content of statistics, the competencies in quantitative methods will be refined. Questions from various business disciplines, such as marketing, market research and finance will be discussed. For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	Prof. Dr. Ann-Kristin Hölter a.o.
Language of teaching:	English
ECTS credits:	5
Workload and its composition:	32 hours contact 80,5 hours independent study 12,5 hours dual workload
Contact hours:	32 hours in academic year
Methods of examination:	Written examination
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of the module

The purpose of the course is to improve students' quantitative skills and to stimulate interest in quantitative methods across different disciplines. The course prepares students to conduct research on topics that involve quantitative evidence. This module delivers detailed methodological and technical knowledge of a wide range of quantitative analytical methods.

Students will acquire skills to analyze data in various forms and using a variety of quantitative tools and techniques. Students will learn the strengths and weaknesses of various techniques. There will be an emphasis placed upon applying the techniques learned and the practical experience of analyzing quantitative data sets.

## Content of courses

1. Essentials of Data Collection
  - 1.1 Types of marketing research
  - 1.2 Measurement and scaling
  - 1.3 Questionnaire design
  - 1.4 Sampling procedures
2. Forecasting Models & Regression Analysis
  - 2.1 Time series methods – Stationary data
  - 2.2 Simple and multiple regression
  - 2.3 Dummy regression
  - 2.4 Time series methods – Non-stationary data
3. Preference Measurement
  - 3.1 Self-explicated models
  - 3.2 Conjoint analysis – Basic model
  - 3.3 Conjoint analysis – Estimating part-worth utilities
  - 3.4 Conjoint analysis – Calculating relative importance weights
4. Cluster Analysis
  - 4.1 Basic concept
  - 4.2 Select a distance measure
  - 4.3 Select a cluster procedure
  - 4.4 Decide on the number of clusters
  - 4.5 Interpret and profile clusters
  - 4.6 Example of use (SPSS)

## Teaching and learning methods

- Mixture of formal lecture and interactive seminar
- The techniques will be explored through appropriate practical work and exercises.
- Private study for repetition and reviewing learning objectives

## Demands on company training

The academic education is intended to be completed by giving the students the chance to:

- » Use data sets from the company for applying the learned analysis procedures,
- » participate in marketing research projects,
- » get access to statistical software programs,
- » be involved in data analysis and report preparation

Additional it is desirable that the students will be encouraged to transfer the learned approaches and methods to actual practical questions during their company training.

## Recommended literature

- » **Clow, K.E. / James, K. E. (2014): Essentials of Marketing Research: Putting Research Into Practice, SAGE.**
- » **Field, A. (2013): Discovering Statistics Using IBM SPSS Statistics, 4th edition, SAGE.**
- » **Hensel-Boerner, S. (2014): Quantitative Methods; custom published textbook by Pearson.**
- » **Malhotra, N. K. / Birks, D. F. (2012): Marketing research - an applied approach, 4<sup>th</sup> edition, Prentice Hall.**

# Strategic Management in Transportation and Logistics

## Module Description

### General

Code:	B12-BSTRAT-TRANS
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	Every second year of studies
Applicability of the module:	Logistics Management Maritime Management
Prerequisites:	This module serves to develop strategies for the maritime and logistics field. For preparation of the module see recommended literature.
Name of lecturer:	Jason Harman
Language of teaching:	English
ECTS credits:	7
Workload and its composition:	66 hours contact, 51 hours independent study 58 hours dual workload
Contact hours:	64 hours in academic year
Methods of examination:	Practical Report (75%) and Presentation (25%)
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Learning Targets

Developing innovative strategies for the maritime and logistics sector in order to discover new business opportunities and to achieve sustainable competitive advantages is one of the most challenging tasks in management and leadership.

Participants of this module will learn to identify and analyse strategic corporate decisions which executive managers are constantly confronted with. Problem diagnosis and business strategy development will thereby be highlighted. The ability to think strategically will be sharpened in the context of interdependent decision-making processes.

The course is intended to provide students with a pragmatic approach that will guide the formulation and implementation of corporate, business, and functional strategies with a special focus on the maritime and logistics business.

At the end of the course students will be in a position to:

- » clearly understand the relevance of strategic management in corporate management
- » identify functional dependencies
- » analyse management by objectives and classify goal hierarchies
- » select tools for business analyses
- » develop and evaluate strategies for particular decision-making situations
- » understand concepts like entrepreneurship, intrapreneurship and the vehicle of a business plan to develop and implement a strategy from SMEs to MNCs.



## Contents

1. Basic principles of strategic management
  - 1.1. Terms and definitions
  - 1.2. Historical development of strategic management
  - 1.3. Content and tasks of strategic management
2. Stages in strategic planning and management processes
  - 2.1. Setting strategic goals and objectives
    - 2.1.1. Tasks in goal formation
    - 2.1.2. Goals and goal dependencies
    - 2.1.3. Goal hierarchies and interconnections of goal hierarchies
    - 2.1.4. Goal formation process
  - 2.2. External analysis: business environment opportunities and threat
    - 2.2.1. Environmental analysis
    - 2.2.2. Market definition and analysis
    - 2.2.3. Target group analysis
    - 2.2.4. Competitive analysis
    - 2.2.5. Stakeholder analysis
  - 2.3. Internal analysis: strengths and weaknesses of the strategic business unit
    - 2.3.1. ABC analysis
    - 2.3.2. Product life cycle analysis
    - 2.3.3. Experience curve analysis
    - 2.3.4. Cost structure analysis
    - 2.3.5. Customer satisfaction analysis
    - 2.3.6. Corporate culture analysis
    - 2.3.7. Core analysis
    - 2.3.8. Value chain analysis (Porter)
  - 2.4. Integrated environmental and business analysis
    - 2.4.1. Portfolio analysis
    - 2.4.2. SWOT analysis(additional methods will be covered in the courses Business Administration, Finance, Marketing, Statistics, Accounting)
  - 2.5. Choice of strategy
    - 2.5.1. Strategies on the corporate level
      - 2.5.1.1. Product-Market Growth Matrix (Ansoff)
      - 2.5.1.2. Internationalisation strategy
      - 2.5.1.3. Cooperation Strategy
      - 2.5.1.4. Integration strategy
    - 2.5.2. Strategies on the business level
    - 2.5.3. Strategies on the functional level
  - 2.6. Strategy implementation

## Methods of instruction

Interactive teaching, lectures, discussions, group work, case studies, articles.

## Requirements on the participating companies

In order to develop a fundamental and thorough understanding of strategic requirements and professional competence, participating companies should support the theoretical phase. In particular, the students should be given the opportunity to gain in-depth insights into a specifically complex and strategic challenge in order to write a term paper. Additionally, they should be given the chance to:

- » develop an insight into the company's strategic tasks, planning methods and the importance of long-term development of the company
- » become acquainted with fundamental strategic goals
- » familiarise themselves with the procedures of internal and external analysis

- » understand the specific complexity of the company's strategic tasks
- » gain insights into specific strategic decisions and policy implementation, and to understand selected functional strategies
- » deal analytically with current strategic decisions

#### Literature

- » Barney, J.B. / Hesterley, W.: **Strategic Management and Competitive Advantage**, Upper Saddle River 2011.
- » Johnson, G./Scholes, K./Whittington, R.: **Fundamentals of Strategy**. Harlow 2009.  
(to be complemented by further literature on the individual topic)
- » Additional literature will be announced in class.

# Transport Logistics

## Module Description

### General

Code:	B12-TRANSPL
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every second year
Applicability of the module:	Logistics Management Maritime Management
Prerequisites:	The lecture "Transport Logistics" is based on the module "Introduction to Logistics" and mainly covers transport mode specific aspects. For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	Prof. Dr. Jan Ninnemann
Language of teaching:	English
ECTS credits:	6
Workload and its composition:	48 hours contact 52 hours independent study 50 hours dual workload
Contact hours:	48 hours in academic year
Methods of examination:	Written Examination (90 min)
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of course

Students will learn the basics of transport logistics covering all relevant modes of transport such as rail, road, sea transport and inland navigation. Furthermore, students will discover transport-related logistics concepts such as hub-and-spoke, cross-docking etc.

### Content

- Introduction to logistics and transportation
- Interrelationship between logistics and transportation
- Components of transportation systems
- Statistics and modal split
- Key points in transportation and logistics systems planning
- Measurement of transportation networks
- Current transportation systems and trends
- Sea transport
- Land transport
- Air transportation
- Terminals and intermodal networks

### Teaching and learning methods

Interactive teaching and discussions in a seminar-like style, case studies related to practice and methods

### Special features

To gain substantial knowledge in transport logistics, the students should be given the opportunity to gather practical experience that builds upon and extends their theoretical knowledge e.g. in terms of mode of transport selection, transportation costs and related logistics concept.

### Recommended literature

- Rodrigue, J-P, C. Comtois and B. Slack (2009) The Geography of Transport Systems, Second Edition
- Sussman J., (2000) Introduction to Transportation Systems
- Geerlings, Harry Ports and networks : strategies, operations and perspectives (2018)

# Warehousing and Inventory Management

## Module description

### General

Code:	B12-WAREHOU
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every second year (4 <sup>th</sup> semester)
Applicability of the module:	Logistics Management
Prerequisites:	This module deepens the content of the courses "Introduction to Logistics" and "Supply Chain management". Specific issues are discussed, which are focused on inventory planning, management and on warehousing with respect to warehouse operations and materials handling activities in warehouses. For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	Prof. Dr. Rainer Lehmann
Language of teaching:	English
ECTS credits:	6
Workload and its composition:	48 hours contact, 72 hours independent study 30 h dual workload
Contact hours:	48 hours in academic year
Methods of examination:	Written Exam (90 min)
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of course

Students successfully completing this course should have a sound understanding of warehousing and inventory management. By the end of this course, students will be able to:

- Distinguish different stock types
- Explain and apply selected inventory methods
- Explain inventory planning methods
- Apply different lot sizing models
- Calculate safety stocks with statistical methods
- Distinguish different warehouses types
- Explain the basic warehouse operations
- Explain and classify storage and retrieval systems and their application areas
- Explain and classify order picking systems and their application areas
- Describe the basic functions and methods of packaging
- Explain materials handling techniques with respect to warehousing
- Explain and apply selected warehouse management and controlling methods
- Explain and classify IT systems for warehousing
- Explain the process of warehouse planning with respect to important planning constraints
- Plan a basic warehouse layout

## Contents of the module

1. Introduction  
Part 1: Inventory planning and management
2. Stock functions
3. Selected methods for inventory management
4. Inventory planning methods
5. Lot sizing
6. Safety stock determination  
Case studies  
Part 2: Warehousing
7. Warehouses in the supply chain – types and functions
8. Warehousing operations
9. Storage and retrieval systems
10. Order picking systems
11. Packaging and materials handling
12. Warehouse management and controlling
13. IT systems for warehousing
14. Warehouse planning and layout  
Case study

## Teaching and learning methods

Interactive teaching, discussions and case studies; optional: field trip.

## Special features

### Demand on company training

To gain substantial knowledge in this field, the students should be given the opportunity to gather practical experience that deepens and extends their theoretical knowledge in the areas of warehousing and inventory management.

## Recommended literature

Arnold, J.R.T.; Chapman, St.N.; Clive, L.M.: Introduction to Materials Management. Harlow: Pearson 2014

Bartholdi, J.J.; Hackman, St.T.: Warehouse and Distribution Science. Atlanta: Georgia Institute of Technology 2014

Frazelle, F.: World Class Warehousing and Material Handling. New York et al: McGraw-Hill 2001

Martin, H.: Warehousing and Transportation Logistics. London: Kogan 2018

Jonsson, P.: Logistics and Supply Chain Management. London et al: Mc Graw Hill 2008

Heizer, J.; Render, B.: Operations Management. Boston et al.: Pearson 2015

Waller, M.A., Esper, T.L.: The Definitive Guide to Inventory Management. Upper Saddle River: Pearson 2014



**HSBA HAMBURG SCHOOL OF  
BUSINESS ADMINISTRATION**

# **Logistics Management Module Descriptions 3rd Year of Study**

Year of Study 2019/2020

## **Core Modules BA**

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## **Sector-customized BA Modules**

International Risk Management  
Management Game  
Transport and Logistics IT

## **Logistics Modules**

Logistics Functions  
Warehousing and Inventory Management

## **Electives**

Special Logistics  
Study Trip

## **Support Modules**

# International Risk Management

## Module description

### General

Code:	B12-IRM 17
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every third year (5h semester)
Applicability of the module:	Maritime Management Logistics Management
Prerequisites:	On the basis of the modules “Quantitative Methods” and “Operations Research” this module provides the fundamentals in Risk Management and offers knowledge required for the specialization. For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	Prof. Dr. Peter Scholz
Language of teaching:	English
ECTS credits:	9 credits
Workload and its composition:	72 hours contact 108 hours independent study 45 hours dual workload
Contact hours:	72 hours in academic year
Methods of examination:	End of 5 <sup>th</sup> semester: Written examination (120 minutes)
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of course

The course aims at enabling students to understand and follow basic principles in risk management. The students will be able to assess risks, to understand and to measure risk. They will learn about different risk preferences and important risk analysis methods. The course provides economic fundamentals which can be transferred to many markets in practice. Another important part of the module consists in the understanding and analysis of the banking and insurance industry, their interdependencies as well as the possibilities of a risk transfer via the capital market. Students also acquire knowledge in risk transfer options and performance of risk management in practice. Finally, students learn about risk management in maritime business. Excel application is essential!

### Contents of the module

#### **0. Introduction to Risk and Risk Management**

1. Definition and Perception of Risk
2. Risk Measures
  - a. Volatility
  - b. Correlation
  - c. Value-at-Risk
3. Diversification

#### **I. Price Risk**

1. Futures & Forwards in Commodity Markets
  - a. Pricing of Futures/Forwards



b. Hedging with Futures/ Forwards

2. Options in Commodity Markets

- a. European Call & Put
- b. Merton Model
- c. Put-Call-Parity

**II. Interest Rate Risk**

1. Term Structure of Interest Rates

- a. Spot Rates
- b. Forward Rates

2. Duration as Measure of Risk

- a. Macaulay Duration
- b. Modified Duration

3. Hedging of Interest Rate Risk

- a. FRA's
- b. Interest Rate Swaps
- c. Caps & Floors

**III. Currency Risk**

1. Introduction of Currencies

2. Hedging of Currency Risk

- a. Futures on Currencies
- b. Fixed-to-Fixed Currency Swap

**IV. Applications (Guest Speakers)**

Potential topics include (subject to change)

- Oil (Bunker) Hedging
- Dry Bulk & Tanker t/c rate Hedging
- Foreign Exchange and Commodities
- Indexation of the Container Market
- Hedging Instruments from a trading perspective
- Hedging from a banking perspective

**Relation to: Line of Business (if applicable) (Cross-Sectoral Subject)**

The course prepares students for the process to identify risks, to understand and to measure risks. Student's capability as to mitigate risks is developed and their understanding of dealing with financial risks of loss using traditional and alternative risk management techniques is enhanced. Finally, students will be provided with a better understanding of the insurance and banking industry as well as gain insight into the practical risk management methodology in Maritime Business.

**Teaching and Learning methods:**

Lecture, Exercises, Self-study, Problem Based Learning, Case Studies, Excel Application

**Case studies in this course:**

Typically, three different case studies (one Maritime, one Logistics, and one banking) are included. Each case study is approx. 10 contact hours.

#### Recommended Literature:

- Brealey, Richard A.; Myers, Stewart C.; & Marcus, Alan J. (2008): Fundamentals of Corporate Finance, McGraw-Hill.
- Eun, Cheol & Resnick, Bruce G. (2011): International Finance, McGraw-Hill.
- Hull, John C. (2012): Risk Management and Financial Institutions, Wiley.
- **Jarrow, Robert A. & Chatterjea, Arkadev (2013): An Introduction to Derivative Securities, Financial Markets, and Risk Management, W.W. Norton & Co.**

# Logistics Functions

## Module description

### General

Code:	B12-LOGFUNC
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every third year
Applicability of the module:	Logistics Management Maritime Management
Prerequisites:	Logistics Functions is a continuation of the basic module with a more general outline. For the preparation of the module see recommended literature.
Name of lecturer:	Prof. Dr. Michael Höbig, Prof. Dr. Jan Ninnemann
Language of teaching:	English
ECTS credits:	8
Workload and its composition:	64 hours contact, 96 hours independent study 40 hours dual workload
Contact hours:	64 hours in academic year
Methods of examination:	5 <sup>th</sup> semester: Written examination (75%) 6 <sup>th</sup> semester: Presentation (25%)
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of course

Students will learn the basics of functional logistics, containing the main topics sourcing, production, distribution and reverse / waste logistics. As a result, after completion they should have achieved the following objectives:

- Distinguish different approaches to internal material flow and operations
- Apply principles of LEAN production to problems in a supply chain game
- Understand the approaches in Distribution Logistics
- Recognize the potential of Waste / Reverse Logistics

### Contents of the module

1. Production Logistics
  - o Internal Logistics / Material Flow
  - o Layout Design
  - o Operations Processes
  - o Lean Production
  - o Management Game
2. Distribution Logistics
  - o Shaping Distribution Logistics
  - o Strategic Logistic Planning /Logistics Network design
  - o Logistics Concepts
  - o Distribution Processes
  - o 3rd party integration
  - o Optimization

- Technology in Distribution Logistics

### 3. Reverse / Waste Logistics

- Return Processes
- Waste Management

#### Teaching and learning methods

Interactive teaching and discussions in a seminar-like style, case studies related to practice and methods

#### Special features

##### Demands on company training:

To gain broad knowledge with regard to the relevant logistics functions, the students should be given the opportunity to gather practical experience on a strategic as well as on an operational level, comprising aspects of logistics sourcing, contract logistics, reverse logistics and additional logistics functions.

#### Recommended literature

- Chopra, S., Meindl, P.: Supply Chain Management, Strategy, Planning and Operation
- Collier, D.A., Evans, J.R.: OM5 Operations Management, Cengage Learning, 2015

Further Literature will be announced.

# Business Management Game

## Module Description

### General

Code:	B12-MGTGAME
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	Every third year
Applicability of the module:	Business Administration Business Administration (Eng.) Logistics Management Media Management
Prerequisites:	During the Management Game students will combine the knowledge and skills from different modules in a simulation, which contains managing a manufacturing company for some years. For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	Prof. Dr. Torsten Keller and others
Language of teaching:	English
ECTS credits:	4
Workload and its composition:	30 hours contact, 48 hours independent study 20 hours dual workload
Contact hours:	32 hours in academic year
Methods of examination:	Participation
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of Course

- » Recognizing and formulating the general conditions for commercial success.
- » Experiencing relationships in business management by adopting a holistic approach.
- » Defining goals and strategies, and realizing them.
- » Deriving insights and decisions from industry figures which can be put into practice.
- » Coping with complex decision making in uncertain situations.
- » Maintaining control of a business in difficult situations.
- » Developing a sense for the essential and a holistic view on business.
- » Learning to think and act in an inter-disciplinary way.
- » Learning how to define and solve problems.
- » Practicing effective communication through visualization.

### Contents of the Module

1. TOPSIM - General Management II is the software for the business management game.
2. The software establishes a link between business management theory and business management in practice.
3. The simulation presents a realistic model of a company.
4. TOPSIM is an interactive teaching and learning system.
5. Students play the role of the managers of a virtual company.
6. The student teams compete against each other.

## Teaching and Learning Methods

Discussion in class, Groupwork, Presentations, Tutorials

## Special Features

### Demand on company training

The company training is carried out in combination with the education in the functional areas. Within this module students apply the knowledge and methods from several parts of their studies in practice and theory.

## Recommended Literature

Jones/Hill: Theory of Strategic Management, ISBN-13: 978-1305502338

Hrebiniak: Making Strategy Work: Leading Effective Execution and Change. ISBN-13: 978-0133092578

# Special Logistics (Elective)

## Module description

### General

Code:	B12-SPECL
Year of study:	2019/2020
Form of course:	Elective
Frequency of course offer:	In every third year (5 <sup>th</sup> semester)
Applicability of the module:	Logistics Management Maritime Management
Prerequisites:	Special Logistics represents a continuation of the previous modules. It allows an advanced subject-specific training of logistics and maritime topics. For the preparation of the module see recommended literature.
Name of lecturer:	Prof. Dr. Jan Ninnemann, Prof. Dr. Sönke Hartmann, Prof. Dr. Max Johns, Mr Helmke, Mr Anderssohn
Language of teaching:	English
ECTS credits:	8 credits for 4 courses
Workload and its composition:	64 hours contact (4 courses á 16 hours) 96 hours independent study 40 hours dual workload
Contact hours:	64 hours in Academic year
Methods of examination:	End of 5 <sup>th</sup> semester: Written exam (120 min)
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of the module

Based on the more general lectures in logistics and maritime management the aim of this elective is to provide a deeper insight into selected topics in the shipping and transport sector. Therefore, a range of different topics is offered.

Upon successful completion of this course, students will be able to

- » describing the key challenges for ports in modern supply chains,
- » solving elementary problems of fleet steering and optimisation in truck transportation
- » explaining the determinants for efficient last-mile deliveries,
- » understanding the processes at container terminals and be able to generalize them to other logistics systems,
- » understanding the framework of ship-finance as well as regional specifications,
- » explaining the challenges of green shipping.

# Course 1: Maritime Logistics

Lecturer: Prof. Dr. Jan Ninnemann

## Aim of course

The aim of this course is to apprise students with concepts for the establishment of efficient maritime logistics chains with special focus on hinterland transportation.

Upon successful completion of this course, students will be able to

- » describing the key challenges for port as important nodes in modern logistics chains
- » identifying strong and weak points regarding port and hinterland infrastructure
- » explaining fundamental reasons for bottlenecks
- » solving elementary cases of hinterland transportation
- » developing innovative solutions for efficient maritime logistics chains

## Contents of the module

1. Current challenges for seaports
  - 1.1. Container market development
  - 1.2. Port strategy
  - 1.3. Hinterland markets
2. Infrastructure development in port and hinterland transport
3. Transport modes in hinterland systems
  - 3.1. Rail
  - 3.2. Inland Waterway
  - 3.3. Road
4. Bottlenecks in hinterland transportation
5. Future concepts in hinterland transportation
  - 5.1. Hinterland hubs
  - 5.2. Truck appointment/Pre-gates

## Teaching and learning methods

- 8 h seminar
- 4 h case studies
- 4 h group exercises/group discussions

## Demands on company training

Practical training in the company should provide

- » insight into company specific fleet hinterland transport concepts
- » insight into mode of transport selection criteria
- » insight into the customer requirements for efficient door-to-door delivery

## Recommended literature

- » Container logistics : the role of the container in the supply chain / edited by Rolf Neise (2018)
- » Ports and networks : strategies, operations and perspectives / edited by Harry Geerlings, Bart Kuipers and Rob Zuidwijk (2018)



# Course 2: Overland Transport Networks

Lecturer: Mr Anderssohn/Mr Helmke

## Aim of the module

The aim of this course is to apprise students with concepts, being applied for an efficient management of logistics networks with special focus on (European) overland transportation.

Upon successful completion of this course, students will be able to

- » describing the importance of networks for both inbound and outbound freight services
- » identifying strong and weak points of existing networks and logistics concepts
- » explaining fundamental features of fleet organising, fleet steering and fleet scheduling
- » identifying fundamental parameters of complex solution for a particular problem
- » solving elementary cases of fleet steering and optimisation in truck transportation
- » assessing effectiveness of new fleet management technologies (IT-/GPS-based)

## Contents of the module

6. Characteristics of logistics networks
  - 6.1. Collection and short-range distribution services
  - 6.2. FTL/LTL
  - 6.3. Logistics alliances
  - 6.4. Logistics apps – what influence they will have on traditional networks
7. Traffic models
  - 7.1. Hub-and-spoke system
  - 7.2. Cross-docking
  - 7.3. Truck-meets-truck traffic
  - 7.4. Freight transports cooperations vs own networks (advantages/disadvantages)
8. Vehicle resource scheduling
  - 8.1. Administrative framework
  - 8.2. Liner service vs. tramp service
  - 8.3. Central vs. decentral disposition
  - 8.4. Cooperative vehicle resource scheduling
  - 8.5. Use of telematic systems
9. Management of logistics fleets
  - 9.1. Maintenance
  - 9.2. Claim settlement
  - 9.3. Fueling
  - 9.4. Next generation of fleet management systems

## Teaching and learning methods

- 8 h seminar
- 4 h case studies
- 4 h outside visit of a logistics network provider

## Demands on company training

Practical training in the company should provide

- » insight into the company's logistics requirements
- » insight into company specific logistics network design
- » insight into fleet management

## Recommended literature

- » Steffen Schorpp: Dynamic Fleet Management for International Truck Transportation : Focusing on Occasional Transportation Tasks, 2011
- » Asvin Goel: Fleet Telematics : Real-time management and planning of commercial vehicle operations, 2008

# Course 3: Urban Freight Logistics

Lecturer: Prof. Dr. Jan Ninnemann

## Aim of the module

The aim of this course is to apprise students with logistics concepts being applied to solve urban freight transportation problems either by insular or complex and integrated solution.

Upon successful completion of this course, students will be able to

- » describing of transport segments significant for urban freight transport
- » identifying strong and weak points of urban freight and agglomeration transport
- » explaining fundamental features of passenger and cargo transport, means of transport and technologies used in urban transport
- » identifying fundamental parameters of complex solution for a particular problem
- » solving elementary cases of transport and transport flows planning and optimisation in agglomeration
- » assessing effectiveness of particular development city transport projects

## Contents of the module

1. Theory of urban freight logistics – problems of large cities
2. Transport and urbanism
3. Forms of Urban Freight Distribution
4. Urban freight logistics as an extended perception of traditional concepts –conflicts among cargo transport, aboveground public transport, individual motorists and pedestrians and the solutions of them
5. Externalities of Urban Freight Distribution
6. Key Urban Logistical Challenges
7. Freight Distribution Strategies for City Logistics
8. Case-Study Micro-Hubs

## Teaching and learning methods

- 8 h seminar
- 4 h case studies
- 4 h group exercises/group discussions

## Demands on company training

Practical training in the company should provide

- » insight into company specific distribution systems
- » insight into mode of transport selection criteria
- » insight into customer requirements for (city) logistics solutions

## Recommended literature

- » Nachhaltige Stadtlogistik durch Kurier-, Express-, Paketdienste (KEP) : Studie über die Möglichkeiten und notwendigen Rahmenbedingungen am Beispiel der Städte Nürnberg und Frankfurt am Main / Ralf Bogdanski. Bundesverband Paket & Expresslogistik, BIEK
- » From city logistics theories to city logistics planning, June 2018, In book: City Logistics 3 – towards sustainability and liveable cities Publisher: STE Ltd, John Wiley and sons

# Course 4: Container Terminal Logistics

Lecturer: Prof. Dr. Sönke Hartmann

## Aim of course

In this lecture, the students should

- » understand the importance of the container in global logistics,
- » understand the processes at container terminals and be able to generalize them to other logistics systems,
- » learn to apply classical methods from logistics, business administration and operations research to real-world problem settings in logistics.

## Contents of the module

1. Introduction to Container Terminals
  - 1.1. Containers
  - 1.2. Container Terminal Equipment and Layout
  - 1.3. Terminal Operating System (TOS)
  - 1.4. Simulation
2. Case Studies
  - 2.1. Key Performance Indicators
  - 2.2. Stacking Strategies
  - 2.3. Workforce Scheduling
  - 2.4. Automated Guided Vehicles (optional)

## Teaching and learning methods

- 6 h seminar
- 6 h case studies
- 4 h group exercises/group discussions

## Special features

### Demands on company training

To deepen the knowledge in maritime logistics in general and container logistics in particular, students should be given the opportunity to gather practical experience which extends their theoretical knowledge. If possible, they should be given the opportunity to participate in the analysis of container-related processes.

## Recommended literature

- » S. Hartmann, D. Briskorn, N. Kemme: Simulation und Optimierung fahrerloser Transportsysteme. *Industrie Management* 23(4), 37-40, 2007.
- » S. Hartmann: Optimierung des Kühlhandwerkereinsatzes auf Container-Terminals: Eine Simulationsstudie. *Industrie Management* 28(1), 41-44, 2012.
- » S. Hartmann: Scheduling reefer mechanics at container terminals. *Transportation Research Part E: Logistics and Transportation Review* 51, 17–27, 2013.
- » F.S. Hillier, G.J. Lieberman: *Introduction to Operations Research*, 7th edition, Singapore 2001.
- » H. Schütt: Optimising container terminals using simulation and emulation methodology: Part 1. *Port Technology International* 41, 81-82, 2009.
- » H. Schütt: Optimising container terminals using simulation and emulation methodology: Part 1. *Port Technology International* 42, 81-82, 2009.

# Course 5: Ship Finance I

Lecturer: Prof. Dr. Max Johns

## Aim of course

In this lecture, the students should

- » understand the sources and major players of ship-finance
- » understand the history of ship finance
- » understand mortgages, liens and leasing schemes
- » understand modelling, risk management and their limitations

## Contents of the module

1. Introduction to SF
  - 1.1. Outline of financing instruments
  - 1.2. the actors
  - 1.3. Mortgages and Liens
2. Demand and Supply of Shipping Services and Global Economy
  - 2.1. Shipping Cycles
3. Fundamentals of Banking SF
  - 3.1. Major Criteria (4Cs)
  - 3.2. Liquidity and Risk issues
4. Shipping Banking I
  - 4.1. Loan Types
  - 4.2. Pricing of the Loan
  - 4.3. Guarantees
  - 4.4. Syndication
5. Shipping Banking II
  - 5.1. Loan Monitoring
    - 5.1.1. Potential Problems
    - 5.1.2. Treatment Options
6. Ship Valuations
  - 6.1. Market based method
  - 6.2. Alternative methods

## Teaching and learning methods

Interactive lecture with discussions and exercises; case studies

- 12 h seminar
- 2 h case studies
- 2 h group exercises/group discussions

## Special features

### Demands on company training

As this is a dual programme and topics related to the theory and modelling are presented in class, students shall be given the opportunity by the employer to:

- » Get a picture on the sources of finance used for the acquisition of vessel or on related ship finance projects or on similar project the employer was involved.
- » Discuss with executives the reasons for selecting the financial scheme
- » Familiarize themselves with financial proposals
- » Access cases and files, selected by executives, for training purposes

## Recommended literature

See module Ship Finance II

# Course 6: Ship Finance II

Lecturer: Prof. Dr. Max Johns

For this course, the successful participation in Ship Finance I is required.

## Aim of course

In this lecture, the students should

- » understand the various equity sources
- » understand the regional differences in ship finance
- » apply the mix of credit and equity to a case study and their own companies

## Contents of the module

1. Leasing
  - 1.1. Types of Leasing
  - 1.2. Advantages and Disadvantages
2. Public Offering I
  - 2.1. IPO
  - 2.2. Bond Issuance
3. KG and similar schemes
  - 3.1. Analysis of the regime
  - 3.2. Planning and Setup
4. Islamic Finance
  - 4.1. Overview
5. Cases and Examples
6. Ship Finance history
  - 6.1. 1950-1967
  - 6.2. 1967-1990
  - 6.3. 1990-now
  - 6.4. Capitals of ship finance

## Teaching and learning methods

Interactive lecture with discussions and exercises; case studies

- 12 h seminar
- 2 h case studies
- 2 h group exercises/group discussions

## Special features

See module Ship Finance I

## Recommended literature

- Grau, Johns, Schinas: Handbook of Ship Finance, 2014.
- Martin Stopford: Maritime Economics
- Peter Lorange: Shipping Company Strategies: Global Management under Turbulent Conditions.
- Clarksons' Shipping Intelligence Network: Electronic Database
- K. Grammenos: The Handbook of Maritime Economics and Business.
- Winter, Hennig, Gerhard et.al.: Grundlagen der Schiffsfinanzierung,
- Students are expected to follow some of the trade magazines such as Fairplay, Tradewinds, Lloyds List, Marine, Money, THB, Hansa et.al.

# Study Trip

## Module Description

### General

Code:	B12-TRIP
Year of study:	2019/2020
Form of course:	obligatory
Frequency of course offer:	In every third year
Applicability of the module:	Logistics Management Maritime Management Business Administration Business Informatics Media Management
Prerequisites:	For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	various
Language of teaching:	English
ECTS credits:	2
Workload and its composition:	30 hours contact 10 hours independent study 10 hours dual workload
Contact hours:	30 hours
Methods of examination:	Ungraded Component, Active Participation
Language of examination	---
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of the module

- Using the knowledge gained during the study programme so far and applying it in a national or international environment Being able to evaluate and interpret relevant information in order to derive scientifically sound judgments that take social, academic and ethical findings into account
- Being able to lead discussions with representatives of different institutions (companies, associations, government agencies, etc.),
- Being able to organize and arrange events independently
- Being able to discuss information, ideas, problems and solutions with experts and laymen
- Being able to take responsibility in a team

### Contents of the module

The study excursions of HSBA focus on a current topic of business management. This topic is dealt with through company visits, lectures, case studies and group work during the excursion.

The students themselves are in charge of the planning, organisation and implementation of their excursion. The group will ensure that five company visits and five other programme items are realised during the excursion.

Students who cannot attend an excursion abroad need to take part in an alternative programme, which consists of case studies that are carried out at HSBA and of company visits in and around Hamburg.

### Teaching and learning methods

Lecture, presentations, case studies, group discussions

### Demands on company training

none

### Literature

Literature and learning materials will be announced by the lecturer, depending on the destination of the study trip.

# Transport and Logistics IT

## Module description

### General

Code:	B12-LOGIT
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every third year (5 <sup>th</sup> semester)
Applicability of the module:	Logistics Management Maritime Management
Prerequisites:	Transport & Logistics IT sets a strong IT focus. For the preparation, monitoring and follow-up of the module see recommended reading list
Name of lecturer:	Silja Lorenzen
Language of teaching:	English
ECTS credits:	6
Workload and its composition:	48 hours contact, 72 hours independent study 30 hours dual workload
Contact hours:	48 hours in academic year
Methods of examination:	End of 5 <sup>th</sup> semester: written examination (90 minutes)
Language of examination:	English
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of the module

Information technology is one of the main enablers of success in today's business. The role of information technology in the modern integrated logistics chains is especially crucial and will become more and more evident as we look at the concept of business process integration which spans across corporate and inter-company boundaries. The aim of the module is to enhance and develop the basic IT knowledge and skills of professionals engaged in business operations. Through discussed case studies it focuses on the effective and appropriate use of IT to support processes, strategies and techniques in general and in maritime and logistics businesses.

Upon completion of the course, students shall possess the requisite knowledge, skills and abilities to:

- Basic understanding of information technology components
- Assess the effectiveness of IT in supporting business processes
- Understand the complex nature of technologies needed to successfully make effective intra- and inter-enterprise IT decisions
- Explain the functionalities offered in existing technology applications that support intra- and inter-company business processes
- Case based understanding of how to leverage technology and maximize effectiveness in solving logistics and maritime related problems (cases from UPS, FORD supply chain, DP World port in Dubai, supply chain at MIGROS retail etc.)

### Contents of the module

1. Introduction to Information systems
  - 1.1. Information technology



- 1.2. Information systems design and implementation
2. IT-Infrastructure & Emerging Technologies
  - 2.1. IT-Infrastructure Components
  - 2.2. Contemporary Hardware Platforms
  - 2.3. Contemporary Software Platforms
3. Function and Architecture of Databases
  - 3.1. Entity Relationship Models
  - 3.2. Relational Data Model
  - 3.3. Databases and Database Management Systems (DBMS)
4. Introduction to Computer Networks
  - 4.1. Types of computer networks
  - 4.2. RFID and protocols of computer communication
  - 4.3. World Wide Web and internet technologies
5. Enterprise Applications
  - 5.1. Enterprise Resource Planning (ERP)
  - 5.2. Intra-organizational Application Systems
  - 5.3. Electronic data interchange (EDI) for cross border communication
  - 5.4. Inter-organizational Application Systems
  - 5.5. Applications for Supply Chain Management

#### Teaching and learning methods

Lecture, Self-study, Case Based Presentations, Student Presentations, Group Discussions

#### Recommended literature

Management Information Systems: Managing the Digital Firm (13th Edition) / Ken Laudon, Jane P. Laudon, Prentice Hall, 2013

RFID in maritime container logistics: participant-specific benefits and process optimization / Thomas Will, Hamburg, 2011

IT in logistics and maritime business / Lauri Ojala and David Menachof, in: The handbook of maritime economics and business, London, 2006, p. 898-913

Accelerating Global Supply Chains with IT-Innovation: ITAIDE Tools and Methods / Tan, Yao-Hua, Berlin, 2012

Schinas, O., Lyridis, D., Psaraftis, H.N. (2002) *"Introducing E-brokerage in European Transport Services; the Case of the PROSIT Project"*, ICECR-5, ORMS, Montreal, Canada, October 28, 2002

# Warehousing and Inventory Management

## Module description

### General

Code:	B12-WAREHOU
Year of study:	2019/2020
Form of course:	Obligatory
Frequency of course offer:	In every third year (5 <sup>th</sup> and 6 <sup>th</sup> semester)
Applicability of the module:	Logistics Management
Prerequisites:	This module deepens the content of the courses "Introduction to Logistics" and "Supply Chain management". Specific issues are discussed, which are focused on inventory planning, management and on warehousing with respect to warehouse operations and materials handling activities in warehouses. For the preparation, monitoring and follow-up of the module see recommended reading list.
Name of lecturer:	Prof. Dr. Rainer Lehmann
Language of teaching:	English
ECTS credits:	6
Workload and its composition:	48 hours contact, 72 hours independent study 30 h dual workload
Contact hours:	48 hours in academic year 5 <sup>th</sup> semester: 24 h, 6 <sup>th</sup> semester: 24 h
Methods of examination:	End of 6 <sup>th</sup> semester: Written Exam (90 min)
Emphasis of the grade for the final grade:	see course specific provisions

### Aim of course

Students successfully completing this course should have a sound understanding of warehousing and inventory management. By the end of this course, students will be able to:

- Distinguish different stock types
- Explain and apply selected inventory methods
- Explain inventory planning methods
- Apply different lot sizing models
- Calculate safety stocks with statistical methods
- Distinguish different warehouses types
- Explain the basic warehouse operations
- Explain and classify storage and retrieval systems and their application areas
- Explain and classify order picking systems and their application areas
- Describe the basic functions and methods of packaging
- Explain materials handling techniques with respect to warehousing
- Explain and apply selected warehouse management and controlling methods
- Explain and classify IT systems for warehousing
- Explain the process of warehouse planning with respect to important planning constraints
- Plan a basic warehouse layout

## Contents of the module

1. Introduction  
Part 1: Inventory planning and management
2. Stock functions
3. Selected methods for inventory management
4. Inventory planning methods
5. Lot sizing
6. Safety stock determination  
Case studies  
Part 2: Warehousing
7. Warehouses in the supply chain – types and functions
8. Warehousing operations
9. Storage and retrieval systems
10. Order picking systems
11. Packaging and materials handling
12. Warehouse management and controlling
13. IT systems for warehousing
14. Warehouse planning and layout  
Case study

## Teaching and learning methods

Interactive teaching, discussions and case studies; optional: field trip.

## Special features

### Demand on company training

To gain substantial knowledge in this field, the students should be given the opportunity to gather practical experience that deepens and extends their theoretical knowledge in the areas of warehousing and inventory management.

## Recommended literature

Arnold, J.R.T.; Chapman, St.N.; Clive, L.M.: Introduction to Materials Management. Harlow: Pearson 2014

Bartholdi, J.J.; Hackman, St.T.: Warehouse and Distribution Science. Atlanta: Georgia Institute of Technology 2014

Frazelle, F.: World Class Warehousing and Material Handling. New York et al: McGraw-Hill 2001

Martin, H.: Warehousing and Transportation Logistics. London: Kogan 2018

Jonsson, P.: Logistics and Supply Chain Management. London et al: Mc Graw Hill 2008

Heizer, J.; Render, B.: Operations Management. Boston et al.: Pearson 2015

Waller, M.A., Esper, T.L.: The Definitive Guide to Inventory Management. Upper Saddle River: Pearson 2014